

---

# **PART 2 - EN-ROUTE (ENR)**

## **ENR 0 INTRODUCTION**

---

### **ENR 0.1 Preface**

---

NIL - Not-applicable

THIS PAGE INTENTIONALLY LEFT BLANK

---

---

**ENR 0.2 Record of AIP Amendments**

---

---

NIL - Not-applicable

THIS PAGE INTENTIONALLY LEFT BLANK



---

---

## ENR 0.3 Record of AIP Supplements

---

---

NIL - Not-applicable

THIS PAGE INTENTIONALLY LEFT BLANK

---

---

## ENR 0.4 Checklist of AIP Pages

---

---

NIL - Not-applicable

THIS PAGE INTENTIONALLY LEFT BLANK

---

## ENR 0.5 List of Hand Amendments to the AIP

---

NIL - Not-applicable

THIS PAGE INTENTIONALLY LEFT BLANK

---

## ENR 0.6 Table of Contents to Part 2

---

### ENR 0 INTRODUCTION

#### ENR 0.1 Preface

#### ENR 0.2 Record of AIP Amendments

#### ENR 0.3 Record of AIP Supplements

#### ENR 0.4 Checklist of AIP Pages

#### ENR 0.5 List of Hand Amendments to the AIP

#### ENR 0.6 Table of Contents to Part 2

---

### ENR 1 GENERAL RULES AND PROCEDURES

#### ENR 1.1 General Rules

1	CIVIL.....	ENR 1.1-1
2	MILITARY.....	ENR 1.1-26

#### ENR 1.2 Visual Flight Rules

1	CIVIL.....	ENR 1.2-1
2	MILITARY.....	ENR 1.2-3

#### ENR 1.3 Instrument Flight Rules

1	CIVIL.....	ENR 1.3-1
2	MILITARY.....	ENR 1.3-2

#### ENR 1.4 ATS Airspace Classification and Description

1	AIRSPACE BELOW FL660.....	ENR 1.4-1
2	AIRSPACE ABOVE FL660.....	ENR 1.4-2

#### ENR 1.5 Holding, Approach and Departure Procedures

1	CIVIL.....	ENR 1.5-1
2	MILITARY.....	ENR 1.5-2

#### ENR 1.6 ATS Surveillance Services and Procedures

1	CIVIL.....	ENR 1.6-1
2	MILITARY.....	ENR 1.6-3

#### ENR 1.7 Altimeter Setting Procedures

1	GENERAL.....	ENR 1.7-1
2	PROCEDURES.....	ENR 1.7-2
3	TABLE OF CRUISING LEVELS.....	ENR 1.7-3

#### ENR 1.8 Regional Supplementary Procedures

#### ENR 1.9 Air Traffic Flow Management and Airspace Management

1	RESPONSIBILITIES OF THE EUROCONTROL NM.....	ENR 1.9-1
2	RESPONSIBILITIES OF ATS.....	ENR 1.9-1
3	ATFM DOCUMENTATION.....	ENR 1.9-1
4	CONTACT.....	ENR 1.9-1
5	ATFM PROCEDURES.....	ENR 1.9-2

---

## ENR 1.10 Flight Planning

1 CIVIL .....	ENR 1.10-1
2 MILITARY .....	ENR 1.10-12
3 ICAO FLIGHT PLAN FORM .....	ENR 1.10-21

## ENR 1.11 Addressing of Flight Plan Messages

1 CIVIL .....	ENR 1.11-1
2 MILITARY .....	ENR 1.11-2

## ENR 1.12 Interception of Civil Aircraft

1 INTERCEPTION PROCEDURES (SERA.11015) .....	ENR 1.12-1
2 SIGNALS FOR USE IN THE EVENT OF INTERCEPTION .....	ENR 1.12-3
3 MILITARY PROCEDURES .....	ENR 1.12-3

## ENR 1.13 Unlawful Interference

1 SERA.11005 .....	ENR 1.13-1
--------------------	------------

## ENR 1.14 Air Traffic Incidents

1 DEFINITIONS .....	ENR 1.14-1
2 SEVERITY CLASSIFICATIONS OF ACCIDENTS (MIL) .....	ENR 1.14-1
3 SEVERITY DEFINITIONS OF AIR TRAFFIC INCIDENTS .....	ENR 1.14-2
4 USE OF THE AIR TRAFFIC INCIDENT REPORT FORM A/B .....	ENR 1.14-2
5 REPORTING PROCEDURES .....	ENR 1.14-3
6 PURPOSE OF REPORTING AND HANDLING OF THE FORMS .....	ENR 1.14-5
7 INSTRUCTIONS FOR THE COMPLETION OF THE AIR TRAFFIC INCIDENT REPORT FORM A .....	ENR 1.14-5
8 INSTRUCTIONS FOR THE COMPLETION OF THE AIR TRAFFIC INCIDENT REPORT FORM B .....	ENR 1.14-6
9 AIR TRAFFIC INCIDENT REPORT FORM A & B .....	ENR 1.14-7

---

## ENR 2 AIR TRAFFIC SERVICES AIRSPACE

### ENR 2.1 FIR, UIR, TMA and CTA

1 UPPER AIRSPACE .....	ENR 2.1-1
2 LOWER AIRSPACE .....	ENR 2.1-2
3 FREQUENCIES OF ATS UNITS .....	ENR 2.1-7

### ENR 2.2 Other Regulated Airspace

1 ATS AIRSPACE .....	ENR 2.2-1
2 TRANSPONDER MANDATORY ZONES .....	ENR 2.2-7
3 RADIO MANDATORY ZONES .....	ENR 2.2-7

---

## ENR 3 ATS ROUTES

### ENR 3.1 Lower ATS Routes Conventional Navigation Routes

### ENR 3.2 Upper ATS Routes Area Navigation Routes

1 REMARKS ON RNAV ROUTES .....	ENR 3.2-1
2 RNAV Routes .....	ENR 3.2-2

### ENR 3.3 Area Navigation (RNAV) Routes Other Routes

1 DIRECT ROUTES .....	ENR 3.3-1
2 MILITARY ROUTES .....	ENR 3.3-1

### ENR 3.4 Helicopter Routes En-route Holding

---

## ENR 4 RADIO NAVIGATION AIDS / SYSTEMS

### ENR 4.1 Radio Navigation Aids - En-route

### ENR 4.2 Special Navigation Systems



**ENR 4.3 Global Navigation Satellite System (GNSS)****ENR 4.4 Name-code Designators for Significant Points****ENR 4.5 Aeronautical Ground Lights - En-route****ENR 5 NAVIGATION WARNINGS****ENR 5.1 Prohibited, Restricted and Danger Areas**

1	RESTRICTED AREAS .....	ENR 5.1-1
2	DANGER AREAS .....	ENR 5.1-12
3	UAS Geographical Zones.....	ENR 5.1-14
4	RESERVATION SPECIFICATIONS (MILITARY ONLY).....	ENR 5.1-14

**ENR 5.2 Military Exercise and Training Areas and Air Defence Identification Zone**

1	TEMPORARY RESERVED AREAS AND TEMPORARY SEGREGATED AREAS .....	ENR 5.2-1
2	HELICOPTER TRAINING AREAS .....	ENR 5.2-21
3	LOW FLYING AREAS .....	ENR 5.2-27
4	AIR DEFENCE IDENTIFICATION ZONE.....	ENR 5.2-29

**ENR 5.3 Other Activities of a Dangerous Nature and Other Potential Hazards**

1	OTHER ACTIVITIES OF A DANGEROUS NATURE .....	ENR 5.3-1
2	OTHER POTENTIAL HAZARDS .....	ENR 5.3-1

**ENR 5.4 Air Navigation Obstacles**

1	IN BELGIUM.....	ENR 5.4-1
2	IN LUXEMBOURG .....	ENR 5.4-2

**ENR 5.5 Aerial Sporting and Recreational Activities**

1	GENERAL .....	ENR 5.5-1
2	LOW FLYING AREAS GOLF .....	ENR 5.5-9
3	MILITARY LOW FLYING AREAS GOLF.....	ENR 5.5-12
4	RADIO CONTROLLED MODEL AIRCRAFT.....	ENR 5.5-14
5	OTHER ACTIVITIES .....	ENR 5.5-17

**ENR 5.6 Bird Migration and Areas with Sensitive Fauna**

1	BIRD MIGRATION.....	ENR 5.6-1
2	CONCENTRATIONS.....	ENR 5.6-1
3	AREAS WITH SENSITIVE FAUNA .....	ENR 5.6-1
4	MILITARY BIRD MIGRATION OBSERVATION SYSTEM .....	ENR 5.6-1

**ENR 6 EN-ROUTE CHARTS**

THIS PAGE INTENTIONALLY LEFT BLANK

---

# ENR 1 GENERAL RULES AND PROCEDURES

---

---

## ENR 1.1 General Rules

---

---

### 1 CIVIL

---

*Note: Unless explicitly indicated, the rules in this section apply in both Belgium and Luxembourg.*

#### 1.1 Compliance with the Rules of the Air (SERA.2005)

The operation of an aircraft either in flight, on the movement area of an aerodrome or at an operating site shall be in compliance with the general rules as the applicable local provisions described in this section and, in addition, when in flight, either with:

- the visual flight rules (see [ENR 1.2](#));
- the instrument flight rules (see [ENR 1.3](#)).

#### 1.2 Responsibilities (SERA.2010)

The pilot-in-command of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the pilot-in-command may depart from these rules in circumstances that render such departure absolutely necessary in the interests of safety.

Before beginning a flight, the pilot-in-command of an aircraft shall become familiar with all available information appropriate to the intended operation. Pre-flight action for flights away from the vicinity of an aerodrome, and for all IFR flights, shall include a careful study of available current weather reports and forecasts, taking into consideration fuel requirements and an alternative course of action if the flight cannot be completed as planned.

#### 1.3 Authority of Pilot-in-command of an Aircraft (SERA.2015)

The pilot-in-command of an aircraft shall have final authority as to the disposition of the aircraft while in command.

#### 1.4 Problematic Use of Psychoactive Substances (SERA.2020)

No person whose function is critical to the safety of aviation (safety-sensitive personnel) shall undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired. No such person shall engage in any kind of problematic use of substances.

#### 1.5 Protection of Persons and Property

##### 1.5.1 Negligent or Reckless Operation of Aircraft (SERA.3101)

An aircraft shall not be operated in a negligent or reckless manner so as to endanger life or property of others.

##### 1.5.2 Minimum Heights (SERA.3105)

Except when necessary for take-off or landing, or by permission from the CAA, aircraft shall not be flown over the congested areas of cities, towns or settlements or over an open-air assembly of persons, unless at such a height as will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface.

*Note: In Belgium, except for helicopters, flights between 2200 and 0459 (2100 and 0359) should be performed at FL 050 or above whenever practicable.*

##### 1.5.3 Cruising Levels (SERA.3110)

The cruising levels at which a flight or a portion of a flight is to be conducted shall be in terms of:

- flight levels, for flights at or above the lowest usable flight level or, where applicable, above the transition altitude;
- altitudes, for flights below the lowest usable flight level or, where applicable, at or below the transition altitude.

## 1.5.4 Dropping or Spraying (SERA.3115)

### 1.5.4.1 General

#### 1.5.4.1.1 In Belgium

Nothing shall be dropped or sprayed from an aircraft in flight except under the conditions prescribed by the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

#### 1.5.4.1.2 In Luxembourg

Dropping or spraying from an aircraft in flight shall only be done during the day and in VMC and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

### 1.5.4.2 Fuel Dumping

Except in case of emergency, fuel dumping should be carried out over the North Sea at or above FL 100.

Other known traffic should be separated from the aircraft dumping fuel by at least 10NM horizontally, but not behind the aircraft dumping fuel. If behind the aircraft dumping fuel within 15MIN flying time or a distance of 50NM, a vertical separation of at least 1000FT above or 3000FT below the aircraft dumping fuel should be maintained.

In case of emergency, fuel dumping shall, whenever possible, not be carried out:

- over the congested area of cities, towns or settlements;
- in holding patterns;
- less than 3000 FT above other aircraft.

## 1.5.5 Towing (SERA.3120)

### 1.5.5.1 In Belgium

#### 1.5.5.1.1 General

No aircraft or other object shall be towed by an aircraft except under the conditions prescribed by the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

#### 1.5.5.1.2 Banner Towing

Banner towing flights are prohibited:

- below 1400FT AGL, except for taking up or throwing off the publicity banners;
- within a radius of 9KM around EBOS ARP, except when authorized by Oostende ATC and under the conditions determined by the CAA;
- along the coast at a distance of less than 500M seaside and less than 1000M landside from the shoreline, except for the area described in the item above;
- within a radius of 20KM around EBBR ARP, except when authorized by the CAA.

Unless permitted otherwise by the CAA, banner towing flights are allowed only between 0900 and 1800 (0800 and 1700) from MON to SAT (HOL excl) and between 1300 and 1700 (1200 and 1600) on SUN and HOL.

The CAA can prohibit any banner towing flight conducted over an open-air assembly of persons.

A banner towing flight conducted over a built-up area of a city or town shall be limited to MAX 45MIN. Over a single location the duration of a towing flight shall not exceed 15MIN. These restrictions apply per day and per advertisement.

Formation banner towing flights shall be performed by maximum three aircraft.

Helicopters conducting banner towing flights shall maintain a speed of 40KT MNM.

Banner towing aircraft shall be equipped with a transponder mode C.

### 1.5.5.2 In Luxembourg

Aircraft or other objects shall only be towed by an aircraft during the day and in VMC and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

## 1.5.6 Parachute Descents (SERA.3125)

Parachute descents, other than emergency descents, shall only be made after approval of the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

## 1.5.7 Aerobatic Flight (SERA.3130)

### 1.5.7.1 In Belgium

Aerobatic flights shall only be carried out in VMC, at a height of 2000FT AGL MNM (unless a lower level is permitted by the CAA) and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

No aerobatic flight shall be carried out over the congested areas of cities, towns or settlements, industrial buildings, the L.N.G. Terminal of Zeebrugge, nuclear plants or over an open-air assembly of persons, in controlled airspace or in restricted areas, except when authorized by the authority responsible for the area.

Aerobatic flight is prohibited in danger areas, unless they are created exclusively for this purpose.

#### 1.5.7.2 **In Luxembourg**

Aerobatic flights shall only be carried out in designated airspaces during the day and in VMC and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

Pilots have to maintain visual contact with the ground at all times.

The express consent of all persons on board the aircraft is required for each manoeuvre.

### 1.5.8 **Formation flights (SERA.3135)**

#### 1.5.8.1 **In Belgium**

Aircraft shall not be flown in formation except in VMC and by pre-arrangement among the pilots-in-command of the aircraft taking part in the flight and, for formation flight in controlled airspace, in accordance with the conditions prescribed by the appropriate ATS unit. These conditions will include the following:

- one of the pilots-in-command shall be designated as the flight leader;
- the formation operates as a single aircraft with regard to navigation and position reporting;
- separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and breakaway; and
- for State aircraft a maximum lateral, longitudinal and vertical distance between each aircraft and the flight leader in accordance with ICAO Standards (exception: military OAT formation flights which are described in § 2.3.2). For other than State aircraft a distance not exceeding 0.5NM laterally and longitudinally and 100 FT vertically from the flight leader shall be maintained by each aircraft.

Formation landing or take-off are subject to permission from the CAA.

Aircraft carrying paying passengers shall not be flown in formation.

#### 1.5.8.2 **In Luxembourg**

Aircraft shall not be flown in formation except under the following conditions:

- aircraft shall not be flown in formation except by pre-arrangement among the pilots-in-command of the aircraft taking part in the flight;
- take-off in formation at ELLX may only take place upon prior authorisation by the CAA after consultation with the Air Navigation Service Provider;
- if such formation flights take place in controlled airspace, the following conditions apply:
  - one of the pilots-in-command shall be designated as the flight leader;
  - the formation operates as a single aircraft with regard to navigation and position reporting;
  - the formation uses one single transponder during the flight in formation, which shall be the one on board the flight leader's aircraft;
  - separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and breakaway; and
  - a distance not exceeding 0.5 NM laterally and longitudinally and 100 FT vertically from the flight leader shall be maintained by each aircraft.

### 1.5.9 **Unmanned Free Balloons (SERA.3140)**

#### 1.5.9.1 **Classification of Unmanned Free Balloons**

Unmanned free balloons shall be classified as:

- a. *light*: an unmanned free balloon which carries a payload of one or more packages with a combined mass of less than 4KG, unless qualifying as a heavy balloon in accordance with (c)(2),(3) or (4)
- b. *medium*: an unmanned free balloon which carries a payload of two or more packages with a combined mass of 4KG or more, but less than 6KG, unless qualifying as a heavy balloon in accordance with (c)(2), (3) or (4)
- c. *heavy*: an unmanned free balloon which carries a payload which:
  1. has a combined mass of 6KG or more; or
  2. includes a package of 3KG or more; or
  3. includes a package of 2KG or more with an area density of more than 13G/CM<sup>2</sup>, determined by dividing the total mass in grams of the payload package by the area in square centimetres of its smallest surface; or
  4. uses a rope or other device for suspension of the payload that requires an impact force of 230N or more to separate the suspended payload from the balloon.

### 1.5.9.2 **General Operating Rules**

An unmanned free balloon shall not be operated without authorisation from the State from which the launch is made.

An unmanned free balloon, other than a light balloon used exclusively for meteorological purposes and operated in the manner prescribed by the CAA, shall not be operated across the territory of another State without authorisation from the other State concerned. This authorisation shall be obtained prior to the launching of the balloon if there is reasonable expectation, when planning the operation, that the balloon may drift into airspace over the territory of another State. Such authorisation may be obtained for a series of balloon flights or for a particular type of recurring flight, e.g. atmospheric research balloon flights.

An unmanned free balloon shall be operated in accordance with conditions specified by the State of Registry and the State(s) expected to be overflown.

An unmanned free balloon shall not be operated in such a manner that impact of the balloon, or any part thereof, including its payload, with the surface of the earth, creates a hazard to persons or property.

A heavy unmanned free balloon shall not be operated over the high seas without prior coordination with the responsible ATS authority.

### 1.5.9.3 **Operating Limitations and Equipment Requirements**

A heavy unmanned free balloon shall not be operated without authorisation from the responsible ATS authority at or through any level below FL600 at which:

- there are clouds or obscuring phenomena of more than four oktas coverage; or
- the horizontal visibility is less than 8KM.

A heavy or medium unmanned free balloon shall not be released in a manner that will cause it to fly lower than 1 000 FT over the congested areas of cities, towns or settlements or an open-air assembly of persons not associated with the operation.

A heavy unmanned free balloon shall not be operated unless:

- it is equipped with at least two payload flight-termination devices or systems, whether automatic or operated by telecommand, that operate independently of each other;
- for polyethylene zero-pressure balloons, at least two methods, systems, devices, or combinations thereof, that function independently of each other are employed for terminating the flight of the balloon envelope;
- the balloon envelope is equipped with either a radar reflective device(s) or radar reflective material that will present an echo to surface radar operating in the 200 MHz to 2700 MHz frequency range, and/or the balloon is equipped with such other devices as will permit continuous tracking by the operator beyond the range of ground-based radar.

A heavy unmanned free balloon shall not be operated under the following conditions:

- in an area where ground-based SSR equipment is in use, unless it is equipped with a secondary surveillance radar transponder, with pressure-altitude reporting capability, which is continuously operating on an assigned code, or which can be turned on when necessary by the tracking station;
- in an area where ground-based ADS-B equipment is in use, unless it is equipped with an ADS-B transmitter, with pressure-altitude reporting capability, which is continuously operating or which can be turned on when necessary by the tracking station.

An unmanned free balloon that is equipped with a trailing antenna that requires a force of more than 230N to break it at any point shall not be operated unless the antenna has coloured pennants or streamers that are attached at not more than 15M intervals.

A heavy unmanned free balloon shall not be operated below FL600 at night or during any other period prescribed by the CAA, unless the balloon and its attachments and payload, whether or not they become separated during the operation, are lighted.

A heavy unmanned free balloon that is equipped with a suspension device (other than a highly conspicuously coloured open parachute) more than 15M long shall not be operated during night below FL600 unless the suspension device is coloured in alternate bands of high conspicuity colours or has coloured pennants attached.

### 1.5.9.4 **Termination**

The operator of a heavy unmanned free balloon shall activate the appropriate termination devices required by the operating limitations:

- when it becomes known that weather conditions are less than those prescribed for the operation;
- if a malfunction or any other reason makes further operation hazardous to air traffic or to persons or property on the surface;
- prior to unauthorised entry into the airspace over another State's territory.

### 1.5.9.5 **Flight Notification**

#### 1.5.9.5.1 **Pre-flight notification**

Early notification of the intended flight of an unmanned free balloon in the medium or heavy category shall be made to the appropriate air traffic services unit not less than seven days before the date of the intended flight.

Notification of the intended flight shall include such of the following information as may be required by the appropriate air traffic services unit:

- a. balloon flight identification or project code name;
- b. balloon classification and description;
- c. SSR code, aircraft address or NDB frequency as applicable;
- d. operator's name and telephone number;
- e. launch site;
- f. estimated time of launch (or time of commencement and completion of multiple launches);
- g. number of balloons to be launched and the scheduled interval between launches (if multiple launches);
- h. expected direction of ascent;
- i. cruising level(s) (pressure-altitude);
- j. the estimated elapsed time to pass FL600 or to reach cruising level if at or below FL600, together with the estimated location. If the operation consists of continuous launchings, the time to be included shall be the estimated time at which the first and the last in the series will reach the appropriate level (e.g. 122136Z–130330Z);
- k. the estimated date and time of termination of the flight and the planned location of the impact/recovery area. In the case of balloons carrying out flights of long duration, as a result of which the date and time of termination of the flight and the location of impact cannot be forecast with accuracy, the term 'long duration' shall be used. If there is to be more than one location of impact/recovery, each location shall be listed together with the appropriate estimated time of impact. If there is to be a series of continuous impacts, the time to be included shall be the estimated time of the first and the last in the series (e.g. 070330Z–072300Z).

Any changes in the pre-launch information shall be forwarded to the ATS unit concerned not less than 6HR before the estimated time of launch, or in the case of solar or cosmic disturbance investigations involving a critical time element, not less than 30MIN before the estimated time of the commencement of the operation.

#### 1.5.9.5.2 Notification of launch

Immediately after a medium or heavy unmanned free balloon is launched the operator shall notify the appropriate air traffic services unit of the following:

- a. balloon flight identification;
- b. launch site;
- c. actual time of launch;
- d. estimated time at which FL600 pressure-altitude will be passed, or the estimated time at which the cruising level will be reached if at or below FL600, and the estimated location;
- e. any changes to the information previously notified in accordance with items (g) and (h) of § 1.5.9.5.1 above.

#### 1.5.9.5.3 Notification of cancellation

The operator shall notify the appropriate ATS unit immediately it is known that the intended flight of a medium or heavy unmanned free balloon, previously notified in accordance with § 1.5.9.5.1, has been cancelled.

#### 1.5.9.6 Position Recording and Reports

The operator of a heavy unmanned free balloon operating at or below FL600 shall monitor the flight path of the balloon and forward reports of the balloon's position as requested by ATS. Unless air traffic services require reports of the balloon's position at more frequent intervals, the operator shall record the position every 2HR.

The operator of a heavy unmanned free balloon operating above FL600 shall monitor the flight progress of the balloon and forward reports of the balloon's position as requested by ATS. Unless air traffic services require reports of the balloon's position at more frequent intervals, the operator shall record the position every 24HR.

If a position cannot be recorded, the operator shall immediately notify the appropriate ATS unit. This notification shall include the last recorded position. The appropriate air traffic services unit shall be notified immediately when tracking of the balloon is re-established.

One hour before the beginning of planned descent of a heavy unmanned free balloon, the operator shall forward to the appropriate ATS unit the following information regarding the balloon:

- a. the current geographical position
- b. the current level (FL)
- c. the forecast time of penetration of FL600, if applicable
- d. the forecast time and location of ground impact

The operator of a heavy or medium unmanned free balloon shall notify the appropriate ATS unit when the operation is ended.

#### 1.5.10 Prohibited Areas and Restricted Areas (SERA.3145)

Aircraft shall not be flown in a prohibited area or in a restricted area, the particulars of which have been duly published, except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.

## 1.6 Avoidance of Collisions

### 1.6.1 General (SERA.3201)

Nothing in these rules shall relieve the pilot-in-command of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment, as will best avert collision.

### 1.6.2 Proximity (SERA.3205)

An aircraft shall not be operated in such proximity to other aircraft as to create a collision hazard.

### 1.6.3 Right-of-way (SERA.3210)

The aircraft that has the right-of-way shall maintain its heading and speed.

An aircraft that is aware that the manoeuvrability of another aircraft is impaired shall give way to that aircraft.

An aircraft that is obliged by the following rules to keep out of the way of another shall avoid passing over, under or in front of the other, unless it passes well clear and takes into account the effect of aircraft wake turbulence.

#### 1.6.3.1 Approaching Head-on

When two aircraft are approaching head-on or approximately so and there is danger of collision, each shall alter its heading to the right.

#### 1.6.3.2 Converging

When two aircraft are converging at approximately the same level, the aircraft that has the other on its right shall give way, except as follows:

- power-driven heavier-than-air aircraft shall give way to airships, gliders and balloons;
- airships shall give way to gliders and balloons;
- gliders shall give way to balloons;
- power-driven aircraft shall give way to aircraft which are seen to be towing other aircraft or objects;
- RPA shall give way to all manned aircraft.

#### 1.6.3.3 Overtaking

An overtaking aircraft is an aircraft that approaches another from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter, i.e. is in such a position with reference to the other aircraft that at night it should be unable to see either of the aircraft's left (port) or right (starboard) navigation lights.

An aircraft that is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear.

*Note:* A sailplane overtaking another sailplane may alter its course to the right or to the left.

#### 1.6.3.4 Landing

An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land.

When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft. Nevertheless, power-driven heavier-than-air aircraft shall give way to sailplanes.

An aircraft that is aware that another is compelled to land (emergency landing) shall give way to that aircraft.

#### 1.6.3.5 Taking Off

An aircraft taxiing on the manoeuvring area of an aerodrome shall give way to aircraft taking off or about to take off.

#### 1.6.3.6 Surface Movement of Aircraft

In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome or equivalent part of an operating site, the following shall apply:

- when two aircraft are approaching head on, or approximately so, each shall stop or where practicable alter its course to the right so as to keep well clear
- when two aircraft are on a converging course, the one which has the other on its right shall give way
- an aircraft which is being overtaken by another aircraft shall have the right-of-way and the overtaking aircraft shall keep well clear of the other aircraft

At a controlled aerodrome an aircraft taxiing on the manoeuvring area shall stop and hold at all runway-holding positions unless an explicit clearance to enter or cross the runway has been issued by the aerodrome control tower. An aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars and may proceed further when the lights are switched off.



#### 1.6.4 Lights to be Displayed by Aircraft (SERA.3215)

- a. Except as provided by (e), at night all aircraft in flight shall display:
  1. anti-collision lights intended to attract attention to the aircraft; and
  2. except for balloons, navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights.
- b. Except as provided by (e), at night:
  1. all aircraft moving on the movement area of an aerodrome shall display navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights;
  2. unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome shall display lights intended to indicate the extremities of their structure, as far as practicable;
  3. all aircraft taxiing or being towed on the movement area of an aerodrome shall display lights intended to attract attention to the aircraft;
  4. all aircraft on the movement area of an aerodrome whose engines are running shall display lights which indicate that fact.
- c. Except as provided by (e), all aircraft in flight and fitted with anti-collision lights to meet the requirement of (a)(1) shall display such lights also during day.
- d. Except as provided by (e), all aircraft:
  1. taxiing or being towed on the movement area of an aerodrome and fitted with anti-collision lights, to meet the requirement of (b)(3); or
  2. on the movement area of an aerodrome and fitted with lights to meet the requirement of (b)(4), shall display such lights also during day.
- e. A pilot shall be permitted to switch off or reduce the intensity of any flashing lights fitted to meet the requirement of (a), (b), (c) and (d) if they do or are likely to:
  1. adversely affect the satisfactory performance of duties;
  2. subject an outside observer to harmful dazzle.

#### 1.6.5 Simulated Instrument Flights (SERA.3220)

An aircraft shall not be flown under simulated instrument flight conditions unless fully functioning dual controls are installed in the aircraft and an additional qualified pilot occupies a control seat to act as safety pilot for the person who is flying under simulated instrument conditions. The safety pilot shall have adequate vision forward and to each side of the aircraft, or a competent observer in communication with the safety pilot shall occupy a position in the aircraft from which the observer's field of vision adequately supplements that of the safety pilot.

#### 1.6.6 Operation on and in the Vicinity of Aerodromes (SERA.3225)

An aircraft operated on or in the vicinity of an aerodrome shall:

- observe other aerodrome traffic for the purpose of avoiding collision;
- conform with or avoid the pattern of traffic formed by other aircraft in operation;
- except for balloons, make all turns to the left, when approaching for a landing and after taking off, unless otherwise indicated, or instructed by ATC;
- except for balloons, land and take off into the wind unless safety, the runway configuration, or air traffic considerations determine that a different direction is preferable.

#### 1.6.7 Water operations (SERA.3230)

##### 1.6.7.1 General

When two aircraft or an aircraft and a vessel are approaching one another and there is a risk of collision, the aircraft shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.

##### 1.6.7.1.1 Converging

An aircraft which has another aircraft or a vessel on its right shall give way so as to keep well clear.

##### 1.6.7.1.2 Approaching head-on

An aircraft approaching another aircraft or a vessel head-on, or approximately so, shall alter its heading to the right to keep well clear.

##### 1.6.7.1.3 Overtaking

The aircraft or vessel which is being overtaken has the right of way, and the one overtaking shall alter its heading to keep well clear.

##### 1.6.7.1.4 Landing and taking off

Aircraft landing on or taking off from the water shall, in so far as practicable, keep well clear of all vessels and avoid impeding their navigation.

### 1.6.7.2 *Lights to be Displayed by Aircraft on the Water*

At night or during any other period prescribed by the CAA, all aircraft on the water shall display lights as required by the *Convention on the International Regulations for Preventing Collisions at Sea (1972)*, unless it is impractical for them to do so, in which case they shall display lights as closely similar as possible in characteristics and position to those required by the International Regulations.

## 1.7 SIGNALS (SERA.3301)

Upon observing or receiving any of the signals indicated below, aircraft shall take such action as may be required by the indicated interpretation of the signal.

### 1.7.1 Distress and Urgency Signals

#### 1.7.1.1 *General*

Notwithstanding the provisions in § 1.7.1.2 and § 1.7.1.3 below, an aircraft in distress shall use any means at its disposal to attract attention, make known its position and obtain help.

#### 1.7.1.2 *Distress Signals*

The following signals, used either together or separately, mean that grave and imminent danger threatens, and immediate assistance is requested:

- a signal made by radiotelegraphy or by any other signalling method consisting of the group SOS (. . . — — — . . . in the Morse Code);
- a radiotelephony distress signal consisting of the spoken word MAYDAY;
- a distress message sent via data link which transmits the intent of the word MAYDAY;
- rockets or shells throwing red lights, fired one at a time at short intervals;
- a parachute flare showing a red light;
- setting of the transponder to Mode A Code 7700.

#### 1.7.1.3 *Urgency Signals*

The following signals, used either together or separately, mean that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:

- the repeated switching on and off of the landing lights; or
- the repeated switching on and off of the navigation lights in such manner as to be distinct from flashing navigation lights.

The following signals, used either together or separately, mean that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or of some person on board or within sight:

- a signal made by radiotelegraphy or by any other signalling method consisting of the group XXX (— . . — — . . — — . . — in the Morse Code);
- a radiotelephony urgency signal consisting of the spoken words PAN, PAN;
- an urgency message sent via data link which transmits the intent of the words PAN, PAN.

### 1.7.2 Visual Signals used to Warn an Unauthorized Aircraft Flying in or about to Enter a Restricted, Prohibited or Danger Area

When visual signals are used to warn unauthorised aircraft flying in or about to enter a restricted, prohibited or danger area by day and by night, a series of projectiles discharged from the ground at intervals of 10SEC, each showing, on bursting, red and green lights or stars shall indicate to an unauthorised aircraft that it is flying in or about to enter a restricted, prohibited or danger area, and that the aircraft is to take such remedial action as may be necessary.



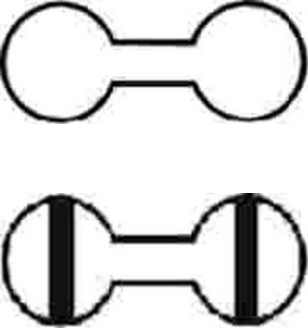
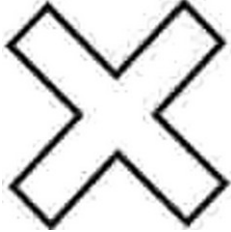
**1.7.3 Signals for Aerodrome Traffic****1.7.3.1 Lights and Pyrotechnic Signals****Instructions**


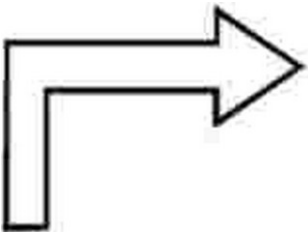
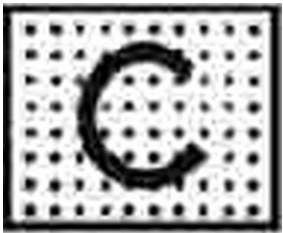
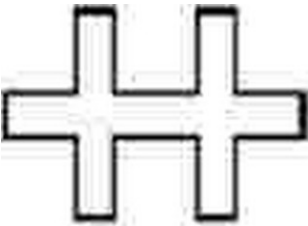
Light		From Aerodrome Control to:	
		Aircraft in flight	Aircraft on the ground
Directed towards aircraft concerned	Steady green	Cleared to land	Cleared for take-off
	Steady red	Give way to other aircraft and continue circling	Stop
	Series of green flashes	Return for landing <sup>(*)</sup>	Cleared to taxi
	Series of red flashes	Aerodrome unsafe, do not land	Taxi clear of landing area in use
	Series of white flashes	Land at this aerodrome and proceed to apron <sup>(*)</sup>	Return to starting point on the aerodrome
Red pyrotechnic		Notwithstanding any previous instructions, do not land for the time being	
<sup>(*)</sup> Clearances to land and to taxi will be given in due course.			

**Acknowledgement by an aircraft**

	When in flight	When on the ground
During HJ	by rocking the aircraft's wings, except for the base and final legs of the approach	by moving the aircraft's ailerons or rudder
During HN	by flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights	


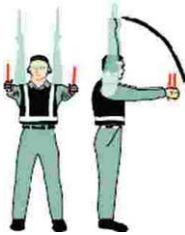



1.7.3.2 Visual Ground Signals






	<p><b>1. Prohibition of landing</b></p> <p>A horizontal red square panel with yellow diagonals when displayed in a signal area indicates that landings are prohibited and that the prohibition is liable to be prolonged.</p>
	<p><b>2. Need for special precautions while approaching or landing</b></p> <p>A horizontal red square panel with one yellow diagonal when displayed in a signal area indicates that owing to the bad state of the manoeuvring area, or for any other reason, special precautions must be observed in approaching to land or in landing.</p>
	<p><b>3. Use of runways and taxiways</b></p> <p>A horizontal white dumb-bell when displayed in a signal area indicates that aircraft are required to land, take off and taxi on runways and taxiways only.</p> <p>A horizontal white dumb-bell with a black bar placed perpendicular to the shaft across each circular portion of the dumb-bell when displayed in a signal area indicates that aircraft are required to land and take off on runways only, but other manoeuvres need not be confined to runways and taxiways.</p>
	<p><b>4. Closed runways or taxiways</b></p> <p>Crosses of a single contrasting colour, yellow or white displayed horizontally on runways and taxiways or parts thereof indicate an area unfit for movement of aircraft.</p>






	<p><b>5. Directions for landing or take-off</b></p> <p>A horizontal white or orange landing T indicates the direction to be used by aircraft for landing and take-off, which shall be in a direction parallel to the shaft of the T towards the cross arm. When used at night, the landing T shall be either illuminated or outlined in white lights.</p> <p>A set of two digits displayed vertically at or near the aerodrome control tower indicates to aircraft on the manoeuvring area the direction for take-off, expressed in units of 10 degrees to the nearest 10 degrees of the magnetic compass.</p>
	<p><b>6. Right-hand circuit</b></p> <p>When displayed in a signal area, or horizontally at the end of the runway or strip in use, a right-hand arrow of conspicuous colour indicates that turns are to be made to the right before landing and after take-off.</p>
	<p><b>7. ATS reporting office</b></p> <p>The letter C displayed vertically in black against a yellow background indicates the location of the ATS reporting office.</p>
	<p><b>8. Sailplane flights in operation</b></p> <p>A double white cross displayed horizontally in the signal area indicates that the aerodrome is being used by sailplanes and that sailplane flights are being performed.</p>

1.7.4 Marshalling Signals


1.7.4.1 From a Signalman/Marshaller to an Aircraft


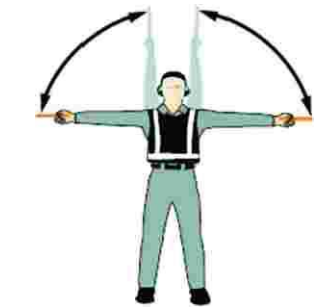



	<p><b>1. Wingwalker/guide (*)</b></p> <p>Right hand raised above head level with wand pointing up; left-hand wand moved pointing down toward body.</p> <p>(*) This signal provides an indication by a person positioned at the aircraft wing tip, to the pilot/marshaller/push-back operator, that the aircraft movement on/off a parking position would be unobstructed.</p>
	<p><b>2. Identify gate</b></p> <p>Fully extended arms raised straight above head with wands pointing up.</p>
	<p><b>3. Proceed to next signalman/marshaller or as directed by tower/ground control</b></p> <p>Both arms pointed upward; arms moved and extended outward to sides of body and wands pointed to direction of next signalman/marshaller or taxi area.</p>
	<p><b>4. Straight ahead</b></p> <p>Extended arms bended at elbows and wands moved up and down from chest height to head.</p>
	<p><b>5(a). Turn left (from pilot's point of view)</b></p> <p>With right arm and wand extended at a 90° angle to body, 'come ahead' signal made with left hand. The rate of signal motion indicates the rate of aircraft turn.</p>





	<p><b>5(b). Turn right</b> (from pilot's point of view)</p> <p>With left arm and wand extended at a 90° angle to body, 'come ahead' signal made with right hand. The rate of signal motion indicates the rate of aircraft turn.</p>
	<p><b>6(a). Normal stop</b></p> <p>Arms fully extended and wands at a 90° angle to sides and slowly moved to above head until wands cross.</p>
	<p><b>6(b). Emergency stop</b></p> <p>Arms and wands abruptly extended to top of head, crossing wands.</p>
	<p><b>7(a). Set brakes</b></p> <p>Hand raised just above shoulder height with open palm. After eye contact, hand closed into a fist. "Thumbs up" acknowledgement required by flight crew before marshaller may move.</p>
	<p><b>7(b). Release brakes</b></p> <p>Hand raised just above shoulder height with hand closed in a fist. After eye contact, palm opened. "Thumbs up" acknowledgement required by flight crew before marshaller may move.</p>

	<p><b>8(a). Chocks inserted</b></p> <p>Arms and wands fully extended above head, wands moved inward in a 'jabbing' motion until wands touch. Acknowledgement shall be given by flight crew.</p>
	<p><b>8(b). Chocks removed</b></p> <p>Arms and wands fully extended above head, wands moved outward in a 'jabbing' motion. Chocks will not be removed until authorisation is given by flight crew.</p>
	<p><b>9. Start engine(s)</b></p> <p>Right arm raised to head level with wand pointing up and circular motion started with hand; at the same time, left arm raised above head level, pointing to engine to be started.</p>
	<p><b>10. Cut engines</b></p> <p>Arm extended with wand forward of body at shoulder level; hand and wand moved to top of left shoulder and wand drawn to top of right shoulder in a slicing motion across throat.</p>
	<p><b>11. Slow down</b></p> <p>Extended arms moved downwards in a 'patting' gesture, wands moved up and down from waist to knees.</p>



	<p><b>12. Slow down engine(s) on indicated side</b></p> <p>With arms down and wands toward ground, either right or left wand waved up and down indicating engine(s) on left or right side respectively should be slowed down.</p>
	<p><b>13. Move back</b></p> <p>With arms in front of body at waist height, arms rotated in a forward motion.</p>
	<p><b>14(a). Turns while backing (for tail to starboard)</b></p> <p>Left arm pointed with wand down and right arm brought from overhead vertical position to horizontal forward position, repeating right-arm movement.</p>
	<p><b>14(b). Turns while backing (for tail to port)</b></p> <p>Right arm pointed with wand down and left arm brought from overhead vertical position to horizontal forward position, repeating left-arm movement.</p>
	<p><b>15. Affirmative/all clear (*)</b></p> <p>Right arm raised to head level with wand pointing up or hand displayed with 'thumbs up'; left arm remains at side by knee.</p> <p>(*) This signal is also used as a technical/servicing communication signal.</p>





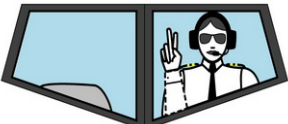
	<p><b>16. Hover (*)</b></p> <p>Arms fully extended and wands at a 90° angle to sides.</p> <p>(*) For use to hovering helicopters</p>
	<p><b>17. Move upwards (*)</b></p> <p>Arms and wands fully extended at a 90° angle to sides and, with palms turned up, hands moved upwards. Speed of movement indicates rate of ascent.</p> <p>(*) For use to hovering helicopters</p>
	<p><b>18. Move downwards (from pilot's point of view) (*)</b></p> <p>Arms and wands fully extended at a 90° angle to sides and, with palms turned down, hands moved downwards. Speed of movement indicates rate of descent.</p> <p>(*) For use to hovering helicopters</p>
	<p><b>19(a). Move horizontally left (from pilot's point of view) (*)</b></p> <p>Arm extended horizontally at a 90° angle to right side of body. Other arm moved in same direction in a sweeping motion.</p> <p>(*) For use to hovering helicopters</p>
	<p><b>19(b). Move horizontally right (*)</b></p> <p>Arms extended horizontally at a 90-degree angle to left side of body. Other arm moved in same direction in a sweeping motion.</p> <p>(*) For use to hovering helicopters</p>

	<p><b>20. Land (*)</b></p> <p>Arms crossed with wands downwards and in front of body.</p> <p>(*) For use to hovering helicopters</p>
	<p><b>21. Hold position/stand by</b></p> <p>Arms and wands fully extended downwards at a 45° angle to sides.</p>
	<p><b>22. Dispatch aircraft</b></p> <p>Standard salute with right hand and/or wand. Eye contact with marshaller shall be maintained until aircraft begins to taxi.</p>
	<p><b>23. Do not touch controls (technical/servicing communication signal)</b></p> <p>Right arm fully extended above head and fist closed or wand hold in horizontal position; left arm remains at side by knee.</p>





	<p><b>24. Connect ground power (technical/servicing communication signal)</b></p> <p>Arms fully extended above head; left hand opened horizontally and finger tips of right hand moved into and touched open palm of left hand (forming a 'T'). At night, illuminated wands can also be used to form the 'T' above head.</p>
	<p><b>25. Disconnect power (technical/servicing communication signal)</b></p> <p>Arms fully extended above head with finger tips of right hand touching open horizontal palm of left hand (forming a 'T'); then right hand moved away from the left. Power will not be disconnected until authorised by flight crew. At night, illuminated wands can also be used to form the 'T' above head.</p>
	<p><b>26. Negative (technical/servicing communication signal)</b></p> <p>Right arm straight out at 90° from shoulder and wand pointed down to ground or display hand with 'thumbs down'; left hand remains at side by knee.</p>
	<p><b>27. Establish communication via interphone (technical/servicing communication signal)</b></p> <p>Both arms extended at 90° from body and hands moved to cup both ears.</p>
	<p><b>28. Open/close stairs (technical/servicing communication signal) (*)</b></p> <p>Right arm at side and left arm raised above head at a 45° angle, right arm moved in a sweeping motion towards top of left shoulder.</p> <p>(*) This signal is intended mainly for aircraft with the set of integral stairs at the front.</p>

**1.7.4.2 From the Pilot of an Aircraft to a Signalman/Marshaller**

Pilots in the cockpit shall use the following signals with hands plainly visible to the signalman/marshaller, and illuminated as necessary to facilitate observation by the signalman/marshaller:

	<p><b>1. Brakes engaged</b></p> <p>Raise arm and hand, with fingers extended, horizontally in front of face, then clench fist.</p>
	<p><b>2. Brakes released</b></p> <p>Raise arm, with fist clenched, horizontally in front of face, then extend fingers.</p>
	<p><b>3. Insert chocks</b></p> <p>Arms extended, palms outwards, move hands inwards to cross in front of face.</p>
	<p><b>4. Remove chocks</b></p> <p>Hands crossed in front of face, palms outwards, move arms outwards.</p>
	<p><b>5. Ready to start engines</b></p> <p>Raise the appropriate numbers of fingers on one hand indicating the number of the engine to be started.</p>

1.7.5 Standard Emergency Hand Signals

	<p><b>1. Recommend evacuation</b></p> <p>Evacuation recommended based on aircraft rescue and fire-fighting and Incident Commander's assessment of external situation.</p> <p>Arm extended from body, and held horizontal with hand upraised at eye level. Beckoning arm motion angled backward. Non-beckoning arm held against body. Night - same with wands.</p>
	<p><b>2. Recommend stop</b></p> <p>Recommend evacuation in progress be halted. Stop aircraft movement or other activity in progress.</p> <p>Arms in front of head - Crossed at wrists. Night - same with wands.</p>
	<p><b>3. Emergency contained</b></p> <p>No outside evidence of dangerous conditions or 'all-clear.'</p> <p>Arms extended outward and down at a 45° angle. Arms moved inward below waistline simultaneously until wrists crossed, then extended outward to starting position. Night - same with wands.</p>
	<p><b>4. Fire</b></p> <p>Right-hand moved in a 'fanning' motion from shoulder to knee, while at the same time left hand is pointing to area of fire. Night - same with wands.</p>

1.8 Time (SERA.3401)

A time check shall be obtained prior to operating a controlled flight and at such other times during the flight as may be necessary.

Wherever time is utilised in the application of data link communications, it shall be accurate to within 1 second of UTC.

1.9 Requirements for Communications and SSR Transponder (SERA.6005)

1.9.1 Radio Mandatory Zone (RMZ)

VFR flights operating in parts of class E, F or G airspace and IFR flights operating in parts of class F or G airspace designated as a radio mandatory zone (RMZ) shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, on the appropriate communication channel, unless in compliance with alternative provisions prescribed for that particular airspace by the ATS authority.

Before entering a radio mandatory zone, an initial call containing the designation of the station being called, call sign, type of aircraft, position, level, the intentions of the flight and other information as prescribed by the appropriate ATS unit, shall be made by pilots on the appropriate communication channel.

1.9.2 Transponder Mandatory Zone (TMZ)

All flights operating in airspace designated as a transponder mandatory zone (TMZ) shall carry and operate SSR transponders capable of operating on Modes A and C or on Mode S, unless in compliance with alternative provisions prescribed for that particular airspace by the ATS authority.

## 1.10 Air Traffic Control Service

### 1.10.1 Air Traffic Control Clearances (SERA.8015)

#### 1.10.1.1 Operation subject to clearance

An ATC clearance shall be obtained prior to operating a controlled flight, or a portion of a flight as a controlled flight. Such clearance shall be requested through the submission of a flight plan to an air traffic control unit.

The pilot-in-command of an aircraft shall inform ATC if an ATC clearance is not satisfactory. In such cases, ATC will issue an amended clearance, if practicable.

Whenever an aircraft has requested a clearance involving priority, a report explaining the necessity for such priority shall be submitted, if requested by the appropriate ATC unit.

If, prior to departure, it is anticipated that, depending on fuel endurance and subject to re-clearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate ATC units shall be so notified by the insertion in the flight plan of information concerning the revised route (where known) and the revised destination.

An aircraft operated on a controlled aerodrome shall not taxi on the manoeuvring area without clearance from the aerodrome control tower and shall comply with any instructions given by that unit.

#### 1.10.1.2 Read-back of clearances and safety-related information

The flight crew shall read back to the air traffic controller safety-related parts of ATC clearances and instructions which are transmitted by voice. The following items shall always be read back:

- a. ATC route clearances;
- b. clearances and instructions to enter, land on, take off from, hold short of, cross, taxi and backtrack on any runway
- c. runway-in-use, altimeter settings, SSR codes, newly assigned communication channels, level instructions, heading and speed instructions;
- d. transition levels, whether issued by the controller or contained in ATIS broadcasts.

Other clearances or instructions, including conditional clearances and taxi instructions, shall be read back or acknowledged in a manner to clearly indicate that they have been understood and will be complied with.

Voice read-back of CPDLC messages shall not be required, unless otherwise specified by the responsible ATS authority.

#### 1.10.1.3 Coordination of clearances

When prescribed by the ATS unit, aircraft shall contact a downstream ATC unit, for the purpose of receiving a downstream clearance prior to the transfer of control point. Aircraft shall maintain the necessary two-way communication with the current air traffic control unit whilst obtaining a downstream clearance.

### 1.10.2 Adherence to Flight Plan (SERA.8020)

#### 1.10.2.1 General

Except as provided for in § 1.10.2.2 and § 1.10.2.4 below, an aircraft shall adhere to the current flight plan or the applicable portion of a current flight plan submitted for a controlled flight unless a request for a change has been made and clearance obtained from the appropriate ATC unit, or unless an emergency situation arises which necessitates immediate action by the aircraft, in which event as soon as circumstances permit, after such emergency authority is exercised, the appropriate ATS unit shall be notified of the action taken and that this action has been taken under emergency authority.

Unless otherwise authorized or directed by the appropriate ATC unit, controlled flights shall, in so far as practicable:

- when on an established ATS route, operate along the defined centre line of that route;
- when on any other route, operate directly between the navigation facilities and/or points defining that route.

Unless otherwise authorised or directed by the appropriate ATC unit, an aircraft operating along an ATS route segment defined by reference to VOR shall change over for its primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the changeover point, where established. Deviation from this requirement shall be notified to the appropriate ATS unit.

#### 1.10.2.2 Inadvertent Changes

In the event that a controlled flight inadvertently deviates from its current flight plan, the following action shall be taken:

- a. Deviation from track: If the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable;
- b. Variation in true airspeed: If the average true airspeed at cruising level between reporting points varies or is expected to vary by plus or minus 5 per cent of the true airspeed, from that given in the flight plan, the appropriate ATS unit shall be so informed;
- c. Change in time estimate: If the time estimate for the next applicable reporting point, FIR boundary or destination aerodrome, whichever comes first, is found to be in error in excess of 2MIN from that notified to ATS, a revised estimated time shall be notified as soon as possible to the appropriate ATS unit;
- d. Additionally, when an ADS-C agreement is in place, the ATS unit shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS-C event contract.

### 1.10.2.3 **Intended Changes**

Requests for flight plan changes shall include information as indicated hereunder:

- a. Change of cruising level: aircraft identification, requested new cruising level and cruising speed at this level, revised time estimates (when applicable) at subsequent FIR boundaries;
- b. Change of route:
  - Destination unchanged: aircraft identification, flight rules, description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence, revised time estimates and any other pertinent information;
  - Destination changed: aircraft identification, flight rules, description of revised route of flight to revised destination aerodrome including related flight plan data beginning with the position from which requested change of route is to commence, revised time estimates, alternate aerodrome(s) and any other pertinent information.

### 1.10.2.4 **Weather Deterioration below the VMC**

When it becomes evident that flight in VMC in accordance with its current flight plan will not be practicable, a VFR flight operated as a controlled flight shall either:

- a. request an amended clearance enabling the aircraft to continue in VMC to destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required;
- b. if no clearance in accordance with (a) can be obtained, continue to operate in VMC and notify the appropriate ATC unit of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome;
- c. if operated within a CTR, request authorization to operate as a special VFR flight;
- d. request clearance to operate in accordance with the instrument flight rules.

### 1.10.3 **Position Reports (SERA.8025)**

Unless exempted by the competent ATS authority or by the appropriate ATS unit under conditions specified by that authority, a controlled flight shall report to the appropriate ATS unit, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any other required information. Position reports shall similarly be made in relation to additional points when requested by the appropriate ATS unit. In the absence of designated reporting points, position reports shall be made at intervals prescribed by the appropriate ATS authority or specified by the appropriate ATS unit.

Controlled flights providing position information to the appropriate ATS unit via data link communications shall only provide voice position reports when requested.

When a controlled flight has been exempted from the requirement to report over compulsory reporting points pilots shall, unless automated position reporting is in effect, resume voice or CPDLC position reporting:

- when so instructed;
- when advised that the ATS surveillance service has been terminated, or;
- when advised that the ATS surveillance identification is lost.

The format of position reports shall be in accordance with Model AIREP special.

URL: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1185&from=EN>

### 1.10.4 **Termination of Control (SERA.8030)**

A controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate ATC unit as soon as it ceases to be subject to ATC.

### 1.10.5 **Communications (SERA.8035)**

#### 1.10.5.1 **General**

An aircraft operated as a controlled flight shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and establish two-way communication as necessary with, the appropriate ATC unit, except as may be prescribed by the relevant ATS authority in respect of aircraft forming part of aerodrome traffic at a controlled aerodrome.

The requirement for an aircraft to maintain an air-ground voice communication watch shall remain in effect when CPDLC has been established.

*Note 1: Aircraft with a MTOW of 136000KG or more shall include the word "heavy" immediately after the aircraft call sign at initial contact with ATC.*

*Note 2: Student pilots should include the word "solo" immediately after the aircraft call sign at initial contact with each ATS unit or Basic Information unit.*

#### 1.10.5.2 **Communication Failure in VMC**

A controlled flight experiencing communication failure in VMC shall:

- set transponder to Code 7600;
- continue to fly in VMC;



- land at the nearest suitable aerodrome;
- report its arrival by the most expeditious means to the appropriate ATS unit.

### 1.10.5.3 Communication Failure in IMC

A controlled flight experiencing communication failure in IMC, or where it does not appear feasible to continue in accordance with VMC shall:

- set transponder to Code 7600;
- maintain for a period of 7MIN the last assigned speed and level. The period of 7MIN starts:
  - if operating on a route without compulsory reporting points or if instructions have been received to omit position reports either:
    - at the time the last assigned level is reached, or
    - at the time the transponder is set to Code 7600, whichever is later;
  - if operating on a route with compulsory reporting points and no instruction to omit position reports has been received either:
    - at the time the last assigned level is reached, or
    - at the previously reported pilot estimate for the compulsory reporting point, or
    - at the time of a failed report of position over a compulsory reporting point, whichever is later;
- thereafter, adjust level and speed in accordance with the filed flight plan;
- if being radar vectored or proceeding offset according to RNAV without a specified limit, proceed in the most direct manner possible to re-join the current flight plan route, including any changes brought about by subsequent clearances, not later than the next significant point;
- proceed according to the current flight plan route to the appropriate designated navigation aid serving the destination aerodrome and, when required to ensure compliance with item (f) below, hold over this aid until commencement of descent;
- commence descent from the navigation aid specified in item (e) at, or as close as possible to, the EAT last received and acknowledged or, if no EAT has been received and acknowledged, at, or as close as possible to, the ETA resulting from the current flight plan;
- complete a normal instrument approach procedure as specified for the designated navigation aid;
- land, if possible, within 30MIN after the ETA specified in item (f) or the last acknowledged EAT, whichever is later.

*Note: The pilot who is given the following message "Delay not determined, X ... aircraft holding for weather improvement" shall not consider it as an EAT for the purpose of the radio communication failure procedures. Pilots whose radio fails after they have received this message, but before an EAT is given, shall not attempt to land at their planned aerodrome of destination but should fly at their assigned level to an area in which VMC prevail and where they can approach and land visually at a suitable aerodrome.*

## 1.11 Minimum fuel and fuel emergency (SERA.11012)

When a pilot reports a state of minimum fuel, the controller will inform the pilot as soon as practicable of any anticipated delays or that no delays are expected.

When the level of fuel renders declaring a situation of distress necessary, the pilot, in accordance with SERA.14095, shall indicate this by using the radiotelephony distress signal (MAYDAY), preferably spoken 3 times, followed by the nature of the distress condition (FUEL).

## 1.12 Degraded aircraft performance (SERA.11013)

### 1.12.1 General

Whenever, as a result of failure or degradation of navigation, communications, altimetry, flight control or other systems, aircraft performance is degraded below the level required for the airspace in which it is operating, the flight crew shall advise the ATC unit concerned without delay. Where the failure or degradation affects the separation minimum currently being employed, the controller will take action to establish another appropriate type of separation or separation minimum.

### 1.12.2 Degradation or failure of the RNAV system

When an aircraft cannot meet the specifications, as required by the RNAV/RNP airspace, route or procedure, as a result of a failure or degradation of the RNAV system, a revised clearance shall be requested by the pilot.

### 1.12.3 Loss of vertical navigation performance required for reduced vertical separation minima (RVSM) airspace

- The pilot shall inform ATC as soon as possible of any circumstances where the vertical navigation performance requirements for RVSM airspace cannot be maintained. In such cases, the pilot shall obtain a revised ATC clearance prior to initiating any deviation from the cleared route and/or flight level, whenever possible. When a revised ATC clearance cannot be obtained prior to such a deviation, the pilot shall obtain a revised clearance as soon as possible thereafter.
- During operations in or vertical transit through reduced vertical separation minimum (RVSM) airspace with aircraft not approved for RVSM operations, pilots shall report non-approved status as follows:
  - at initial call on any channel within RVSM airspace;

- ii. in all requests for level changes; and
  - iii. in all readbacks of level clearances.
3. Air traffic controllers will explicitly acknowledge receipt of messages from aircraft reporting RVSM non-approved status.
4. Degradation of aircraft equipment – pilot reported
  - i. When informed by the pilot of an RVSM-approved aircraft operating in RVSM airspace that the aircraft's equipment no longer meets the RVSM requirements, ATC will consider the aircraft as non-RVSM-approved.
  - ii. Pilots shall inform ATC, as soon as practicable, of any restoration of the proper functioning of equipment required to meet the RVSM requirements.
5. Severe turbulence – not forecast
  - i. When an aircraft operating in RVSM airspace encounters severe turbulence due to weather or wake vortex that the pilot believes will impact the aircraft's capability to maintain its cleared flight level, the pilot shall inform ATC. ATC will establish either an appropriate horizontal separation or an increased minimum vertical separation.
  - ii. ATC will, to the extent possible, accommodate pilot requests for flight level and/or route changes and will pass on traffic information as required.
  - iii. ATC will solicit reports from other aircraft to determine whether RVSM should be suspended entirely or within a specific flight level band and/or area.
  - iv. The ACC suspending RVSM will coordinate with adjacent ACCs such suspension(s) and any required adjustments to sector capacities, as appropriate, to ensure an orderly progression to the transfer of traffic.
6. Severe turbulence – forecast
  - i. When a meteorological forecast predicts severe turbulence within RVSM airspace, ATC will determine whether RVSM should be suspended and, if so, for how long and for which specific flight level(s) and/or area.
  - ii. In cases where RVSM will be suspended, the ACC suspending RVSM will coordinate with adjacent ACCs with regard to the flight levels appropriate for the transfer of traffic, unless a contingency flight level allocation scheme has been determined by letter of agreement. The ACC suspending RVSM will also coordinate with adjacent ACCs applicable sector capacities, as appropriate.

### 1.13 ACAS Resolution advisory (RA) (SERA.11014)

In the event of an ACAS RA, pilots shall:

1. respond immediately by following the RA as indicated, unless doing so would jeopardize the safety of the aeroplane;
2. follow the RA even if there is a conflict between the RA and an ATC instruction to manoeuvre;
3. not manoeuvre in the opposite sense to an RA;
4. as soon as possible, as permitted by flight crew workload, notify the appropriate ATC unit of any RA which requires a deviation from the current ATC instruction or clearance;
5. promptly comply with any modified RAs;
6. limit the alterations of the flight path to the minimum extent necessary to comply with the RAs;
7. promptly return to the terms of the ATC instruction or clearance when the conflict is resolved; and
8. notify ATC when returning to the current clearance.

When a pilot reports an ACAS resolution advisory (RA), the controller will not attempt to modify the aircraft flight path until the pilot reports 'CLEAR OF CONFLICT'.

Once an aircraft departs from its ATC clearance or instruction in compliance with an RA, or a pilot reports an RA, the controller ceases to be responsible for providing separation between that aircraft and any other aircraft affected as a direct consequence of the manoeuvre induced by the RA. The controller will resume responsibility for providing separation for all the affected aircraft when:

1. the controller acknowledges a report from the flight crew that the aircraft has resumed the current clearance, or
2. the controller acknowledges a report from the flight crew that the aircraft is resuming the current clearance and issues an alternative clearance which is acknowledged by the flight crew.

### 1.14 Special aircraft observations (SERA.12005)

Special observations shall be made and reported by all aircraft whenever the following conditions are encountered or observed:

1. moderate or severe turbulence; or
2. moderate or severe icing; or
3. severe mountain wave; or
4. thunderstorms, without hail, that are obscured, embedded, widespread or in squall lines; or
5. thunderstorms, with hail, that are obscured, embedded, widespread or in squall lines; or
6. heavy dust storm or heavy sandstorm; or
7. volcanic ash cloud; or
8. pre-eruption volcanic activity or a volcanic eruption.

Flight crews shall compile the reports using forms based on the model AIREP SPECIAL form. The detailed instructions for reporting, shall be complied with.

URL: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1185&from=EN>

1. The detailed instructions, including the formats of messages and the phraseologies shall be used by flight crews when transmitting air-reports and by air traffic services units when retransmitting such reports.
2. Special air-reports containing observations of volcanic activity shall be recorded on the special air-report of volcanic activity form. Forms based on the model form for special air-reports of volcanic activity shall be provided for flight crews operating on routes which could be affected by volcanic ash clouds.

## 1.15 Supplementary Rules

### 1.15.1 Ultra-Light Motorized Aircraft

#### 1.15.1.1 In Belgium

Flights with ULM shall only take place during HJ, in VMC, with ground or water in sight and with a visibility of minimum 3KM.

Unless authorised by the appropriate ATS unit, ULM shall not be flown in controlled airspace.

Unless authorised by the CAA, ULM shall not be flown:

- over cities, residential areas, industrial installations or an open-air assembly of people;
- in prohibited, restricted or danger areas.

ULM shall not be used for aerobatic flights.

#### 1.15.1.2 In Luxembourg

Flights with ULM shall only take place during HJ, in VMC and at an altitude of maximum 3500 FT AMSL or 1000 FT AGL, whichever is higher. Except for landing or take-off, no flight shall be performed below 50M AGL.

Unless authorised by the competent ATS authority, ULM shall not be flown in Luxembourg TMA. In order to obtain such authorisation, the pilot of an ULM shall be holder of an RTF qualification and be able to maintain two-way communications with ATS.

ULM shall not be used for aerobatic flights.

### 1.15.2 Lighter-than-air Aircraft, Tele-guided Devices, Rockets and Kites

#### 1.15.2.1 In Belgium

The authorisation of the CAA is needed in case of:

- ascents of manned free gas balloons over the congested areas of cities, towns or settlements;
- ascents of airships and captive balloons;
- operation of devices that might cause damage to aircraft in flight such as tele-guided devices, rockets or kites.

Manned free balloons shall not enter controlled airspace unless an ATC clearance has been obtained before ascent and at least 10 MIN before entering the controlled airspace. When entering the controlled airspace, two-way radiocommunications shall be established and maintained with the appropriate control unit.

It is recommended to notify all ascents of manned free balloons to Brussels FIC by phone (+32 (0) 2 206 27 31) or via the operational website of skeyes ([ops.skeyes.be](http://ops.skeyes.be) - for registered users only) at least one hour before the estimated time of departure. Following information should be provided:

- identification of the balloon;
- name of the pilot;
- telephone number of the place where the pilot can eventually be contacted until the start of the ascent;
- location of the ascent;
- estimated time (UTC) of the ascent;
- estimated time of the flight, maximum altitude and estimated track.

*Note 1: In case of loss of two-way radio communications, manned free balloons shall immediately leave the airspace for which a clearance had been obtained.*

*Note 2: When notifying the balloon flight via the Internet, a confirmation form will be displayed. The internet balloon notification form cannot be used for flights crossing international borders. In this case an appropriate ICAO flight plan shall be filed.*

#### 1.15.2.2 In Luxembourg

Captive balloon and kite ascents above 100M AGL are subject to authorization from the CAA. These ascents are in any case forbidden in each approach sector of an aerodrome up to 100 M on either side of the extended runway centre line from the runway threshold up to a distance of 2KM before threshold.

Manned free balloons and airships may be operated under the following conditions:

- a balloon or an airship shall not be flown between sunset and sunrise unless it is equipped with at least one flashing light visible in all azimuths and in an angle of at least 30 degrees below and 30 degrees above the horizontal line and at a distance of at least 8KM;
- a balloon overtaking, while climbing, has the right of way over a balloon being overtaken; the latter shall deviate by all appropriate means from the trajectory of the overtaking balloon;

- only water and/or fine sand may be used as ballast. Dropping of ballast or stays may only be done without undue hazard to persons or property on the ground;
- the operator and the pilot-in-command shall comply with the procedures laid down by the constructor in the operational and maintenance manuals.

*Note: Manned balloons fixed to the ground, for any reason, are not to be considered as captive balloons.*

### 1.15.3 Flights Requiring Special Handling by ATC

#### 1.15.3.1 In Brussels FIR/UIR below FL245

Flights conducted in the Brussels FIR/UIR below FL245 (Luxembourg airspace below the upper limit of Luxembourg TMA excl) that have a specific character, requiring special handling by ATC (such as calibration flights, test flights, check flights, radio relay missions and aerial surveys) must be coordinated at least five working days in advance with the Special Activities Coordination Cell (SPACC) of skeyes, using the form available on the skeyes website ([www.skeyes.be](http://www.skeyes.be)).

The SPACC will coordinate the requests with the appropriate ATS authorities and formulate a reply that contains the conditions to execute the requested mission.

The reply contains a file number "SAYYYY.NNNN", where "YYYY" stands for the year and "NNNN" for the file number itself. Only this reference shall be used by the operator in communications with the appropriate ATS service.

The submission of a flight plan for each aircraft is compulsory. Item 15 shall clearly indicate the area and/or route and/or place of the mission and item 18 shall include the reference number (e.g. "RMK/PHOTOMISSION SAYYYY.NNNN" or "RMK/RADIO RELAY SAYYYY.NNNN").

#### 1.15.3.2 In Brussels UIR above FL245

Flights conducted in the Brussels UIR above FL245 that have a specific character, requiring special handling by ATC (such as calibration flights, test flights, check flights, etc.) must be coordinated at least 24HR in advance with Maastricht UAC by filling the web form available from <https://www.eurocontrol.int/muac#operational-contacts> or by sending an email with equivalent content to [masuac.testflights@eurocontrol.int](mailto:masuac.testflights@eurocontrol.int) to obtain acceptance.

Supplementary contact: Executive Duty Supervisor

TEL: +31 43 366 2022

FAX: +31 43 366 1320

---

## 2 MILITARY

---

### 2.1 Introduction

#### 2.1.1 General Air Traffic

General Air Traffic (GAT): Flights conducted in accordance with the regulations and procedures promulgated by the State Civil Aviation authorities and operating under the control or authority of the civil ATS organization.

#### 2.1.2 Operational Air Traffic

##### 2.1.2.1 General

Operational Air Traffic (OAT): Flights that do not necessarily comply with the provisions stated for GAT and for which rules and procedures have been specified by appropriate authorities. OAT is allowed during Steenokkerzeel ATCC OPS hours only (see [GEN 3.3](#)).

Outside OPS hours, Steenokkerzeel ATCC does not provide any ATS (nor ATC nor FIS). Planned military flights outside the OPS hours shall therefore:

- file a GAT FPL (Remark: The MIL TACAN routes TG1 and TL4 cannot be filed GAT); or obtain special permission from COMOPSAIR to file OAT (72 HR in advance, see [ENR 1.10, § 2.1](#));
- and, contact the civil FIC when entering uncontrolled airspace.

Belgian or foreign QRA aircraft flying in the Brussels FIR/UIR outside Steenokkerzeel ATCC OPS hours will be under control of CRC Beauvechain or under control of an aerodrome ATS unit during their mission.

Controlled flights are:

- flights conducted within controlled airspace and receiving a control service,
- flights in TRA and in TSA above 4500 FT AMSL, and
- flights performing an air defence mission (see [§ 2.16](#)).

Uncontrolled VFR flights are authorised below 4500 FT AMSL, outside controlled airspace (see [ENR 1.2, § 2.5](#)).

Within airspace controlled by military authorities, military pilots shall comply with OAT regulations in accordance with ATS airspace classification. In airspace controlled by civil authorities, pilots should comply with GAT regulations. Military pilots shall cross ATS routes and airways under radar control. If no contact can be established with Steenokkerzeel ATCC, the appropriate civil ATS unit shall be contacted for crossing clearance.

All military activity in Belgian airspace above 4500FT AMSL require an airspace reservation (see [ENR 5.2, § 1.3](#), optional for transiting Belgian military aircraft) and a correct FPL (see [ENR 1.10](#)). Transits of foreign aircraft require only a correct FPL (see [ENR 1.10](#)) but shall adhere to the airspace permeability rules (see [ENR 5.2, § 1.2](#)).

*Note: If Police flights are unable to comply with the regulations laid down in this AIP, derogation must be obtained from COMOPSAIR Air Operations Support.*

### 2.1.2.2 EUROAT

The Eurocontrol specification for harmonized rules for OAT under Instrument Flight Rules inside controlled airspace of the ECAC area (EUROAT) is applicable within the Brussels FIR/UIR.

The following national exceptions to EUROAT apply:

- a. Applicability of ICAO Rules of the Air
 

“Foreign military flights may be conducted according GAT or OAT rules, depending upon operational requirements of the mission.
- b. Flight Plan
 

Specific regulations related to FPL are laid down in [ENR 1.10](#).
- c. Communication
 

For operational reason, Belgian military aircraft are not required to maintain a continuous listening watch on guard frequency.

The carriage of a serviceable mode S (ELS or EHS) SSR transponder is highly recommended but not yet compulsory for state aircraft flying OAT within the Brussels FIR/UIR including low level VFR flights.

For RPAS flights, the Belgian Military Aviation Authority may approve alternative methods of communication that provide an equivalent level of safety.
- d. Altimeter setting procedures
 

Specific regulations related to altimeter setting procedures are laid down in [ENR 1.7](#).
- e. Speed limitation
 

Specific regulations related to Speed limitation are laid down in [§ 2.15.3](#).
- f. Military formation flight
 

Specific regulations related to military formation flight are laid down in [§ 2.3.2](#).
- g. Supersonic flights
 

Specific regulations related to supersonic flights are laid down in [§ 2.9](#).
- h. Flight in an Airspace Reservation
 

Even when declaring MARSAs aircraft will receive TRA service. TRA service see [GEN 3.3, § 3.2.2](#).

When flying an air defense mission the pilot shall receive Close Positive or Loose Positive Control (see [§ 2.16.2](#)), therefore MARSAs can not be declared.
- i. Radio communication failure
 

Specific regulations related to radio communication failure are laid down in [ENR 1.6, § 2.4](#).
- j. Formation lost wingman (lost lead)
 

National procedures differ from the definition given by EUROAT.

## 2.2 Compliance with the Rules of the Air

The operation of an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with the general rules and shall, when in flight, be conform the ATS airspace classification (see [ENR 1.4](#)) and in addition, either with:

- the Visual Flight Rules (see [ENR 1.2](#))
- the Instrument Flight Rules (see [ENR 1.3](#))

## 2.3 Separation

### 2.3.1 Minimum Separation

#### 2.3.1.1 Separation applied by the Pilot-in-Command

When, in accordance with airspace classification, separation is the responsibility of the pilot-in-command, a minimum standard separation shall be maintained.

- Military aircraft shall not be flown closer than 2000FT horizontally to civil aircraft, military transport aircraft or military light aircraft.
- Military aircraft shall not be flown closer than 1NM to helicopters.
- It is prohibited to position an aircraft in close formation with a high-winged aircraft without the knowledge of the pilot-in-command of the latter.
- It is prohibited to simulate attacks on training aircraft, aircraft participating to air refuelling operations and on helicopters operating in the HTA.

### 2.3.1.2 Radar Separation

When, in accordance with airspace classification, separation is the responsibility of the air traffic/defence controller, the regulations laid down in *ICAO Doc 4444*, *ICAO Doc 7030* and *ICAO Doc 9574* apply.

In military CTR and military TMA, horizontal separation can be reduced to:

1. 3 NM when the aircraft are within 40 NM of the Radar antenna, with a 5 sec radar refresh rate minimum (For approach control purpose only).
2. 2.5 NM between succeeding aircraft which are established on the same final approach track within 10 NM of the runway end. A reduced separation of minimum of 2.5 NM may be applied, provided:
  - braking action is reported as good and runway occupancy times are not adversely affected by runway contaminants such as slush, snow or ice;
  - a radar system with an update rate of 5 seconds or less is used and that the aircraft are within 40NM of the Radar antenna;

the aerodrome controller is able to observe visually the runway-in-use and associated exit and entry taxiways; distance-based wake turbulence separation is respected;

aircraft approach speeds are closely monitored by the controller and when necessary adjusted so as to ensure that separation is not reduced below the minimum.

If the intentions of an aircraft are unknown, the vertical separation, if applied, will be enlarged to 5000FT in order to ensure sufficient time for the controller to react in order to have ICAO standard separation at all times. The horizontal separation to be applied to an aircraft with unknown intentions remains 5NM.

Aircraft with unknown intentions are defined as:

- Aircraft entering or within controlled airspace, a TRA or a TSA without radio contact with the appropriate ATC/AD agency.
- Aircraft entering controlled airspace, a TRA or a TSA without clearance from the appropriate ATC/AD agency.
- Aircraft within controlled airspace, a TRA or a TSA diverging from their last received clearance.
- Aircraft on an ATS route or within a CTA with unclear intentions.

The intentions of an aircraft flying within uncontrolled airspace even without radio contact are not to be considered as unknown.

### 2.3.1.3 Separation (visual) applied by AD controllers

In the circuit VFR applies and consequently pilots are responsible for the separation. The controller will assist by providing all necessary information about other traffic in the CTR and by issuing clearances and instructions for sequencing. Clearances to land and to take-off are issued respecting the following rules:

1. Take-off: aircraft will only be cleared for take-off when the preceding departing aircraft has crossed the end of the RWY or has commenced a turn and when the preceding landing aircraft has vacated the RWY.
2. Landing: aircraft will only be cleared to land when the preceding departing aircraft has crossed the end of the RWY or has commenced a turn and when the preceding landing aircraft has vacated the RWY.

These rules do not apply to:

- Aircraft in formation.
- Aircraft landing on different RWYs when simultaneous landings are possible.
- Aircraft under operational requirements, incompatible with these rules.

### 2.3.2 Formation Flights

- a. Military Authority Assumes Responsibility for Separation of Aircraft (MARSA)

MARSA acknowledges from the respective formation (mission) leader to the ATCO that the military participants involved in an OAT flight assume responsibility for separation (safety distance) between participating military aircraft, thus relieving the ATCO from his responsibility to ensure prescribed separation minima. The remaining responsibility of the ATCO is to provide prescribed separation between military aircraft engaged in MARSA operations and other non-participating IFR aircraft.

- b. Separation

ATC is only allowed to treat a formation as a single speaking unit if all elements stay within a radius of 1NM horizontally from the lead aircraft and within 100FT vertically from the lead aircraft (military standard formation).

Exceptionally, a controller may increase the separation between the lead aircraft and all other elements within the formation to maximum 3NM horizontally and/or 1000FT vertically. (non-standard formation)

If a formation is more widely dispersed, the elements of it shall be regarded as separate speaking units. During initial radio contact, the leader shall announce the number of aircraft and the type of formation.

To ensure that the minimum required horizontal radar separation, for each element of a military standard formation, is guaranteed with other traffic, an ATCO shall increase the minimum required horizontal radar separation from other traffic with 1NM, in the case that the other traffic is also a military standard formation, 2NM will be added.

For non-standard formation the minimum required horizontal and/or vertical separation with other traffic shall be increased according to the maximum cleared distance from the lead aircraft.

During radar trail departures and recoveries, a controller may allow the separation between the lead aircraft and all other elements of the formation to be higher than 3NM horizontally and/or 1000FT vertically. For this type of departure / recovery, all elements of the formation shall squawk Mode 3/A and Mode C.

Radar trail departures and recovery shall only be granted by the controller if minimum radar separation with other traffic can be guaranteed for each element of the formation.

Unless otherwise coordinated, all elements of the formation shall stay within a radius of 1NM horizontally from the lead aircraft and within 100FT vertically from the lead aircraft whilst crossing civil controlled airspace (e.g airways) or before being transferred to a non Belgian Air Force ATS unit.

c. Safety distance between two or more formation flights

In the event that an aerial operation requires two or more formation flights to operate below prescribed IFR separation minima between individual formation flights, the formation leaders shall be responsible for sufficient safety distance between their individual formation flights.

This responsibility shall be accepted from the respective formation leaders by stating "MARSAS", relieving the ATCO from his responsibility to maintain prescribed IFR separation minima in regard to the formation flights concerned.

d. Formation break up (split)

Except in an emergency, a formation break up shall only occur after planning, advanced coordination and approval by ATC.

Prior to the planned formation break up, the formation leader shall inform ATC whether to break up the formation flight into single aircraft or elements.

The formation leader shall inform ATC about his intended aircraft/element break up sequence, call signs and position of these aircraft/elements relative to the formation leader's aircraft. Aircraft/elements shall receive separate clearances and transponder codes from ATC.

As soon as the formation break up has been directed by ATC for the respective aircraft/element, this aircraft/element is no longer part of the previous formation flight and shall follow subsequent ATC instructions issued to them.

However, ATC shall only assume responsibility for separation between the aircraft/elements that are conducting the formation break up after prescribed separation minima have been established. Until then, the individual pilot-in-command/ element-leader is responsible for maintaining sufficient safety distance.

e. Formation join up

When a formation join up is controlled by an ATCO, he/she shall apply standard separation criteria between individual aircraft wishing to join a formation, until the formation leader accepts responsibility for maintaining sufficient safety distance between the aircraft concerned.

The formation leader, once he is safely able to do so, shall confirm his assumption of responsibility for maintaining sufficient safety distance between his aircraft, the aircraft comprising the formation and the joining aircraft by stating "MARSAS"; whereupon ATC shall transfer responsibility for the joining aircraft to the formation leader.

f. Lost wingman (Lost lead) procedures

In any lost wingman situation, an immediate initial safety distance between aircraft is essential for flight safety to avoid a potential mid-air collision. Therefore, each wingman losing sight/contact of the aircraft preceding him or being unable to maintain formation for other reasons shall immediately execute the procedures relevant to his flight position, while transitioning to instrument flying and resuming own navigation.

*Note: Irrespective of the nationally prescribed lost wingman procedures, their execution may result in a loss of minimum IFR separation in respect to other air traffic and is an emergency situation for ATC.*

Recommendation: in order to immediately alert ATC and allow to safely resolve resulting conflict potentials without undue delay, the following should be executed in addition to the appropriate lost wingman procedure:

- Formation leader squawks emergency and informs the appropriate ATC unit as soon as possible.
- Each pilot-in-command executing a lost wingman procedure squawks as directed by the appropriate ATC unit as soon as practicable.

g. Formation radio failure

A formation flight in which a flight member experiences total radio failure shall comply with the procedures outlined for this case within the standard operating procedures (SOP) of their appropriate national authority.

If the SOP requires deviations from a given clearance, the flight leader or the pilot of aircraft with the serviceable radio shall inform the ATC unit and request a different clearance.

In the event that the total radio failure affects all aircraft of the formation flight, the formation leader shall ensure compliance with basic ICAO radio failure procedures.

In case a formation break up is required for safe approach and landing all aircraft or element-leader of the formation flight shall squawk Mode 3, Code 7600, as soon as the break-up was initiated by the formation leader and continue to ensure compliance with basic ICAO radio failure procedures.

## 2.4 Airborne and traffic collision avoidance system (ACAS/TCAS)

### 2.4.1 Single Aircraft

If equipped with ACAS/TCAS, single aircraft shall operate in the traffic alert/resolution advisory (TA/RA) mode outside ARES.

## 2.4.2 Formation Flight

In a standard military formation, if equipped with ACAS/TCAS, only the lead aircraft shall operate in the TA/RA mode. Nevertheless, the aircraft operating in the TA/RA mode shall also be the one operating the transponder.

In the event that mission requirements would necessitate to not using ACAS/TCAS, the rules of the state in which the flight is taking place shall apply. In the absence of such rules, a deviation from § 2.4.1 or § 2.4.2 is not permissible, unless prior permission has been obtained from the appropriate national authority.

## 2.5 Cruising Level

The cruising levels at which a flight or a portion of a flight is to be conducted shall be in terms of:

- Flight levels (FL), for flights above the TA (4500FT)
- Altitudes (ALT), for flights at or below the TA (4500FT)

The Levels at which a flight shall be conducted are specified in the FPL:

- In terms of flight level for that part of the flight which is conducted at or above the transition level.
- In terms of altitude for that part of the flight which is conducted at or below the transition altitude.

The chosen flight levels shall ensure an adequate terrain clearance at all points along the route and shall conform to the traffic requirements and be in accordance with the table of cruising levels.

The information required determining the lowest flight level to ensure terrain clearance may be obtained from the air traffic control centres or from the Belgian Air Component meteorological offices. A chart for converting QNH values to flight levels is shown in ENR 1.7, § 1.3 for this purpose.

The transition altitude for the aerodromes of departure and arrival and for alternate aerodromes located outside the Brussels FIR shall be noted. These transition altitudes may be obtained from the air traffic control services.

Pilots shall keep in mind that rules concerning altimeter setting and transition altitude may differ from one country to another.

The following procedure shall be applied in non controlled airspaces:

- The altimeter setting 1013.2 HPA (29.92 Inches) shall always be used above 4500FT AMSL. At or below this altitude, the regional QNH altimeter setting will be used.
- Non-controlled VFR flights conducted at or below 3000FT AGL are not to maintain a semi-circular cruising altitude.

## 2.6 Persons on Board

At the first contact with a military ATS unit on an aerodrome the pilot shall report the number of POB. In case of omission the ATS unit will request this information.

## 2.7 Low Flying Regulations

### 2.7.1 Applicability

In the Brussels FIR, the low flying regulations specified below are applicable to every OAT flight conducted below 4500FT AMSL and to every OAT flight if descending from controlled airspace and passing the transition level. Security flights under control of a Belgian Air Defence Station are an exception.

### 2.7.2 Minimum Safety Height

#### 2.7.2.1 General

The minimum safety height is the vertical buffer between the flown altitude and the top of every obstacle in a specified radius along the flight path of an aircraft. The minimum safety height shall be respected in order:

- to reduce the risk of collision with ground obstacles
- to allow manoeuvring away from populated areas in the event of technical aircraft failure
- to reduce noise pollution

All military aircraft shall comply with the rules described in this paragraph, except:

- for take-off and landing
- for SAR operations (real and training mission)
- for a mission ordered by other ministries (e.g. inspection of fishing activities, inspection of the sea pollution, ...)
- if approved by COMOPSAIR
- in the cases specified in § 2.7.2.2.2, § 2.7.2.2.3 (fixed wing aircraft) and § 2.7.2.3.2 (helicopters).

#### 2.7.2.2 Minimum Safety Height for Fixed Wing Aircraft

##### 2.7.2.2.1 General

- VFR day flight:  
1000FT above the highest obstacle within a radius of 600M of the aircraft, except for Belgian light propeller training aircraft for which a minimum altitude of 500FT above the highest obstacle within a radius of 600M of the aircraft must be respected.



- VFR night flight:  
1000FT above the highest obstacle within a radius of 5KM of the aircraft.
- IFR flight:  
1000FT above the highest obstacle within 8KM of the estimated position of the aircraft

#### 2.7.2.2.2 *Exceptions: Application of Higher Minima*

Over congested areas, towns, industrial sites, nuclear power station, LNG terminals and gatherings of people in the open, aircraft shall maintain a height sufficient to permit an emergency landing without endangering any persons or property on the surface. This height shall not be less than 2000FT (1000FT for twin engine police aircraft) above the highest obstacle within a radius of 600M from the aircraft in VFR, or within a radius of 8KM in IFR.

It is prohibited for military aircraft to fly over Brussels city below FL200, except for landing and take-off at EBBR. It is recommended that jet aircraft should avoid other large cities below FL200.

Over a strip of 5NM either side of the Belgian coastline at least FL100 must be maintained, except for flights to and from the United Kingdom and for aircraft participating in combined Land - Air Component anti-aircraft exercises at Lombardsijde for which the minimum altitude to cross this strip is 2000FT. This rule is not applicable to state aircraft verifying marine and surface water pollution.

#### 2.7.2.2.3 *Exceptions: Application of Lower Minima*

Belgian fixed wing aircraft are allowed to operate below 1000FT AGL:

- Within the lateral limits of the LFA Ardennes, with a minimum of 500FT above the highest obstacle within a radius of 600M of the aircraft, if all of the following conditions are fulfilled:
  - VFR day flight
  - If essential for the training value of the mission
- Within the LFA Ardennes, when activated by NOTAM, the minimum safety height to be respected is 250FT above the highest obstacle within a radius of 600M of the aircraft.
- Outside the lateral limits of the LFA Ardennes, Belgian fixed wing aircraft are only authorised to fly below 1000FT AGL according to a COMOPSAIR tasking (e.g. final portion of a COA IPR fly past) and if all of the following conditions are fulfilled:
  - VFR day flight
  - Minimum 500FT above the highest obstacle within a radius of 600M of the aircraft.
- In the LFA11, when activated by NOTAM, but only outside the strip mentioned in [§ 2.7.2.2.2](#) above, the minimum safety height to be respected is 250FT above the highest obstacle within a radius of 600M of the aircraft if all of the following conditions are fulfilled:
  - The aircraft must carry a serviceable radar altimeter
  - The horizon must be clearly defined
  - If the radar altimeter is inoperative, the minimum height to be respected is 500FT above the highest obstacle within a radius of 600M of the aircraft

The overflight of ships not participating in the exercise shall be avoided at all times.

Foreign fixed wing aircraft are allowed to operate below 1000FT AGL:

- Within the LFA Ardennes, after prior authorisation from COMOPSAIR (See [ENR 5.2, § 3.2](#)) and when subsequently activated by NOTAM, the minimum safety height to be respected is 250FT above the highest obstacle within a radius of 600M of the aircraft.

Fixed wing aircraft, Belgian and foreign, are allowed to operate below 1000FT AGL:

- In exercise ranges designated as danger area or restricted zones, according to the applicable publications and procedures (AIP, range orders...).

The minimum safety height for Belgian light propeller training aircraft operating in VFR by day is 500FT above the highest obstacle within a radius of 600M of the aircraft.

Belgian military training aircraft SF-260 are authorised to perform Practice Forced Landings (PFL) within the lateral limits of [EBD37 - TRAINING SECTOR](#), for which the minimum safety height to be respected is 200FT above the highest obstacle within a radius of 600M of the aircraft.

15 W fixed wing aircraft are authorised to fly below 1000FT AGL:

- Within the lateral limits of the LFA Ardennes by night with NVA/NVG the minimum safety height to be respected is 500FT above the highest obstacle within a radius of 1NM of the aircraft.
- Along predetermined routes using NVG the minimum safety height to be respected is 500FT above the highest obstacle within a radius of 1NM of the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas.
- Along the 15W navigation routes by daylight in order to update the obstacle clearance sheet on a yearly basis the minimum safety height to be respected is 500FT above the highest obstacle within a radius of 600M of the aircraft.
- Along prescribed run-ins of drop zones published in the latest version of the SYLTEC 9102 DROPZONES, according following limitations:
  - VFR by day: minimum safety height to be respected is 500FT above the highest obstacle within a radius of 600M of the aircraft.

- VFR by night without NVA/NVG: minimum safety height to be respected is 1000FT above the highest obstacle within a radius of 1 NM of the aircraft AND minimum safety height to be respected is 500FT above the highest obstacle within a radius of 5KM of the aircraft.
- VFR by night with NVA/NVG: minimum safety height to be respected is 500FT above the highest obstacle within a radius of 1 NM of the aircraft.

### 2.7.2.3 **Minimum Safety Height for Helicopters**

#### 2.7.2.3.1 *General*

- VFR day flight:  
500FT above the highest obstacle within a radius of 50M of the helicopter.
- VFR night flight:  
500FT above the highest obstacle within a radius of 3KM of the helicopter.
- Night vision aids (allowed exclusively for Belgian helicopters):  
In the HTA at an altitude between GND and 500FT AGL, speed and height shall be adapted in function of the contours and cover of the ground. Along the predetermined routes: 200FT above the highest obstacle within a radius of 3KM of the helicopter.

#### 2.7.2.3.2 *Exceptions*

Belgian military helicopters are authorised to operate at or above 300FT AGL along predetermined routes and within CTR.

In all the HTAs and in the LFA 11, a lower minimum safety height is allowed for Belgian helicopters. The helicopters booked in those areas are authorised to fly within the published vertical limits of the specific area. In the HTA Ardennes however, climb-out to 250FT or above is not allowed in order to avoid the LFA Ardennes, unless air safety dictates otherwise.

The overflight of cities by single engine helicopters is prohibited, except along predetermined routes in which case the altitude and speed must be sufficient to permit an emergency landing without endangering any person or property on the ground. Helicopters shall avoid overflying populated areas and industrial sites.

A strip of 5NM on either side of the Belgian coastline is prohibited. This rule does not apply to helicopters to and from EBFN or EBOS, for flights to and from the United Kingdom and for helicopters participating in combined exercises at Lombardsijde (EBR17A) or over the North Sea. In these cases, the minimum altitude to cross the strip of 5NM on either side of the Belgian Coast, is 2000FT.

### 2.7.2.4 **Belgian Military helicopter landings outside aerodromes**

#### 2.7.2.4.1 *Use of civilian heliports*

Landing will only be authorized when authorization is obtained from the heliport operator prior arrival, by contacting the phone number or via the email address mentioned in the Heliport Data sheet (see list in [AD 1.3](#)), even when the type of military helicopter does not comply with limitations mentioned in [AD 1.3](#) such as: performance class, dimensions, platform strength, arrival routes and opening hours (including night operations with or without night vision aids).

The heliport owner remains responsible for heliport safety area as per CAA regulations.

*Exception:*

In case of emergency or for flight safety reasons, a pilot may derogate and land without authorization. If he does so, he shall notify the controlling authority immediately and he shall notify his unit OPS section as soon as possible after landing.

#### 2.7.2.4.2 *Landing outside recognized and prepared landing sites*

Field landing training exercises can only be performed in a reserved and active HTA Ardennes or inside a CTR, danger or restricted areas.

*Exception:*

In case of emergency or for flight safety reasons, a pilot may derogate and land outside recognized and prepared landing sites. If he does so, he shall notify the controlling authority immediately and he shall notify his unit OPS section as soon as possible after landing.

Real aeromedical evacuation missions are authorized to derogate and land outside recognized and prepared landing sites if the medical urgency requires so.

Training aeromedical evacuation missions can derogate and land outside recognized and prepared landing sites if prior permission of the site owner is obtained.

Military Helicopters can derogate and land outside recognized and prepared landing sites if prior permission of COMOPSAIR and the site owner is obtained.

### 2.7.3 **Low Level Cross-Channel Traffic**

Military aircraft may operate at or above 500FT over the sea (Oostende CTR excluded).

Belgian jet pilots, before overflying the Strait of Dover at or above 500FT, shall make an RTF broadcast on FREQ 362.300 MHZ, stating position (in relation to a geographical feature), heading and height. This broadcast will not be acknowledged.

## 2.7.4 Low Level Abort Procedure

### 2.7.4.1 Navigation (unsure of position)

The pilot shall climb to the emergency safe altitude (4300FT AMSL) maintaining VMC and shall re-establish position by own means. If the pilot cannot confirm his position, he may request assistance from Belga Information or Brussels FIC outside the ATCC OPS HR (see [GEN 3.3](#)).

### 2.7.4.2 Weather deterioration

The pilot shall alter heading to maintain VMC and weather minima for low-level flight or he may request assistance from Belga Information or Brussels FIC outside the ATCC OPS HR (see [GEN 3.3](#)) maintaining VMC if possible. If unable to continue, return to base in VMC, the pilot should abort.

## 2.7.5 Abort Procedure

The pilot shall climb to the emergency safe altitude (4300FT AMSL) and shall switch the IFF/SIF to EMERG and Mode C when encountering IMC without ATC clearance. The pilot shall call Belga Information or Brussels FIC outside the ATCC OPS HR (see [ENR 2.1, § 3](#)).

## 2.7.6 Emergency

The pilot shall climb as necessary and shall switch the IFF/SIF to EMERG and Mode C. If no contact can be established with Steenokkerzeel ATCC on 374.400MHZ or 129.325MHZ, the pilot shall pass a distress message on 243.000MHZ or 121.500MHZ.

## 2.8 Night Flight

### 2.8.1 Definition

Night flights are all flights or parts thereof conducted between 30MIN after SS and 30MIN before SR.

### 2.8.2 Time Schedule

Complementary to the regulations mentioned in COMOPSAIR Flying Window (CAIR-SPS-OPSDIR-AOCC-201), the following rules are applicable. SAR missions are authorised to fly at night. Except for Belgian transport aircraft, night flights are not authorised from 01 JUL until 31 AUG. Night flights are not authorised between 2300 and 0500 (2200 and 0400). Deviations to the above mentioned rules can be authorised by COMOPSAIR.

### 2.8.3 Authorised Night Flight

#### 2.8.3.1 Jet Aircraft

Are authorised:

- Flights below 4500FT AMSL within controlled airspace, and
- Flights above 4500FT AMSL, and
- Flights on published BENE routes, and
- Flights on published DARK FALCON routes (see [ENR 3.3](#)) and,
- Flights in accordance with the CAIR-SPS-OPSDIR-AOCC-202.

#### 2.8.3.2 Transport Aircraft

Are authorised:

- Flights below 4500FT AMSL within controlled airspace, and
- Flights above 4500FT AMSL are authorised, and
- Exclusively for Belgian propeller transport aircraft, flights along the Navigation Routes 15W Tpt (see [ENR 3.3](#)).
- Flights of Belgian propeller transport aircraft involved in paradrop exercises under the following conditions:
  - Minimum level 1000FT AGL,
  - Drop zone is clearly mentioned in the flight plan and
  - Coordination is done by AMC.

#### 2.8.3.3 Helicopters

Are authorised:

- Flights below 4500FT AMSL within controlled airspace; and only for training and real SAR flights in uncontrolled airspace, and
- Flights above 4500FT AMSL, and
- Exclusively for Belgian helicopters, flights using NVG/NVA along NVG Link Routes (see [§ 2.8.4.2](#) and [ENR 3.3](#)) and flights in HTA 10 and LFA 11 (see [ENR 5.2](#)).

#### 2.8.3.4 Other Cases

All night flights not mentioned above, are subject to prior authorisation by COMOPSAIR.

## 2.8.4 Use of Night Vision Aids (NVA) or Night Vision Goggles (NVG)

### 2.8.4.1 Fixed Wing Aircraft

Foreign fixed wing aircraft are not allowed to fly with NVA/NVG in the Brussels FIR, unless prior authorization has been obtained from COMOPSAIR.

Training of flights with NVA/NVG shall be performed along a net of predetermined routes, except for Belgian military jets flying in accordance with the CAIR-SPS-OPSDIR-AOCQ-202, as described in [ENR 3.3. § 2.2.2](#). The altitudes mentioned in [ENR 3.3. § 2.2.2](#) are minimum altitudes and should be adhered to at all times. Transport aircraft may fly above the lateral limits of the LFA Ardennes by night with NVA/NVG from 500FT AGL above the highest obstacle within 1 NM radius.

Reservation of any link route shall be coordinated by AMC based on an IFR FPL submitted to ATCC ARO (EBMIZGZF) before 1100 of the same day. The requested route(s) will be described in FPL field 15 (ROUTE). Coordination of several NVA/NVG flights within Brussels FIR shall be performed by AMC.

When flying with NVA/NVG in uncontrolled airspace, pilots shall listen out on 362.350MHZ and at every reporting point along their route, transmit the following: Callsign, route followed + direction, reporting point and altitude. NVA/NVG night flying may be performed in control zones, following previous coordination with local air traffic control.

Anticollision lights and position lights shall be switched on, except:

- In formations: only the last element to have all lights on
- Inside mission-allocated TRA/TSA

### 2.8.4.2 Helicopters

Foreign helicopters, with the exception of real SAR flights, are not allowed to fly with NVA/NVG in the Brussels FIR, unless prior authorisation has been obtained from COMOPSAIR.

Training flights with NVA shall be performed in the HTAs, LFA 11 and along a net of predetermined link routes as described in [ENR 3.3. § 2.5](#). The HTA can be activated for helicopter low flying by night with NVA/NVG from GND up to 500FT AGL. Reservation of a HTA and of a link route shall be coordinated by AMC based on an IFR FPL submitted to ATCC ARO (EBMIZGZF) before 1100 (1000) the same day. The requested HTA and the link route will be described in flight plan field 15 (ROUTE). The activation of the reserved HTA will be announced by NOTAM. Coordination and deconfliction of several NVA flights within a HTA shall be the responsibility of the operator. Coordination of several NVA/NVG flights within Brussels FIR shall be performed by AMC.

When flying with NVA/NVG in uncontrolled airspace, pilots shall listen out on 362.350MHZ and at every reporting point along their route, transmit the following: Call sign, route followed + direction, reporting point and altitude. NVA/NVG night flying may be performed in control zones, following previous coordination with local air traffic control.

Anti-collision lights and position lights shall be switched on, except:

- Outside CTR: anti-collision lights may be in NVG mode
- Inside CTR: when in short final or take-off below 300FT AGL
- In formations: only the last element to have all lights on
- In exceptional operational circumstances

## 2.8.5 Flight Planning

OAT night flights in the Brussels FIR conducted entirely or partially in class G airspace require the submission of an IFR FPL, (also those executed under VFR or with NVA/NVG) before 1100 (1000) the same day, including ATCC ARO (EBMIZGZF) as addressee. OAT night flights in the Brussels FIR/UIR conducted entirely in controlled airspace (class C and D) require the submission of a FPL at least 60 MIN before ETD. The ATCC ARO (address EBMIZGZF) shall coordinate night flights conducted in class G airspace and for which an IFR FPL is submitted.

AMC will endeavour to reduce the risk of collisions by deconflicting planned missions based on received IFR FPL by sending all received FPL to the other participating squadrons. This deconfliction process does not take CIV VFR flights into account. The AMC is not providing a separation service to ACFT during the flight.

## 2.9 Supersonic Flight

Supersonic flights are authorised from MON to FRI between 0700-1100 (0600-1000) and 1200-1700 (1100-1600), acceptance flights for SABCA only are also authorised between 1100-1200 (1000-1100). They are prohibited on SAT, SUN and HOL, except when especially authorised by COMOPSAIR. However, the number of supersonic flights will be limited to those necessary for maintenance in flight tests of Belgian aircraft and those scheduled in the Belgian training syllabi for pilots. Exceptions can be authorised by the COMOPSAIR Air Operations Support.

Supersonic flights must be performed under radar control (SSR compulsory). Only during air defence exercises with CRC Beauvechain, supersonic flights may be performed under loose Positive Control, provided the pilot declares his intention to pass supersonic to the air defence controller. The pilot must receive the clearance before passing supersonic. Nevertheless, the pilot shall cross ATS routes and airways under radar control.

Supersonic flights are prohibited below FL360 and at all levels in the following areas (see [ENR 6-INDEX.10](#)):

- Brussels: circle of 8NM radius centred on 505042N 0042147E
- Antwerp: circle of 6NM radius centred on 511230N 0042500E
- Gent: circle of 6NM radius centred on 510245N 0034400E

- Liege: circle of 10NM radius centred on 503800N 0053530E
- The area delimited by two circles of 6NM radius centred on Mons (502700N 0035700E) and Charleroi (502500N 0042700E), connected by their common tangents
- All foreign airspaces, delegated to Belgian ATS

Before any descent, speed will be reduced to M0.98, except that supersonic descent may be maintained till reaching FL500. Pilots will advise the controller when starting and ending a supersonic flight, even when flying accidentally through M1, so that time and track can be logged.

## 2.10 Aerobatics

Aerobatics shall be performed under the conditions prescribed by the appropriate authority. Aerobatics shall be performed above 4500FT AMSL except in controlled airspace where the controlling authority can grant a deviation from this rule, and in designated temporary or permanent areas (see ENR 5). Visibility must be more than 8KM. It is prohibited to perform aerobatics above towns, congested areas, industrial sites, LNG terminals, nuclear power stations or gatherings of people in the open. All aerobatic manoeuvres are forbidden below FL100 during night flight. Exceptions to these rules can be granted by the Chief of Staff of the Belgian Air Component.

## 2.11 Air Refuelling

Air refuelling in the Brussels FIR/UIR can be conducted in a TRA or CBA.

### 2.11.1 Procedure

Tankers and receivers will establish initial radio contact with Steenokkerzeel ATCC for radar vectored join up. Steenokkerzeel ATCC will provide radar vectors to tankers in order to keep the Air-to-Air Refuelling Cell within the defined area. Dissimilar tankers will not use the same block time.

All aircraft shall file an IFR flight plan to the scheduled refuelling area. The flight plan shall include the following entry in Item 18: 'RMK/ IN-flight REFUELLING AREA ... (area name as appropriate) APPROVAL REQ'. While in the air refuelling area, the tanker and receivers shall squawk Mode 3 as directed and Mode C. After completion of refuelling operation, en-route to exit point, tactical aircraft shall report to Steenokkerzeel ATCC for hand-off coordination. For aircraft departing towards France, departure clearance requests should be submitted 30MIN in advance.

### 2.11.2 Scheduling

Air-to-air refuelling operations shall be scheduled from MON to FRI only (HOL excl).

## 2.12 Parachute Dropping

### 2.12.1 Planning

#### 2.12.1.1 Standard

Parachute dropping can take place within the limits of the permanently reserved airspaces designated for this activity without prior notification.

#### 2.12.1.2 Non-Standard

For military parachute dropping activities, the airspace reservation request shall be addressed to COMOPSAIR Air Operations Support at least 10 working days before the activity.

If the airspace foreseen for the parachute dropping is affecting a civil controlled airspace and/or is taking place above 4500FT AMSL, request shall be addressed to COMOPSAIR Air Operations Support at least 3 weeks before the activity.

### 2.12.2 Minimum Safety Height

- VFR flight:  
When the visibility is less than 8 KM and at night, 500FT above the highest obstacle located within a radius of 8KM around the estimated position of the aircraft.
- IFR flight:  
1000FT above the highest obstacle located within 8 KM around the estimated position of the aircraft.

### 2.12.3 Weather Minima for Parachute Dropping

#### 2.12.3.1 Cloud base

Drop height + 100FT

#### 2.12.3.2 Visibility

- One aircraft: 2KM
- Formation: 3KM for one drop, 5KM for more drops

*Note: Radar beacon drop: 1.5KM, clear of clouds and in sight of the ground, only one aircraft and CARP within dropping zone limits.*

### 2.12.3.3 *Wind*

- Personnel drops:  
day: ground 20KT - drop height 30KT  
night: ground 10KT - drop height 30KT
- Equipment drops:  
day: ground 20KT - drop height 30KT  
night: ground 20KT - drop height 30KT

## 2.13 Target Towing

### 2.13.1 Notification

Target towing flights shall be coordinated with Steenokkerzeel ATCC and be notified to EBSZ NOF at least two working days before the planned date.

### 2.13.2 Area

Target towing can only be executed in a TRA or CBA under radar control.

### 2.13.3 Flight Conditions

Target towing must be executed in VMC. If target towing takes place between cloud layers, the vertical distance from clouds must be 3000FT. For the departure, the crosswind component must be less than 15KT. The flight towards the target area can be flown in IMC, under radar control, if the cloud base is at least at 1500FT.

## 2.14 Fuel Dumping

Except in case of emergency, fuel dumping shall be carried out over the North Sea at 4500FT AMSL or above. In case of emergency, fuel dumping shall, whenever possible, not be carried out over the congested areas of cities, towns or settlements, in holding patterns and less than 2000FT above other aircraft.

If the need to drop external tanks arises and the overall situation allows it (concerning the emergency, weather, fuel etc...), dropping of the tanks will be executed in Helchteren Range.

## 2.15 Noise Abatement Procedures

Pilots-in-command should always exercise great care to avoid unnecessary noise pollution during the execution of a mission. Noise is a factor that should be considered during the planning phase as well as during the flight itself. As a minimum, the noise abatement procedures specified below shall be respected.

### 2.15.1 Applicability of Noise Abatement Procedures

Noise abatement procedures are applicable to OAT within the Brussels FIR/UIR, unless flight safety is jeopardised or a waiver has been obtained from COMOPSAIR.

### 2.15.2 Violation of Noise Abatement Procedures

Every violation against the rules of noise abatement, with or without prior authorisation, shall be logged after the flight in the authorisation book by the pilot-in-command of the concerned flight.

### 2.15.3 Speed Limitation

Due to military operational and training requirements, the speed limitation below FL 100 set at maximum 250KIAS is not applicable to OAT flights. Nevertheless for noise abatement reason, Aircraft are not to be flown below 4500FT at speeds exceeding 450KT GS (420KT planned), except when there is a specific training requirement, for the maximum speed which will be:

- For FBA missions: between IP and target for a maximum of 2MIN and with maximum TAS 520KT (510KT planned).
- For FBS missions: between IP and target for a maximum of 2MIN and with maximum TAS 550KT (540KT planned).
- For Air Defence missions, TAS 550KT only in the final intercept phase (inside 10NM).

### 2.15.4 Use of Standard Routes

Aircrew shall avoid the use of standard routes and shall diversify their everyday training routes away from well used choke points, except when such routes are required by training establishments.

### 2.15.5 Repetitive Overflight

Unless it is essential to the training aim of the sortie, aircrews are not to make repetitive overflights of targets, IP's, etc. The number of repetitive overflights below 1000FT AGL is limited to a maximum of two.

### 2.15.6 Use of Afterburner

The use of afterburner is prohibited below FL 100 except for take-off, climb out and in case of emergency. Exceptions to this rule may be granted by COMOPSAIR (e.g. to allow demonstration flights and rehearsals).

## 2.16 Tactical Air Operations

Within the Brussels FIR/UIR and delegated airspace, Tactical Air Operations (defensive, offensive and support to air operations) are permitted within the framework of the following indicated regulations.

### 2.16.1 Terminology

Although the terms mentioned below may often be used in a wider sense, within [§ 2.16](#) the following meanings apply:

#### **Air Control Unit (ACU) for Tactical Air Operations**

Air Control Units within the framework of the NATO Control and Reporting (C&R) system are:

- Control and Reporting Centre (CRC/CRP)
- Airborne Early Warning and Control (AEW&C) Aircraft
- Tactical Air Control Systems (TACS)
- Radar Systems of Maritime Units (MU)
- Contingency locations

#### **Air Combat Manoeuvres (ACM)**

Training designed to achieve proficiency in element formation manoeuvring and the coordinated application of BFM to achieve a simulated kill or effectively defend against one or more aircraft from a preplanned starting position. ACM can be carried out by a maximum of four aircraft. ACM carried out with dissimilar aircraft is called Dissimilar-ACM (D-ACM).

#### **Air Combat Training (ACT)**

Training designed to give aircrews skills in tactics used to gain superiority in air combat. In Dissimilar Air Combat Training (DACT), different types of aircraft are involved.

#### **Air Defence Controller (ADC)**

Radar Controller, working within the NATO Control and Reporting (C&R) system, in charge of providing tactical control to Tactical Air Operations in the Brussels FIR/UIR and delegated airspace.

#### **Air Defence Mission**

Air defence missions are intercept missions under tactical control of an air defence unit and separated from other traffic by standard ICAO separation minima. Non-Belgian air control units performing intercept missions under tactical control, see [§ 2.16.6.1](#).

#### **Air Surveillance And Control System (ASACS)**

A network of mobile and airborne radars, associated communications and facilities that provide for the detection, recognition, reporting and control of interception and engagement of airborne vehicle within the detection range.

#### **Area of Responsibility (AoR)**

Geographical area in which a military unit is responsible to conduct operations.

#### **Armed Aircraft**

An armed aircraft is an aircraft with loaded ammunition (training or live) that can be expended by pilot initiation.

#### **ATM network**

The airspace including all civil and military structures (AWY, TMA, CTR, PDR, TSA, TRA, CBA, ...).

#### **Autonomous Operations**

Air Operations without any type of service and/or control from an ACU. These types of operations are not allowed in Brussels FIR/UIR and delegated airspace.

#### **Basic Fighter Manoeuvring (BFM)**

Training designed to give aircrews skills in handling their aircraft within the performance limits and capabilities of that specific aircraft. BFM can be carried out by a maximum of four aircraft. BFM carried out with dissimilar aircraft is called Dissimilar-BFM (D-BFM).

#### **BRA (A/H)**

A type of information provided by the Air Defense Controller to aircrew in a format of Bearing, Range, Altitude (and Aspect or Heading).

#### **Break-off rules**

The minimum required separation distance between the interceptor and a target of opportunity (see [§ 2.16.6.3](#)).

#### **Bullseye format**

System used to pass information to a ground or airborne ASACS. The information will be related to reference point known by all exercise participants. The format will be bearing, range, altitude, identification + additional information (number of aircraft, heading).

#### **Composite Air Operations (COMAO)**

Operations interrelated and/or limited in both time-scale and space, where units differing in type and/or role are put under the control of a single commander to achieve a common, specific objective.

#### **Defensive Counter Air (DCA)**

DCA operations are a basic building block for all air-to-air activity and permit weapon deconfliction in conditions with and without communications. Different types are point defense, area defense and lane defense. The objective is to detect, identify and engage aircraft attempting to penetrate the AoR in accordance with the mission and adhering with the RoE in effect. The next objective is passing the tactical picture to the ASACS unit as required.

### **Escort Flights (e.g. Presidential Flights)**

The employment of AD fighters to directly intercept and protect friendly aircraft.

### **Fighter Area of Responsibility (FAOR)-operations**

Operations within a well defined area, during which an ADC will provide the aircrew with all relevant information concerning the FAOR, the adjacent FAORs and target information to the optimum extent possible. When providing loose or broadcast control (see § 2.16.2) the target information will be given in relation to a defined geographical position (bull's eye).

### **Judy**

AD fighter has radar/visual contact on the correct target and is taking control of the intercept within a close positive control mission.

### **Link 16 (L16)**

Tactical data link for exchange of real time tactical data among military units.

### **Loaded aircraft**

A loaded aircraft is an aircraft of which all or some weapon systems have been provided with ammunitions (training or live). However, safety measures have been taken to preclude use of the armament by pilot initiation.

### **Manoeuvring categories**

The manoeuvring categories used in § 2.16 are applicable to air-to-air training missions and are the following:

- Unlimited:  
No restrictions except national regulations and flight manual, or aircraft limits, normal for air-to-air training.
- Limited:  
A defender, i.e. an aircraft of any type engaged in defensive manoeuvring, may react against an attacker with an extension/separation and/or turn not to exceed 180 degrees after the attacker has passed the defender's 3/9 line, level or climbing below 5000FT AGL. An attacker engaging defenders may turn until the defender terminates the engagement or a simulated kill is achieved or the defender has turned 180 degrees, whichever comes first, post merge.
- Restricted:  
Heading changes up to 60 degrees either side of the initial course and a maximum of 10000FT altitude change.
- Non-manoevring:  
Constant heading, airspeed and altitude.

### **Practice Intercepts (PI's)**

An air-to-air mission in which the fighter executes a series of manoeuvres using an ADC, to place the aircraft or flight in a position from which air-to-air ordnance can be employed, a visual identification (VID) can be made, or a visual engagement can be initiated. The manoeuvring category is limited.

### **PI Patrol (PIPAT)**

Training as specified above in which 'Targets of Opportunity' and 'Embellish Targets' are intercepted. Contrary to PI's, these targets may be controlled by different controllers and/or radar stations and air traffic centres.

### **Practice Intervention flights**

Training under control of an ADC to give aircrews skills in the interception and escort of intruders and defectors.

### **Rules of Engagement (RoE)**

Directives issued by higher authority which dictate the conditions under which military units can initiate combat engagement with other forces.

### **Safety frequency**

A safety frequency will be used to order 'cease jamming' when safety is endangered. This frequency will be available to all exercise participants.

### **Security Flights (or Alpha Scrambles)**

Military flights (Air Defence Priority Flights) resulting from urgent national or NATO security requirements, which for this reason do not have to comply with ICAO regulations (e.g. standard radar separation minima), normal control procedures and directions. See § 2.16.3 for more details.

### **Surface Attack Tactics (SAT)**

Training designed to give the aircrew skills in the use of air-to-ground targeting and weapon delivery. (e.g. Targeting Pod (TGP), CAS).

### **Surface Attack Tactics with Air Opposition**

SAT in a more complex and realistic scenario with opposition forces (air threat and SAM).

### **Taboo frequency**

This will be determined before the start of the exercise and communicated to all exercise participants. This frequency may not be jammed.

### **Tactical Intercepts (TIs)**

An air-to-air mission in which the fighter executes a series of manoeuvres using an ADC, to place the aircraft or flight in a position from which air-to-air ordnance can be employed, a visual identification (VID) can be made, or a visual engagement can be initiated. The manoeuvring category is unlimited.



**Tally**

Sighting of target, bandit, bogey, landmark or enemy position; opposite of no joy.

**Tango Scramble**

A scramble for a directed practice AD mission. This will be executed in accordance with national flying regulations.

**Tap the CAP (Combat Air Patrol)**

An air-to-air mission to practice visual lookout, spike awareness and engaging an adversary where the exact range, azimuth and altitude is not precisely known. The fighters will perform a visual CAP over the centre point of the area and will remain within 7NM of that point. The adversary will perform sequential attacks on the fighters with a mix of Beyond Visual Range (BVR) and visual engagements.

**Targeted**

Group responsibility has been met.

**Time Sensitive Targeting (TST)**

This operation is used to find and destroy sensitive targets (including mobile targets) using airborne tasked fighters.

**Unloaded aircraft**

An unloaded aircraft is an aircraft carrying no ammunition (training or live) i.e. training or real ammunitions.

**Visual**

Sighting of a friendly aircraft/ground position; opposite blind.

**2.16.2 Tactical Control of Aircraft**

Tactical control of aircraft is based on two aspects, namely the aircraft's mission and the aircraft's safety. Doc AAP-49 defines combinations of terms to cover both aspects; however, some reservations are made by the Belgian Air Component.

Due to airspace classification, the two following combinations of terms for tactical control are not provided in Brussels FIR/UIR and delegated airspace:

- Close - Advisory Control
- Loose - Advisory Control

**2.16.2.1 Terminology**

Only the combinations of terms mentioned in the paragraphs hereafter are used inside Brussels FIR/UIR and delegated airspace during missions under control of an ACU:

**2.16.2.1.1 Close - Positive Control**

A form of aircraft mission control in which the aircraft is continuously controlled for altitude, speed and heading, to a position from which the mission can be accomplished. The controlling unit will advise the aircraft commander of the current tactical picture and will provide further advice if and when available.

The controlling unit is responsible for taking actions for collision avoidance, such as ordering the necessary alterations to heading, speed and altitude to maintain separation criteria.

Belgian Reservation to ATP-3.3.5.1: separation criteria is the radar separation minima in accordance with the airspace classification.

**2.16.2.1.2 Loose - Positive Control**

A form of aircraft mission control in which the aircraft commander selects his own speed, altitude, heading and the appropriate tactics required to accomplish the assigned task. The controlling unit will advise the aircraft commander of the current tactical picture and will provide further advice if and when available.

The controlling unit is responsible for taking actions for collision avoidance such as ordering the necessary alterations to heading, speed and altitude to maintain separation criteria.

Belgian Reservation to ATP-3.3.5.1: separation criteria are the radar separation minima in accordance with the airspace classification.

**2.16.2.1.3 Broadcast Control**

A form of aircraft mission control used in the absence of full capability or if the tactical situation precludes close or loose control, in which tactical/target information is passed to enable the aircraft to accomplish the assigned task. The controlling unit, when possible, provides adequate warnings of hazards, but the aircraft commander(s) is (are) responsible for aircraft navigation and collision avoidance. Two-way communications are not a prerequisite for this type of control.

**2.16.2.1.4 TRAFFIC AVOIDANCE**

Traffic avoidance is the action taken to avoid traffic by means of mandatory instructions and is to be initiated soon enough to ensure the prescribed separation minima (see § 2.16.4.3.1 and § 2.16.4.3.2).

Acknowledgement by aircrew on UHF is mandatory.

**2.16.2.1.5 TRAFFIC WARNING**

Traffic Warning is the information provided by the Air Defense Controller about factor traffic and can be done in BRA(A/H) format to a specific aircrew or can be done in Bullseye format for awareness to all aircrew.

Acknowledgement by aircrew on UHF is mandatory.

Traffic warning is to be done as follows:

> 15 NM	When no other urgent messages to pass to the aircrew
15 - 10 NM	Mandatory for traffic on collision course + avoiding actions to be initiated if necessary
10 - 5 NM	Mandatory for all factor traffic + avoiding actions to be ordered if necessary

**2.16.2.2 Establishment of Mutual Responsibilities**

At the start of each mission the air defence controller (ADC) must inform the aircrew about the type of tactical control for that specific mission, this shall be acknowledged by the aircrew. Every following change in tactical control must also be acknowledged by the aircrew.

The combination of terms for tactical control depends on the exercise, status of the ADC-equipment (radar and radio coverage), airspace classification and exercise area.

**2.16.2.3 Responsibilities**

Notwithstanding the regulations laid down below, the aircraft commander will always be ultimately responsible for the flight safety of the aircraft. Only in case of the necessity to maintain flight safety, an aircraft commander can deviate from directions given by the ADC. The deviation must be stated by the aircraft commander to the ADC as soon as possible. However, the above does not release the ADC from taking any conceivable measure within the range of possibilities to ensure the aircraft's safety.

**2.16.2.3.1 Under Close - Positive Control and Loose - Positive Control**

The air defence controller is responsible for:

- Giving timely traffic information about all non-participating air traffic to the aircraft under his control which may interfere with the flight path of the mission and, if necessary, giving mandatory instructions to maintain the radar separation minima in accordance with airspace classification.
- Giving mandatory instructions to keep the aircraft under his control within the allocated exercise area (airspace integrity).
- Obtaining clearance for the use of the exercise airspace from the appropriate ATM service.

The aircrew is responsible for:

- Acknowledging and following mandatory instructions: to maintain radar separation minima according to airspace classification and to maintain airspace integrity.
- Calling out 'targeted/sorted' or 'tally' on the frequency when assuming separation versus other participating aircraft during training missions inside TSA or TRA.
- Reporting radar or visual contact with non-participating air traffic.
- Contacting the previous agency if initial contact with the controlling ACU cannot be obtained or contacting Steenokkerzeel ATCC if contact is lost with the controlling ACU (ICF) (VHF 129.325MHZ or UHF 374.400MHZ).
- Flight safety, if the aircrew decides not to comply with the instructions given by the controller.

**2.16.2.3.2 Under Broadcast Control**

Broadcast control will only be provided within airspace class G. The rules of class G airspace are applicable

**2.16.2.4 Standards for Provision of Tactical Control****2.16.2.4.1 Controlled Airspace**

For A-scramble and for PI's training, tactical control provided by an ACU is close positive control.

For all other missions than the previous point in a TSA and/or TRA which are categorized as class C airspace, the tactical control service provided by an ACU is loose positive control. For (D) ACT missions, loose positive control will be given using the bullseye format and threat awareness in BRAA/BRAH when able.

**2.16.2.4.2 Uncontrolled Airspace (Class G)**

In uncontrolled airspace (class G) tactical control provided by an ACU is broadcast control (even for A-scramble).

**2.16.3 Security Flights (Alpha Scramble)****2.16.3.1 General**

Security flights (or Alpha Scramble) under NATO Command can operate within the Brussels FIR/UIR and delegated airspace if they are identified and under control of an ACU. Security flights (or Alpha Scramble) under National Command can operate within the airspace above the national territory and under control of CRC Beauvechain only. If needed, CRC Beauvechain will immediately inform Brussels ACC and Maastricht UAC through Steenokkerzeel ATCC regarding initial heading, initial altitude and SSR-code (Mode 3A). The nature and importance of a security flight might lead to deviation of

the standard radar separation minima or to a request to respective ATC agencies to alter flight path of OAT. Adherence to specific flight rules stated in the AIP might not be possible or operationally desirable in order to achieve the mission. If a security flight is controlled by another ACU than CRC Beauvechain, CRC Beauvechain remains responsible for informing the respective ATC agencies.

### **2.16.3.2 Termination of Alpha Scramble**

Whenever the security flight is cancelled by the appropriate authority, the Alpha Scramble is downgraded to a Tango Scramble and has to adhere again to radar separation minima.

### **2.16.3.3 Interception and Identification Manoeuvres**

See [ENR 1.12](#)

### **2.16.3.4 Responsibilities for Separation**

#### **2.16.3.4.1 Under Close - Positive Control**

The air defence controller may, for operational reason, choose to deviate from the standard radar separation minimum during the conduct of an A-scramble but he remains responsible for safety of the intercepting aircraft and any other traffic.

However, the pilot-in-command of the intercepting aircraft is taking over the responsibility for separation and collision avoidance in the following cases:

- When calling out 'visual' on any other traffic.
- When approaching closer than 1NM of the intercepted aircraft (see [§ 2.16.4.2](#)) and/or calling out 'judy/tally'.

#### **2.16.3.4.2 Under Broadcast Control**

When the Alpha Scramble is performed under broadcast control, the pilot-in-command is responsible for collision avoidance and the ADC will, when possible, provide adequate warning of hazards.

## **2.16.4 Separation Minima and Break-off Rules for Intercepts**

### **2.16.4.1 Separation Applied by the Pilot-in-Command**

When, in accordance with airspace classification, separation is the responsibility of the pilot-in-command, the rule is see and avoid.

However, national operational directives may impose supplementary rules including minimum separation distance (i.e. safety bubble) or altitude blocks.

### **2.16.4.2 Separation Minima during Alpha Scramble and PI's**

The minimum distance for separation with the intercepted aircraft will depend on the mission tasking (reporting aircraft type versus reporting cockpit activity of target aircraft) but the see and avoid principle remains applicable. When completing the interception and closing in on the intercepted aircraft for visual identification (VID), the pilot in command needs to have 'tally' or 'judy'.

Without visual contact on the intercepted aircraft or in IMC, the following separation minima shall be maintained:

- Front and beam intercepts require 1000FT vertical separation at all times.
- Maintain  $\geq$  1NM unless radar lock and 'judy'.
- Maintain  $\geq$  1500FT (bubble) unless 'tally'.
- If visual contact is lost within 1500FT, the intercept is broken off immediately.

### **2.16.4.3 Radar Separation**

#### **2.16.4.3.1 Standard rule for radar separation**

Vertical separation 5000FT or horizontal separation 5 NM

#### **2.16.4.3.2 Reduction of separation**

The vertical separation can be reduced after co-ordination between the controllers controlling the two aircraft and when the intentions of the others are known:

- To 1000FT between aircraft flying below FL 290.
- To 2000FT between aircraft flying at and/or above FL 290.

#### **2.16.4.3.3 Force QNH**

The use of force QNH is mandatory inside a TSA when aircraft are under tactical air control and are using an airspace block with a lower limit below 4500FT AMSL and an upper limit above 4500FT AMSL. (i.e. [TSA26A](#), [TSA26B](#) and [EBD26](#)). The force QNH is defined as the regional QNH reference. Therefore, the vertical separation in relation to a non-participating aircraft crossing the TSA will be adapted as follows.

The air defence controller will add the vertical separation mentioned below to the standard vertical separation indicated in [§ 2.3.1.2](#) above.

- 1000FT, if  $980\text{HPA} \leq \text{QNH} \leq 1046\text{HPA}$

- 2000FT, if 947HPA ≤ QNH < 980HPA or 1046HPA < QNH ≤ 1079HPA
- 3000FT, if QNH < 947HPA or QNH > 1079HPA

### 2.16.5 Airspace Regulations for Tactical Air Operations

The table in this paragraph shows the areas and combinations of areas suitable for tactical air operations in the Brussels FIR/UIR and delegated airspace. Reservation procedures are in described in [ENR 5.2, § 1.3](#).

Exercise area	Controlling Agency	Remarks
TSA24	CRC Beauvechain	
TSA25A	CRC Beauvechain, AEW&C	
TSA25A/B	CRC Beauvechain, AEW&C	
TSA25A/B/C	CRC Beauvechain, AEW&C	
TSA25A/B/C + EBD26	CRC Beauvechain, AEW&C	
TSA25A/B + TSA S1 + TSA S4	CRC Beauvechain	
TSA25A/B/C + TSA S1 + TSA S4	CRC Beauvechain	
TSA25A/B/C + TSA S1 + TSA S4 + EBD26	CRC Beauvechain	
TSA26A	CRC Beauvechain, AEW&C	
TSA26A/B	CRC Beauvechain, AEW&C	
TSA26A/B + EBD26	CRC Beauvechain, AEW&C	
TSA26A/B + EBD26 + TRA S6	CRC Beauvechain	
TSA26A/B + EBD26 + TSA32A/TSA32B	CRC Beauvechain	
TSA N2 (Balen)	CRC Beauvechain	Only for Belgian users
TSA N3 (Meeuwen)	CRC Beauvechain	Only for Belgian users
TSA N2 + TSA N3	CRC Beauvechain	Only for Belgian users
TSA S1 (Namur)	CRC Beauvechain	See <a href="#">ENR 5.2</a> for vertical limits
TSA S2 (Beauraing)	CRC Beauvechain	See <a href="#">ENR 5.2</a> for vertical limits

Exercise area	Controlling Agency	Remarks
TSA S3 (Givet)	CRC Beauvechain	See <a href="#">ENR 5.2</a> for vertical limits
TSA S4 (Charleroi)	CRC Beauvechain	See <a href="#">ENR 5.2</a> for vertical limits
TSA S1 + TSA S4	CRC Beauvechain	First usable FL 100
Uncontrolled airspace	CRC Beauvechain, AEW&C	See <a href="#">ENR 1.2</a> for vertical limits
Unclassified airspace	CRC Beauvechain, AEW&C	Above FL 660

In TSA 25A/B it is possible to execute a HVAA (High Value Airborne Asset) protection scenario with a maximum of 8 aircraft. The aircraft participating are made up of a maximum of 6 Belgian fighter aircraft, with display of working area, in unlimited manoeuvring category and 2 HVAA aircraft in restricted or non-manoevring category. The HVAA will receive an airspace briefing. The flight path of HVAA will be briefed and sent to the different units i.a.w the scenario. Control will only be performed by CRC Beauvechain.

In TSA25A/B it is possible to execute a mission air-to-air (2 vs 1) and a mission TGP training with 4 aircraft. This exercise is for Belgian fighter aircraft only, with display of working area. Two dedicated UHF frequencies and one common VHF will be assigned. Control will only be performed by CRC Beauvechain. During this exercise, a fixed separation line between two missions is used to help the pilot with their visual separation. The fixed separation line has the following coordinates:

- North (501300N 0044500E)
- Bullseye TSA25A/B (500000N 0044500E)
- South (495216N 0044500E)

In TSA26A/B, EBD26, TSA32A and TSA32B combined air defense and CAS missions are possible. This exercise is for Belgian fighter aircraft only. The lateral limits are the standard lateral limits of TSA26, therefore TSA34A and TSA34B are not authorised to be booked for this kind of mission. Deconfliction and communication plan briefing between pilots, controllers and FAC is mandatory before the mission. Deconfliction cannot only be based on L16. For deconfliction, a common VHF frequency shall be used between CAS and the DCA pilots and the respective CAS and DCA controllers or if no common VHF frequency is available because the frequency is in use by the FAC, the three controllers (DCA/CAS/Red Air), located side by side, will deconflict flights amongst each other on their UHF frequency. Control will only be performed by CRC Beauvechain.

## 2.16.6 Additional Regulations

### 2.16.6.1 Tactical Control by Other ACU than CRC Beauvechain

#### 2.16.6.1.1 Regulations

All foreign ADC must be familiar with the airspace structure within the Brussels FIR/UIR and delegated airspace. Foreign ACU equipment must be certified by appropriate authorities before receiving clearance to operate in the above mentioned airspace. For these stations all rules mentioned in the AIP apply. Additionally they must adhere to the following:

- Intercepts must be conducted within the framework of the integrated NATO C&R system.
- All standing NATO air defence rules and regulations.
- Operations must be authorised in advance by the master controller of CRC Beauvechain, who also needs to get the ap-approval of the Steenokkerzeel ATCC supervisor before delegating airspace to any external ACU.
- All inadvertent supersonic flights must be reported to the master controller of CRC Beauvechain.

#### 2.16.6.1.2 Tactical Control by AEW&C Aircraft

Tactical control by AEW&C aircraft is limited to:

- E-3A/D/F are allowed to control missions in an active TSA25A/B/(C) (with a maximum of 6 aircraft), TSA26A, TSA26B, EBD26 and in uncontrolled airspace below 4500FT AMSL. Other type of AEW&C aircraft need a waiver issued by COMOPSAIR and an airspace briefing before controlling in the Brussels FIR/UIR or delegated airspace.
- The distance between the farthest edge from the E-3 orbit and the farthest edge of TSA South must be within 200NM. Present orbit meeting this condition is NL2.
- All weapons (controlling) activity coordination between CRC Beauvechain FA and AEW&C FA are done using the manda-tory CRC Beauvechain WM (weapons manager) frequency.
- Before the start of the mission, all necessary information for the execution (i.e. dimensions & restrictions TSA-airspace, timings, NOTAM, traffic information, pilot's tactics briefing, handover and mission information) will be provided to the AEW&C FA by CRC Beauvechain FA and/or vice versa.

- The CRC Beauvechain FA will assign the control frequency and Mode 3/A to be used for the mission.
- Hand-over from Steenokkerzeel ATCC to AEW&C aircraft has to be approved by and coordinated via CRC Beauvechain. For the coordination between Steenokkerzeel ATCC and CRC Beauvechain, the direct telephone line will be used. For the coordination between CRC Beauvechain and AEW&C aircraft, the E-3A weapons manager frequency will be used. CRC Beauvechain will approve the direct hand-over to all parties before Steenokkerzeel ATCC will transfer the fighter aircraft on the E-3A working frequency. Hand-over from AEW&C aircraft to Steenokkerzeel ATCC is not allowed. They shall pass via CRC Beauvechain, after which CRC Beauvechain will hand the aircraft over to Steenokkerzeel ATCC. At CRC Beauvechain, workload permitting the hand-over between AEW&C aircraft and CRC Beauvechain will be performed by the Fighter Allocator (FA) on the E-3A weapons manager frequency. If the FA workload is not permitting, the hand-over between AEW&C aircraft and CRC Beauvechain will be performed by the air defence controller (ADC) on the E-3A working frequency.
- The AEW&C FA will provide a 10 minutes prenote before recovery and recovery intentions of the aircraft under control to CRC Beauvechain.

### **2.16.6.2 Intercepts with Armed (Live Ordnance equipped) Aircraft**

#### **2.16.6.2.1 General Safety Directives**

No live ordnance will be carried on participating aircraft during air-to-air training except in exercises where live ordnance is specifically authorised in an Exercise Operations Order. Live ordnance is defined as 'hot guns' and 'Air-to-Air missiles' that are not mechanically or electrically made safe. When live ordnance is authorised, the procedures laid down in ACE Manual 75-2-1 'Fighting Edge' Air-to-Air Training Rules or more restrictive national regulations apply.

#### **2.16.6.2.2 Northern Region NATO QRA (I) Procedures**

The following procedures are to be adhered to by all armed NR NATO QRA (I) aircraft conducting operational or training missions:

- Practice engagements are prohibited in all circumstances.
- An armament safety check is to be carried out at the initial check-in with the controlling ACU and repeated prior to the initiation of each intercept. The armament safety check is to be initiated by the ADC and a verbal response to the check is to be given by the aircrew.
- If this procedure has not been carried out, or the aircrew cannot confirm that weapons are safe, an intercept shall not be initiated.

### **2.16.6.3 Interceptions of Targets of Opportunity**

Targets of opportunity can be intercepted over in the Brussels FIR/UIR and delegated airspace. In principle all military non-training aircraft (OAT) may be intercepted unless a special mission is executed (test-, calibration flights, special transport, AEW flights).

OAT traffic wishing to be intercepted can mention this wish in their flight plan (embellish targets) or to Steenokkerzeel ATCC. The intercept will be coordinated between the ADC and ATC control agencies. Unless clearance is received for close-in, aircrews will maintain radar separation minima. When close-in clearance is received, a minimum horizontal separation distance of 1NM to the target will be maintained. The minimum separation to an AEW aircraft is 3000FT vertically or 3NM horizontally, for loaded /armed aircraft.

Only basic intercepts will be executed on a target of opportunity. Both aircrew and ADC will ensure that guard frequencies are monitored. The intercept must take place outside the civil ATM network. Weather conditions at intercept level must be better or equal to:

- Flight visibility of 8KM
- Vertical distance from clouds 1000FT
- Horizontal distance from clouds 1500FT

Break-off rules are as follows:

- No frontal quadrant attacks are allowed.
- 5NM when no radar contact.
- 3NM when no lock-on.
- 1NM is the minimum distance unless approved by the pilot-in-command of the intercepted aircraft.

### **2.16.6.4 Intervention to Land during A-Scramble**

The following procedure is applicable for intervention to land on a military aerodrome and on a civil aerodrome during a renegade event and is performed only during a security flight (see § 2.16.3). The QRA (I) aircraft shall remain VMC and maintain on the frequency of the Air Defence Controller (ADC) of CRC Beauvechain until a handover from the ADC to the Approach Control has been established through Steenokkerzeel ATCC (during opening hours). At transfer of communications only one fighter will switch to the assigned frequency. The second fighter will maintain on the ADC frequency.

### **2.16.6.5 Practice Intervention Flights**

The following procedures are applicable during practice intervention flights and NATO readiness verification. Crossing of civil and military ATM network will be performed under control of military ATC. However, only one QRA (I) aircraft will be on the ATC frequency while the other aircraft is on a CRC frequency in order to receive tactical orders. Internal communication between the QRA (I) formation is performed on a common VHF frequency. Crossing of civil ATS routes will be coordinated

by COMOPSAIR before the exercise and a cleared level block (or Flight Level) will be requested for the benefit of Steenokkerzeel ATCC.

#### **2.16.6.6 Operations under Electronic Warfare (EW) Conditions**

Flight operations under EW conditions are only allowed after coordination with the master controller (MC) or fighter allocator (FA) of the CRC Beauvechain, and under the following conditions:

- Flight operations and EW must be according AIRCOM Manual 75-1. Taboo frequencies, which may not be jammed, will be determined before exercise start and communicated to all exercise participants. A safety FREQ will be used to order cease jamming when safety is endangered. This FREQ will be available to all exercise participants.
- In case of radio and/or radar jamming the jamming agency will monitor all safety frequencies and UHF guard. Jamming is not allowed during air-to-air refuelling (AAR), aircraft in distress, operational (non-training) missions and VIP flights.
- In case non-planned meaconing-, intrusion-, jamming- or interference (MIJI) conditions are observed both aircrew and ADC will inform each other immediately, log all necessary information (DTG, type, frequency, direction and duration) and perform all necessary actions to safeguard flight safety. Furthermore, action will be taken in order to localise the source of MIJI and to terminate the MIJI.

#### **2.16.6.7 Use of Chaff and IR Flares**

Chaff and IR Flares are not allowed in the Brussels FIR/UIR and delegated airspace, except inside air to ground range where it is specifically authorized or a waiver is granted by COA.

#### **2.16.6.8 Degradation of Radar Equipment**

If an ACU experiences a degradation of radar equipment and/or has no radar available due to equipment outages, it must inform the aircrew immediately. The ADC will immediately arrange a hand-over to another ACU or Steenokkerzeel ATCC.

#### **2.16.6.9 Short Term Contingency**

The following short term contingencies are applicable for outages foreseen to last a short period of time or as a transitional solution during long outages. Depending on the technical restriction, different procedures will be enforced:

- In case of failure or short term outage of the radar equipment at CRC Beauvechain, the callsign of EFFLUX (CRC Beauvechain) is backed up by callsign HERO, being personnel of CRC Beauvechain deployed to Steenokkerzeel ATCC.
- A separate TTY and NOTAM will be issued to warn all Belgian and foreign units that CRC Beauvechain will operate from Steenokkerzeel ATCC. This message will include the restrictions applicable. In case of planned outage, this message will be sent not later than 2 weeks in advance.
- The message will include some restrictions like:
  - number of control points available
  - maximum size of the mission
  - equipment limitations
  - possibility of control by AEW&C aircraft

#### **2.16.6.10 Outside Steenokkerzeel ATCC OPS HR**

During their mission, Belgian or foreign QRA aircraft flying in the Brussels FIR/UIR outside the Steenokkerzeel ATCC operational hours will be controlled by CRC Beauvechain or by another ACU.

### **2.17 Unplanned diversion with Armement**

Before landing with armament or practice munitions at any military or civilian airfield, where respective local procedures are not known, the pilot-in-command shall appropriately advise ATC about the circumstances.

After landing the pilot-in-command shall request taxi instructions to the designated safe-for-parking area and avoid taxiing into an area or position that could threaten personnel or equipment.

Before leaving the aircraft the pilot-in-command shall ensure ground crew awareness about the armament on board and their qualification to handle armament.

If necessary, the pilot-in-command shall request assistance from the nearest suitable military installation and ensure appropriate measures be taken to safeguard the aircraft until qualified personnel take over.

THIS PAGE INTENTIONALLY LEFT BLANK



## ENR 1.2 Visual Flight Rules

### 1 CIVIL

*Note: Unless explicitly indicated, the rules in this section apply in both Belgium and Luxembourg.*

#### 1.1 VMC Visibility and Distance from Clouds Minima (SERA.5001 and SERA.5005a)

Except when operating as a special VFR flight, VFR flights shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in the following table.

Altitude band	Airspace class	Flight visibility	Distance from cloud
At and above FL 100	A <sup>(1)</sup> B C D E F G	8 KM	1 500 M horizontally 1 000 FT vertically
Below FL 100 and above 3000 FT AMSL, or above 1000 FT above terrain, whichever is the higher	A <sup>(1)</sup> B C D E F G	5 KM	1 500 M horizontally 1 000 FT vertically
At and below 3 000FT AMSL, or 1000 FT above terrain, whichever is the higher.	A <sup>(1)</sup> B C D E	5 KM	1 500 M horizontally 1 000 FT vertically
	F G	5 KM <sup>(2)</sup>	Clear of cloud and with the surface in sight
<p><sup>(1)</sup> The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.</p> <p><sup>(2)</sup> Flight visibilities reduced to not less than 1 500 M are permitted for flights operating:</p> <ul style="list-style-type: none"> <li>• at speeds of 140 KIAS or less to give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or</li> <li>• in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels.</li> </ul> <p>Helicopters are permitted to operate in less than 1500 M but not less than 800 M flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.</p>			

*Note: For rules applicable to UAS geographical zones details can be found in [ENR 5.1, § 4](#).*

#### 1.2 VFR Flights at Aerodromes (SERA.5005b)

Except when a special VFR clearance is obtained from an ATC unit, VFR flights shall not take off or land at an aerodrome within a CTR, or enter the ATZ or aerodrome traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima:

- the ceiling is less than 1500FT; or
- the ground visibility is less than 5KM.

#### 1.3 VFR Flights at Night (SERA.5005c)

##### 1.3.1 General

##### 1.3.1.1 In Belgium

VFR flights at night may be authorised under the following conditions:

1. if leaving the vicinity of an aerodrome, a flight plan shall be submitted in accordance with [ENR 1.10](#);
2. flights shall establish and maintain two way radio communication on the appropriate ATS communication channel, when available;
3. the VMC visibility and distance from cloud minima as specified in [§ 1.1](#) above shall apply, except that:
  - the ceiling shall not be less than 1500FT;
  - the reduced flight visibility provisions specified in remark (2) of [§ 1.1](#) shall not apply;
  - in airspace classes B, C, D, E, F and G at and below 3000FT AMSL or 1000 FT AGL, whichever is the higher, the pilot shall maintain continuous sight of the surface;
4. except when necessary for take-off or landing, or except when specifically authorised by the CAA, a VFR flight at night shall be flown at a level that is at least 1000FT above the highest obstacle located within 8 KM of the estimated position of the aircraft.

VFR flights at night are authorised, except for gliders, DPM and ULM.

##### 1.3.1.2 In Luxembourg

VFR flights at night may be authorised under the following conditions:

1. They are operated exclusively in controlled airspace except for flights who have been granted exemptions for special operations;
2. A complete flight plan shall be filed;
3. Except when necessary for take-off or landing, or except when specifically authorised by the CAA, VFR flights at night shall be operated at a level which is at least 1 000 FT above the highest obstacle located within 8 KM of the estimated position of the aircraft;
4. Visibility and distance from cloud minima in visual meteorological conditions at night are the following:

Altitude band	Airspace class	Flight visibility	Distance from cloud
At and above FL 100	C D	8 KM	1 500 M horizontally 1 000 FT vertically
Below FL 100 and above 3 000 FT AMSL, or above 1 000 FT above terrain, whichever is the higher	C D	5 KM	1 500 M horizontally 1 000 FT vertically
At and below 3 000 FT AMSL, or 1 000 FT above terrain, whichever is the higher.	C D	5 KM	1 500 M horizontally 1 000 FT vertically
However:			
<ol style="list-style-type: none"> <li>1. the ceiling shall not be less than 1 500 FT;</li> <li>2. in airspace classes C and D, at and below 3 000 FT AMSL or 1 000 FT above terrain, whichever is the higher, the pilot shall maintain continuous sight of the surface.</li> </ol>			

### 1.3.2 Night VFR on top (SERA.5005c)

When flying in airspace classes B, C, D, E, F, or G, more than 3 000 FT above mean sea level (MSL) or 1 000 FT above terrain, whichever is higher, the pilot may elect to fly above a cloud layer (VFR on top). When making the decision on whether to fly above or below a cloud at night, consideration should be given at least but not limited to the following:

1. The likelihood of weather at destination allowing a descent in visual conditions;
2. Lighting conditions below and above the cloud layer;
3. The likelihood of the cloud base descending, if flight below cloud is chosen, thus resulting in terrain clearance being lost;
4. The possibility of flight above the cloud leading to flight between converging cloud layers;
5. The possibility of successfully turning back and returning to an area where continuous sight of surface can be maintained; and
6. The possibilities for the pilot to establish their location at any point of the route to be flown, taking into consideration also the terrain elevation and geographical and man-made obstacles.

## 1.4 VFR Flight Restrictions

### 1.4.1 VFR Flights Above FL 195 or at Transonic and Supersonic Speeds (SERA.5005d and SERA.5005e)

Unless authorised by the CAA, VFR flights shall not be operated:

- a. above FL 195;
- b. at transonic and supersonic speeds.

*Note 1: Authorisation will not be granted for VFR flights to operate above FL285.*

*Note 2: In Belgium, authorisation for VFR flights above FL 195 shall be obtained from the CAA at least five working days in advance and after prior agreement with the responsible ATS authority.*

### 1.4.2 Minimum Heights (SERA.5005f)

Except when necessary for take-off or landing, or except by permission from the CAA, a VFR flight shall not be flown:

- over the congested areas of cities, towns or settlements, or over an open-air assembly of persons at a height less than 1000FT above the highest obstacle within a radius of 600M from the aircraft;
- elsewhere, at a height less than 500FT above the ground or water, or 500FT above the highest obstacle within a radius of 150M from the aircraft.

## 1.5 VFR Cruising Levels (SERA.5005g)

VFR flights in level cruising flight, operated in uncontrolled airspace above 3000FT AGL, shall be conducted at a cruising level appropriate to the track as specified in the table of cruising levels in [ENR 1.7](#).

VFR flights operated in controlled airspace shall select cruising levels from those to be used by IFR flights as specified in [ENR 1.7](#), unless instructed otherwise by ATC or as indicated in the AIP.

## 1.6 Air Traffic Control Service (SERA.5005h)

VFR flights shall comply with the provisions of [ENR 1.1, § 1.10](#) when:

- operated within class B, C or D airspace;
- forming part of aerodrome traffic at controlled aerodromes; or

- operated as special VFR flights.

## 1.7 Change from VFR to IFR (SERA.5005j)

An aircraft operated in accordance with VFR that wishes to change to compliance with IFR shall:

- if a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan; or
- when so required, submit a flight plan to the appropriate ATS unit as soon as practicable and obtain a clearance prior to proceeding IFR when in controlled airspace.

For flights departing from uncontrolled airfields in Belgium (except EBKT), intending to join IFR in controlled airspace in Belgium, it is highly recommended to call Brussels FIC by telephone, maximum 30 minutes before the departure of the flight, confirming their intended routing.

## 1.8 Special VFR Flights (SERA.5010)

Special VFR flights may be authorised to operate within a CTR, subject to an ATC clearance.

Except when permitted by the CAA for helicopters in special cases such as, but not limited to, police, medical flights, search and rescue operations and fire-fighting flights, the following additional conditions shall be applied:

- such special VFR flights may be conducted during day only, unless otherwise permitted by the CAA;
- by the pilot:
  - clear of cloud and with the surface in sight;
  - the flight visibility is not less than 1 500M or, for helicopters, not less than 800M;
  - fly at speed of 140KIAS or less to give adequate opportunity to observe other traffic and any obstacles in time to avoid a collision; and
- an ATC unit will not issue a special VFR clearance to aircraft to take off or land at an aerodrome within a CTR, or enter the ATZ zone or aerodrome traffic circuit, when the reported meteorological conditions at the aerodrome are below the following minima:
  - the ground visibility is less than 1 500M or, for helicopters, less than 800M
  - the ceiling is less than 180M (600FT).

*Note: When the reported ground visibility at the aerodrome is less than 1 500M, ATC may issue a special VFR clearance for a flight crossing the control zone and not intending to take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or aerodrome traffic circuit when the flight visibility reported by the pilot is not less than 1 500M, or, for helicopters, not less than 800M.*

## 2 MILITARY

### 2.1 Minima for Visibility and Distance from Clouds

#### 2.1.1 Military Fixed Wing Aircraft

VFR flights shall be conducted in conditions of visibility and distance from clouds equal to or greater than those specified in the following table, except those mentioned in § 2.1.1.1, § 2.1.1.2 and § 2.1.2 hereafter.

Airspace class	C	D	G	
			Above 3000 FT AMSL or above 1000 FT AGL, whichever is higher	At and below 3000 FT AMSL or 1000 FT AGL, whichever is higher
Distance from clouds	1500M horizontally 1000FT vertically	Cloud base ≥ 1500 FT	1500M horizontally 1000FT vertically	Clear of clouds and in sight of the surface
Flight visibility	≥ 5KM	≥ 5KM	Speed > 250KT: ≥ 5KM	
			Speed ≤ 250KT: ≥ 3KM	

#### 2.1.1.1 Special VFR Flights

Within a CTR and on decision of the OC Flying Group, VFR flights by day may be authorised below the established minima when the following weather criteria are met:

Jet aircraft:

- visibility ≥ 3.7KM
- cloud base ≥ 1000FT

Conventional aircraft:

- visibility  $\geq 1.5$  KM
- cloud base  $\geq 1000$  FT

Note 1: VFR flights executed in these conditions (below normal minima) are called special VFR flights.

### 2.1.1.2 VFR Flights at Night

Within a CTR and on decision of the SOF, VFR flights at night may be authorised at a height which shall not exceed 1500 FT AGL when the following weather criteria are met:

- visibility  $\geq 5$  KM
- cloud base  $\geq 1500$  FT

### 2.1.2 Military Helicopters

General Visual Meteorological Conditions			
	Day VFR	Night VFR	NVA Flight
Visibility	$\geq 800$ M	$\geq 3$ KM	$\geq 3$ KM
Clouds	Clear of clouds and in sight of the surface	Cloud base $\geq 500$ FT above the flown altitude	Cloud base $\geq 200$ FT above the MSA of the flown altitude and in sight of the surface

Note: NVA visibility is the capacity, expressed in KM, to recognize unlighted conspicuous objects and terrain profiles by means of night vision aids. SAR flights on real live and training missions may deviate from these prescribed meteorological conditions in accordance with Belgian 40 Sqn HEL permanent flying orders.

## 2.2 Minimum safety height

The minimum safety height and the low flying regulation are laid down in [ENR 1.1. § 2.7](#).

## 2.3 Flight Level

VFR flights above 3000 FT AGL shall select a level appropriate to their track as specified in [ENR 1.7. § 3](#), except for:

- security flights
- when otherwise instructed by the appropriate ATS unit.

## 2.4 Change from VFR to IFR

When changing from VFR to IFR, pilots shall introduce an IFR flight plan by RTF if part of the flight is to be made within controlled airspace. Proceed in IFR, conforming to the IFR cruising levels (see [ENR 1.7](#)), if no part of the flight is to be made within a controlled airspace. The flight will pass from VFR to IFR status upon confirmation by ATC.

## 2.5 Uncontrolled VFR Flights

Uncontrolled VFR flights are provided with FIS and shall report to Belga Information or Brussels FIC when commencing and ending their mission in the Brussels FIR. These VFR flights shall at all times squawk mode 3/A and mode C.

In order to decrease the risk of collision between military aircraft proceeding VFR outside controlled airspace, the traffic shall be flown one-way between the CTRs as published on chart ENR 6-INDEX.08. Pilots are warned that these regulations are only applicable to military aircraft. Consequently, collision hazard still exists with civil aircraft. These regulations do not apply to helicopters flying at 500 FT AGL.

Note1: The corridor between [Liège CTR](#) and [EBD37](#) (direction Waremme) shall in no case be crossed south-westbound below 1500 FT AMSL. When the cloudbase is below this altitude, this corridor will be avoided via the east and south of EBLG.

Note2: The corridor between [Antwerpen CTR](#) and [Brussels CTR](#) shall be crossed at 1000 FT AMSL.

Note3: The corridor between [Charleroi CTR](#) and [Chièvres CTR](#) shall be crossed at 1500 FT AMSL.

---

## ENR 1.3 Instrument Flight Rules

---

### 1 CIVIL

---

*Note: Unless explicitly indicated, the rules in this section apply in both Belgium and Luxembourg.*

#### 1.1 Rules Applicable to All IFR Flights (SERA.5015)

##### 1.1.1 Aircraft Equipment

Aircraft shall be equipped with suitable instruments and with navigation equipment appropriate to the route to be flown in accordance with the applicable air operations legislation.

##### 1.1.2 Minimum Levels

Except when necessary for take-off or landing, or except when authorized by the CAA, an IFR flight shall be flown at a level that is at least 1000FT above the highest obstacle located within 8KM of the estimated position of the aircraft.

##### 1.1.3 Change from IFR Flight to VFR Flight

An aircraft electing to change the conduct of its flight from compliance with IFR to compliance with VFR shall notify the appropriate ATS unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

When an aircraft operating under IFR is flown in or encounters VMC it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted VMC.

Change from IFR flight to VFR flight shall only be acceptable when a message initiated by the pilot in command containing the specific expression 'CANCELLING MY IFR FLIGHT', together with the changes, if any, to be made to the current flight plan, is received by an ATS unit. No invitation to change from IFR flight to VFR flight shall be made by ATS either directly or by inference.

#### 1.2 Rules Applicable to IFR Flights within Controlled Airspace (SERA.5020)

An IFR flight operating in cruising flight in controlled airspace shall be flown at a cruising level, or, if authorised by the ATS unit to employ cruise climb techniques, between two levels or above a level, selected from the table of cruising levels in [ENR 1.7, § 3](#), except that the correlation of levels to track prescribed therein shall not apply whenever otherwise indicated in ATC clearances or specified in the AIP.

#### 1.3 Rules Applicable to IFR flights outside Controlled Airspace (SERA.5025)

##### 1.3.1 Cruising Levels

An IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in the table of cruising levels in [ENR 1.7, § 3](#).

##### 1.3.2 Communications

An IFR flight operating outside controlled airspace shall maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication with the air traffic services unit providing flight information service.

##### 1.3.3 Position Reports

An IFR flight operating outside controlled airspace shall report position, as specified in [ENR 1.1, § 1.10.3](#).

#### 1.4 Supplementary Rules

##### 1.4.1 Flights Within Brussels UTA

###### 1.4.1.1 General

Except as specified in [§ 1.4.1.2](#) and in [ENR 3.3, § 1](#) aircraft shall follow the RNAV routes published in [ENR 3.2](#). Alternate ATS routes may be used on prior request made by the pilot to Brussels ACC or Maastricht UAC, if co-ordination of the different types of traffic allows it.

Cruising levels below FL220 are normally not available for overflying traffic.

**1.4.1.2 Free Route Airspace**

**1.4.1.2.1 Area of Application**

FRA procedures are available within the lateral limits of the Brussels UIR, the Amsterdam FIR (excluding ATS delegated areas), the Hannover UIR (excluding ATS delegated areas) and those parts of the Rhein UIR where the provision of ATS is delegated to Maastricht UAC between FL 245 and FL 660 (hereafter mentioned MUAC FRA). For detailed lateral and vertical limits see [ENR-2.1](#).

Detailed information and charts are available on <https://www.eurocontrol.int/service/free-route-airspace-maastricht-uac>.

**1.4.1.2.2 Time of application**

MUAC FRA is available H24.

The ATS route network and RAD Annex 3B direct routings (DCTs) are not available above FL 245, except for those segments required for the vertical connection to the lower airspace or for special purposes.

**1.4.1.2.3 Eligible Flights**

Eligible flights are those overflying aircraft that enter and exit MUAC FRA (FL 245-FL 660). Additional eligible flights are those that depart from or arrive at aerodromes below the lateral area of MUAC FRA or in its proximity and have a requested flight level above FL 245 within MUAC FRA.

**1.4.1.2.4 Definitions**

**FRA (free route airspace)**

A specified airspace within which users may freely plan a route between a defined entry point and a defined exit point, with the possibility to route via intermediate (published or unpublished) waypoints, without reference to the ATS route network, subject to airspace availability. Within this airspace, flights remain subject to air traffic control.

**FRA Horizontal Entry Point (E)**

A published significant point on the horizontal boundary of the FRA from which FRA operations are allowed. The FRA relevance of such points is included in [ENR-4.1](#) and [ENR-4.4](#) columns as (E).

**FRA Horizontal Exit Point (X)**

A published significant point on the horizontal boundary of the FRA to which FRA operations are allowed. The FRA relevance of such points is included in [ENR-4.1](#) and [ENR-4.4](#) columns as (X).

**FRA Intermediate Point (I)**

A published significant point or unpublished point, defined by geographical coordinates or by bearing and distance via which FRA operations are allowed. Intermediate points may be used to connect FRA operations to the ATS route network. If published, the FRA relevance of such points is included in [ENR-4.1](#) and [ENR-4.4](#) columns as (I).

**FRA Arrival Connecting Point (A)**

A published significant point to which FRA operations are allowed for arriving traffic to specific aerodromes. The FRA relevance of such points is included in [ENR-4.1](#) and [ENR-4.4](#) columns as (A).

**FRA Departure Connecting Point (D)**

A published significant point from which FRA operations are allowed for departing traffic from specific aerodromes. The FRA relevance of such points is included in [ENR-4.1](#) and [ENR-4.4](#) columns as (D).

**1.4.1.2.5 MUAC FRA flight procedures and flight planning**

**1.4.1.2.5.1 Flight Procedures**

Within MUAC FRA airspace users may freely plan a route between a defined FRA Horizontal Entry point (E) and a defined FRA Horizontal Exit point (X), with the possibility to route via FRA Intermediate points (I), without a reference to the ATS route network, subject to airspace availability.

**1.4.1.2.5.2 Airspace Restrictions and Airspace Reservations**

All airspace utilisation rules and availability as published in the RAD must be adhered to.

Flights may plan through AMC manageable RSAs according to the EAUP/EUUP; subject rules are specified in RAD Annex 2C.

In case of ad-hoc activations of RSA, and where crossing is not possible, airspace users shall expect a tactical re-routing/vectoring by ATC.

**1.4.1.2.5.3 Flight Planning**

**1.4.1.2.5.3.1 General**

Within MUAC FRA aircraft shall comply with aircraft equipment requirements as specified in [GEN-1.5](#).

Within MUAC FRA, airspace users will be able to flight plan direct routes freely, according to the table below.

From	To	Procedure
FRA Horizontal Entry Point (E)	FRA Horizontal Exit Point (X)	Flight plan direct or via one or several FRA Intermediate Points
FRA Departure Connecting Point (D)	FRA Arrival Connecting Point (A)	
FRA Intermediate Point (I)	FRA Intermediate Point (I)	

Relevant points available for flight planning are described in [ENR-4.1](#) and [ENR-4.4](#).

Restrictions on the availability for flight planning are detailed in the RAD. Filing of unpublished points, defined by geographical coordinates or by bearing and distance, is not permitted in the flight plan within the MUAC FRA area.

The airspace users may use any published FRA significant point for indicating changes of level and speed.

For flights operating within MUAC FRA, the route shall be indicated as follows:

- FRA significant points shall be described using the standard ICAO format;
- Route portions between FRA significant points shall be indicated by means of DCT (direct).

Within MUAC FRA, DCT segments shall not be planned closer than 2.5 NM to the MUAC FRA lateral border.

#### **1.4.1.2.5.3.2 Overflying Traffic**

Except for segments defined in ATS routes, RAD Annex 3B and SID/STAR lateral entry and exit to/from MUAC FRA shall be planned using the published FRA Horizontal Entry and FRA Horizontal Exit points only. For exceptions see paragraph 1.4.1.2.5.3.4.

Unless otherwise stated for a specific FRA Horizontal Entry point or FRA Horizontal Exit point in the RAD, flight planning shall follow the ICAO semi-circular rules as described in [ENR-1.7](#).

#### **1.4.1.2.5.3.3 Access to/from Terminal Airspace**

Except for segments defined in ATS routes, RAD Annex 3B and SID/STAR vertical entry and exit to/from MUAC FRA shall be planned using the published FRA Departure and FRA Arrival Connecting points only. The available connecting routes are published in RAD Annex 2B.

#### **1.4.1.2.5.3.4 Cross-border Application**

Except for segments defined in ATS routes, RAD Annex 3B and SID/STAR:

- the planning of DCT segments that are partially outside the vertical and lateral limits of MUAC FRA (re-entry segments) is not allowed;
- the planning of DCT segments across the MUAC FRA border (cross-border DCT) is not allowed, except to/from those FRA relevant significant points that are located outside the MUAC FRA but depicted with FRA relevance in [ENR-4.1](#) and [ENR-4.4](#).

#### **1.4.1.2.5.3.4.1 MUAC FRA and DK-SE FAB FRA**

Between MUAC FRA and DK-SE FAB FRA there is no need to file a FRA Horizontal Entry or Exit Point (E, X) for certain flows. For details on the eligible flows refer to the RAD. The use of a FRA Intermediate Point (I), that is situated on the boundary and published in [ENR-4.1](#) or [ENR-4.4](#), is possible if necessary. It is not allowed to plan from a FRA significant point inside MUAC FRA to a location described by geographical coordinates inside DK-SE FAB FRA, only significant points as published in AIP Denmark ENR 4.1 or ENR 4.4 and AIP Sweden ENR 4.1 or ENR 4.4 are permitted.

#### **1.4.1.2.5.3.4.2 MUAC FRA and DFS FRA**

Between MUAC FRA and DFS FRA cells EDUU West, EDUU East and EDUU North there is no need to file a FRA Horizontal Entry or Exit Point (E, X). The use of a FRA Intermediate Point (I) situated on or near the boundary and published in [ENR-4.1](#) or [ENR-4.4](#) is possible, if necessary. The conditions for the use of these points are defined in the RAD. All cross-border DCT segments require at least one published FRA significant point within MUAC FRA and one within DFS FRA. The explicit rules and eligible significant points can be retrieved from the RAD. At border sections with a higher traffic density and/or complexity, traffic is structured through so-called gates. These gates are published in AIP Germany ENR 2.2 and the conditions for the use are defined in the RAD. It is not allowed to plan from a FRA significant point inside MUAC FRA to a location described by geographical coordinates inside DFS FRA and vice versa. Only significant points as published in [ENR-4.1](#) and [ENR-4.4](#) are permitted.

#### **1.4.1.2.5.3.4.3 MUAC FRA and France FRA**

Between MUAC FRA and France FRA East Cell (LFFRAE) there is no need to file a FRA Horizontal Entry or Exit Point (E, X). The use of a FRA Intermediate Point (I), that is situated on or near the boundary and published in [ENR-4.1](#) or [ENR-4.4](#) is possible, if necessary. For this, the conditions for the use of these points are defined in the RAD. It is not allowed to plan from a FRA significant point inside MUAC FRA to a location described by geographical coordinates inside France FRA East Cell (LFFRAE) and vice versa. Only significant points as published in [ENR-4.1](#) and [ENR-4.4](#) are permitted.

### **1.4.1.3 Reduced Reporting Procedures**

Pilots shall apply the following procedures in order to reduce air-ground communications, unless otherwise instructed by ATC:

- the initial call after a frequency change shall only contain aircraft identification and actual level, with the addition of cleared level for climbing or descending aircraft;
- any position report, if required subsequently, shall only contain aircraft identification, position and time;
- level changes shall only be reported on leaving assigned levels;
- pilots shall, in the absence of prior instructions from ATC to change frequency, indicate that the aircraft is going to leave Brussels UIR by reporting: "approaching the UIR boundary" unless crossing the Brussels/Hannover UIR boundary;
- aircraft that are not capable of replying on SSR with 4096 codes on Mode A, nor with automatic pressure-altitude transmission on Mode C, but that have been exceptionally authorized to operate in the Brussels UIR, shall make an abbreviated position report over all "on request" reporting points.

#### 1.4.1.4 **Formation Flights**

Formation flights along ATS routes are authorized, provided that:

- prior permission has been obtained in accordance with ENR 1.1, § 1.15.3;
- a proper ICAO flight plan has been filed;
- they are performed in accordance with ENR 1.1, § 1.5.8;
- the formation leader squawks the assigned transponder code.

A formation flight will be handled by ATC as a single aircraft with increased radar separation (1 NM). When individual control is requested, advisory information will be issued to assist pilots in attaining standard ATC separation. When pilot-reports indicate that standard ATC separation has been established, normal ATC clearances will be issued.

*Note 1: Separation responsibility between the aircraft within the formation during the formation flight and during transition to individual flight rests with the pilots concerned, until standard separation has been obtained.*

*Note 2: Formation join-up and break-away shall only be conducted when authorization has been obtained from ATC.*

#### 1.4.2 **Flights Above FL 660**

The lowest usable flight level above FL 660 is FL 670.

Flights above FL 660 should be conducted along the axes of the upper RNAV routes. Aircraft shall join or cross the axes of such routes at one of the reporting points listed in ENR 4.4. The flight plan shall only mention reporting points defining the upper RNAV routes.

Flights bound for Brussels UTA shall request entry clearance 5 MIN before the estimated time of entry, unless such clearance has been previously issued by an adjacent control unit.

---

## 2 **MILITARY**

---

### 2.1 **Minimum safety height**

The minimum safety height and the low flying regulation are laid down in ENR 1.1, § 2.7.

### 2.2 **Flight Level**

IFR flights shall select a level appropriate to its track as specified in the ENR 1.1, § 2.7, except for:

- security flights;
- flights under radar control;
- when otherwise instructed by the appropriate ATS unit.

### 2.3 **Change from IFR Flight to VFR Flight**

A pilot encountering VMC during an IFR flight shall continue his flight according to IFR until receiving permission from the appropriate ATS unit to proceed in VFR.



## ENR 1.4 ATS Airspace Classification and Description

The airspace within the Brussels FIR/UIR is subdivided into four classifications (C, D, E and G) according to ICAO specifications.

*Note 1: If an airspace is not activated at specific times, the classification of the surrounding airspace applies.*

*Note 2: Where ATS airspaces with a different class of airspace adjoin vertically, flights at a common level shall comply with the requirements of, and will receive the services applicable to, the less restrictive class of airspace (class B is considered less restrictive than class A; class C is considered less restrictive than class B; etc.).*

### 1 AIRSPACE BELOW FL 660

#### 1.1 ICAO Airspace Classification (SERA.6001)

The requirements for the flights within each class of airspace are as shown in the following table.

Class	Type of flight	Separation provided	Service provided	Speed limitation <sup>(*)</sup>	Radio communication capability requirement	Continuous two-way-air-ground voice communication required	Subject to ATC CLR
A	IFR only	all ACFT	ATC service	not applicable	yes	yes	yes
B	IFR	all ACFT	ATC service	not applicable	yes	yes	yes
	VFR	all ACFT	ATC service	not applicable	yes	yes	yes
C	IFR	IFR from IFR IFR from VFR	ATC service	not applicable	yes	yes	yes
	VFR	VFR from IFR	(1) ATC service for separation from IFR; (2) ATC service, VFR/VFR traffic information (and traffic avoidance advice on request)	250KIAS below FL 100	yes	yes	yes
D	IFR	IFR from IFR	ATC service, traffic information about VFR flights (and traffic avoidance advice on request)	250KIAS below FL 100	yes	yes	yes
	VFR	NIL	ATC service, IFR/VFR and VFR/VFR traffic information (and traffic avoidance advice on request)	250KIAS below FL 100	yes	yes	yes

(\*) the CAA may exempt aircraft types that cannot maintain this speed for technical or safety reasons.

(\*\*) Pilots shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, when flying in RMZ.

Class	Type of flight	Separation provided	Service provided	Speed limitation(*)	Radio communication capability requirement	Continuous two-way-air-ground voice communication required	Subject to ATC CLR
E	IFR	IFR from IFR	ATC service and, as far as practical, traffic information about VFR flights	250 KIAS below FL 100	yes	yes	yes
	VFR	NIL	traffic information as far as practical	250 KIAS below FL 100	no(**)	no(**)	no
F	IFR	IFR from IFR as far as practical	air traffic advisory service, FIS if requested	250 KIAS below FL 100	yes	yes	no
	VFR	NIL	FIS if requested	250 KIAS below FL 100	no(**)	no(**)	no
G	IFR	NIL	FIS if requested	250 KIAS below FL 100	yes	yes	no
	VFR	NIL	FIS if requested	250 KIAS below FL 100	no(**)	no(**)	no

(\*) the CAA may exempt aircraft types that cannot maintain this speed for technical or safety reasons.

(\*\*) Pilots shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, when flying in RMZ.

## 1.2 Operational Air Traffic

Deviations from the ICAO airspace classification valid for OAT are highlighted in bold in the table below.

Class	Type	Separation	Service	Speed limitation	Radio communication	Subject to ATC CLR
C	IFR	IFR from IFR IFR from VFR	ATC service	not applicable	continuous two-way	yes
	VFR	VFR from IFR	ATC service for separation from IFR VFR traffic information (and traffic avoidance advice on request)	not applicable	continuous two-way	yes
D	IFR	IFR from IFR	ATC service including traffic information about VFR flights (and traffic avoidance advice on request)	not applicable	continuous two-way	yes
	VFR	not provided	aerodrome control service	not applicable	continuous two-way	yes
G	IFR	not provided	FIS and RIS	not applicable	required	no
	VFR	not provided	FIS and RIS	not applicable	required	no

## 2 AIRSPACE ABOVE FL 660

The airspace above FL660 is an unclassified, uncontrolled airspace within which only IFR flights are permitted. Aircraft operating within this airspace are submitted to following conditions:

- submission of a flight plan;
- maintain a listening watch on the appropriate radio frequency, establish two-way communication with the ATS unit providing FIS and report position as specified in ENR 1.1, § 1.10.3;
- carriage of a serviceable transponder.

---

# ENR 1.5 Holding, Approach and Departure Procedures

---

---

## 1 CIVIL

---

The holding, approach and departure procedures in use are based on those contained in *ICAO Doc 8168*.

### 1.1 Categories of Aircraft

Aircraft performance has a direct effect on the airspace and visibility needed to perform the various manoeuvres associated with the conduct of instrument approach procedures. The most significant performance factor is aircraft speed. Accordingly, the following five categories of typical aircraft have been established, based on 1.3 times stall speed  $V_{SO}$  or 1.23 times stall speed  $V_{SLG}$  in the landing configuration at maximum certificated landing mass (if both  $V_{SO}$  and  $V_{SLG}$  are available, the higher resulting value is applied), to provide a standardized basis for relating aircraft manoeuvrability to specific instrument approach procedures:

- CAT A: less than 91 KIAS;
- CAT B: 91 KIAS or more, but less than 121 KIAS;
- CAT C: 121 KIAS or more, but less than 141 KIAS;
- CAT D: 141 KIAS or more, but less than 166 KIAS;
- CAT E: 166 KIAS or more, but less than 211 KIAS.

As indicated in § 1.3 below, a specified range of handling speeds for each category of aircraft has been assumed for use in calculating airspace and obstacle clearance requirements for each procedure.

The IAC will specify the individual categories of aircraft for which the procedure is approved. Normally, procedures will be designed to provide protected airspace and obstacle clearance for aircraft up to and including CAT D. However, where airspace requirements are critical, procedures may be restricted to lower speed categories. Alternatively, the procedure may specify a maximum IAS for a particular segment without reference to aircraft category. In any case it is essential that pilots comply with the procedures and information depicted on instrument flight charts and the appropriate flight parameters shown in § 1.3 below if the aircraft is to remain in the areas developed for obstacle clearance purposes.

### 1.2 Obstacle Clearance

Obstacle clearance is a primary safety consideration in the development of instrument approach procedures. The criteria used and the detailed method of calculation is covered in *ICAO Doc 8168, Volume II*. However, from the operational point of view it is stressed that the obstacle clearance applied in the development of each instrument approach procedure is considered to be the minimum required for an acceptable level of safety in operations.

For each individual approach procedure an obstacle clearance altitude/height (OCA/H) is calculated in the development of the procedure and published on the IAC. In the case of precision approach and circling approach procedures, an OCA/H is specified for each category of aircraft listed in § 1.1 above. OCA/H is:

- a. in a precision approach procedure, the lowest altitude (OCA) or alternatively the lowest height (OCH) above the elevation of the relevant runway threshold, at which a missed approach must be initiated to ensure compliance with the appropriate obstacle clearance criteria;
- b. in a non-precision approach procedure, the lowest altitude (OCA) or alternatively the lowest height (OCH) above aerodrome elevation or the elevation of the relevant runway threshold, if the threshold elevation is more than 7 FT below the aerodrome elevation, below which the aircraft cannot descend without infringing the appropriate obstacle clearance criteria;
- c. in a visual (circling) procedure, the lowest altitude (OCA) or alternatively the lowest height (OCH) above the aerodrome elevation below which an aircraft cannot descend without infringing the appropriate obstacle clearance criteria.

### 1.3 Speeds for Procedure Calculations in KIAS

Aircraft CAT	V <sub>at</sub>	Range of speeds for initial approach	Range of final approach speeds	MAX speeds for visual manoeuvring (circling)	MAX speeds for missed approach	
					intermediate	final
A	< 91	90 / 150 (110*)	70 / 100	100	100	110
B	91 / 120	120 / 180 (140*)	85 / 130	135	130	150
C	121 / 140	160 / 240	115 / 160	180	160	240
D	141 / 165	185 / 250	130 / 185	205	185	265
E	166 / 210	185 / 250	155 / 230	240	230	275

V<sub>at</sub>: speed at THR based on 1.3 times stall speed V<sub>so</sub> or 1.23 times stall speed V<sub>slg</sub> in the landing configuration at maximum certificated landing mass. If both V<sub>so</sub> and V<sub>slg</sub> are available, the higher resulting V<sub>at</sub> is applied.  
\* maximum speed for reversal and racetrack procedures.

### 1.4 Naming Convention for Waypoints Used in Instrument Approach Procedures

- IAF is pronounceable letter name code (except in Luxembourg);
- IF is a 5 alphanumeric name code finishing with letter "I" or a pronounceable letter name code (if operational advantage);
- FAF is a 5 alphanumeric name code finishing with letter "F";
- Where MAPT is co-located with THR, WPT is named as "RWxx (RUNWAYdesignator)". Otherwise the WPT is named as "MAPxx (RUNWAYdesignator)".

### 1.5 Arriving Flights

Controlled flights entering and landing within a TMA will be cleared to a specified holding point and instructed to contact APP at a specified time, level or position. The terms of this clearance shall be adhered to until further instructions are received from APP. If the clearance limit is reached before further instructions have been received, holding procedure shall be carried out at the level last authorized.

Due to the limited airspace available, it is important that the approaches to the holding patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if for any reason the approach and/or holding cannot be performed as required.

#### Maximum Holding Speeds

Levels	Normal conditions	Turbulence conditions
up to FL 140 incl	aircraft CAT A/B: 170KIAS aircraft CAT C/D/E: 230KIAS	aircraft CAT A/B: 170KIAS aircraft CAT C/D/E: 280KIAS
between FL 140 and FL 200 incl	240KIAS	280KIAS or M0.8, whichever is less
between FL 200 and FL 340 incl	265KIAS	
above FL 340	M0.83	M0.83

### 1.6 Departing Flights

Flights departing from controlled aerodromes will receive initial ATC clearance from the local TWR. The clearance limit will normally be the aerodrome of destination.

Flights departing from non-controlled aerodromes and intending to enter controlled airspace are required to file a flight plan with the nearest ATS unit prior to departure. However, where a non-controlled aerodrome is located outside a CTR and where telephone facilities are not available, flight plans may be filed during flight. In those cases pilots should ensure that the flight plan is filed at least 10 MIN before entering controlled airspace and that RTF transmissions are kept to a minimum.

## 2 MILITARY

The holding, approach and departure procedures in use are designed according criteria contained in the STANAG 3759 - APATC-1(A). Procedures reviewed, changed or developed henceforth are based on the STANAG 3759 - AATCP-1(C). The STANAG 3759 and its allied publication AATCP-1, adopt ICAO Doc 8168, Volume II for procedure design. The AATCP-1 is a supplement to PANS-OPS that provides for criteria for specific military needs. Procedures developed according AATCP-1 are annotated "MIPS" (NATO military instrument procedures standardisation). More detailed explanation is available in the BEMIL FLIP (IFR). Belgian military IFR publications are also available through the CENOR website:

URL: [www.cenor.org](http://www.cenor.org)

### 2.1 Categories of Aircraft

Aircraft performance has a direct effect on the airspace and visibility needed to perform certain manoeuvres, such as circle to land, turning missed approach, final alignment correction to land and descent. The most significant performance factor

is aircraft speed. Accordingly, the following five categories of aircraft have been established, based on 1.3 times stall speed in the landing configuration at maximum gross landing weight. The OPS authority determines the category of minima required and to be used by their aircraft.

- CAT A: less than 91 KIAS;
- CAT B: 91 KIAS or more, but less than 121 KIAS;
- CAT C: 121 KIAS or more, but less than 141 KIAS;
- CAT D: 141 KIAS or more, but less than 166 KIAS;
- CAT E: 166 KIAS or more.

## 2.2 Minima for Instrument Approach Procedures

Instrument approach procedure minima published in AD 2 and the BEMIL FLIP (IFR) and established in accordance with the 'NATO Supplement to ICAO Doc 8168 - OPS/611 Volume II for the preparation of instrument approach and departure procedures (AATCP-1)' will be applied at all Belgian military aerodromes.

The published minima for instrument approach procedures are the lowest permitted by AATCP-1 criteria. Pilots have to consult applicable directives of their respective services for aircraft model restrictions. In case of temporary changes to the instrument landing minima, a NOTAM will be published.

### 2.2.1 Height above Touchdown Zone Elevation (HAT) and Height above Aerodrome (HAA)

The height above touchdown zone elevation and height above aerodrome are published together with the DA and the MDA. The HAT is the height of the DA or MDA above the highest runway elevation in the first 3000 FT of the runway, beginning at the threshold and will be published in conjunction with straight-in minima. The HAA is the height of the MDA above the published aerodrome elevation and will be published in conjunction with circling minima.

### 2.2.2 Decision Altitude (DA) and Minimum Descent Altitude (MDA)

In a precision approach procedure (ILS and PAR), the DA is the lowest altitude, or alternatively the HAT is the lowest height, at which a missed approach must be initiated if the required visual reference has not been established.

In a non-precision approach procedure, the MDA is the lowest altitude, or alternatively the HAT is the lowest height, below which the aircraft cannot descend until the runway environment is in sight and the aircraft is in a position to descend for a normal landing.

In a circling procedure, the MDA is the lowest altitude, or alternatively the HAA is the lowest height, below which the aircraft cannot descend until the runway environment is in sight and the aircraft is in a position to descend for a normal landing.

## 2.3 Information About The Use of Instrument Procedures Plates

### 2.3.1 Specifications

The lay out and the information on the MIL IFR procedures plates is according to the CENOR specifications. These specifications are agreed amongst the responsible authorities of 6 NATO nations (Norway, Denmark, The Netherlands, Germany, Czech Republic and Belgium) and they are based upon the STANAG 3970.

### 2.3.2 Publication

The instrument procedure plates and the aerodrome lay out plates of the Belgian MIL aerodromes published in this AIP, the BEMIL FLIP(s) and the CENOR FLIPs are identical.

Due to publication cycles the moment of publication a new or revised procedure plate in the CENOR FLIPs can be different from the MIL AIP and BEMIL FLIP. To assure this situation is not a safety risk the necessary NOTAM will be published in the Belgian M-series as well as in the German U-series.

### 2.3.3 Landing Minima

See below for the explanation of the landing minima as it is represented in the BEMIL FLIP - IFR (High and Low Instrument Approach and Departure Procedures Belgium).

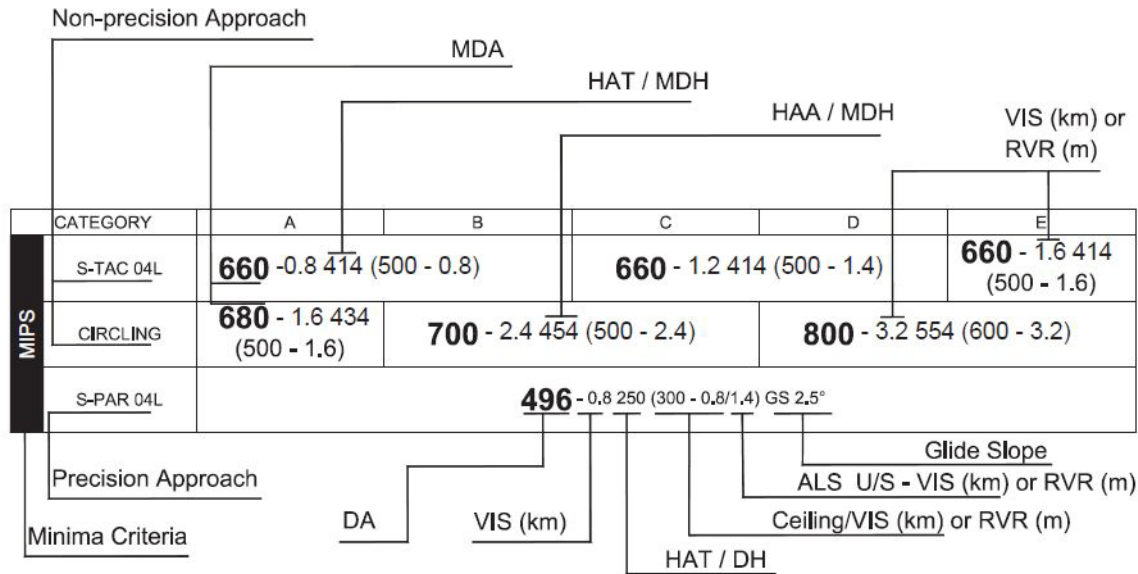
Landing minima are established for six aircraft categories, determined as follow:

CAT	APPROACH SPEED
A	Less than 91 KT
B	91 KT or more but less than 121
C	121 KT or more but less than 141
D	141 KT or more but less than 166
E	166 KT or more
HPMA	See page IV in BEMIL FLIP - IFR

Note 1: Speeds are based on 1.3 times the stall speed in the landing configuration at maximum gross landing weight.

Note 2: Operational authorities determine the category of minima required and to be used by their aircraft.

Standard portrayal of instrument approach minima for landing is as follows.



- Only “estimated horizontal visual range on ground” is available for Belgian military airfields.
- The VIS value published following the DA or the MDA is the required minimum for the approach.
- Pilots should consult applicable directives of their respective service for aircraft restrictions.

**2.3.4 Procedure Design System**

See below for the explanation of the procedure design system used in NATO nations that ratified the STANAG 3759 and information on the system used for Belgian civil aerodromes as well as information on the differences to fly these procedures.

**2.3.4.1 Identification of Procedure Design Standards Used**

Pilots should be aware of the system used for designing the procedure since it may be of influence on the way to fly the procedure.

Therefore one of the following annotations are put on the top left of the procedure plates:

- NATIONAL: Procedure designed according national specific criteria
- MIPS: Procedure designed according NATO military instrument procedures standardization implemented by AATCP-1.
- PANS-OPS: Procedure designed according ICAO Doc. 8168 Vol. II.
- TERPS: Procedure designed according NATO military criteria in APATC-1(A).

**2.3.4.2 Identification of Minima Criteria**

Criteria used to establish the minima are stated on the left side of the minima table (See § 2.3.3 for illustration):

- MIPS: Minima assigned according NATO military instrument procedures standardization implemented by AATCP-1.
- EU-OPS: Minima assigned according EU-OPS.
- TERPS: Minima assigned according NATO military criteria in APATC-1(A). No longer updated after 22 OCT 2008.
- NATIONAL XXX: Minima assigned according national specific criteria

**2.3.4.3 ICAO (PANS-OPS) Procedures**

NATO countries that have ratified STANAG 3759 will gradually recalculate their procedures according the AATCP-1 which is the ICAO PANS-OPS standard with some military exceptions and add-ons. These procedures shall be flown according STANAG 7199 and AFPP-1 covering and implementing ICAO Doc 8168 Vol I (PANS-OPS).

*Note: The differences between the way of flying IFR procedures according the AFMAN 11-217 and ICAO Doc 8168 Vol I are explained in AFMAN 11-217 Vol I (Ed Oct 2010) chapter 15.*

**2.3.4.4 High Performance Military Aircraft Procedures**

HPMA procedures introduce a new aircraft category (See also page IV in BEMIL FLIP IFR). Procedures designed exclusively for HPMA are annotated 'HPMA' before the procedure identification. The plates for such procedures are made distinctive with a hatch pattern.

---

# ENR 1.6 ATS Surveillance Services and Procedures

---

## 1 CIVIL

---

### 1.1 Transponder requirement

The carriage and operation of Mode S transponders is mandatory in the Brussels FIR/UIR for all aircraft operating:

- in civil class C airspace;
- in civil class D airspace;
- in EBKT RMZ/TMZ;
- in Belgium in class G airspace for VFR flights at night.

During missions, police aircraft are exempted for replying to Mode S interrogations, provided they activate the A/C modes of the on-board transponder and advise the ATC unit concerned.

The carriage and operation of a serviceable transponder - capable of replying to Mode A and C interrogations - is mandatory in the Brussels FIR/UIR for all aircraft operating in military controlled airspace.

In Belgium an exemption to these rules may be granted for a single (ferry-) flight to a maintenance facility, provided that the request is made before the flight, to the ATC unit of the airspace concerned.

*Note: Pilots are reminded about the importance of having a well-functioning transponder to be switched on in the Brussels FIR/UIR; ATC is allowed when possible to refuse aircraft without a well-functioning one.*

### 1.2 Operation of an SSR Transponder (SERA.13001)

When an aircraft carries a serviceable SSR transponder, the pilot shall operate the transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where SSR is used for ATS purposes.

Pilots shall not operate the IDENT feature unless requested by ATS.

Except for flight in airspace designated by the competent authority for mandatory operation of transponder, aircraft without sufficient electrical power supply are exempted from the requirement to operate the transponder at all times.

*Note 1: Pilots of aircraft engaged in formation join-ups are expected to continue operating the transponder until established in formation. Once established in formation, all except the lead aircraft should be instructed to 'squawk standby'.*

*Note 2: Pilots of non-powered aircraft are also encouraged to operate the transponder during flight outside airspace where carriage and operation of SSR transponder is mandatory.*

### 1.3 Standard SSR Operating Procedures

#### 1.3.1 General

Except when encountering a state of emergency, pilots shall operate transponders and select modes and codes in accordance with ATC instructions. In particular, when entering the Brussels FIR, pilots who have already received specific instructions from ATC concerning the setting of the transponder shall maintain that setting until otherwise instructed.

#### 1.3.2 SSR transponder Mode A code setting (SERA.13005)

To indicate that it is in a specific contingency situation, the pilot of an aircraft equipped with SSR shall:

1. select Code 7700 to indicate a state of emergency unless ATC has previously directed the pilot to operate the transponder on a specified code. In the latter case, a pilot may nevertheless select Code 7700 whenever there is a specific reason to believe that this would be the best course of action;
2. select Code 7600 to indicate a state of radio-communication failure;
3. attempt to select Code 7500 to indicate a state of unlawful interference. If circumstances so warrant, Code 7700 should be used instead.

*Note 1: If a pilot has selected Mode A Code 7500 and has been requested to confirm this code by ATC, the pilot should, according to circumstances, either confirm this or not reply at all. If the pilot does not reply, ATC will take this as confirmation that the use of Code 7500 is not an inadvertent false code selection.*

Except in the cases described above, the pilot shall:

1. select codes as instructed by the ATS unit; or
2. in the absence of ATS instructions related to code setting, select code 2000
3. when not receiving air traffic services, select code 7000 in order to improve the detection of suitably equipped aircraft.

*Note 2: When requested by ATC to confirm the code selected, the pilot should verify the Mode A code setting on the transponder; reselect the assigned code if necessary; and confirm to ATC the setting displayed on the controls of the transponder.*

### 1.3.3 Frequency Monitoring Code

Pilots operating in Belgian class G airspace who are not receiving FIS, but are monitoring the COM channel of Brussels FIC, should select Code 5101 if the aircraft is equipped with a Mode S transponder.

### 1.3.4 Pressure altitude derived information (SERA 13010)

When the aircraft carries serviceable Mode C equipment, the pilot shall continuously operate this mode unless otherwise dictated by ATC.

### 1.3.5 SSR transponder Mode S aircraft identification setting (SERA.13015)

Aircraft equipped with Mode S having an aircraft identification feature shall transmit the aircraft identification as specified in Item 7 of the ICAO flight plan or, when no flight plan has been filed, the aircraft registration.

In order to be interpreted properly, there must be no spaces between the designator letters and flight number, nor any additional/superfluous zeros preceding the flight number. In case the aircraft identification can be entered manually, entry should be part of the start-up procedures.

Correct setting of aircraft identification is essential for identification and correlation (of radar track with flight plan data). An incorrect setting of the aircraft identification will be reported to the Belgian Civil Aviation Authority.

*Note 1: For Mode S transponder ground operation at EBBR, see [EBBR AD 2.20, § 1.4](#).*

*Note 2: For Mode S transponder ground operation at ELLX, see [ELLX AD 2.20, § 1.1](#).*

## 1.4 SSR transponder failure when the carriage of a functioning transponder is mandatory (SERA.13020)

### 1.4.1 Transponder failure after departure

In case of a transponder failure after departure, ATC units will attempt to provide for continuation of the flight to the destination aerodrome in accordance with the flight plan. Pilots may, however, be expected to comply with specific restrictions.

*Note: When an aircraft experiencing transponder failure after departure is operating or expected to operate in an area where the carriage of a functioning transponder with specified capabilities is mandatory, the ATC units concerned will endeavour to provide for continuation of the flight to the aerodrome of first intended landing in accordance with the flight plan. However, in certain traffic situations, either in terminal areas or en- route, continuation of the flight may not be possible, particularly when failure is detected shortly after take-off. The aircraft may then be required to return to the departure aerodrome or to land at the nearest suitable aerodrome acceptable to the operator concerned and to ATC.*

### 1.4.2 Transponder failure before departure

In the case of a transponder which has failed and cannot be restored before departure, pilots shall:

1. inform ATS as soon as possible, preferably before submission of a flight plan;
2. insert in Item 10 of the ICAO flight plan form under SSR the character 'N' for complete unserviceability of the transponder or, in case of partial transponder failure, insert the character corresponding to the remaining transponder capability; and
3. comply with any published procedures for requesting an exemption from the requirements to carry a functioning SSR transponder.

*Note: In case of a transponder failure which is detected before departure from an aerodrome where it is not practicable to effect a repair, the aircraft concerned should be permitted to proceed, as directly as possible, to the nearest suitable aerodrome where repair can be made. When granting clearance to such aircraft, ATC will take into consideration the existing or anticipated traffic situation and may have to modify the time of departure, flight level or route of the intended flight. Subsequent adjustments may become necessary during the course of the flight.*

## 1.5 System of SSR Code Assignment

Codes will be assigned in accordance with the SSR code allocation list for the ICAO EUR Region, which is based on the Originating Region Code Assignment Method (ORCAM).

Codes protected for international transit, transit codes, which are assigned to overflying or inbound flights, will be retained by ATC.

Code 1000 will be assigned or retained to indicate an eligible (flagged by the IFPS) IFR flight, where the downlinked aircraft identification is validated as matching the aircraft identification entered in the flight plan.



**1.5.1 In Belgium****Departing International IFR Flights**

0101 - 0117	departing traffic
7101 - 7167	departing traffic
4401 - 4427	departing traffic inbound the United Kingdom, the Netherlands, Ireland, Greenland, Iceland, Canada or the United States, and departing traffic re-entering Belgium.
1000	eligible (flagged by the IFPS) departing traffic

**Domestic Flights**

4450 - 4457	codes assigned by Brussels ACC/APP
5102 - 5173	codes assigned by Brussels ACC/APP
6301 - 6313	codes assigned by Brussels TWR
6314 - 6327	codes assigned by Charleroi TWR/APP
6330 - 6343	codes assigned by Liège TWR/APP
6344 - 6361	codes assigned by Oostende TWR/APP
6362 - 6367	codes assigned by Antwerpen TWR

**VFR Flights**

0041 - 0057	codes assigned by Brussels INFO
-------------	---------------------------------

**1.5.2 In Luxembourg****Departing International IFR Flights**

3501 - 3507	Departing traffic
5650 - 5657	Departing traffic
7170 - 7177	Departing traffic
1000	Eligible (flagged by the IFPS) departing traffic

**Flights remaining in Luxembourg TMA below FL165  
and solely controlled by Luxembourg APP**

4460 - 4464	Codes assigned by Luxembourg APP
-------------	----------------------------------

**VFR Flights**

4465 - 4467	Codes assigned by Luxembourg APP/TWR
4470 - 4477	Codes assigned by Luxembourg APP/TWR

**2 MILITARY****2.1 General**

ATS units and Air Defence Stations use SSR for identification and automatic tracking of aircraft.

The carriage of a serviceable transponder capable of replying to Mode A and C is compulsory for all aircraft operating in all military controlled airspace. An exemption to this rule may be granted, provided that the request is made before the flight to the authority having jurisdiction over the airspace concerned. Aircraft flying OAT within the Brussels FIR/UIR must have a serviceable SSR transponder.

The carriage of a serviceable Mode S (ELS or EHS) SSR transponder is highly recommended but not yet compulsory for State aircraft flying OAT within the Brussels FIR/UIR including low level VFR flights.

State aircraft flying GAT within the Brussels FIR/UIR shall comply with the regulation for the carriage and operation of SSR mode S airborne equipment published in the AIP and/or related AIC.

State aircraft that do not transmit ADS-B out for technical or operational reasons, will be accommodated in the Brussels FIR/UIR through traditional surveillance methods such as Mode A/C/S.

Flights with a wrong Mode S ACID will be instructed by ATC to correct this. Flight limitations may be imposed until the ACID is correct (e.g. not leaving the CTR or TMA).

## 2.2 SSR Mode

Aircraft flying OAT within the Brussels FIR/UIR shall squawk:

Mode 1	as instructed by the appropriate NATO authority
Mode 2	always activated unless instructed otherwise
Mode 3/A	as instructed by the controlling agency
Mode C	always activated unless instructed otherwise
Mode S	Only mandatory for declared Mode S capable Belgian military aircraft. Mode S ACID must exactly match the ACID as entered in item 7 of the FPL (See ENR 1.10. § 2.3.1.1)

*Note:* In a formation flight, only one aircraft shall squawk as mentioned above, the other aircraft shall squawk "stand-by".

*Note:* Mode 4 is forbidden.

## 2.3 SSR Mode 3 Code Allocation

### Domestic Flights

1401 - 1477	Steenokkerzeel ATCC
2601 - 2627	Cross-border to EH/ED
5401 - 5417	Koksijde/HELI
5420 - 5427	RPAS
5430 - 5477	SF260M
6001 - 6077	Beauvechain CRC
6401 - 6477	Steenokkerzeel ATCC

### Local Flights

4201 - 4207	Chièvres
4210 - 4227	Beauvechain
4230 - 4247	Kleine-Brogel
4250 - 4267	Florennes
4270 - 4277	Koksijde

### Special Codes

A1000	conspicuity code applicable to civil city pair aircraft, forbidden for OAT flights.
A7000 + C	uncontrolled flights, which have not received an instruction concerning the setting of their transponder
A7500	unlawful interference
A7600	radio communication failure
A7700	emergency (unless instructed otherwise by the controlling agency)

## 2.4 Radio Communication Failure

### 2.4.1 Receiver Failure

The pilot shall transmit reports at the scheduled times or positions, preceded by "transmitting in the blind due to receiver failure". These reports should include his intentions and the time of his next intended transmission.

### 2.4.2 Receiver and Transmitter Failure

#### 2.4.2.1 VFR

- Squawk A7600, and
- Maintain VMC, and
- Land at the nearest suitable aerodrome, and
- Report his arrival by the most expeditious means to the appropriate ATC unit.

#### 2.4.2.2 IFR

- Squawk A7600, and
- Proceed according to flight plan and hold over the last navaid, and

- Commence a descent from this navaid as close as possible to the last acknowledged EAT or the flight plan EAT, and
- Complete the normal instrument approach procedure and land, if possible within 30 MIN of EAT (last acknowledged or flight plan).

If the pilot is established on a published ATS route, he shall maintain the last assigned speed and level for a period of 7 MIN. After this period, he shall adjust to the level in accordance with the flight plan. If the pilot is established on a published ATS route but he was receiving radar vectors or he was proceeding offset, the pilot shall proceed in the most direct manner possible to rejoin the current flight plan route.

If the pilot has been given level clearances for only a part of the route, he shall fly this level to the point specified in the clearance and then the cruising level of the flight plan. Departing aircraft shall fly the level they are cleared to for 3 MIN and then fly the cruising level of their flight plan.

### **2.4.3 Transmitter (and Receiver) Failure and SSR inoperative**

The pilot may or, if transponder is inoperative, shall fly triangles of 1 MIN legs (TAS higher than 300 KT) or 2 MIN legs (TAS equal or less than 300 KT) clockwise if his receiver still works, anti-clockwise if the radio receiver and transmitter are both out of service. He can expect to be intercepted by a shepherd aircraft.

THIS PAGE INTENTIONALLY LEFT BLANK

# ENR 1.7 Altimeter Setting Procedures

## 1 GENERAL

Altimeter setting procedures are established in accordance with *ICAO Doc 8168, Volume III, Section 2* and *ICAO Doc 7030, European (EUR) Regional Supplementary Procedures, § 6.3*.

The transition altitude is established as follows:

- Brussels FIR (except Luxembourg TMA): 4 500 FT AMSL
- Luxembourg TMA: 5 000 FT AMSL

The transition level is established in function of the tables below:

### Brussels FIR (except Luxembourg TMA)

QNH (HPA) (1)	Transition Level
942.2 - 959.4	FL 075
959.5 - 977.1	FL 070
977.2 - 995.0	FL 065
995.1 - 1013.2	FL 060
1013.3 - 1031.6	FL 055
1031.7 - 1050.3	FL 050

(1) QNH values are transmitted by ATC as whole numbers.

### Luxembourg TMA

QNH (HPA)	Transition Level
< 959.9	FL 080
960.0 - 977.9	FL 075
978.0 - 995.9	FL 070
996.0 - 1013.9	FL 065
1014.0 - 1031.9	FL 060
>1032.0	FL 055

## 2 PROCEDURES

### 2.1 Take-off and Climb

A QNH altimeter setting is made available to aircraft in taxi clearance prior to take-off.

Vertical positioning of aircraft during climb is expressed in terms of altitude until reaching the transition altitude above which vertical positioning is expressed in terms of flight level.

### 2.2 Approach and Landing

#### 2.2.1 General

A QNH altimeter setting and the transition level are made available in approach clearance and in clearance to enter the traffic circuit.

Vertical positioning of aircraft during approach is controlled by reference to flight levels until reaching the transition level below which vertical positioning is controlled by reference to altitude.

When flying outside controlled airspace at or below 4 500 FT AMSL, the altimeter should be set to the QNH of the aerodrome of destination as soon as entering the controlled airspace associated with it (TMA or CTR as the case may be).

A QFE altimeter setting is only given on request and shall only be used for terrain clearance during final approach. The reference datum of the QFE altimeter setting is either:

- a. the threshold elevation:
  - for instrument runways (SRA or NDB approaches), if the threshold elevation is 7 FT or more below the aerodrome elevation;
  - for precision approach runways (ILS);
- b. the aerodrome elevation.

**2.2.2 Missed Approach Procedure for Military Pilots**

In the event of a missed approach, pilots shall use the QNH unless otherwise instructed by the control tower. If the missed approach procedure requires a climb above the transition altitude, pilots shall follow the relevant altimeter setting procedures given in § 1 above.

*Note 1: Military pilots shall comply with the civilian instructions when flying within airspace controlled by civil authorities.*

*Note 2: An aerodrome QNH setting is a setting of which the source is located at or less than 5NM from the landing threshold.*

**2.3 En-route**

The cruising level at which a flight or a portion of a flight is to be conducted shall be expressed in terms of flight level when operated above the transition altitude.

When flying in a controlled airspace associated with an aerodrome (TMA or CTR) at or below the transition altitude, the aerodrome QNH value given by the relevant control unit shall be used for the altimeter setting.

When flying outside controlled airspace at or below 4500FT AMSL, the altimeter shall be set to the regional QNH given on pilot's request by Brussels FIC, Steenokkerzeel ATCC or by any ATC unit. The regional QNH is the lowest of the QNH values for the following stations: EBAW, EBBE, EBBR, EBCI, EBCV, EBFS, EBBL, EBFN, EBLG, ELLX, EBOS, EBSH and EBSP.

VFR flights conducted at or below 3000FT AGL do not have to maintain a semi-circular cruising level and consequently are not compelled to use any particular altimeter setting. However, they are advised:

- to take into consideration, for terrain and obstacle clearance purpose, either the regional QNH or the QNH value relevant to the area overflown (EBBR, ELLX, EBOS and EBSP) obtainable from Brussels FIC or Steenokkerzeel ATCC;
- to take note that high speed low level military flights, having a flight visibility less than 5KM, are mandatory conducted under IFR and are therefore maintaining semi-circular IFR cruising altitudes based on the regional QNH.

**3 TABLE OF CRUISING LEVELS**

Magnetic track											
From 000 degrees to 179 degrees						From 180 degrees to 359 degrees					
IFR flights			VFR flights			IFR flights			VFR flights		
FL	ALT		FL	ALT		FL	ALT		FL	ALT	
	M	FT		M	FT		M	FT		M	FT
010	300	1000	-	-	-	020	600	2000	-	-	-
030	900	3000	035	1050	3500	040	1200	4000	045	1350	4500
050			055			060			065		
070			075			080			085		
090			095			100			105		
110			115			120			125		
130			135			140			145		
150			155			160			165		
170			175			180			185		
190			195			200					
210						220					
230						240					
250						260					
270						280					
290						300					
310						320					
330						340					
350						360					
370						380					
390						400					
410						430					
450						470					
490						510					
etc.						etc.					

---

## ENR 1.8 Regional Supplementary Procedures

---

Regional Supplementary Procedures are applied in accordance with *ICAO Doc 7030. Regional Supplementary Procedures*.

THIS PAGE INTENTIONALLY LEFT BLANK



---

## ENR 1.9 Air Traffic Flow Management and Airspace Management

---

---

### 1 ATFM STRUCTURE

---

#### 1.1 Service Area

Within the European ATFM Area (see [https://www.nm.eurocontrol.int/STATIC/NM\\_AREA](https://www.nm.eurocontrol.int/STATIC/NM_AREA)), the EUROCONTROL Network Manager (NM) is responsible for the provision of the ATFM service.

#### 1.2 Service Provided

The objective of the ATFM service is to:

- Ensure the achievement of an efficient utilisation of the available capacity of the European air traffic management network;
- Facilitate the planning, coordination and execution of ATFM measures taken by all operational stakeholders;
- Facilitate accommodation of military requirements and crisis management responses;
- Ensure regional connectivity and interoperability of the European network within the ICAO EUR Region and with adjacent ICAO regions.

The ATFM service is provided in accordance with *ICAO Doc 7030*.

#### 1.3 ATFM Units

The unit responsible for the ATFM service is the Network Manager Operations Centre (NMOC). This unit is available H24:

Post: EUROCONTROL NM  
Rue de la Fusée / Raketstraat 96  
1130 Brussels  
BELGIUM

AFS: EUCHZMTA

SITA: BRUEA7X

URL: <https://www.eurocontrol.int/network-operations>

The flow management positions (FMP) are the major interface between ATC, the local aircraft operators and the NMOC.

The Brussels FMP is the responsible FMP for the Brussels FIR/UIR up to FL 245. This unit is available H24:

Post: skeyes  
O/CANAC/ATFCM  
Building U  
Tervuursesteenweg 303  
1820 Steenokkerzeel  
BELGIUM

TEL: +32 (0) 2 206 27 30 or 31

AFS: EBBRFMPC

The Maastricht FMP is the responsible FMP for the Brussels UIR above FL 245. This unit is available H24:

Post: Eurocontrol  
Maastricht UAC  
Horsterweg 11  
6199 AC Maastricht Airport  
THE NETHERLANDS

TEL: +31 (0) 43 366 1473

Email: [masuac.fmp@eurocontrol.int](mailto:masuac.fmp@eurocontrol.int)

The interface between the military airspace users and the Brussels FMP is ensured by the AMC (see below, § 3) and the Steenokkerzeel ATCC supervisor.

---

### 2 ATFM MESSAGES AND PROCEDURES

---

Procedures concerning the ATFM service, including flight plan requirements, slot allocation and the ATFM messages, shall be applied as described in the IFPS User Manual: [www.eurocontrol.int/publication/ifps-users-manual](http://www.eurocontrol.int/publication/ifps-users-manual).

It is the responsibility of the aircraft operator or the pilot to inform himself of any applicable ATFM measures. Information with respect to valid ATFM measures can be consulted on the Network Operations Portal (NOP) of EUROCONTROL NM: [www.public.nm.eurocontrol.int/pubportal/gateway/spec](http://www.public.nm.eurocontrol.int/pubportal/gateway/spec).

Information concerning the ATFM procedures and applicable ATFM measures can also be obtained from the ARO of the aerodrome of departure or from the responsible FMP.

*Note: MIL cross-border GAT and OAT/GAT flights departing from Belgian aerodromes are subject to the ATFM service. More information can be obtained from the AMC (see below, § 3).*

## 2.1 ATFM Exemptions

### 2.1.1 In Belgium

#### 2.1.1.1 Request for Special Handling

The insertion of an STS indicator in field 18 of a flight plan (see [ENR 1.10, § 1.4.9](#)), indicates to all parties that may have to handle the flight that special handling may be required.

It shall be noted that only STS/FFR, STS/HEAD, STS/MEDEVAC and STS/SAR indicators grant automatic exemption from ATFM measures.

The STS/ATFMX indicator also enables exemption when used, but prior authorisation must be given by the CAA if the nature of the flight duly justifies it.

Information about abbreviations used can be found in the IFPS Users Manual.

#### 2.1.1.2 Use of the 'STS/ATFMX' indicator

For flights departing from the Brussels FIR, the use of the STS/ATFMX indicator in item 18 of the flight plan can only be requested in the following cases:

- a. A human life may be lost, or the physical integrity of a person seriously compromised in permanent manner in the event of a delay due to an ATFM control measure. Such situations include urgent transport of organs or medical teams. Pre-positioning flights may also be granted an exemption if the situation requires it.
- b. The flight is for a state mission (but does not fall under STS/HEAD) of such importance that the flight cannot accept any delay.
- c. Flights operating on a humanitarian mission.

It shall be noted that any flight that would have normally been delayed and that obtains an ATFM departure slot exemption transfers the delay to other flights. It is therefore essential that the STS/ATFMX indicator be used if, and only if, the nature of the flight justifies this.

Operators who wish to use the STS/ATFMX indicator must obtain authorisation before the flight, by transmitting the information required using the application form available at <https://mobilit.belgium.be/fr/aviation/espace-aerien/demandes>, accompanied by documents justifying the request.

The request and flight documentation must be sent to the following email address: [aspa.exemptions@mobilit.fgov.be](mailto:aspa.exemptions@mobilit.fgov.be).

The request must be sent at least 48 hours prior to the flight during working hours: MON to FRI (HOL excl), 0700-1600 (0600-1500).

Authorisation is granted after examination of the supporting documents provided. The absence of a response 24 hours prior to a flight departure constitutes authorisation.

In any case, the BCAA may request further information regarding the supporting documents provided.

In the event of an emergency when the request cannot be made within the prescribed deadlines, the flight plan and the associated supporting documents are sent as soon as possible to the CAA, and not later than 48 hours after the flight. The operator can file his flight plan with the STS/ATFMX indicator, the verification of the compliance of the request being carried out a posteriori based on the provided information.

#### 2.1.1.3 Verification by the competent authority

The CAA consults the EUROCONTROL flight database monthly to identify the number of flight plans marked with STS/ATFMX and the air operators concerned.

All operators shall retain all appropriate documents to justify the use of the ATFMX exemption for a period of 12 months from the date of the exempted flight and provide them on request to the CAA.

### 2.1.2 In Luxembourg

#### 2.1.2.1 Principles

Within the framework of ATFM, flights for which an IFR flight plan is filled-out may be subject to control measures and imposed ATFM departure slots. Due to the specific nature of the flight and when duly filled-out in the field 18 of the ICAO flight plan, some flights are granted an exemption from ATFM measures.

It shall be noted that only STS/HEAD, STS/MEDEVAC, STS/SAR and STS/FFR indicators grant an automatic exemption. The STS/ATFMX also grants an automatic exemption from flow regulations when duly authorised by the CAA and if the nature of the flight duly justifies it.

The information about the additional STS designator to be used in combination with the STS/ATFMX can be found in the Network Manager IFPS Users Manual and the relevant CAA procedure:

URL: <https://dac.gouvernement.lu/fr/licences-certificats-autres-demarches/autres-demarches/exemptions-atfm.html>  
(Procedure DAC-NSA-104)

### 2.1.2.2 **Approval Procedure**

All operators who wish to use an ATFM exemption for flights departing ELLX shall request authorisation before the flight, using the following form(s):

URL: <https://dac.gouvernement.lu/fr/administration/departements/ea-atm-ans/exemptions-atfm.html> (NSA104-1 & NSA104-2)

The filled out form together with all the required documents justifying the request shall be sent to the following e-mail address:

Email: [atfmx@av.etat.lu](mailto:atfmx@av.etat.lu)

The request shall be made at least 48 hours before the flight on working days: MON to FRI (HOL excl), 0700-1600 (0600-1500).

Authorisation is granted after examination of the documents received. The absence of response within 24 hours grants authorisation.

In the event of an emergency (e.g. urgent medical evacuation or organ transport) and when the request cannot be made within the aforementioned time period, the request form dully filled-out and all associated documents shall be transmitted, as soon as possible, to the aforementioned e-mail address and no later than 48 hours after the flight.

### 2.1.2.3 **Verification**

All operators shall keep all appropriate documents to justify the use of the ATFM exemption for a period of 12 months as from the date of the exempted flight and provide it on request to the CAA.

---

## 3 **AIRSPACE MANAGEMENT**

---

Within the Brussels FIR/UIR, skeyes and Belgian Defence are jointly responsible for airspace management.

The Airspace Management Cell (AMC) is available MON to FRI (MIL HOL excl), 0600-1800 (0500-1700):

Post: Airspace Management Cell  
p/a skeyes (CANAC)  
Tervuursesteenweg 303  
1820 Steenokkerzeel  
BELGIUM

TEL: +32 (0) 2 206 29 81 (CIV airspace manager)

TEL: +32 (0) 2 206 29 82 (MIL airspace manager)

Email: [amc@skeyes.be](mailto:amc@skeyes.be) (CIV)

Email: [ATCC-AMC\\_MAM@mil.be](mailto:ATCC-AMC_MAM@mil.be) (MIL)

AFS: EBMIZGZF

Airspace management is performed in conformance with ERNIP Part 3 – Procedures for Airspace Management:

URL: <https://www.eurocontrol.int/publication/european-route-network-improvement-plan-ernip-part-3>.

THIS PAGE INTENTIONALLY LEFT BLANK

---

## ENR 1.10 Flight Planning

---

### 1 CIVIL

---

#### 1.1 Requirement to Submit a Flight Plan (SERA.4001)

Information relative to an intended flight or portion of a flight, to be provided to ATS units, shall be in the form of a flight plan. A flight plan shall be submitted prior to operating:

- a. any IFR flight;
- b. any flight or portion thereof to be provided with ATC service;
- c. any flight above FL660;
- d. any flight at night, if leaving the vicinity of an aerodrome;
- e. any flight across international borders. VFR flights remaining within the Schengen Area do not need a flight plan as far as the Brussels FIR is concerned (for requirements applicable in other Schengen States, please consult the relevant AIP).

It is advisable to file a flight plan:

- a. when flying over sparsely populated areas, where SAR operations would be difficult;
- b. if the aircraft is not equipped with radio.

A flight plan may be filed for any flight in order to facilitate the provision of SAR services.

*Note: A pilot who has submitted a flight plan for a flight departing from a private aerodrome is responsible for the forwarding of the associated messages either by TEL or by radio to the ATS unit to which the flight plan was sent.*

#### 1.2 Categories of Flight Plan

A distinction is made between three different categories of flight plan:

- **Full flight plan submitted prior departure**  
A flight plan in line with the formatting requirements of § 1.4 below, submitted prior departure in accordance with the procedures specified in § 1.3.4 below.
- **Full flight plan submitted during flight (AFIL)**  
A flight plan in line with the formatting requirements of § 1.4 below, submitted to an ATS unit during flight in accordance with the procedures specified in § 1.3.5 below.
- **Abbreviated flight plan**  
Limited information provided to an ATS unit with the purpose to obtain a clearance for a minor portion of a VFR flight, such as to cross a CTR, to take-off from or land at a controlled aerodrome.

##### 1.2.1 In Belgium

An abbreviated flight plan transmitted in the air contains as a minimum:

- call sign;
- type of aircraft;
- point of entry;
- point of exit;
- level.

##### 1.2.2 In Luxembourg

An abbreviated flight plan transmitted in the air by radiotelephony for the crossing of controlled airspace contains, as a minimum:

- call sign;
- type of aircraft;
- point of entry;
- point of exit;
- level.

For domestic VFR flights (no border crossing), an abbreviated flight plan may be submitted at least 30 MIN prior departure. It comprises the following information:

- aircraft identification;
- departure aerodrome and estimated off-block time;
- destination aerodrome or operating site and total estimated flight time;
- mandatory reporting point for CTR exit;
- fuel endurance;
- total number of persons on board;

- name of the pilot in command.

### 1.3 Submission of a Flight Plan

A flight plan form based on the model shown in § 3 below shall be used by operators and ATS units for the purpose of completing flight plans. If the flight plan is transmitted by FAX, a special flight plan model shall be used. This form can be obtained from EBBR or ELLX ARO (see GEN 3.3, § 6).

#### 1.3.1 IFR Flight Plan

A full flight plan shall be submitted for IFR flights prior to departure either to the IFPS or to an ARO, or during flight to an appropriate ATS unit.

The IFPS is the responsible unit for accepting IFR/GAT flight plans, for flights conducted within the IFPS Zone. Unless a flight plan has been received and accepted by the IFPS (i.e. an ACK message has been received), the requirement to submit a flight plan for an IFR/GAT flight intending to operate into the IFPS-Zone will not have been satisfied and no ATC clearance will be issued for such a flight.

Aircraft operators shall file their flight plans and associated messages for IFR/GAT flights directly with the IFPS, whenever possible, or they can use the intermediate of a local ARO. The IFPS will send back "Operational Reply Messages" to the message originator (aircraft operator or ARO), indicating the status of processing of his flight plan or associated message:

- an acknowledge message (ACK) will indicate the successful processing of the message;
- a reject message (REJ) indicates that the submitted message could not be processed and that the message originator should file a new corrected message;
- a manual message (MAN) means that the message contains errors and that it will be presented to an IFPS operator for manual processing. A MAN message will be followed either by an ACK message, if the message has been corrected successfully by the IFPS operator, or by a REJ message, if the error(s) could not be solved.

Detailed information on flight plan filing procedures with IFPS is published in the *IFPS Users Manual* (see ENR 1.9, § 3).

#### 1.3.2 VFR Flight Plan

Flight plans shall be submitted for VFR flights as required in § 1.1 above. A full flight plan can be submitted for VFR flights prior to departure to an ARO or during flight to an appropriate ATS unit. Alternatively, an abbreviated flight plan may be submitted to the ATS unit concerned. A full flight plan must be filed if the pilot requires other ATS units affected by his flight to be notified.

#### 1.3.3 Adherence to Airspace Utilisation Rules and Availability

No flight plans shall be filed via the Brussels FIR/UIR deviating from the State restrictions defined within the Route Availability Document (RAD). This common European reference document contains all airspace utilisation rules and availability for the Brussels FIR/UIR and any reference to them shall be made via:

URL: [www.nm.eurocontrol.int/RAD/index.html](http://www.nm.eurocontrol.int/RAD/index.html)

#### 1.3.4 Procedures for Submitting Flight Plans Prior to Departure

##### 1.3.4.1 Flight Plans Submitted via AFTN and SITA

###### 1.3.4.1.1 IFR/GAT flights conducted in the IFPS Zone

Such flight plans shall be submitted to the IFPS via:

- AFTN to EUCHZMFP and EUCBZMFP, or
- SITA to BRUEP7X and PAREP7X.

###### 1.3.4.1.2 IFR/GAT flights leaving the IFPS Zone and/or mixed rules flight plans

Message originators able to file the addresses for the portion of their flight outside the IFPS Zone and/or for the VFR portion of their flight should only file to the IFPS via:

- AFTN to EUCHZMFP and EUCBZMFP;
- SITA to BRUEP7X and PAREP7X.

Such message originators shall fill in the non-IFPS addresses or the VFR addresses in AFTN-format below the date/time/originator line - using the re-addressing procedure - as specified in the *IFPS Users Manual*. (see ENR 1.9, § 3).

Message originators not able to file the addresses for the portion of their flight outside the IFPS Zone and/or for the VFR portion of their flight shall file to the ARO via AFTN to EBBRZPZX (departure from Belgium) or ELLXZPZX (departure from Luxembourg).

The ARO will address the IFR or mixed rules flight plan to both IFPS units in accordance with the re-addressing procedure.

*Note 1: Aircraft Operators filing via an ARO shall never submit the same flight plan simultaneously to the IFPS.*

*Note 2: If a REJ message is received from the IFPS, the ARO will transmit this REJ message to the message originator's AFS address for corrective action.*

#### 1.3.4.1.3 VFR Flight Plans

VFR flight plans shall be transmitted to the responsible ARO for distribution. This shall be done via AFTN to EBBRZPXZ for departures from Belgium, or to ELLXZPXZ for departures from Luxembourg.

#### 1.3.4.2 Flight Plans Submitted by FAX, TEL or in Person

Regardless the flight rules, flight plans can be submitted by FAX, TEL or in person at the ARO of EBBR and ELLX. ELLX ARO also accepts flight plans via email. Such flight plans cannot be submitted directly with IFPS. At EBBR ARO, acceptance of flight plans by TEL is subject to workload permitting.

*Note: All flight plan forms sent by FAX should be filled out in capital letters using a black ballpoint.*

It is the aircraft operator's responsibility to ensure himself of the correct reception of his FAX flight plan at the appropriate ARO.

Operators of IFR/GAT flights filing their flight plan by FAX, TEL or in person shall indicate a (mobile) telephone number in item 19 under "N/(remarks)" on which they can be contacted in case the originally filed IFR or mixed rules flight plan would be changed by the IFPS (especially when in item 18 "RMK/IFPSRA" has been included) or if there are problems with the flight plan that prevent the processing.

Operators of IFR/GAT flights filing their flight plan by FAX, TEL or in person shall in any case contact the appropriate ARO, (preferably 15 MIN after filing) to obtain confirmation on the acceptance of their flight plan by the IFPS (ACK message received at the ARO).

EBBR ARO can be contacted at:

TEL: +32 (0) 2 206 25 40 or 41

FAX: +32 (0) 2 206 25 39

ELLX ARO can be contacted at:

TEL: +352 47 98 23 01 0

FAX: +352 47 98 23 09 0

Email: [aro@airport.etat.lu](mailto:aro@airport.etat.lu)

#### 1.3.4.3 Flight Plans Submitted via Dedicated Workstations or via the Internet

Flight plans can be submitted to Brussels ARO via dedicated workstations or via the Internet. Dedicated workstations for filing of flight plans are installed at EBAW, EBCI, EBLG and EBOS.

Aircraft Operators intending to use the Internet for the submission of their flight plan, shall exclusively use the electronic flight plan form made available on the operational website of skeyes.

URL: [ops.skeyes.be](http://ops.skeyes.be)

It is the aircraft operator's responsibility to ensure himself of the correct reception of his internet flight plan at the Brussels ARO.

Operators of IFR/GAT flights filing their flight plan via either a dedicated workstation or via the Internet shall in any case contact Brussels ARO (preferably 15MIN after filing) to obtain confirmation on the acceptance of their flight plan by the IFPS (ACK message received at the ARO).

Operators of IFR/GAT flights filing their flight plan either via a dedicated workstation or via the Internet shall leave a (mobile) telephone number at the ARO, where they can be contacted in case the originally filed flight plan would be changed by the IFPS (especially when in Item 18 "RMK/IFPSRA" has been included).

#### 1.3.4.4 Submission Time

Flight plans for flights planned to operate across international borders or to be provided with ATC or air traffic advisory service shall be submitted at least 1 HR before the EOBT. See [ENR 1.9](#) for ATFM purposes.

A flight plan shall not be submitted more than 120HR (5 days) prior to the EOBT.

In the event of a delay of 15MIN in excess of the EOBT for a controlled flight or a delay of 60MIN for a non-controlled flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan shall be submitted and the old one should be cancelled.

In Luxembourg, flight plans for local and domestic flights shall be submitted at least 30 MIN before the EOBT.

#### 1.3.5 Procedures for Submitting Flight Plans during Flight (AFIL)

A flight plan submitted during flight should normally be transmitted to the ATS unit in charge of the FIR or control area in which the aircraft is flying in, or through which the aircraft wishes to fly.

In case of an AFIL, the ATS unit receiving the flight plan will be responsible for addressing the flight plan message in accordance with the procedures described above.

An AFIL for a flight to be provided with ATC service shall be submitted at a time that will ensure its receipt by the appropriate ATS unit at least 10MIN before the aircraft is estimated to reach:

- the intended point of entry into a control area;
- the point of crossing an airway.

*Note: If the flight plan is submitted for the purpose of obtaining ATC service, the aircraft is required to wait for an ATC clearance prior to proceed under the conditions requiring compliance with ATC procedures.*

## 1.4 Completion of a Full Flight Plan (SERA.4010)

### 1.4.1 General

A form based of the model shown in § 3 below shall be used for the purpose of completing flight plans. If the flight plan is transmitted by FAX, a special model shall be used. This model can be obtained from EBBR or ELLX ARO.

Whatever the purpose for which it is submitted, a flight plan shall contain information, as applicable, on the items listed up to § 1.4.9 below, regarding the whole route or the portion thereof for which the flight plan is submitted. It shall contain in addition, as applicable, information as listed in § 1.4.10 below, when submitted to facilitate the provision of alerting and SAR services or prior to departure for an IFR flight.

When filling in a flight plan, pilots shall:

- Adhere closely to the prescribed formats and manner of specifying data;
- Commence inserting data in the first space provided. Where excess space is available, leave unused spaces blank;
- Insert all clock times in 4 figures UTC;
- Insert all estimated elapsed times in 4 figures (HR and MIN);
- Complete items 7 to 18 as indicated hereunder;
- Complete also item 19 as indicated hereunder, when so required by the appropriate ATS authority or when otherwise deemed necessary.

*Note 1: Item numbers on the form are not consecutive, as they respond to Field Type numbers in ATS messages.*

*Note 2: The fields preceding item 3 are to be completed by ATS and COM services, unless the responsibility for originating flight plan messages has been delegated*

### 1.4.2 Item 7: Aircraft Identification (MAX 7 characters)

Insert one of the following aircraft identifications, not exceeding 7 alphanumeric characters and without hyphens or symbols:

- a. the ICAO designator for the aircraft operating agency followed by the flight identification (e.g. "BEL511", "NGA213"), when in RTF the call sign of the aircraft will consist of the ICAO telephony designator for the operating agency followed by the flight identification (e.g. "BEELINE 511", "NIGERIA 213",...). In this case, the registration marking of the aircraft shall be specified in Item 18, preceded by "REG/";
- b. the nationality or common mark and the registration mark of the aircraft (e.g. "EIAKO", "4XB CD", "OOSDE", "N2567GA"), when:
  - in RTF the call sign to be used by the aircraft will consist of this identification alone (e.g. "OOSDE"), or preceded by the ICAO telephony designator for the aircraft operating agency (e.g. "BEELINE OOSDE"). in this case the name of the operator shall be specified in item 18, preceded by "OPR/";
  - the aircraft is not equipped with radio.

*Note: Provisions for the use of RTF call signs are contained in chapter 5 of ICAO Annex 10, Volume II. ICAO designators for aircraft operating agencies are contained in ICAO Doc 8585.*

### 1.4.3 Item 8: Flight Rules and Type of Flight (1 or 2 characters)

#### 1.4.3.1 Flight Rules

Insert one of the following letters to denote the category of flight rules with which the pilot intends to comply:

<b>I</b>	if it is intended that the entire flight will be operated under IFR
<b>V</b>	if it is intended that the entire flight will be operated under VFR
<b>Y</b>	if the flight initially will be operated under IFR, followed by one or more subsequent changes of flight rules
<b>Z</b>	if the flight initially will be operated under VFR followed by one or more subsequent changes of flight rules

*Note: Specify the point(s) where a change of flight rules is planned in item 15.*

#### 1.4.3.2 Type of Flight

Insert one of the following letters to denote the type of flight:

<b>S</b>	scheduled air service
<b>N</b>	non-scheduled air transport operation
<b>G</b>	general aviation
<b>M</b>	military (see note 1)
<b>X</b>	other than any of the categories defined above (see note 2)

*Note 1: In addition to MIL operations, operators of customs or police aircraft shall insert the letter "M" in item 8.*

*Note 2: If "X" is used, the status of the flight shall be indicated in item 18, preceded by the indicator "STS/", or when necessary to denote other reasons for specific handling by ATS, the reason shall be indicated, preceded by the indicator "RMK/".*



**1.4.4 Item 9: Number and Type of Aircraft and Wake Turbulence Category****1.4.4.1 Number of aircraft (1 or 2 characters)**

Insert the number of aircraft, if more than one.

**1.4.4.2 Type of aircraft (2 or 4 characters)**

Insert the appropriate designator as specified in *ICAO Doc 8643*. If no such designator has been assigned, or in case of formation flights comprising more than one type, insert "ZZZZ" and specify the (numbers and) type(s) of aircraft in item 18, preceded by "TYP".

**1.4.4.3 Wake Turbulence Category (1 character)**

Insert an oblique stroke followed by one of the following letters to indicate the wake turbulence category of the aircraft:

<b>J</b>	SUPER, to indicate an aircraft type specified as such in <i>ICAO Doc 8643</i> (Aircraft Type Designators)
<b>H</b>	HEAVY, to indicate an aircraft with a MTOW of 136000KG or more, with the exception of aircraft types listed in <i>ICAO Doc 8643</i> in the SUPER category (J)
<b>M</b>	MEDIUM, to indicate an aircraft with a MTOW of less than 136000KG, but more than 7000KG
<b>L</b>	LIGHT, to indicate an aircraft with a MTOW of 7000KG or less

**1.4.5 Item 10: Equipment and Capabilities**

Capabilities comprise the following elements:

- presence of relevant serviceable equipment on board the aircraft;
- equipment and capabilities commensurate with flight crew qualifications; and
- where applicable, authorization from the appropriate authority.

**1.4.5.1 ITEM 10a: Radio Communication, Navigation and Approach Aid Equipment**

The letter "N" shall be inserted if no COM/NAV/APCH aid equipment for the route to be flown is carried, or the equipment is unserviceable.

Otherwise, any or more of the following letters shall be inserted:

<b>S</b>	If standard COM/NAV/APCH aid equipment for the route to be flown is carried and serviceable (see note 1). If this equipment is required, the inclusion of letter S must be the first one in item 10a.	<b>J6</b>	CPDLC FANS 1/A SATCOM (MTSAT)
<b>A</b>	GBAS (landing system)	<b>J7</b>	CPDLC FANS 1/A SATCOM (Iridium)
<b>B</b>	LPV (APV with SBAS)	<b>K</b>	MLS
<b>C</b>	LORAN C	<b>L</b>	ILS
<b>D</b>	DME	<b>M1</b>	ATC RTF SATCOM (INMARSAT)
<b>E1</b>	FMC WPR ACARS	<b>M2</b>	ATC RTF (MTSAT)
<b>E2</b>	D-FIS ACARS	<b>M3</b>	ATC RTF (Iridium)
<b>E3</b>	PDC ACARS	<b>O</b>	VOR
<b>F</b>	ADF	<b>P1-P9</b>	Reserved for RCP
<b>G</b>	GNSS. If any portion of the flight is planned to be conducted under IFR it refers to GNSS receivers that comply with the requirements of <i>ICAO Annex 10, Volume I</i> (see note 2)	<b>R</b>	PBN approved (see note 4)
<b>H</b>	HF RTF	<b>T</b>	TACAN
<b>I</b>	Inertial navigation	<b>U</b>	UHF RTF
<b>J1</b>	CPDLC ATN VDL Mode 2(see note 3)	<b>V</b>	VHF RTF
<b>J2</b>	CPDLC FANS 1/A HFDL	<b>W</b>	RVSM approved
<b>J3</b>	CPDLC FANS 1/A VDL Mode 4	<b>X</b>	MNPS approved
<b>J4</b>	CPDLC FANS 1/A VDL Mode 2	<b>Y</b>	VHF with 8.33KHZ channel spacing capability (see note 1)
<b>J5</b>	CPDLC FANS 1/A SATCOM (INMARSAT)	<b>Z</b>	Other equipment carried or other capabilities (see note 5)

Note 1: If the letter S is used, standard equipment is considered to be VHF RTF, VOR and ILS, unless another combination is prescribed by the appropriate ATS authority. 8.33 KHZ channel spacing capability of VHF equipment shall be indicated separately by adding the letter Y.

Note 2: If the letter G is used, the types of external GNSS augmentation, if any, are specified in Item 18 following the indicator "NAV" and separated by a space.

Note 3: See RTCA/EUROCAE Interoperability Requirements Standard For ATN Baseline 1 (ATN B1 INTEROP Standard - DO-280B/ED-110B) for data link services, air traffic control clearance and information/air traffic control communications management/air traffic control microphone check.

Note 4: If the letter R is used, the performance based navigation levels that can be met shall be specified in item 18 following the indicator "PBN". Guidance material on the application of performance based navigation to a specific route segment, route or area is contained in the Performance-Based Navigation Manual (ICAO Doc 9613).

Note 5: If the letter Z is used, the other equipment carried or other capabilities shall be specified in item 18, preceded by "COM/", "NAV/" and/or "DAT/", as appropriate. Exemptions for RNAV, CPDLC and 8.33KHZ are to be indicated by inserting the letter Z in item 10a and then inserting the appropriate descriptors in the following indicators in item 18 ("NAV/RNAVX", "NAV/RNAVINOP", "DAT/CPDLCX" or "COM/EXM833").

Note 6: Operators of aircraft approved for P-RNAV, relying solely on VOR/DME for determination of position, shall insert the letter Z in item 10a and the descriptor "NAV/EURPRNAV" in item 18.

Note 7: Information on navigation capability is provided to ATC for clearance and routing purposes.

**1.4.5.2 ITEM 10b: Surveillance Equipment and Capabilities**

Insert N if no surveillance equipment for the route to be flown is carried or the equipment is unserviceable, or insert one or more of the following descriptors, to a maximum of 20 characters, to describe the serviceable surveillance equipment and/or capabilities on board:

Equipment	Letter	Significance
SSR equipment	A	Transponder - Mode A (4 digits - 4096 codes)
	C	Transponder - Mode A (4 digits - 4096 codes) and Mode C
	E	Transponder - Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) capability
	H	Transponder - Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability (*)
	I	Transponder - Mode S, including aircraft identification, but no pressure-altitude capability
	L	Transponder - Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B) and enhanced surveillance capability (*)
	P	Transponder - Mode S, including pressure-altitude, but no aircraft identification capability
	S	Transponder - Mode S, including both pressure-altitude and aircraft identification capability
	X	Transponder - Mode S with neither aircraft identification nor pressure-altitude capability
ADS equipment	B1	ADS-B with dedicated 1090MHZ ADS-B "out" capability
	B2	ADS-B with dedicated 1090MHZ ADS-B "out" and "in" capability
	U1	ADS-B "out" capability using UAT
	U2	ADS-B "out" and "in" capability using UAT
	V1	ADS-B "out" capability using VDL Mode 4
	V2	ADS-B "out" and "in" capability using VDL Mode 4
	D1	ADS-C with FANS 1/A capabilities
	G1	ADS-C with ATN capabilities

(\*) Enhanced surveillance capability is the ability of the aircraft to down-link aircraft derived data via Mode S transponder.

Note: Additional surveillance applications and capabilities should be listed in Item 18 following the indicator "SUR".

**1.4.6 Item 13: Departure Aerodrome and Time (8 characters)**

Insert the ICAO location indicator of the departure aerodrome. If no location indicator has been assigned, insert "ZZZZ" and specify the name and location of the aerodrome in item 18, preceded by "DEP/".

If the aircraft has not taken off from an aerodrome, insert "ZZZZ" and specify the first point of the route or the marker beacon in item 18, preceded by "DEP/".

If the flight plan is received from an aircraft in flight, insert "AFIL" and specify the ICAO location indicator of the ATS unit from which supplementary flight plan data can be obtained in item 18, preceded by "DEP/".

Then, without a space, insert for a flight plan submitted before departure, the EOBT, or, for a flight plan received from an aircraft in flight, the actual or estimated time over the first point of the route to which the flight plan applies.

**1.4.7 Item 15: Route**

Insert the first cruising speed as in § 1.4.7.1 and the first cruising level as in § 1.4.7.2, without a space between them. Then, following the arrow, insert the route description as in § 1.4.7.3.

#### 1.4.7.1 **Cruising Speed (MAX 5 characters)**

Insert the TAS for the first or the whole cruising portion of the flight, in terms of:

- kilometres per hour, expressed as "K" followed by 4 figures (e.g. "K0830");
- knots, expressed as "N" followed by 4 figures (e.g. "N0485");
- Mach number, when so prescribed by the appropriate ATS authority, to the nearest hundredth of Mach, expressed as "M" followed by 3 figures (e.g. "M082").

#### 1.4.7.2 **Cruising Level (MAX 5 characters)**

Insert the planned cruising level for the first or the whole portion of the route to be flown, in terms of:

- Flight level, expressed as "F" followed by 3 figures (e.g. "F085", "F330");
- Standard Metric Level in tens of meters, expressed as "S" followed by 4 figures (e.g. "S1130"), when so prescribed by the appropriate ATS authorities;
- Altitude in hundreds of feet, expressed as "A" followed by 3 figures (e.g. "A045", "A100");
- Altitude in tens of metres, expressed as "M" followed by 4 figures (e.g. "M0840");
- for uncontrolled VFR flights, the letters "VFR".

#### 1.4.7.3 **Route (including changes of speed, level and/or flight rules)**

##### 1.4.7.3.1 *Flights along designated ATS routes or direct routes (DCT)*

Insert, if the departure aerodrome is located on or connected to the ATS route or direct route, the significant point at the end of the SID. If the departure aerodrome is not on or connected to the ATS route or direct route, insert the letters "DCT" followed by the point of joining the first ATS route or direct route, followed by the designator of the ATS route or the direct route.

Then, insert each point at which either a change of speed or and/or level is planned to commence, or a change of ATS route or direct route, and/or a change of flight rules is planned. Followed by the designator of the next ATS route segment, even if the same as the previous one, or by "DCT", if the flight to the next point will be outside a designated route, unless both points are defined by geographical co-ordinates.

For flights operating within free route airspace, FRA entry/exit points and other significant points shall be described using the standard ICAO format. Route segments between waypoints shall be indicated by means of DCT and shall not be planned closer than 2.5 NM to the MUAC FRA lateral border. Any published FRA significant point may be used for indicating changes of level and speed.

When a transition is planned between a lower and upper ATS route and the routes are oriented in the same direction, the point of transition need not be inserted.

If a STAR is prescribed for the aerodrome of destination, the last point of the route shall be the first point of a STAR.

##### 1.4.7.3.2 *Flights outside designated ATS routes*

Insert points normally not more than 30 MIN flying time or 200NM apart, including each point at which a change of speed or level, a change of track, or a change of flight rules is planned.

Or, when required by appropriate ATS authorities, define the track of flights operating predominantly in an east-west direction between 70°N and 70°S by reference to significant points formed by the intersections of half or whole degrees of latitude with meridians spaced at intervals of ten degrees of longitude. For flights operating in areas outside those latitudes, the tracks shall be defined by significant points formed by the intersection of parallels of latitude with meridians normally spaced at twenty degrees of longitude. The distance between significant points shall, as far as possible, not exceed one hour flight time. Additional significant points shall be established as deemed necessary.

For flights operating predominantly in a north-south direction, define tracks by reference to significant points formed by the intersection of whole degrees of longitude with specified parallels of latitude which are spaced at five degrees.

Insert "DCT" between successive points unless both points are defined by geographical co-ordinates or by bearing and distance.

##### 1.4.7.3.3 *Coding conventions*

Use only the following conventions and separate each sub-time by a space:

#### **ATS route (2 to 7 characters)**

The coded designator assigned to the route or route segment including, where appropriate, the coded designator assigned to the standard departure or arrival route (e.g. "BCN1", "B1", "R14", "UB10", "KODAP2A").

*Note: Provisions for the application of route designators are contained in appendix 1 of ICAO Annex 11, whilst guidance material on the application of an RNP type to a specific route segment(s), route(s) or area is contained in ICAO Doc 9613.*

#### **Significant point (2 to 11 characters)**

The coded designator (2 to 5 characters) assigned to the point (e.g. "LN", "MAY", "HADDY"), or if no coded designator has been assigned, one of the following ways:

- Degrees only (7 characters): two figures describing latitude in degrees, followed by “N” (north) or “S” (south), followed by three figures describing longitude in degrees, followed by “E” (east) or “W” (west). Make up the correct number of figures, where necessary, by insertion of zeros (e.g. “46N078W”);
- Degrees and minutes (11 characters): four figures describing latitude in degrees and tens and units of minutes, followed by “N” (north) or “S” (south), followed by five figures describing longitude in degrees and tens and units of minutes, followed by “E” (east) or “W” (west). Make up the correct number of figures, where necessary, by insertion of zeros (e.g. “4620N07805W”);
- Bearing and distance from a significant point: The identification of the significant point followed by the bearing from the point in the form three figures giving degrees (MAG), then the distance from the point in the form of three figures expressing nautical miles. Make up the correct number of figures, where necessary, by insertion of zeros (e.g. a point 180° MAG at a distance of 40NM from VOR “DUB” should be expressed as “DUB180040”).

#### Change of speed or level (MAX 21 characters)

The significant point at which a change of speed (5% TAS or M0.01, or more) or a change of level is planned to commence, followed by an oblique stroke and both the cruising speed and the cruising level, without a space between them, even when only one of these quantities will be changed.

Examples:

“LN/N0284A045”	“4602N07805W/N0500F350”
“HADDY/N0420F330”	“DUB180040/N0350M0840”
“MAY/N0305F180”	“46N078W/M082F330”

#### Change of flight rules (MAX 3 characters)

The significant point at which the change of flight rules is planned, followed by a space and one of the following:

“VFR” - if from IFR to VFR;

“IFR” - if from VFR to IFR.

Examples:

- “LN VFR”
- “LN/N0284A050 IFR”

#### Cruise climb (MAX 28 characters)

The letter “C” followed by an oblique stroke; then the point at which cruise climb is planned to start, expressed exactly as in 2. above, followed by an oblique stroke; then the speed to be maintained during cruise climb, expressed exactly as in a) above, followed by the two levels defining the layer to be occupied during cruise climb, each level expressed exactly as in b) above, or the level above which cruise climb is planned, followed by the letters “PLUS”, without a space between them.

Examples:

- “C/48N050W/M082F290F350”
- “C/48N050W/M082F290PLUS”
- “C/52N050W/M220F580F620”

#### En-route special activities (MAX 10 characters)

Flights that are conducted entirely within the IFPS zone and that encounter time delays on their route due to special en-route activities (e.g. training activities, photographic missions or air-to-air refuelling), may indicate such time delay by adding a STAY indicator between the entry and the exit point of the area of activity. The STAY indicator shall consist of the letters “STAY”, followed by a sequence number of one digit, an oblique stroke and then four numbers indicating the duration of the time delay in hours and minutes.

Examples:

- “SOG STAY1/0100 DUB”
- “SOG STAY1/0050 SOG”
- “SOG STAY1/0100 DUB DCT WAL STAY2/0030 DCS”

#### 1.4.7.3.4 RVSM airspace

Operators of RVSM approved aircraft and non-RVSM approved state aircraft intending to operate within EUR RVSM airspace shall include the following in item 15:

- the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point;
- the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point. When the RVSM exit point is situated in the planned final descent trajectory, the requirement to include a requested flight level is withdrawn. Where appropriate, a co-located STAR may be included after the RVSM exit point.

**1.4.8 Item 16: Destination Aerodrome, Total Estimated Elapsed Time and Alternate Destination Aerodrome(s)****1.4.8.1 Destination Aerodrome and Total Estimated Elapsed Time (8 characters)**

Insert the ICAO location indicator of the destination aerodrome followed, without a space, by the total estimated elapsed time, or, if no location indicator has been assigned, insert "ZZZZ" followed, without a space, by the total estimated elapsed time, and specify the name and location of the aerodrome in item 18, as indicated below (§ 1.4.9).

*Note:* For a flight plan received from an aircraft in flight, the total estimated elapsed time is the estimated time from the first point of the route to which the flight plan applies to the termination point of the flight plan.

**1.4.8.2 Alternate Destination Aerodrome(s) (4 characters)**

Insert the ICAO location indicator(s) of not more than two alternate destination aerodromes, separated by a space, or, if no location indicator has been assigned to the alternate aerodrome, insert "ZZZZ" and specify the name and location of the alternate aerodrome in item 18, as indicated below (§ 1.4.9).

**1.4.9 Item 18: Other Information**

Operators are warned that the use of indicators not included in the provisions may result in data being rejected, processed incorrectly or lost.

Only indicators described in the provisions may be used, and they must be inserted in the order shown. The indicators defined are as follows, and are listed in the order in which they are to be inserted, if used:

*Note 4:* According to ICAO Annex 11, an ATS unit will, when practicable, inform the aircraft operator when an alerting service is provided to an aircraft. In order to facilitate quick and effective coordination, it is advisable to provide in the flight plan (item 18 'Other information') information sufficient to enable the ATS unit to contact the on-duty staff of the aircraft operator if such information has not been provided to the ATS unit by other means.

**STS/**

Reason for special handling by ATS, e.g. a search and rescue mission, as follows:

<b>STS/ALTRV</b>	for a flight operated in accordance with an altitude reservation
<b>STS/ATFMX</b>	for a flight approved for exemption from ATFM measures by the appropriate ATS authority
<b>STS/FFR</b>	for a fire-fighting flight
<b>STS/FLTCK</b>	for a flight to check calibration of nav aids
<b>STS/HAZMAT</b>	for a flight carrying hazardous material
<b>STS/HEAD</b>	for a flight with Head of State status
<b>STS/HOSP</b>	for a medical flight declared by medical authorities
<b>STS/HUM</b>	for a flight operating on a humanitarian mission
<b>STS/MARSA</b>	for a flight for which a military entity assumes responsibility for separation of military aircraft
<b>STS/MEDEVAC</b>	for a life critical medical emergency evacuation
<b>STS/NONRVSM</b>	for a non-RVSM capable flight intending to operate in RVSM airspace
<b>STS/SAR</b>	for a flight engaged in a search and rescue mission
<b>STS/STATE</b>	for a flight engaged in military, customs or police services

*Note:* Other reasons for special handling by ATS shall be denoted under the designator "RMK"

**PBN/**

Indication of RNAV and/or RNP capabilities. Include as many of the descriptors below, as apply to the flight, up to a maximum of 8 entries, i.e. a total of not more than 16 characters.

RNAV SPECIFICATIONS		RNP SPECIFICATIONS	
<b>A1</b>	RNAV 10 (RNP 10)	<b>L1</b>	RNP 4
<b>B1</b>	RNAV 5 all permitted sensors	<b>O1</b>	Basic RNP 1 all permitted sensors
<b>B2</b>	RNAV 5 GNSS	<b>O2</b>	Basic RNP 1 GNSS
<b>B3</b>	RNAV 5 DME/DME	<b>O3</b>	Basic RNP 1 DME/DME
<b>B4</b>	RNAV 5 VOR/DME	<b>O4</b>	Basic RNP 1 DME/DME/IRU
<b>B5</b>	RNAV 5 INS or IRS	<b>S1</b>	RNP APCH
<b>B6</b>	RNAV 5 LORAN-C	<b>S2</b>	RNP APCH with BARO-VNAV
<b>C1</b>	RNAV 2 all permitted sensors	<b>T1</b>	RNP AR APCH with RF (special authorization required)
<b>C2</b>	RNAV 2 GNSS	<b>T2</b>	RNP AR APCH without RF (special authorization required)
<b>C3</b>	RNAV 2 DME/DME		

RNAV SPECIFICATIONS		RNP SPECIFICATIONS	
<b>C4</b>	RNAV 2 DME/DME/IRU		
<b>D1</b>	RNAV 1 all permitted sensors		
<b>D2</b>	RNAV 1 GNSS		
<b>D3</b>	RNAV 1 DME/DME		
<b>D4</b>	RNAV 1 DME/DME/IRU		

Note 1: Operators of aircraft approved for B-RNAV shall indicate the availability of capabilities relevant to RNAV 5. It is not necessary to insert additional information to indicate the aircraft is approved for B-RNAV.

Note 2: Operators of aircraft approved for P-RNAV, not relying solely on VOR/DME for determination of position, shall indicate the availability of capabilities relevant to RNAV 1. It is not necessary to insert additional information to indicate the aircraft is approved for P-RNAV.

**NAV/**

Significant data related to navigation equipment, other than specified in "PBN/", as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, e.g. "NAV/GBAS SBAS". If appropriate, insert "RNAVX" or "RNAVINOP" as described in the *IFPS Users Manual*, or "EURPRNAV" as described in chapter 2 of EUR SUPPS, *ICAO Doc 7030*.

**COM/**

Indicate communications applications or capabilities not specified in item 10a. If appropriate, insert "EXM833" as described in chapter 2 of EUR SUPPS, *ICAO Doc 7030*.

**DAT/**

Indicate data applications or capabilities not specified in item 10a. If appropriate, insert "CPDLCX" as described in chapter 2 of EUR SUPPS, *ICAO Doc 7030*.

**SUR/**

Include surveillance applications or capabilities not specified by item 10b.

**DEP/**

Name and location of departure aerodrome, if "ZZZZ" is inserted in item 13, or the ICAO location indicator of the location of the ATS unit from which supplementary flight plan data can be obtained, if "AFIL" is inserted in item 13. For aerodromes not listed in the relevant AIP, indicate location in any of the following ways:

- With four figures describing latitude in degrees and tens and units of minutes, followed by "N" (north) or "S" (south), followed by five figures describing longitude in degrees and tens and units of minutes, followed by "E" (east) or "W" (west). Make up the correct number of figures, where necessary, by insertion of zeros, e.g. "4620N07805W" (11characters);
- Bearing and distance from the nearest significant point, as follows: the identification of the significant point followed by the bearing from the point in the form three figures giving degrees (MAG), then the distance from the point in the form of three figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical, degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros (e.g. a point 180° MAG at a distance of 40 NM from VOR "DUB" should be expressed as "DUB180040");
- The first point of the route (name or LAT/LONG) or the marker radio beacon, if the aircraft has not taken off from an aerodrome.

**DEST/**

Name and location of destination aerodrome, if "ZZZZ" is inserted in item 16. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described under "DEP/" above.

**DOF/**

Date of flight departure in a six figure format (YYMMDD where: YY = year; MM = month; DD = day).

**REG/**

The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in item 7.

**EET/**

Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority (e.g. "EET/CAP0745 XYZ0830", "EET/EINN0204").

**SEL/**

SELCAL code, for aircraft so equipped.

**TYP/**

Type(s) of aircraft, preceded if necessary without a space by number(s) of aircraft and separated by one space, if "ZZZZ" is inserted in item 9 (e.g. "TYP/2F15 5F5 3B2").

**CODE/**

Aircraft address (expressed in the form of an alphanumeric code of six hexadecimal characters) when required by the appropriate ATS authority (e.g. "F00001" is the lowest aircraft address contained in the specific block administered by ICAO).

**RVR/**

The minimum RVR requirement of the flight, as detailed in the EUR SUPPS, *ICAO Doc 7030*.

**DLE/**

In case of en route delay or holding, insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four figure time in hours and minutes (hhmm) (e.g. "DLE/MDG0030").

**OPR/**

ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.

**ORGN/**

The originator's eight letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority.

*Note: In some areas, flight plan reception centres may insert the "ORGN" identifier and originator's AFTN address automatically.*

**PER/**

Aircraft performance data, indicated by a single letter as specified in *ICAO Doc 8168, Volume I*, if so prescribed by the appropriate ATS authority.

**ALTN/**

Name of destination alternate aerodrome(s), if "ZZZZ" is inserted in item 16. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in "DEP" above.

**RALT/**

ICAO four letter indicator(s) for en-route alternate(s), as specified in *ICAO Doc 7910*, or name(s) of en-route alternate aerodrome(s), if no indicator is allocated. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in "DEP" above.

**TALT/**

ICAO four letter indicator(s) for take-off alternate, as specified in *ICAO Doc 7910, Location Indicators*, or name of take-off alternate aerodrome, if no indicator is allocated. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in "DEP" above.

**RIF/**

The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to re-clearance in flight (e.g. "RIF/DTA HEC KLAX", "RIF/ESP G94 CLA YPPH").

**RMK/**

Any other plain language remarks when required by the appropriate ATS authority or deemed necessary.

**RFP/**

Q followed by a digit to indicate the sequence of the replacement flight plan being submitted, see [ENR 1.9, § 5.3](#).

**STAYINFO/**

Indication of the reason for the insertion of a STAY indicator in item 15 (see [§ 1.4.7](#) above). Insert "STAYINFO" followed by the sequence number of the STAY indicator, an oblique stroke and an explanation in free text (e.g. "STAYINFO1/CALIBRATION OF SOG").

**1.4.10 Item 19: Supplementary Information**

*Note: In the paper flight plan form, an indicator is crossed out to denote that it is not available, in the digital flight plan form however, a mark is placed at the emergency and survival equipment that is available.*

**1.4.10.1 Endurance**

After "E/" insert a 4-figure group giving the fuel endurance in HR and MIN.

**1.4.10.2 Persons on Board**

After "P/" insert the total number of persons (passengers and crew) on board.

insert "TBN" (to be notified) if the total number of persons is not known at the time of filing.

**1.4.10.3 Emergency and Survival Equipment**

"R" (RADIO)

- cross out "U" if UHF on FREQ 243.000MHZ is not available;
- cross out "V" if VHF on FREQ 121.500MHZ is not available;
- cross out "E" if emergency location beacon-aircraft (ELBA) is not available.

"S" (SURVIVAL EQUIPMENT)

- cross out "P" if polar survival equipment is not carried;
- cross out "D" if desert survival equipment is not carried;
- cross out "M" if maritime survival equipment is not carried;
- cross out "J" if jungle survival equipment is not carried.

"J" (JACKETS)

- cross out "J" if life jackets are not carried;
- cross out "L" if life jackets are not equipped with lights;
- cross out "F" if life jackets are not equipped with fluorescein;
- cross out "U" or "V" or both as in "R/" above to indicate radio capability of jackets, if any.

“D” (DINGHIES)

- (Number): cross out “D” and “C” if no dinghies are carried, or insert number of dinghies carried;
- (Capacity): insert total capacity, in persons, of all dinghies carried;
- (Cover): cross out “C” if dinghies are not covered;
- (Colour): insert colour of dinghies if carried.

“A” (AIRCRAFT COLOUR AND MARKINGS)

- insert colour of aircraft and significant markings.

“N” (REMARKS)

- cross out “N” if no remarks, or indicate any other survival equipment carried and any other remarks regarding survival equipment.

“C” (PILOT)

- insert name of pilot-in-command.

“Filed by”: insert the name of the unit, agency or person filing the flight plan.

## 1.5 Changes to a Flight Plan (SERA.4015)

Except for the provisions described in ENR 1.1, § 1.10.2.2, all changes to a flight plan submitted for an IFR flight and/or a mixed flight rules flight shall be reported as soon as practicable to IFPS (either directly via AFTN or SITA, or through the intermediate of a local ARO).

All changes to VFR flight plans shall be reported as soon as practicable to the responsible ARO or to the appropriate ATS unit.

*Note 1: Information submitted prior to departure regarding fuel endurance or total number of persons carried on board, if incorrect at the time of departure, constitutes a significant change to the flight plan and must be reported.*

*Note 2: Changes to the route of a flight plan affecting the AFS addresses, involve the cancellation of the flight plan and subsequent submission of a new flight plan, except for IFR flights remaining within the IFPS zone.*

## 1.6 Closing a Full Flight Plan (SERA.4020)

A report of arrival shall be made either in person or by radio at the earliest possible moment after landing, to the appropriate ATS unit at the arrival aerodrome, by any flight for which a flight plan has been submitted.

When no ATS unit exists at the arrival aerodrome, the pilot of a flight for which a flight plan has been submitted shall ensure that the arrival report is made immediately after landing to Brussels ARO or to Brussels FIC or, if this is not possible, to any other ATS unit with the request to inform Brussels FIC.

*Note: A flight plan and its associated messages submitted for a VFR flight to be conducted wholly within Brussels FIR will not be sent to the destination aerodrome if the latter is a private aerodrome. This flight will nevertheless be provided with alerting service in so far as it is known or believed to be in a state of emergency. As a consequence, the pilot shall ensure that an arrival message is forwarded immediately after landing to the departure aerodrome or, if this is not possible, to Brussels FIC or Brussels ATC with the request to inform the aerodrome. Any failure to meet this obligation may cause unnecessary and expensive SAR operations.*

Arrival reports made by the pilots shall contain the following information:

- aircraft identification;
- departure aerodrome;
- destination aerodrome (in case of diversion only);
- arrival aerodrome;
- time of arrival.

---

## 2 MILITARY

---

### 2.1 Requirement to submit a Flight Plan

Information relative to an intended flight or portion of a flight, to be provided to ATS units, shall be in the form of a flight plan.

Traffic that intends to file an OAT flight plan outside the published OPS HR of Steenokkerzeel ATCC has to obtain prior permission from COMOPSAIR (PPR 72HR). The request shall be sent to COMOPSAIR Air Operations Support. The permission will only be granted under exceptional circumstances when the ATS provided by a civil agency would not be possible or would not be desirable (e.g. sensitive military flight). If permission has been granted, Steenokkerzeel ATCC will provide ATS only to that traffic for which the permission has been obtained.

Compliance with diplomatic rules as published by the foreign authorities is compulsory.

A flight plan shall be submitted prior to every flight, with exemption of a QRA(I) or SAR mission.



## 2.2 Submission of a Flight Plan

A flight plan form based on the model shown hereafter shall be provided and shall be used by AIS and ATS units for the purpose of completing flight plans.

A flight plan is submitted by the local AIS section using the standard ICAO format. The addressing of the flight plan has to be in accordance with [ENR 1.11](#).

A flight plan submitted during flight should normally be transmitted to the ATS unit in charge of the FIR or control area in which the aircraft is flying in, or through which the aircraft wishes to fly.

In case of an AFIL, the ATS unit receiving the flight plan will be responsible for addressing the flight plan message in accordance with the procedures described above.

An AFIL for a flight to be provided with ATC service shall be submitted at a time which will ensure its receipt by the appropriate ATS unit at least 10MIN before the aircraft is estimated to reach:

- the intended point of entry into a control area;
- the point of crossing an airway.

*Note:* If the flight plan is submitted for the purpose of obtaining ATC service, the aircraft is required to wait for an ATC clearance prior to proceed under the conditions requiring compliance with ATC procedures.

### 2.2.1 Delay of Flight Plan Submission

- GAT or mixed OAT/GAT (subject to ATFM measures): at least 3HR before EOBT/ETD;
- Other flights (except night flights): at least 60MIN prior ETD;
- OAT night flights conducted entirely or partially in class G airspace: before 1100 of the same day;
- OAT night flights conducted entirely in controlled airspace (class C and D): at least 60MIN prior ETD;
- Flights to foreign FIR/UIR: according to foreign national regulations.

*Note:* Reservation of airspace by foreign Mil aircraft: see [ENR 5.2, § 1.3](#)

In the event of a delay of 30MIN in excess of the EOBT for a flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan should be submitted and the old one should be cancelled. See [ENR 1.9, § 5.2](#) for the specifications in reference to FPL which are subject to ATFM measures.

## 2.3 Completion of a Flight Plan

See [§ 1.4](#) for the general instructions concerning completion of a flight plan. The term “aerodrome” where used in a flight plan is intended to cover also sites other than aerodromes which may be used by certain types of aircraft, e.g. helicopters and balloons.

### 2.3.1 Insertion of ATS Data

Complete items 7 to 19 as indicated hereunder. Item numbers on the form are not consecutive, as they respond to Field Type numbers in ATS messages.

If a flight plan for a flight conducted wholly in the EUR Region is filed more than 24HR in advance of the EOBT, it is mandatory to provide the date of the flight. This information will be indicated in the item 18 of the flight plan in the form of a 3-letter indicator (DOF) followed by an oblique stroke and the date of the flight in a 6-figure group format: DOF/YYMMDD (YY = year; MM = month; DD = day). These flight plans shall be processed and transmitted without being held in abeyance.

*Note:* Air traffic services data systems may impose communications or processing constraints on information in filed flight plans. Possible constraints may, for example, be limits with regard to item length, number of elements in the route item or total flight plan length. Significant constraints are documented in the relevant Aeronautical Information Publication.

#### 2.3.1.1 Item 7: Aircraft Identification (MAX 7 or 13 characters)

Insert one of the following aircraft identifications, not exceeding 7 characters and without hyphens or symbols:

- a. the registration marking of the aircraft (e.g. “CH11”, “OOSDE”), when:
  - in RTF the call sign to be used by the aircraft will consist of this identification alone (e.g. “CH11”), or preceded by the ICAO telephony designator for the aircraft operating agency (e.g. “Belgian Air Force CH11”);
  - the aircraft is not equipped with radio;
- b. the ICAO designator for the aircraft operating agency followed by the flight identification (e.g. “BAF105”) when in RTF the call sign to be used by the aircraft will consist of the ICAO telephony designator for the operating agency followed by the flight identification (e.g. “Belgian Air Force 105”);
- c. The SSR mode A and code may be included. It shall consist of the letter A and it shall be followed by four numerics between the values of 0 and 7 and shall be separated from the aircraft identification by a slash ‘/’. The maximum number of characters, including the ‘/’, shall be 13 (e.g. ABC567C/A4510).

*Note1:* What is entered at item 7 before the slash “/” (aircraft identifications) shall match exactly what is entered in the Mode S aircraft identification (also known as flight ID) input device in the cockpit. If it does not, then the aircraft will not be correlated with its stored flight plan and delays will ensue.

*Note2:* No spaces between the designator letters and flight number, nor any zeros preceding the flight number are allowed.

**2.3.1.2 Item 8: Flight Rules and Type of Flight (1 or 2 characters)**

FLIGHT RULES

Insert one of the following letters to denote the category of flight rules with which the pilot intends to comply:

- I - if it is intended that the entire flight will be operated under the IFR;
- V - if it is intended that the entire flight will be operated under the VFR;
- Y - if the flight initially will be operated under the IFR, followed by one or more subsequent changes of flight rules;
- Z - if the flight initially will be operated under the VFR, followed by one or more subsequent changes of flight rules.

*Note:* Specify the point(s) where a change of flight rules is planned in item 15.

TYPE OF FLIGHT

Insert one of the following letters to denote the type of flight:

- S - Scheduled air service;
- N - Non-scheduled air transport operation;
- G - General aviation;
- M - Military;
- X - other than any of the categories defined above (see note).

*Note:* Specify status of a flight following the indicator STS in Item 18, or when necessary to denote other reasons for specific handling by ATS, indicate the reason following the indicator RMK/ in Item 18.

**2.3.1.3 Item 9: Number and Type of Aircraft and Wake Turbulence Category**

See § 1.4.4.

**2.3.1.4 Item 10: Equipment**

Capabilities comprise the following elements:

- Presence of relevant serviceable equipment on board the aircraft;
- Equipment and capabilities commensurate with flight crew qualifications;
- Where applicable, authorization from the appropriate authority.

*Note:* Compliance with constraints identified in the EUROCONTROL Basic CFMU Handbook – IFPS Manual applicable to equipment, capabilities and surveillance is compulsory (e.g. IFPS Manual §48,-49,82).

RADIO COMMUNICATION, NAVIGATION AND APPROACH AID EQUIPMENT AND CAPABILITIES

Insert the letter as follows:

- N - if no COM/NAV/APCH aid equipment for the route to be flown is carried, or the equipment is unserviceable,

or

- S - if standard COM/NAV/APCH aid equipment for the route to be flown is carried and serviceable (see note 2 hereafter).

and/or

Insert one or more of the following letters to indicate the serviceable COM/NAV/APCH aid equipment and capabilities available:

A	GBAS landing system	J7	CPDLC FANS 1/A SATCOM (Iridium)
B	LPV (APV with SBAS)	K	MLS
C	LORAN C	L	ILS
D	DME	M1	ATC RTF SATCOM(INMARSAT)
E1	FMC WPR ACARS	M2	ATC RTF (MTSAT)
E2	D-FIS ACARS	M3	ATC RTF (Iridium)
E3	PDC ACARS	O	VOR
F	ADF	P1-P9	Reserved for RCP
G	GNSS (See Note 3)		
H	HF RTF	R	PBN approved (See Note 5)
I	Inertial Navigation	T	TACAN

J1	CPDLC ATN VDL Mode 2 (See Note 4)	U	UHF RTF
J2	CPDLC FANS 1/A VDL HFDL	V	VHF RTF
J3	CPDLC FANS 1/A VDL Mode 4	W	RVSM approved (See Note 8)
J4	CPDLC FANS 1/A VDL Mode 2	X	MNPS approved
J5	CPDLC FANS 1/A SATCOM (INMARSAT)	Y	VHF with 8.33kHz channel spacing capability (See Note 9)
J6	CPDLC FANS 1/A SATCOM (MTSAT)	Z	Other equipment carried or other capabilities (See Note 6)

Operators of aircraft approved for basic area navigation (B-RNAV / RNAV5) operations shall insert the designator 'R' in Item 10a of the flight plan and PBN/ in Item 18 followed by the appropriate capability of that flight.

The PBN descriptors for B-RNAV are: B1, B2, B3, B4, and B5.

Operations of aircraft approved for precision area navigation (P-RNAV) operations shall, in addition to the designator 'R' in Item 10a, also insert PBN/ in Item 18 followed by the appropriate capability of that flight.

The PBN descriptors for RNAV1 are: O1, O2, O3, O4, D1, D2, D3, and D4. It is also possible to indicate the RNAV1 capability by inserting 'Z' in Item 10a and NAV/RNAV1 in Item 18.

Operators of State aircraft not equipped with RNAV shall not insert the designators 'S' or 'R' in Item 10 of the flight plan. Instead, the letter 'Z' shall be inserted in Item 10a and NAV/NONRNAV shall be inserted in Item 18 of the flight plan.

Where a failure or degradation results in the aircraft being unable to meet the B-RNAV functionality and accuracy requirements before departure, the operator of the aircraft shall not insert the designators 'S' or 'R' in Item 10a of the flight plan. Since such flights require special handling by ATC, the letter 'Z' shall be inserted in Item 10a and Item 18 shall contain NAV/RNAVINOP.

*Note1: Any alphanumeric characters not indicated above are reserved.*

*Note2: If the letter 'S' is used, standard equipment is considered to be VHF RTF, VOR and ILS, unless another combination is prescribed by the appropriate ATS authority.*

*Note3: If the letter 'G' is used, the types of external GNSS augmentation, if any, are specified in Item 18 following the indicator NAV/ and separated by a space.*

*Note4: See RTCA/EUROCAE Interoperability Requirements Standard For ATN Baseline 1 (ATN B1 INTEROO Standard – DO-280B/ED-110B) for data link services air traffic control clearance and information/air traffic control communications management/air traffic control microphone check.*

*Note5: If the letter 'R' is used, the performance based navigation levels that can be met shall be specified in Item 18 following the indicator PBN/. Guidance material on the application of performance based navigation to a specific route segment, route or area is contained in the Performance-Based Navigation Manual (Doc 9613).*

*Note6: If the letter 'Z' is used, specify in Item 18 the other equipment carried or other capabilities, preceded by COM/, NAV/ and/or DAT, as appropriate.*

*Exemptions for RNAV, CPDLC and 8.33 kHz are to be indicated by inserting the letter 'Z' in Item 10a and then inserting the appropriate descriptors in the following indicators in Item 18:*

- Insert COM/EXM833
- Insert NAV/RNAVX or NAV/RNAVINOP as appropriate;
- Insert DAT/CPDLCX

*Note7: Information on navigation capability is provided to ATC for clearance and routing purposes.*

*Note8: RVSM approved aircraft are required to indicate the approval status by inserting the letter 'W', regardless of the requested FL. Formation FLT shall NOT insert 'W', regardless of the RVSM approval status of the individual aircraft. Formation FLT of state aircraft in RVSM airspace shall include STS/NONRVSM in Item 18 of the FPL. Operators of non-RVSM approved state aircraft with a requested FL of 290 or above shall insert STS/NONRVSM in Item 18.*

*Note9: In addition to the letter 'S' and/or any other letters, as appropriate, the letter 'Y' shall be inserted in Item 10a of the FPL, for aircraft equipped with 8.33kHz channel spacing capable radio equipment. aircraft normally capable of operating above FL 195, but planning to fly below these levels, shall include the letter 'Y' as specified above.*

*If the aircraft is not equipped with 8.33kHz radios but is exempted from the carriage of the 8.33kHz radios, the letter 'Z' shall be inserted in Item 10a instead of 'Y', and COM/EXM833 shall be inserted in the Item 18 of the FPL.*

*Only those State aircraft that are not equipped with 8.33kHz capable radios but are equipped with UHF, shall be permitted to fly in 8.33kHz airspace where UHF coverage is provided or special procedures are implemented. To indicate such, the letter 'M' shall be inserted in Item 8: Flight Type; both letters 'U' and 'Z' shall be inserted in Item 10a and 'COM/EXM833' shall be inserted in Item 18 of the FPL.*

### 2.3.1.5 Item 10B: Surveillance Equipment

Insert 'N' if no surveillance equipment for the route to be flown is carried or the equipment is unserviceable,

or

Insert one or more of the following descriptors, to a maximum of 20 characters, to describe the serviceable surveillance equipment and/or capabilities on board:

SSR Mode A and C:

- A - Transponder - Mode A (4digits - 4096 codes)
- C - Transponder - Mode A (4digits - 4096 codes) and Mode C

SSR Mode S:

- E - Transponder - Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) capability
- H - Transponder - Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability
- I - Transponder - Mode S, including aircraft identification, but no pressure-altitude capability
- L - Transponder - Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B) and enhanced surveillance capability
- P - Transponder - Mode S, including pressure-altitude, but no aircraft identification capability
- S - Transponder - Mode S, including both pressure altitude and aircraft identification capability
- X - Mode S with neither aircraft identification nor pressure-altitude capability

*Note: Enhanced surveillance capability is the ability of the aircraft to down-link aircraft derived data via a Mode S transponder.*

ADS-B:

- B1 - ADS-B with dedicated 1090MHz ADS-B "out" capability
- B2 - ADS-B with dedicated 1090MHz ADS-B "out" and "in" capability
- U1 - ADS-B "out" capability using UAT
- U2 - ADS-B "out" and "in" capability using UAT
- V1 - ADS-B "out" capability using VDL Mode 4
- V2 - ADS-B "out" and "in" capability using VDL Mode 4

ADS-C:

- D1 - ADS-C with FANS 1/A capabilities
- G1 - ADS-C with ATN capabilities

Alphanumeric characters not indicated above are reserved.

Example: ADE3RV/HB2U2V2G1

*Note: Additional surveillance application should be listed in Item 18 following the indicator SUR/.*

Remarks:

What is entered at Item 7 before the slash '/' (aircraft identifications) match exactly what is entered in the Mode S aircraft Identification (also known as Flight ID) input device in the cockpit. If it does not, then the aircraft will not be correlated with its stored FPL and delays will ensue.

There must be no spaces between the designator letters and flight number, nor any zeros preceding the flight number.

### 2.3.1.6 **Item 13: Departure Aerodrome and Time (8 characters)**

See § 1.4.6.

### 2.3.1.7 **Item 15: Route**

See § 1.4.7.

When applicable, military users shall insert information concerning the change of type of flight (OAT/GAT). An OAT route section is used to mean any portion of the route of a flight which is conducted outside civil controlled airspace and which is operating in accordance with military air traffic services procedures and which as a result does not require systematic addressing to civilian ATS units.

IFPS uses the indicators "/OAT" and "/GAT" to indicate a change from GAT to OAT or vice versa. The indicator shall be inserted after the appropriate significant point in the route.

Examples:

"N0400F280 ... NTM/OAT TB6 ..."

"N0400F280 ... NTM/N0300F250/OAT TB6 ..."

*Note: The significant point must be a published "civil" point.*

IFPS always assumes that all flight plans begin GAT, unless it finds a change to GAT indicated later in the route. In this case it is assumed that everything prior to the change was OAT.

*Note: Compliance with constraints identified in the EUROCONTROL Basic CFMU Handbook – IFPS Manual applicable to MIL/OAT flights is compulsory (e.g. IFPS Manual §36-42 and 50).*

In case of training activity taking place in an area listed in the table hereunder, the corresponding coordinates have to be used as point before and after the “STAY” indicator:

Name of Zone	Coordinates	Name of Zone	Coordinates
EBR03 - DIEST	5100N00504E	TRA/TSA S3 – GIVET AREA	5000N00430E
EBR04 – ELSNBORN 01	5103N00615E	TRA/TSA S2/S3 - BEAURAING GIVET AREA	5007N00442E
EBR05A(BCDF) - HELCHTEREN	5103N00528E	TRA/TSA S1/S2/S3/S4 - NAMUR BEAURAING GIVET CHARLEROI AREA	5012N00440E
EBR05E – HELCHTEREN MEDIUM LEVEL	5104N00518E	TRA/TSA S5 – NEUFCHATEAU AREA	4947N00515E
EBD26 – ARDENNES 05	5011N00451E	TRA/TSA S2/S3/S5 – BEAURAING GIVET NEUFCHATEAU AREA	4950N00453E
EBD29 – ARDENNES 07	5011N00528E	TRA/TSA S1/S2 – NAMUR BEAURAING	5015N00459E
EBD37 – AEROBATIC SECTOR	5040N00505E	TRA/TSA S3/S4 – CHARLEROI GIVET	5010N00428E
EBD38 – NORTH SEA	5125N00211E	TRA/TSA S6 – DURBUY AREA	5020N00530E
EBD39 – KOKSIJDE AREA	5019N00238E	TRA S1/S4/TSA25A(B) - NAMUR CHARLEROI ARDENNES 03A (B)	5012N00440E
HTA01 – ARDENNES 01	5023N00507E	TRA/TSA11 – URSEL	5109N00329E
HTA02 – ARDENNES 02	5020N00531E	TSA13A – CHANNEL A	5124N00218E
HTA03A – ARDENNES 03A	5013N00551E	TSA13B – CHANNEL B	5124N00240E
HTA03B – ARDENNES 03B	5016N00601E	TSA13C – CHANNEL C	5122N00303E
HTA04A – ARDENNES 04A	5002N00502E	TSA13D – CHANNEL D	5121N00316E
HTA04B – ARDENNES 04B	5007N00517E	TRA/TSA22 – BERTRIX-JEHONVILLE	4954N00513E
HTA05A – ARDENNES 05A	4958N00530E	TRA/TSA N1 – BRUSSELS AREA	5104N00449E
HTA05B – ARDENNES 05B	5008N00539E	TRA/TSA N2 – BALEN AREA	5118N00456E
HTA06 – ARDENNES 06	4945N00525E	TRA/TSA N3 – MEEUWEN AREA	5107N00516E
HTA07 – ARDENNES 07	4949N00539E	TRA/TSA N2/N3 – BALEN MEEUWEN AREA	5113N00512E
HTA08	5036N00502E	TSA24 – ARDENNES 02	5019N00500E
HTA10A – COASTAL HELICOPTER TRAINING AREA	5110N00301E	TSA25A – ARDENNES 03A	5007N00442E
HTA10B – AALTER HELICOPTER TRAINING AREA	5108N00326E	TSA25A(B)C – ARDENNES 03A(B)C	4950N00453E
HTA10C – IEPER HELICOPTER TRAINING AREA	5054N00258E	TSA26A(B)D26) – ARDENNES 01 (04) (05)	5011N00451E
HTA10D – TOURNAI HELICOPTER TRAINING AREA	5042N00326E	TSA27A - LEGLISE	4949N00521E
HTA12A	5055N00511E	TSA27B - RONCHAMP	5005N00523E
HTA12B	5047N00518E	TSA27AB – LEGLISE RONCHAMP	4955N00521E
HTA13	5104N00455E	TSA27C - HOTTON	5017N00527E
HTA14A	5121N00456E	TSA27BC – RONCHAMP HOTTON	5014N00523E
HTA14B	5113N00459E	TSA27ABC – LEGLISE RONCHAMP HOTTON	5003N00535E
LFA01 – ARDENNES 01	5015N00512E	TSA27D - GEDINNE	5007N00502E
LFA02 – ARDENNES 02	5015N00541E	TSA27AD – LEGLISE GEDINNE	4951N00459E
LFA03 – ARDENNES 03	5020N00604E	TSA27E - COUVIN	5000N00425E
LFA04 - ARDENNES 04	5000N00508E	TSA28A – ELSNBORN02	5033N00606E
LFA05 - ARDENNES 05	5005N00530E	TSA28B – ELSNBORN03	5018N00608E
LFA06 – ARDENNES 06	4945N00527E	TSA29A - ARDENNES 06	5011N00514E
LFA07 – ARDENNES 07	4950N00504E	TSA29B - ARDENNES 07	5020N00552E
LFA11 – KOKSIJDE TRAINING AREA	5120N00228E	TSA29C - LUXEMBOURG	5006N00600E
LFA01/04/06LFA - LOW FLYING AREA ARDENNES WEST	5000N00507E	TSA32A - LIBRAMONT WEST	4954N00513E
LFA02/03/05/07 – LOW FLYING AREA ARDENNES EAST	5015N00541E	TSA32B - LIBRAMONT EAST	4953N00531E
LFA01/02/03 - LOW FLYING AREA ARDENNES NORTH	5015N00541E	TSA34A - CHAMPLON WEST	5009N00518E
LFA 04/05/06/07 - LOW FLYING AREA ARDENNES SOUTH	4955N00524E	TSA34B - CHAMPLON EAST	5009N00536E

Name of Zone	Coordinates	Name of Zone	Coordinates
TRA WA(BC) – TRA WEST ALPHA (BRAVO CHARLIE)	5051N00300E	LF-CBA1C – CROSS BORDER AREA ONE CHARLIE	5051N00300E
TRA W D – TRA WEST DELTA	5118N00245E	LF-CBA1ABC - CROSS BORDER AREA ONE ALPHA BRAVO CHARLIE	5051N00259E
TRA23 – TIENEN AREA	5027N00505E	EBZR	5116N00445E
TRA/TSA15 LO-RENINGE RPAS AREA	5052N00247E	EBWE	5124N00458E
TRA/TSA N1/N2/N3 – BRUSSELS BALEN MEEUWEN AREA	5103N00500E	EBSP	5029N00555E
TRA/TSA S1 - NAMUR AREA	5025N00450E	EBSU/EBSH	5002N00526E
TRA/TSA S4 – CHARLEROI AREA	5023N00421E	EBKT	5049N00312E
TRA/TSA S1/S4 – NAMUR CHARLEROI AREA	5025N00435E	EBBX	4954N00513E
TRA/TSA S2 – BEAURAING AREA	5005N00505E		

Examples:

- “5100N00504E STAY1/0100 5100N00504E”: staying 1 hour in EBR03
- “5100N00504E STAY1/0050 5100N00504E”: staying 50 minutes in EBR03
- “5100N00504E STAY1/0100 5100N00504E 5103N00528E STAY2/0030 5103N00528E”: staying 1 hour in EBR03 then direct to EBR05A and staying 30 minutes there

**2.3.1.8 Item 16: Destination Aerodrome, Total Estimated Elapsed Time and Alternate Aerodrome(s)**

See § 1.4.8.

**2.3.1.9 Item 18: Other Information**

See § 1.4.9.

Insert “0” (zero) if no other information or any other necessary information in the sequence shown hereunder, in the form of the appropriate indicator selected from those defined hereunder followed by an oblique stroke and the information to be recorded:

STS/ - Reason for special handling by ATS, e.g. a search and rescue mission, as follows:

- ALTRV - a flight operated in accordance with an altitude reservation;
- ATFMX - For a flight approved for exemption from ATFM measures by the appropriate ATS authority;
- FFR - Fire fighting;
- FLTCK - Flight check for calibration of nav aids;
- HAZMAT - For a flight carrying hazardous material;
- HEAD - A flight with Head of State status;
- HOSP - For a medical flight declared by medical authorities;
- HUM - For a flight operating on a humanitarian mission;
- MARSAS - For a flight for which a military entity assumes responsibility for separation of MIL aircraft;
- MEDEVAC - For a life critical medical emergency evacuation;
- NONRVSM - For a non-RVSM capable flight intending to operate in RVSM airspace;
- SAR - For a flight engaged in a search and rescue mission;
- STATE - For a flight engaged in military, customs or police services.

Other reasons for special handling by ATS shall be denoted under the designator RMK/.

PBN/ indication of RNAV and/or RNP capabilities. Include as many of the descriptors below, as apply to the flight, up to a maximum of 8 entries, i.e. a total of not more than 16 characters.

	RNAV Specifications
A1	RNAV 10 (RNP 10)
B1	RNAV 5 all permitted sensors
B2	RNAV 5 GNSS
B3	RNAV 5 DME/DME
B4	RNAV 5 VOR/DME
B5	RNAV 5 INS or IRS
B6	RNAV LORAN C
C1	RNAV 2 all permitted sensors

C2	RNAV 2 GNSS
C3	RNAV 2 DME/DME
C4	RNAV 2 VOR/DME
D1	RNAV 1 all permitted sensors
D2	RNAV 1 GNSS
D3	RNAV 1 DME/DME
D4	RNAV 1 DME/DME/IRU
	RNP Specifications
L1	RNP 4
O1	Basic RNP 1 all permitted sensors
O2	Basic RNP 1 GNSS
O3	Basic RNP 1 DME/DME
O4	Basic RNP 1 DME/DME/IRU
S1	RNP APCH
S2	RNP APCH with BARO-VNAV
T1	RNP AR APCH with RF (special authorization required)
T2	RNP AR APCH without RF (special authorization required)

Combinations of alphanumeric characters not indicated above are reserved.

If any of the indicators B1, B2, C1, C2, D1, D2, O1 or O2 are filed, then a 'G' must be present in Field 10a.

If any of the indicators B1, B3, C1, C3, D1, D3, O1 or O3 are filed, then a 'D' must be present in Field 10a.

If either of the indicators B1 or B4 is filed, then either an 'O' or 'S' must be present and a 'D' must also be present in Field 10a.

If any of the indicators B1, B5, C1, C4, D1, D4, O1 or O4 are filed, then an 'I' must be present in Field 10a.

If any of the indicators C1, C4, D1, D4, O1 or O4 are filed, then a 'D' must be present in Field 10a.

#### **NAV/**

Significant data related to navigation equipment, other than specified in PBN/, as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, e.g. NAV/GBAS SBAS.

#### **COM/**

Indicate communications applications or capabilities not specified in Field 10a.

Example:

"COM/EXM833"

#### **DAT/**

Indicate data applications or capabilities not specified in Field 10a.

Example:

"DAT/CPDLCX"

#### **SUR/**

Include surveillance applications or capabilities not specified in Field 10b.

#### **DEP/**

Name and location of departure aerodrome, if ZZZZ is inserted in Item 13, or the ATS unit from which supplementary flight plan data can be obtained, if AFIL is inserted in Item 13. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location as follows:

With 4 figures describing latitude in degrees and tens and units of minutes followed by "N" (North) or "S" (South), followed by 5 figures describing longitude in degrees and tens and units of minutes, followed by "E" (East) or "W" (West). Make up the correct number of figures, where necessary, by insertion of zeros, e.g.4620N07805W (11 characters).

**Or,**

Bearing and distance from the nearest significant point, as follows:

The identification of the significant point followed by the bearing from the point in the form of 3 figures giving degrees magnetic, followed by the distance from the point in the form of 3 figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical, degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros, e.g. a point of 180° magnetic at a distance of 40 nautical miles from VOR "DUB" should be expressed as DUB180040.

**Or,**

The first point of the route (name or LAT/LONG) or the marker radio beacon, if the aircraft has not taken off from an aerodrome.

**DEST/**

Name and location of destination aerodrome, if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described under DEP/ above.

**DOF/**

The date of flight departure in a six-figure format (YYMMDD, where YY equals the year, MM equals the month and DD equals the day).

**REG/**

The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in Item 7 (50 characters maximum).

**EET/**

Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority.

Examples:

"EET/CAP0745 XYZ0830"

"EET/EINN0204"

**SEL/**

SELCAL Code, for aircraft so equipped.

**TYP/**

Type(s) of aircraft, preceded if necessary without a space by number(s) of aircraft and separated by one space, if ZZZZ is inserted in Item 9.

Example:

"TYP/2F15 5F5 3B2"

**CODE/**

Aircraft address (expressed in the form of an alphanumeric code of six hexadecimal characters) when required by the appropriate ATS authority.

Example:

"F00001 is the lowest aircraft address contained in the specific block administered by ICAO."

**DLE/**

Enroute delay or holding, insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four-figure time in hours and minutes (hhmm).

Example:

"DLE/MDG0030"

**OPR/**

ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.

**ORGN/**

The originator's 8 letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority.

*Note 1: In some areas, flight plan reception centres may insert the ORGN/ identifier and originator's AFTN address automatically.*

*Note 2: Check the EUROCONTROL Basic CFMU Handbook – IFPS Manual for further instructions.*

**PER/**

Aircraft performance data, indicated by a single letter (A, B, C, D, E or H) as specified in the Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume I — Flight Procedures, if so prescribed by the appropriate ATS authority.

**ALTN/**

Name of destination alternate aerodrome(s), if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

**RALT/**

ICAO four letter indicator(s) for en-route alternate(s), as specified in Doc 7910, Location Indicators, or name(s) of en-route alternate aerodrome(s), if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

**TALT/**

ICAO four letter indicator(s) for take-off alternate, as specified in Doc 7910, Location Indicators, or name of take-off alternate aerodrome, if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.



**RIF/**

The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to re-clearance in flight.

Examples:

“RIF/DTA HEC KLAX”

“RIF/ESP G94 CLA YPPH”

**RMK/**

Any other plain-language remarks when required by the appropriate ATS authority or deemed necessary.

*Note: RMK/IFPSRA (IFPS reroute accepted) is used where route definition help is sought. Check the EUROCONTROL Basic CFMU Handbook – IFPS Manual for further instructions.*

**STAYINFO/**

It shall be possible to indicate the reason for the STAY in the item 15 of the flight plan; for this purpose the sub-field heading ‘STAYINFO’ shall be used, immediately followed by a ‘/’, then free alphanumeric text.

Example:

“Item 15: Route ....WAL STAY1/0100 WAL.... ”

“Item 18: Other Information STAYINFO1/CALIBRATION OF WAL”

**2.3.1.10 Item 19: Supplementary Information**

See § 1.4.10.

**2.3.2 Acceptance of the Flight Plan**

Indicate acceptance of the flight plan in the manner prescribed by the appropriate ATS authority.

**2.3.3 Insertion of Data**

Complete the FPL form.

Complete Item 19 (Supplementary information (not to be transmitted in FPL messages)) only when necessary; in accordance with the provisions in *PANS-ATM*, chapter 11, 11.2.1.2, unless ATS prescribes otherwise.

**2.4 Transmission of a Filed Flight Plan****2.4.1 Correction**

Unless otherwise prescribed, correct obvious format errors and/or omissions (i.e. oblique strokes) to ensure adherence as specified in § 2.3.

**2.4.2 Items to be transmitted**

Transmit items as indicated hereunder, unless otherwise prescribed:

1. The items in the shaded lines, above item 3
2. Starting with “<<= (FPL” in item 3:
  - all symbols and data in the unshaded boxes down to “) <<=” at the end of item 18
  - additional alignment functions as necessary to prevent the inclusion of more than 69 characters in any line of items 15 or 18. The alignment function is to be inserted only in lieu of a space so as not to break up a group of data
  - letter shifts and figure shifts (not pre-printed on the form) as necessary
3. The AFTN ending, as described below:
  - End-of-text signal:
    - a. one letter shift
    - b. two carriage returns, one line feed
  - Page-feed sequence: seven line feeds
  - End-of-message signal: four of the letter N

**3 ICAO FLIGHT PLAN FORM**



## ENR 1.11 Addressing of Flight Plan Messages

*Note: In case of mixed flight rules, addresses for IFR and VFR flights shall be added for each IFR and VFR portion of the flight respectively.*

### 1 CIVIL

#### 1.1 Flights departing from Brussels FIR

##### IFR flights

Departure from CIV AD	Departure of GAT from MIL AD
EUCHZMFP EUCBZMFP	EUCHZMFP EUCBZMFP EDYYBAFA EBMIZGZF

##### VFR flights

Departure from Belgium	Departure from Luxembourg
EBBRZPX	ELLXZPX

#### 1.2 Overflights

##### IFR flights

EUCHZMFP EUCBZMFP
----------------------

##### VFR flights

Add following addresses as required:	
All Flights	EBBUZFZX
Flights entering Antwerpen CTR	EBAWZTZX
Flights entering Brussels TMA (below FL 085) or CTR	EBBRZTZX
Flights entering Charleroi TMA or CTR	EBCIZTZX
Flights entering Oostende TMA or CTR and flights along the Belgian coast line	EBOSZTZX
Flights entering Liège TMA or CTR	EBLGZTZX
Flights entering Luxembourg TMA or CTR or uncontrolled Luxembourgish airspace	ELLXZTZX
Flights entering MIL TMA or CTR	EB..ZPX <sup>(1)</sup> EBMIZGZF EDYYBAFA
Flights at night	EBMIZGZF

(1) Insert location of relevant CTR or TMA.

### 1.3 Flights arriving in Brussels FIR

#### IFR flights

Arrival at CIV AD	Arrival at MIL AD
EUCHZMFP EUCBZMFP	EUCHZMFP EUCBZMFP EDYYBAFA EBMIZGZF EB..ZPZX <sup>(1)</sup>

(1) Insert location of arrival AD.

#### VFR flights

Add following addresses as required:	
All Flights	EBBUZFZX
Flights inbound Belgium	EBBRZPZX
Flights inbound Luxembourg (AD not connected to AFTN only)	ELLXZTZX
Flights entering Antwerpen CTR	EBAWZTZX
Flights entering Brussels TMA or CTR	EBBRZTZX
Flights entering Chièvres CTR	ETARYXYX KRCHYXYX
Flights entering Charleroi TMA or CTR	EBCIZTZX
Flights entering Oostende TMA or CTR	EBOSZTZX
Flights entering Liège TMA or CTR	EBLGZTZX
Flights entering Luxembourg TMA or CTR	ELLXZTZX
Flights inbound EBKT	EBKTZTZX EDYYBAFA
Flights inbound EBSP	EBSPZPZX
Flights at night	EBMIZGZF

## 2 MILITARY

#### Military Flights

IFR flights	VFR flights
EBMIZGZF EDYYBAFA EBBUZQZX EUCHZMFP + EUCBZMFP <sup>(1)</sup> EBURZQZX <sup>(2)</sup> EBBRZTZX <sup>(3)</sup> ---- ZPZX <sup>(4)</sup>	EBMIZGZF EDYYBAFA EBBUZFZX ---- ZPZX <sup>(4)</sup>

(1) For GAT or mixed OAT/GAT flights.

(2) For flights entirely or partially above FL245.

(3) For flights to EBBR, EBMB, EBCV and flights through Brussels TMA below FL 085.

(4) For flights with a Belgian military aerodrome as destination or alternate.

Remarks:

- OAT is only possible during Steenokkerzeel ATCC operating hours (see [GEN 3.3. § 7](#))
- For mixed flight rules: add addresses for both VFR and IFR.
- For flights through a civil CTR/TMA or to a civil aerodrome: add addresses as mentioned above.
- For flights outside IFPS: add relevant civil addresses in accordance with national civil regulations.
- For flights inside and outside IFPS: add relevant military addresses of ATS and ATCC units concerned in accordance with national military regulations.
- Compliance with Diplomatic rules as published by the foreign authorities is compulsory.

## ENR 1.12 Interception of Civil Aircraft

Occasions may arise when, after all other means have been exhausted, it is necessary for military reasons of public safety to intercept an aircraft to:

- identify it;
- lead it away from a particular area;
- force it to land for security reasons at a designed aerodrome.

Adherence to the flight plan and ATC procedures and the maintenance of a listening watch on appropriate ATC frequencies will make the occurrence of an interception highly unlikely for civil aircraft. However, should the occasion arise, the rules laid down in *SERA* apply.

### 1 INTERCEPTION PROCEDURES (SERA.11015)

*Note:* The word “interception” in this context does not include intercept and escort service provided, on request, to an aircraft in distress.

The pilot in command of a civil aircraft, when intercepted, shall:

- a. immediately follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in § 2 below;
- b. notify, if possible, the appropriate ATS unit;
- c. attempt to establish radio-communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.500MHZ, giving the identity of the intercepted aircraft and the nature of the flight; if no contact has been established and if practicable, repeating this call on the emergency frequency 243.000 MHZ;
- d. if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate ATS unit;
- e. if equipped with ADS-B or ADS-C, select the appropriate emergency functionality, if available, unless otherwise instructed by the appropriate ATS unit.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the phrases and pronunciations in the following tables and transmitting each phrase twice:

The phrases shown in the table below shall be used by the intercepting aircraft.

Phrase	Pronunciation <sup>(1)</sup>	Meaning
CALL SIGN	<u>KOL</u> SA-IN	What is your call sign?
FOLLOW	FOL- <u>LO</u>	Follow me
DESCEND	DEE- <u>SEND</u>	Descend for landing
YOU LAND	YOU <u>LAAND</u>	Land at this aerodrome
PROCEED	PRO- <u>SEED</u>	You may proceed

(1) Syllables to be emphasised are underlined.

The phrases shown in the table below shall be used by the intercepted aircraft.

Phrase	Pronunciation <sup>(1)</sup>	Meaning
CALL SIGN (call sign) <sup>(2)</sup>	<u>KOL</u> SA-IN (call sign)	My call sign is (call sign)
WILCO	<u>VILL</u> -KO	Understood. Will comply
CAN NOT	<u>KANN</u> NOTT	Unable to comply
REPEAT	REE- <u>PEET</u>	Repeat your instruction
AM LOST	AM <u>LOSST</u>	Position unknown

Phrase	Pronunciation <sup>(1)</sup>	Meaning
MAYDAY	MAYDAY	I am in distress
HIJACK <sup>(3)</sup>	<u>HI</u> - <u>JACK</u>	I have been hijacked
LAND (place name)	LAAND (place name)	I request to land at (place name)
DESCEND	DEE-SEND	I require descent

(1) Syllables to be emphasised are underlined.

(2) The call sign required to be given is that used in RTF communications with ATS units and corresponding to the aircraft identification in the flight plan.

(3) Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

## 2 SIGNALS FOR USE IN THE EVENT OF INTERCEPTION

### Signals Initiated by Intercepting Aircraft and Responses by Intercepted Aircraft

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
1	<p>DAY or NIGHT. Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of a helicopter) on the desired heading.</p> <p><i>Note 1: MET conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn.</i></p> <p><i>Note 2: If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of race-track patterns and to rock the aircraft each time it passes the intercepted aircraft.</i></p>	You have been intercepted. Follow me.	DAY or NIGHT. Rocking aircraft, flashing navigational lights at irregular intervals and following.	Understood, will comply.
2	DAY or NIGHT. An abrupt break-away manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT. Rocking the aircraft.	Understood, will comply.
3	DAY or NIGHT. Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT. Lowering landing gear, (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overflying the runway or helicopter landing area, landing is considered safe, proceeding to land.	Understood, will comply.

### Signals Initiated by Intercepted Aircraft and Responses by Intercepting Aircraft

Series	INTERCEPTED Aircraft Signals	Meaning	INTERCEPTING Aircraft Responds	Meaning
4	DAY or NIGHT. Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 1000 FT but not exceeding 2000 FT (in the case of a helicopter, at a height exceeding 170 FT but not exceeding 330 FT) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	<p>DAY or NIGHT. If it is desired that the intercepted aircraft follows the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the series 1 signals prescribed for intercepting aircraft.</p> <p>If it is decided to release the intercepted aircraft, the intercepting aircraft uses the series 2 signals prescribed for intercepting aircraft.</p>	<p>Understood, follow me.</p> <p>Understood, you may proceed.</p>
5	DAY or NIGHT. Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply.	DAY or NIGHT. Use series 2 signals prescribed for intercepting aircraft (see above).	Understood.
6	DAY or NIGHT. Irregular flashing of all available lights.	In distress.	DAY or NIGHT. Use series 2 signals prescribed for intercepting aircraft (see above).	Understood.

## 3 MILITARY PROCEDURES

The intercept control unit (CRC Beauvechain or CRC Nieuw Milligen) will advise Steenokkerzeel ATCC of the position of the intercepted aircraft and the intercepting aircraft and of the estimated approach heading of the latter. Steenokkerzeel ATCC will in its turn advise the civil agency controlling the intercepted aircraft.

THIS PAGE INTENTIONALLY LEFT BLANK



---

## ENR 1.13 Unlawful Interference

---

---

### 1 SERA.11005

---

An aircraft which is being subjected to unlawful interference shall endeavour to set the transponder to Code 7500 and notify the appropriate ATS unit of, any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the ATS unit to give priority to the aircraft and to minimise conflict with other aircraft.

If an aircraft is subjected to unlawful interference, the pilot-in-command shall attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate ATS unit unless considerations aboard the aircraft dictate otherwise.

The following procedures are intended as guidance for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this fact:

1. If the pilot-in-command cannot proceed to an aerodrome, they should attempt to continue flying on the assigned track and at the assigned cruising level at least until able to notify an ATS unit or until within radar or ADS-B coverage.
2. When an aircraft subjected to an act of unlawful interference must depart from its assigned track or its assigned cruising level without being able to make radiotelephony contact with ATS, the pilot-in-command should, whenever possible:
  - 2.1 attempt to broadcast warnings on the VHF channel in use or the VHF emergency frequency, and other appropriate channels, unless considerations aboard the aircraft dictate otherwise. Other equipment such as on-board transponders and data links should also be used when it is advantageous to do so and circumstances permit; and
  - 2.2 proceed in accordance with applicable special procedures for in-flight contingencies, where such procedures have been established and promulgated in the Regional Supplementary Procedures (Doc 7030); or
  - 2.3 proceed at a level which differs from the cruising levels normally used for an IFR flight by 500 FT.

THIS PAGE INTENTIONALLY LEFT BLANK

---

## ENR 1.14 Air Traffic Incidents

---

### 1 DEFINITIONS

---

#### 1.1 Air Traffic Occurrence

The term air traffic occurrence is used for accidents and all categories of incidents as well as for defects or mal-functioning of an aircraft, its equipment and any element of the Air Navigation System which is used or intended to be used for the purpose or in connection with the operation of an aircraft or with the provision of an ATM service or navigational aid to an aircraft.

#### 1.2 Accident

##### 1.2.1 Civil

An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

1. A person is fatally or seriously injured as a result of:
  - being in the aircraft, or
  - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
  - direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
2. The aircraft sustains damage or structural failure which adversely affect the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component except for engine failure or damage, when the damage is limited to the engine, its cowling's or accessories; or for damages limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or
3. The aircraft is missing or is completely inaccessible.

*Note1: For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified as a fatal injury by ICAO.*

*Note2: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.*

##### 1.2.2 Military

An occurrence involving military aircraft, missiles and/or UAS, associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

1. A person is fatally or seriously injured as a result of:
  - the operation of the aircraft, or
  - associated activities, or
2. The aircraft sustains serious damage or structural failure which adversely affect the structural integrity, strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component except for engine failure or damage, when the damage is limited to the engine, its cowling's or accessories; or for damages limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or
3. The aircraft is missing or is completely inaccessible.

*Note1: For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified as a fatal injury.*

*Note2: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.*

#### 1.3 Incident

A serious occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.

#### 1.4 Air Traffic Incident

A serious occurrence related to the provision of air traffic services, such as:

- a. aircraft proximity;
- b. serious difficulty resulting in a hazard to aircraft caused, for example, by:

1. faulty procedures;
2. non-compliance with procedures;
3. failure of ground facilities.

## 1.5 Aircraft Proximity (AIRPROX)

A situation in which, in the opinion of the pilot or the ATS personnel, the distance between aircraft, as well as their relative positions and speed, have been such that the safety of the aircraft involved may have been compromised.

---

## 2 SEVERITY CLASSIFICATIONS OF ACCIDENTS (MIL)

---

The severity of an accident is to be expressed according to:

1. The level of damage to the aircraft:
  - destroyed/not economically repairable;
  - aircraft unavailability has major operational impact;
  - aircraft unavailability has moderate operational impact.
2. The type and number of injuries:
  - lethal;
  - major injury;
  - minor injury.

In Belgian Defence these three levels are called:

- MISHAP category alpha;
- MISHAP category bravo;
- MISHAP category charlie.

---

## 3 SEVERITY DEFINITIONS OF AIR TRAFFIC INCIDENTS

---

### 3.1 Serious Incident

*ICAO Doc 4444*: AIRPROX - Risk of collision (Eurocontrol ESARR2 category A) = The risk classification of aircraft proximity in which serious risk of collision has existed. Critical near collision between aircraft or between aircraft and obstacle(s). Separations lower than half the separation minima (e.g. 2 NM).

*ICAO Annex 13* / attachment C:

- Near collision requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate;
- Controlled flight into terrain only marginally avoided;
- Aborted take-off on a closed or engaged runway / take-off from a closed or engaged runway with marginal separation from obstacles / landings or attempted landings on a closed or engaged runway / take-off or landing incidents, such as under-shootings, overrunning or running off the runway.

### 3.2 Major Incident

*ICAO Doc 4444*: AIRPROX - Safety not assured (Eurocontrol ESARR2 category B) = The risk classification of an aircraft proximity in which the safety of the aircraft may have been compromised:

- Loss of separation (separation higher than half the separation minima, e.g. 4 NM);
- Safety margins not respected (higher than half the applicable safety margins);
- A crew avoidance manoeuvre and/or an ATC instruction which allowed to reduce the risk, without eliminating it, as safety margins were still infringed.

### 3.3 Significant Incident

*ICAO Doc 4444*: AIRPROX - No risk of collision (Eurocontrol ESARR2 category C) = The risk classification of an aircraft proximity in which no risk of collision has existed:

- After visual contact between two aircraft, no avoidance manoeuvre was seen as necessary or was carried out within safety margins;
- aircraft deviation from ATC clearance (such as flight level, route, heading, runway), unauthorized penetration of airspace, runway incursion with no other traffic in the vicinity (hence, where no avoiding action was necessary).

### 3.4 Not Determined

*ICAO Doc 4444*: AIRPROX - Risk not determined (Eurocontrol ESARR2 category D) = The risk classification of an aircraft proximity in which insufficient information was available to determine the risk involved or inconclusive or conflicting evidence precluded such determination.

### 3.5 No Safety Effect

*Eurocontrol ESARR2: An incident which has no safety significance (category E).*

## 4 USE OF THE AIR TRAFFIC INCIDENT REPORT FORM A/B

### 4.1 Civil

#### 4.1.1 Designation and identification of Air Traffic incidents

Air traffic incidents are designated and identified in reports as follows:

Type	Designation
Air traffic incident	Incident
as point a (*)	AIRPROX
as b1 and b2 (*)	Procedure
as b3 (*)	Facility
(*) defined above (§ 1.4)	

#### 4.1.2 The Air Traffic Incident Report Form A

The Air Traffic Incident Report Form A is intended for use:

- by a pilot for filing a report on an air traffic incident after arrival or for confirming a report made initially by radio during flight. The form, if available on board, may also be of use in providing a pattern for making the initial report in flight;
- by an ATS or air defence unit for recording an air traffic incident report received by radio, TEL or teleprinter. The form may also be used as the format for the text of a message to be transmitted over the AFS network.

An example of this form is added below (§ 4.2).

#### 4.1.3 The Air Traffic Incident Report Form B

The Air Traffic Incident Report Form B is intended for ATS personnel or air defence personnel to report an occurrence caused by an aircraft or a vehicle, by your own or another ATS unit, an alleged violation of ATS provisions or clearances, equipment/ATC procedures shortcomings, etc.

An example of this form is added below (§ 4.2).

#### 4.1.4 Instructions For The Completion Of The Air Traffic Incident Report Form A

The items mentioned below shall be filled in, even if unknown (UNK) or not relevant (N/R).

Item	
A	aircraft identification of the aircraft, the ATS unit or air defence unit filing the report.
B	An AIRPROX report should be filed immediately by radio.
C1	Date/time UTC and position in bearing and distance from a navigation aid or in LAT/LONG.
C2	Information regarding aircraft filing the report, tick as necessary.
C2 c)	E.g. FL 350/1013 HPA or 2500 FT QNH / 1007 HPA or 1200 FT/QFE / 998 HPA.
C3	Information regarding the other aircraft involved.
C4	Passing distance (state units used).
C5	Weather conditions.
C6	Attach additional papers as required. The diagrams may be used to show aircraft's positions.
D1 f)	State name of ATS unit and date/time in UTC.
D1 g)	Date and time in UTC.
D2 d)	Telephone number of pilot, or operating authority, as appropriate, to facilitate enquiries by investigating authority.
E2	Include details of ATS unit such as service provided, RTF frequency, SSR codes assigned and altimeter setting. Use diagram to show the aircraft's position and attach additional papers as required.

#### 4.1.5 Instructions For The Completion Of The Air Traffic Incident Report Form B

Use this form to report an occurrence involving an aircraft or vehicle, your own or another ATS unit, an alleged violation of ATS provisions or clearances, equipment and ATC procedures shortcomings.

Fill in this Form as soon as practicable after the occurrence.

Fill in as many boxes (1 to 19) as possible. Fill in relevant information. If not relevant, use "N/R"; or if not known, use "N/K".

Box 1: Year (YY), Month (MM), Date (DD), hour (hh), minute (mm) of occurrence.

Box 2: Night: as defined nationally, or by ICAO.

Box 3: State location using LAT / LONG, a place name, AD, BRG / DIST from a navigation aid or significant point, etc . . .

Box 4: Use this box only if aircraft affected or involved. Provides for details regarding up to two aircraft involved. Use box 13 for additional aircraft.

Type:	Use ICAO aircraft designators
ADEP/ADES	Use ICAO location indicators or plain language
Flight level, altitude or height:	Specify flight level (FL), altitude (A), height (H) in feet. If metric, add "m". Insert altimeter setting, if applicable.
Mode C:	If level information from the aircraft is available from other sources (e.g. Mode S, ADS, etc...), specify in box 13.
Relevant route segment:	e.g. SID/STAR/ATS route (specify), aerodrome traffic circuit (specify e.g. downwind), landing, take-off, taxiing, initial climb, etc... Mark flight rules.

Box 5: To assist in retention of relevant RTF and surveillance recordings.

Box 6: Mark the class of ATS airspace (A, B, C, D, E, F, G) within which the occurrence took place.

Box 7: Indicate the type of service provided, e.g. Area/Approach/Aerodrome - Control/Advisory/Information - Procedural/ Radar - etc. Use a combination of these for full description of service provided.

Box 8: Use this box only if aircraft affected or involved, or if near-controlled flight into terrain (CFIT) event, to indicate distance aircraft/aircraft or aircraft/terrain.

Box 9: Specify if automated warning system(s) was/were involved (e.g. conflict alert, ACAS). If applicable, specify type and contents of warning and/or alert.

Box 10: Mark "YES" or "NO", if relevant.

Box 11: Self-explanatory.

Box 12: Mark "YES" or "NO", if weather was considered relevant to the occurrence. Include details in box 13.

Box 13: Use free text to describe the occurrence, include a diagram if necessary. Include causes and factors believed to be relevant to the occurrence. Suggest changes and improvements, if appropriate (you may wish to indicate that the report reflects your subjective recollection of the facts). Include relevant weather information. If necessary, use box 13 of additional forms. Indicate sequential number of pages and total number of pages.

Box 14: Give *your* assessment of workload, taking into account complexity and other factors.

Box 15: Indicate the time period since your last rest break.

Box 16: Self-explanatory.

Box 17: Self-explanatory.

Box 18: Specify your duty position and/or responsibility at the time of the occurrence.

Box 19: Self-explanatory.

4.2 Air Traffic Incident Report Form A & B

**Air Traffic Incident Report Form**

**Form A**

(For use when submitting and receiving reports on air traffic incidents. In an initial report by radio, shaded items should be included.)

<b>A - AIRCRAFT IDENTIFICATION</b>	<b>B - TYPE OF INCIDENT</b>
	AIRPROX / PROCEDURE / FACILITY * <span style="float: right;">(* Delete as appropriate)</span>

**C - THE INCIDENT**

**1. General**

- a) Date / time of incident .....UTC
- b) Position.....

**2. Own aircraft**

- a) Heading and route
- b) True airspeed.....measured in ( ) kt..... ( ) km/h.....
- c) Level and altimeter setting.....
- d) Aircraft climbing or descending
  - ( ) Level flight                      ( ) Climbing                      ( ) Descending
- e) Aircraft bank angle
  - ( ) Wings level                      ( ) Slight bank                      ( ) Moderate bank
  - ( ) Steep bank                      ( ) Inverted                      ( ) Unknown
- f) Aircraft direction of bank
  - ( ) Left                      ( ) Right                      ( ) Unknown
- g) Restrictions to visibility (select as many as required)
  - ( ) Sunglare                      ( ) Windscreen pillar                      ( ) Dirty windscreen
  - ( ) Other cockpit structure                      ( ) None
- h) Use of aircraft lighting (select as many as required)
  - ( ) Navigation lights                      ( ) Strobe lights                      ( ) Cabin lights
  - ( ) Red anti-collision lights                      ( ) Landing / taxi lights                      ( ) Logo (tail fin) lights
  - ( ) Other                      ( ) None
- i) Traffic avoidance advice issued by ATS
  - ( ) Yes, based on radar                      ( ) Yes, based on visual sighting                      ( ) Yes, based on other information
  - ( ) No
- j) Traffic information issued
  - ( ) Yes, based on radar                      ( ) Yes, based on visual sighting                      ( ) Yes, based on other information
  - ( ) No
- k) Airborne collision avoidance system - ACAS
  - ( ) Not carried                      ( ) Type                      ( ) Traffic advisory issued
  - ( ) Resolution advisory issued                      ( ) Traffic advisory or resolution advisory not issued

l ) Radar identification  
 No radar available       Radar identification       No radar identification

m ) Other aircraft sighted  
 Yes       No       Wrong aircraft sighted

n ) Avoidance action taken  
 Yes       No

o ) Type of flight plan      IFR / VFR / None \*      (\* Delete as appropriate)

**3. Other aircraft**

a ) Type and call sign / registration (if known).....

b ) If a ) above not known, describe below

High wing       Mid wing       Low wing  
 Rotorcraft  
 1 engine       2 engines       3 engines  
 4 engines       More than 4 engines

Marking, colour or other available details.....  
.....

c ) Aircraft climbing or descending

Level flight       Climbing       Descending  
 Unknown

d ) Aircraft bank angle

Wings level       Slight bank       Moderate bank  
 Steep bank       Inverted       Unknown

e ) Aircraft direction of bank

Left       Right       Unknown

f ) Lights displayed

Navigation lights       Strobe lights       Cabin lights  
 Red anti-collision lights       Landing / taxi lights       Logo (tail fin) lights  
 Other       None       Unknown

g ) Traffic avoidance advice issued by ATS

Yes, based on radar       Yes, based on visual sighting       Yes, based on other information  
 No       Unknown

h ) Traffic information issued

Yes, based on radar       Yes, based on visual sighting       Yes, based on other information  
 No       Unknown

i ) Avoiding action taken

Yes       No       Unknown



**4. Distance**

- a) Closest horizontal distance.....
- b) Closest vertical distance.....

**5. Flight weather conditions**

- a) IMC / VMC \*
  - b) Above / below \* clouds / fog / haze or between layers \*
  - c) Distance vertically from cloud.....m / ft \* below .....m / ft \* above
  - d) In cloud / rain / snow / sleet / fog / haze \*
  - e) Flying into / out of \* sun
  - f) Flight visibility.....m / km \*
- (\* Delete as appropriate)

**6. Any other information considered important by the pilot-in-command**

.....

.....

**D - MISCELLANEOUS**

**1. Information regarding reporting aircraft**

- a) Aircraft registration.....
- b) Aircraft type.....
- c) Operator.....
- d) Aerodrome of departure.....
- e) Aerodrome of first landing.....destination.....
- f) Reported by radio or other means to.....(name of ATS Unit) at time.....UTC
- g) Date / time / place of completion of Form.....

**2. Function, address and signature of person submitting report**

- a) Function.....
- b) Address.....
- c) Signature.....
- d) Telephone number.....

**3. Function and signature of person receiving report**

- a) Function.....
- b) Signature.....

**E - SUPPLEMENTARY INFORMATION BY ATS UNIT CONCERNED**

**1. Receipt of report**

a) Report received via AFTN / radio / telephone / other (specify) \* .....

b) Report received by.....(name of ATS Unit)

(\* Delete as appropriate)

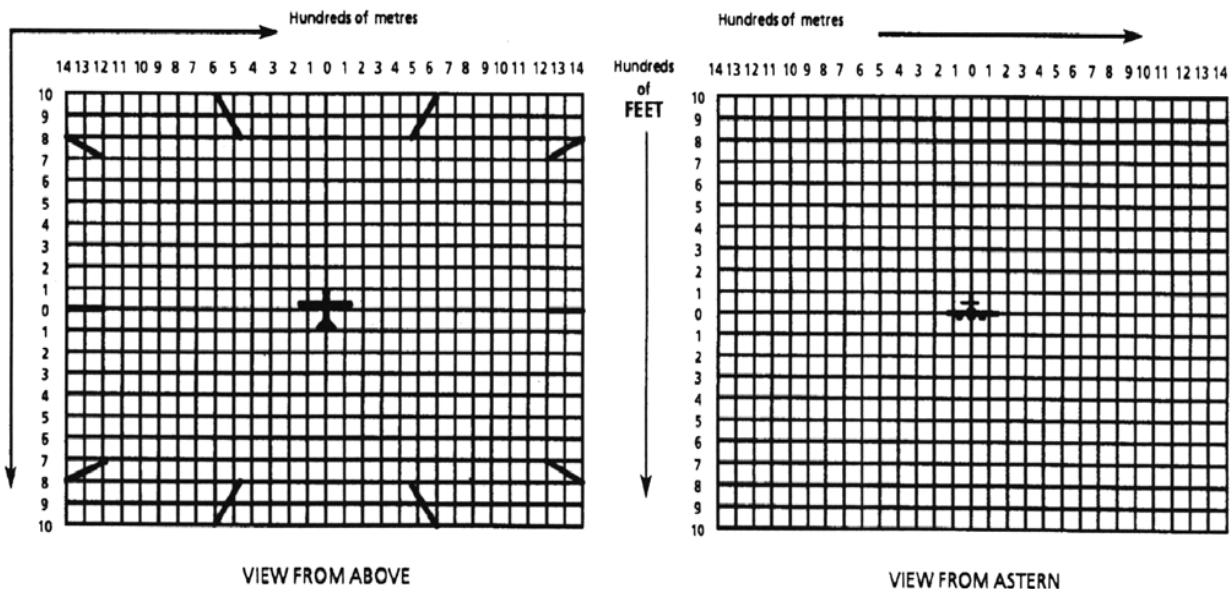
**2. Details of ATS action**

Clearance, incident seen (radar / visually, warning given, result of local enquiry, etc . . .)

.....  
.....  
.....  
.....  
.....  
.....

**DIAGRAMS OF AIRPROX**

Mark passage of other aircraft relative to you, in plan on the left and in elevation on the right, assuming **YOU** are at the centre of each diagram. Include first sighting and passing distance.



National Reference Number	
---------------------------	--

## ATS OCCURRENCE REPORTING FORM

## Form B

For ATS personnel to report an occurrence caused by an aircraft or a vehicle, by your own or another ATS Unit, an alleged violation of ATS provisions or clearances, equipment / ATC procedures shortcomings, etc . . .  
 Fill in as many Boxes (1 to 19) as possible and relevant. Mark **V** as appropriate ; refer to Guidelines.

<b>1. Date/Time of occurrence (in UTC) :</b>			<b>2. Day or Night :</b>		<b>3. Geographical location of occurrence :</b>				
YY	MM	DD		Day					
hh	mm			Night					

<b>4. Aircraft involved :</b>										
Operator	CS and/or registration	Type	ADEP	ADES	FL, altitude or height	SSR Code	Mode C		Route segment	Flight rules
							Yes	<input type="checkbox"/>		IFR
							No	<input type="checkbox"/>		VFR
										Spec.
							Yes	<input type="checkbox"/>		IFR
							No	<input type="checkbox"/>		VFR
										Spec.

<b>5. RTF frequency/communication equipment and surveillance equipment used :</b>	<b>6. Class of ATS airspace (A, B, C, D, E, F or G) :</b>	<b>7. Type of Air Traffic Services :</b>
---	---	--

<b>8. Estimated vertical distance (ft/m) :</b>	<b>9. Automated Warning Systems :</b>	
Estimated horizontal distance (NM/km/minutes) :	Ground-based	Airborne
	<input type="checkbox"/>	<input type="checkbox"/>

<b>10. Traffic information given :</b>	Yes	No	<b>11. Have you reviewed relevant RTF and/or surveillance recordings ?</b>		
	<input type="checkbox"/>	<input type="checkbox"/>	Yes	No	
			<input type="checkbox"/>	<input type="checkbox"/>	

<b>12. Was Weather considered relevant ? (If yes, include details in Box 13)</b>	Yes	No	
	<input type="checkbox"/>	<input type="checkbox"/>	

**13. Description of occurrence with diagram, if necessary ; Causes and factors believed relevant to the occurrence ; Suggested changes and improvements, if appropriate :**

Use additional forms as necessary

<b>14. Assessment of workload :</b>	<b>15. Time since last break :</b>	<b>16. Start time of shift</b>	<b>17. Name of your ATS Unit and Sector :</b>
(very) <input type="checkbox"/>		in UTC :   in local time :	
heavy <input type="checkbox"/>			
medium <input type="checkbox"/>			
light <input type="checkbox"/>			

<b>18. On duty as :</b>	<i>FOR OFFICE USE ONLY</i>		
<b>19. Your name, signature and local date :</b>			

## 4.3 Military

The military aviation has an own reporting system called Aviation Safety Reporting System (ASRS), which includes the same information as the Air Traffic Incident Report Form A/B in a different reporting format. Relevant reports and information will be shared with the civilian stakeholders.

---

# 5 REPORTING PROCEDURES

---

## 5.1 Civil

### 5.1.1 Pilots procedures involved in incident

The following are the procedures to be followed by a pilot who is or has been involved in an incident:

- a. during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the facts to be ascertained immediately;
- b. as promptly as possible after landing, and not later than 7 days after the occurrence, submit a completed Air Traffic Incident Report Form A:
  1. for confirming a report of an incident made initially as in a above, or for making the initial report on such an incident if it had not been possible to report it by radio;
  2. for reporting an incident that did not require immediate notification at the time of occurrence.

### 5.1.2 Initial report by radio

An initial report made by radio should contain the following information:

- aircraft identification;
- type of incident, e.g. aircraft proximity;
- the incident:
  - 1. a ) and b ) ;
  - 2. a ), b ), c ), d ), n ) ;
  - 3. a ), b ), c ), i ) ;
  - 4. a ), b )of the Air Traffic Incident Report Form A;
- miscellaneous; 1. e ) of the Air Traffic Incident Report Form A.

#### 5.1.2.1 The confirmatory report

The confirmatory report on an incident of major significance initially reported by radio or the initial report on any other incident should be submitted to the Air Accidents and Incidents Investigation Unit of the Ministry of Communications and Infrastructure or to the ARO of the aerodrome of first landing for submission to the Investigation Unit and the appropriate ATS authorities. The pilot should complete the Air Traffic Incident Report Form A, supplementing the details of the initial reports as necessary. Where there is no ARO, the report may be submitted to another ATS Unit.

##### 5.1.2.1.1 Mandatory reporting addresses

#### Incidents that occurred in Brussels FIR/UIR or are related to civil aircraft registered in Belgium:

Post: Federal Public Service Mobility and Transport  
Air Accidents and Incidents Investigation Unit  
Atrium - 6th floor  
Rue du Progrès / Vooruitgangstraat 56  
1210 Brussels  
BELGIUM

TEL: +32 (0) 2 277 44 22 or +32 (0) 2 277 44 33  
TEL: +32 (0) 476 76 18 65  
FAX: +32 (0) 2 277 45 52 and +32 (0) 2 277 45 53  
Email: [air-acc-incidents@mobiliteit.fgov.be](mailto:air-acc-incidents@mobiliteit.fgov.be) and [air-por-incidents@mobiliteit.fgov.be](mailto:air-por-incidents@mobiliteit.fgov.be)

*Note: To make sure that the investigation procedure can start in due time, it is of high importance to inform the Air Accidents and Incidents Investigation Unit as promptly as possible and not later than seven days after the occurrence.*

#### Incidents that occurred in the area of responsibility of skeyes:

Post: skeyes  
DGS&O  
Tervuursesteenweg, 303  
1820 Steenokkerzeel  
BELGIUM

TEL: +32 (2) 206 20 40  
FAX: +32 (2) 206 22 21

**Incidents that occurred in the area of responsibility of ANA:**

Post: Administration de la navigation aérienne  
Safety Unit  
BP 273  
L-2012 Luxembourg  
LUXEMBOURG

TEL: +352 47 98 23 01 0  
FAX: +352 47 98 23 09 0  
Email: [safety@airport.etat.lu](mailto:safety@airport.etat.lu)

**Incidents that occurred in BRUSSELS UIR above FL 245:**

Post: EUROCONTROL Agency Safety Regulation Unit (ASRU)  
Rue de la Fusée / Raketstraat 96  
1130 Brussels  
BELGIUM

TEL: +32 (2) 729 90 11  
FAX: +32 (2) 729 90 44  
Telex: 21173 euroc b

**Incidents that occurred in foreign countries and relate to civil aircraft registered in Luxembourg:**

Post: Direction de l'Aviation Civile  
BP 283  
L-2012 Luxembourg  
LUXEMBOURG

TEL: +352 24 77 49 00  
FAX: +352 46 77 90  
Email: [info@dac.public.lu](mailto:info@dac.public.lu)

## 5.2 Military

### 5.2.1 Pilots procedures involved in incident

The following are the procedures to be followed by a pilot who is or has been involved in an incident:

- a. during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the facts to be ascertained immediately. An AIRPROX report shall always be notified immediately by radio;
- b. as promptly as possible after landing, submit a completed Air Traffic Incident Report Form A:
  1. for confirming a report of an incident made initially as in a above, or for making the initial report on such an incident if it had not been possible to report it by radio;
  2. for reporting an occurrence which did not require immediate notification at the time of occurrence.

### 5.2.2 Initial report by radio

An initial report made by radio should contain the following information:

- aircraft identification (own aircraft);
- type of occurrence, e.g. aircraft proximity;
- the incident; 1. a ) and b ) ; 2. a ) , b ) , c ) , d ) , n ) ; 3. a ) , b ) available details: heading, controlling unit and frequency, c ) , i ) ; 4. a ) , b ) of the Air Traffic Incident Report Form A;
- miscellaneous; 1. e ) of the Air Traffic Incident Report Form A.

### 5.2.3 Reporting of Air Traffic Occurrences by ATS of AD Units

ATS personnel or air defence personnel shall proceed as follows regarding an occurrence in which he has been involved. As promptly as possible after an occurrence took place, ATS personnel or air defence personnel shall submit a completed Air Traffic Occurrence Notification Report in accordance with ATM instruction 12 and the Air Traffic Occurrence Notification Report form.

#### 5.2.3.1 Mandatory reporting addresses

Air Traffic Occurrence Notification Reports concerning air traffic occurrences that happened within the Brussels FIR/UIR or in other FIRs to a flight terminating in the Brussels FIR will be addressed to the relevant ATS unit.

Post: Defence  
Air Component  
Aviation Safety Directorate/Safety Monitoring Office  
Base Charles Roman  
1320 Beauvechain  
BELGIUM

TEL: +32 (0) 2 442 54 49

Email: [asd-atm@mil.be](mailto:asd-atm@mil.be)

---

## 6 PURPOSE OF REPORTING AND HANDLING OF THE FORMS

---

The purpose of the reporting of air traffic incidents and their investigation is to promote the safety of aircraft and to reduce the risk of mid-air collisions and to reduce the risk of accidents and incidents caused by faulty procedures or non-compliance with procedures, or failure of ground facilities. The sole objective of the safety investigation of an occurrence shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability. Aircrew and Air Traffic Control/Air Defence personnel who are involved in air traffic occurrences, including those who have been reported as being involved, should cooperate in the investigation by providing complete and accurate information. The degree of risk involved, and the severity of the aircraft incidents should be determined in the incident investigation and classified as "serious incident", "major incident", "significant incident", "not determined" or "no safety effect".

The purpose of the forms is to provide investigatory authorities with as complete information on an air traffic incident as possible and to enable them to report back, with the least possible delay to the pilot or operator concerned, the result of the investigation of the incident and, if appropriate, the remedial action taken for safety improvement. Any information given in order to improve the investigation processes may be used by the receiving party exclusively for safety purposes. Those data may never be used for any other purpose. All the safety related data shall stay confidential.

# ENR 2 AIR TRAFFIC SERVICES AIRSPACE

## ENR 2.1 FIR, UIR, TMA and CTA

Note: Airspace situated outside Brussels FIR/UIR but controlled by Belgian or Luxembourg ATS units is published in ENR 2.2.

### 1 UPPER AIRSPACE

#### 1.1 Upper Flight Information Region

##### BRUSSELS UIR

<b>Lateral limits</b>	510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 500748N 0060816E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-French border - 510521N 0023244E.		
<b>Vertical limits</b>	UNL / FL 195		
<b>Airspace class</b>	C <sup>(1)</sup>		
<b>Units</b>	Maastricht UAC <sup>(2)</sup>	<b>Call sign</b>	Maastricht Radar (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Brussels ACC <sup>(3)</sup>	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Steenokkerzeel ATCC <sup>(4)</sup>	<b>Call sign</b>	Belga Radar (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See § 3
<b>Remarks</b>	<p>(1) Unclassified above FL 660.</p> <p>(2) Above FL 245 (DLIC, ACM, AMC and ACL AVBL).</p> <p>(3) Below FL 245.</p> <p>(4) for OAT only.</p>		

## 1.2 Control Areas within Brussels UIR

### BRUSSELS UTA

<b>Lateral limits</b>	510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 500748N 0060816E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-French border - 510521N 0023244E.		
<b>Vertical limits</b>	FL660 / FL195		
<b>Airspace class</b>	C <sup>(1) (2)</sup>		
<b>Control units</b>	Maastricht UAC <sup>(3)</sup>	<b>Call sign</b>	Maastricht Radar (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Brussels ACC <sup>(4)</sup>	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Steenokkerzeel ATCC <sup>(5)</sup>	<b>Call sign</b>	Belga Radar (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See § 3
<b>Remarks</b>	<p>(1) The airspace between FL290 and FL410 (incl) forms part of the EUR RVSM airspace.</p> <p>(2) The airspace between FL245 and FL660 forms part of the FRA (see ENR 1.3).</p> <p>(3) Above FL245.</p> <p>(4) Below FL245.</p> <p>(5) for OAT only.</p>		

## 2 LOWER AIRSPACE

### 2.1 Flight Information Region

#### BRUSSELS FIR

<b>Lateral limits</b>	510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 500748N 0060816E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-French border - 510521N 0023244E.		
<b>Vertical limits</b>	FL195 / GND		
<b>Airspace class</b>	G <sup>(1) (2)</sup>		
<b>Units</b>	Brussels FIC	<b>Call sign</b>	Brussels Information (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Luxembourg APP <sup>(3)</sup>	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See ELLX AD 2.18
	Steenokkerzeel ATCC	<b>Call sign</b>	Belga Information (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See § 3
<b>Remarks</b>	<p>(1) Outside regulated airspace.</p> <p>(2) RMZ and TMZ during night.</p> <p>(3) Provides FIS for the Luxembourgish part of the Brussels FIR.</p>		



## 2.2 Control Areas within Brussels FIR

### AIRWAYS

<b>Lateral limits</b>	The RNAV routes constitute airways where situated within the limits of <u>Brussels LCTA</u> , <u>Charleroi TMA One</u> or <u>Oostende TMA Two</u> . Airway width is 5 NM either side of the axis, except where indicated otherwise (see <u>ENR 3.2</u> ).		
<b>Vertical limits</b>	See <u>ENR 3.2</u>		
<b>Airspace class</b>	C <sup>(1)</sup>		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>§ 3</u>
<b>Remarks</b>	(1) Partially airspace class G on some airways during activation of the <u>Low Flying Areas Golf</u> (see ENR 5.5).		

### BRUSSELS CTA EAST ONE

<b>Lateral limits</b>	510251N 0045955E - 510216N 0050508E - 505345N 0045425E - 505500N 0044845E - 510251N 0045955E.		
<b>Vertical limits</b>	FL 195 / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>§ 3</u>
	Brussels APP	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>

### BRUSSELS CTA EAST TWO

<b>Lateral limits</b>	505345N 0045425E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced counterclockwise to 510122N 0051316E - 510216N 0050508E - 505345N 0045425E.		
<b>Vertical limits</b>	FL 195 / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>§ 3</u>
	Brussels APP	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>

### BRUSSELS CTA EAST THREE

<b>Lateral limits</b>	510122N 0051316E - 510057N 0051655E - 505000N 0053854E - along the Belgian-Dutch border - 504935N 0053857E - 504851N 0053815E - 504501N 0053605E - 505107N 0050712E, an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced counterclockwise to 510122N 0051316E.		
<b>Vertical limits</b>	FL 195 / FL 055		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>§ 3</u>
	Brussels APP	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>

**BRUSSELS CTA EAST FOUR A**

<b>Lateral limits</b>	504851N 0053815E - 504611N 0054446E - 504519N 0054824E - 504459N 0055454E - 504508N 0055956E - 504513N 0055956E - along the Belgian-Dutch border - 504515N 0060116E - 504219N 0054902E - 504501N 0053605E - 504851N 0053815E.(1)		
<b>Vertical limits</b>	FL 095 / FL 055 (2)		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
<b>Remarks</b>	(1) Partially situated in Amsterdam FIR. (2) Lower limit 4500FT AMSL east of <u>Liège TMA One</u> .		

**BRUSSELS CTA EAST FOUR B**

<b>Lateral limits</b>	504935N 0053857E - along the Belgian-Dutch border - 504515N 0060116E - 504219N 0054902E - 504501N 0053605E - 504851N 0053815E - 504935N 0053857E.		
<b>Vertical limits</b>	FL 195 / FL 095		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3

**BRUSSELS CTA EAST FIVE**

<b>Lateral limits</b>	503318N 0055610E - 503754N 0061308E - along the Belgian-German border - 501818N 0061745E - 503318N 0055610E.		
<b>Vertical limits</b>	FL 195 / FL 105 (1)		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
<b>Remarks</b>	(1) <u>EBR04</u> excluded when active.		

**BRUSSELS CTA EAST SIX**

<b>Lateral limits</b>	510605N 0051000E - 511332N 0045955E - 510251N 0045955E - 510122N 0051316E - 510605N 0051000E.		
<b>Vertical limits</b>	FL 095 / 4500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels APP (1)(2)	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>
	Steenokkerzeel ATCC	<b>Call sign</b>	Belga Radar (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See § 3
<b>Remarks</b>	(1) Controlled by Brussels APP from 0700 to 0830 (0600 to 0730), from 1630 to 1900 (1530 to 1800) and outside MIL OPR HR. (2) Aircraft entering Brussels CTA East Six below FL 065 shall contact Brussels Departure, aircraft entering Brussels CTA East Six at or above FL 065 shall contact Brussels Arrival.		

**BRUSSELS CTA SOUTH ONE**

<b>Lateral limits</b>	502920N 0034840E - 503039N 0040151E - 503823N 0042917E - 504048N 0043801E - 503640N 0045629E - 503353N 0050818E - 503053N 0045743E - 502900N 0045106E - 502316N 0045220E - 501842N 0041627E - 502920N 0034840E.		
<b>Vertical limits</b>	FL 095 / FL 055		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Brussels APP	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>

**BRUSSELS CTA SOUTH THREE<sup>(1)</sup>**

<b>Lateral limits</b>	494038N 0051741E - 494105N 0053116E - 494738N 0054729E - along the Belgian-Luxembourg border - 494328N 0054955E - 494032N 0054956E - 493537N 0054356E - 493232N 0054520E - along the Belgian-French border - 494038N 0051741E.		
<b>Vertical limits</b>	FL 165 / FL 055		
<b>Airspace class</b>	C <sup>(2)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	(1) Delegation of ATS from Brussels ACC to Luxembourg APP. (2) Partially airspace class G during activation of <a href="#">Low Flying Area Golf Two South</a> (see ENR 5.5).		

**BRUSSELS CTA WEST ONE**

<b>Lateral limits</b>	510314N 0032818E - 510520N 0031513E - 511533N 0032155E - 510945N 0034749E - 510314N 0032818E.		
<b>Vertical limits</b>	FL 195 / FL 055		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3

**BRUSSELS CTA WEST TWO**

<b>Lateral limits</b>	510520N 0031513E - 511042N 0024029E - 511254N 0020000E - 513000N 0020000E - 512704N 0023246E - 511533N 0032155E - 510520N 0031513E.		
<b>Vertical limits</b>	FL 195 / FL 095		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3

**FLORENNES CTA**

<b>Lateral limits</b>	501704N 0041035E - 501842N 0041627E - 502316N 0045220E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced clockwise to 500728N 0045635E - 500656N 0045209E - along the Belgian-French border - 500545N 0044211E - 500206N 0040902E - along the Belgian-French border - 501704N 0041035E. <sup>(1)</sup>		
<b>Vertical limits</b>	FL 095 / 4500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Florennes APP	<b>Call sign</b>	Florennes Approach (En)
		<b>OPR HR</b>	HX <sup>(2)(3)(4)(5)</sup>
		<b>FREQ</b>	See EBFS <u>AD-2.18</u>
<b>Remarks</b>	<p>(1) Excludes <u>TRA23</u> when active.</p> <p>(2) Can be activated by NOTAM.</p> <p>(3) When the <u>Brussels LCTA</u> is military controlled airspace (Steenokkerzeel ATCC) activation is only possible after prior approval of ATCC Supervisor.</p> <p>(4) When the <u>Brussels LCTA</u> is civil controlled airspace (Brussels ACC) and outside EBFS OPR HR, Florennes CTA is not active. However, as EBFS may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Aircraft shall maintain a listening watch with Florennes TWR when <u>EBR06B</u> is activated. Upon activation of Florennes CTA, aircraft shall comply with instructions from Florennes APP.</p> <p>(5) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.</p>		

**Kleine Brogel CTA**

<b>Lateral limits</b>	510251N 0045955E - 510634N 0045955E - 511551N 0051647E - along the Belgian-Dutch border - 510805N 0055036E - 510607N 0053455E - 510723N 0053455E - 510557N 0052255E - 510452N 0051951E - 505929N 0051951E - 510057N 0051655E - 510251N 0045955E. <sup>(1)</sup>		
<b>Vertical limits</b>	FL 075 <sup>(2)</sup> / 4500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Kleine Brogel APP	<b>Call sign</b>	Kleine Brogel Approach (En)
		<b>OPR HR</b>	HX <sup>(3)(4)(5)(6)</sup>
		<b>FREQ</b>	See EBBL <u>AD-2.18</u>
<b>Remarks</b>	<p>(1) Excluding the lateral limits of <u>Brussels TMA Nine B</u> and <u>Brussels CTA East Six</u> when this has been delegated to Brussels APP.</p> <p>(2) Upper limit can be raised to FL 095 when <u>Brussels LCTA</u> is military controlled airspace (Steenokkerzeel ATCC).</p> <p>(3) Can be activated by NOTAM.</p> <p>(4) When the <u>Brussels LCTA</u> is military controlled airspace (Steenokkerzeel ATCC) activation is only possible after prior approval of ATCC Supervisor.</p> <p>(5) When the <u>Brussels LCTA</u> is civil controlled airspace (Brussels ACC) and outside EBBL OPR HR, Kleine Brogel CTA is not active. However, as EBBL may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Aircraft shall maintain a listening watch with Kleine Brogel TWR when <u>EBR07B</u> is activated. Upon activation of Kleine Brogel CTA, aircraft shall comply with instructions from Kleine Brogel APP.</p> <p>(6) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.</p>		

**BRUSSELS LOWER CONTROL AREA**

<b>Lateral limits</b>	The FIR boundary. <sup>(1)</sup>		
<b>Vertical limits</b>	FL 195 (incl) / 4500FT AMSL		
<b>Airspace class</b>	C <sup>(2)</sup>		
<b>Control units</b>	Brussels ACC <sup>(3)</sup>	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>§ 3</u>
	Steenokkerzeel ATCC <sup>(4)</sup>	<b>Call sign</b>	Belga Radar (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See <u>§ 3</u>
<b>Remarks</b>	<p>(1) All AWY, CTA, TMA and CTR excluded.</p> <p>(2) Partially airspace class G during activation of the <u>Low Flying Areas Golf</u> (see ENR 5.5).</p> <p>(3) Outside MIL OPR HR (Luxembourg airspace H24).</p> <p>(4) During MIL OPR HR (except Luxembourg airspace).</p>		

## 2.3 Terminal Control Areas

BEAUVECHAIN TMA ONE A <sup>(1)</sup>

<b>Lateral limits</b>	503823N 0042917E - 504048N 0043801E - 505345N 0045425E - 510216N 0050508E - 510122N 0051316E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 503640N 0045629E - 503053N 0045743E - 502900N 0045106E - 503018N 0045049E - an arc of circle, 5.5 NM radius, centred on 502932N 0044215E and traced counterclockwise to 503502N 0044248E - 503823N 0042917E.		
<b>Vertical limits</b>	3500FT AMSL / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Beauvechain APP	<b>Call sign</b>	Beauvechain Approach (En)
		<b>OPR HR</b>	HO <sup>(2)</sup>
		<b>FREQ</b>	See <a href="#">EBBE AD 2.18</a>
<b>Remarks</b>	(1) Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible. (2) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.		

BEAUVECHAIN TMA ONE B <sup>(1)</sup>

<b>Lateral limits</b>	504048N 0043801E - 505345N 0045425E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 504048N 0043801E.		
<b>Vertical limits</b>	4500FT AMSL / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Beauvechain APP	<b>Call sign</b>	Beauvechain Approach (En)
		<b>OPR HR</b>	HO <sup>(2)</sup>
		<b>FREQ</b>	See <a href="#">EBBE AD 2.18</a>
<b>Remarks</b>	(1) Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible. (2) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.		

## BEAUVECHAIN TMA TWO

<b>Lateral limits</b>	504111N 0042920E - 505500N 0044845E - 505345N 0045425E - 504048N 0043801E - 503823N 0042917E - 504111N 0042920E.		
<b>Vertical limits</b>	3500FT AMSL / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Beauvechain APP	<b>Call sign</b>	Beauvechain Approach (En)
		<b>OPR HR</b>	HO <sup>(1)</sup>
		<b>FREQ</b>	See <a href="#">EBBE AD 2.18</a>
	Brussels APP <sup>(2)</sup>	<b>Call sign</b>	Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	(1) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC. (2) Outside EBBE OPR HR. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible.		

BEAUVECHAIN TMA THREE <sup>(1)</sup>

<b>Lateral limits</b>	503053N 0045743E - 503640N 0045629E - 503810N 0044949E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced counterclockwise to 510122N 0051316E - 505533N 0051951E - 505530N 0052754E - 505223N 0053408E - 505150N 0052933E - 504817N 0051953E - 503814N 0050408E - 503316N 0050607E - 503053N 0045743E. <sup>(2)</sup>		
<b>Vertical limits</b>	4500FT AMSL / 2500FT AMSL		
<b>Airspace class</b>	C		

**BEAUVECHAIN TMA THREE <sup>(1)</sup>**

<b>Control units</b>	Beauvechain APP	<b>Call sign</b>	Beauvechain Approach (En)
		<b>OPR HR</b>	HO <sup>(3)</sup>
		<b>FREQ</b>	See <a href="#">EBBE AD 2.18</a>
<b>Remarks</b>	<p>(1) Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible.</p> <p>(2) <a href="#">EBR05C</a> excl when active.</p> <p>(3) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.</p>		

**BEAUVECHAIN TMA FOUR <sup>(1)</sup>**

<b>Lateral limits</b>	502900N 0045106E - 503316N 0050607E - 503101N 0050701E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced counterclockwise to 502451N 0050914E - 502300N 0050943E - 502205N 0050105E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced counterclockwise to 502316N 0045220E - 502900N 0045106E.		
<b>Vertical limits</b>	4500FT AMSL / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Beauvechain APP	<b>Call sign</b>	Beauvechain Approach (En)
		<b>OPR HR</b>	HO <sup>(2)</sup>
		<b>FREQ</b>	See <a href="#">EBBE AD 2.18</a>
<b>Remarks</b>	<p>(1) Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible.</p> <p>(2) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.</p>		

**BRUSSELS TMA ONE**

<b>Lateral limits</b>	504036N 0040415E - 503852N 0035231E - 510207N 0040621E - 511005N 0044746E - 510251N 0045955E - 504111N 0042920E - 503823N 0042917E - 503205N 0040655E - an arc of circle, 6 NM radius, centred on 503532N 0035910E and traced counterclockwise to 504036N 0040415E.		
<b>Vertical limits</b>	FL 195 / 1500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">§ 3</a>
	Brussels APP <sup>(1)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	(1) Aircraft entering Brussels TMA below FL 065 shall contact Brussels Departure.		

**BRUSSELS TMA TWO**

<b>Lateral limits</b>	503059N 0034410E - 504012N 0033609E - 511440N 0040056E - along the Belgian-Dutch border - 512114N 0041431E - 511726N 0042522E - 511807N 0043011E - 511835N 0043325E - 511005N 0044746E - 510207N 0040621E - 503852N 0035231E - 504036N 0040415E, an arc of circle, 6 NM radius, centred on 503532N 0035910E and traced clockwise to 503205N 0040655E - 503039N 0040151E - 502920N 0034840E - 503059N 0034410E.		
<b>Vertical limits</b>	FL 195 / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">§ 3</a>
	Brussels APP <sup>(1)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	(1) Aircraft entering Brussels TMA below FL 065 shall contact Brussels Departure.		

**BRUSSELS TMA THREE A**

<b>Lateral limits</b>	511440N 0040056E - 504012N 0033609E - 505334N 0032421E - 510314N 0032818E - 511257N 0035731E - along the Belgian-Dutch border - 511440N 0040056E.		
<b>Vertical limits</b>	FL 195 / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Brussels APP <sup>(1)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>
<b>Remarks</b>	(1) Aircraft entering Brussels TMA below FL 065 shall contact Brussels Departure.		

**BRUSSELS TMA THREE B**

<b>Lateral limits</b>	512844N 0043011E - 511807N 0043011E - 511726N 0042522E - 512114N 0041431E - along the Belgian-Dutch border - 512844N 0043011E.		
<b>Vertical limits</b>	FL 195 / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Brussels APP <sup>(1)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>
<b>Remarks</b>	(1) Aircraft entering Brussels TMA below FL 065 shall contact Brussels Departure.		

**BRUSSELS TMA FOUR**

<b>Lateral limits</b>	511835N 0043325E - 511938N 0044052E - an arc of circle, 26 NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 510251N 0045955E - 511835N 0043325E.		
<b>Vertical limits</b>	FL 145 / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Brussels APP <sup>(1)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>
<b>Remarks</b>	(1) Aircraft entering Brussels TMA below FL 065 shall contact Brussels Departure.		

**BRUSSELS TMA FIVE**

<b>Lateral limits</b>	504111N 0042920E - 505500N 0044845E - 505345N 0045425E - 504048N 0043801E - 503823N 0042917E - 504111N 0042920E.		
<b>Vertical limits</b>	FL 195 / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See § 3
	Brussels APP <sup>(1)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBBR AD 2.18</u>
<b>Remarks</b>	(1) Aircraft entering Brussels TMA below FL 065 shall contact Brussels Departure.		

**BRUSSELS TMA SEVEN**

<b>Lateral limits</b>	511938N 0044052E - 511938N 0050800E - along the Belgian-Dutch border - 511845N 0051000E - 510605N 0051000E - 511332N 0045955E - an arc of circle, 26 NM radius, centred on 505408N 0043217E and traced counterclockwise to 511938N 0044052E.		
<b>Vertical limits</b>	FL 095 / FL 055		
<b>Airspace class</b>	C <sup>(1)</sup>		
<b>Control units</b>	Brussels APP <sup>(2)(3)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
	Steenokkerzeel ATCC	<b>Call sign</b>	Belga Radar (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See <a href="#">§ 3</a>
<b>Remarks</b>	<p>(1) Airspace class G between FL 055 and FL 075 during activation of <a href="#">Low Flying Area Golf Two North</a> (see ENR 5.5).</p> <p>(2) Controlled by Brussels APP outside MIL OPR HR.</p> <p>(3) Aircraft entering Brussels TMA below FL 065 shall contact Brussels Departure.</p>		

**BRUSSELS TMA EIGHT <sup>(1)</sup>**

<b>Lateral limits</b>	504048N 0043801E - 505345N 0045425E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 504048N 0043801E.		
<b>Vertical limits</b>	4500FT AMSL / 3500FT AMSL		
<b>Airspace class</b>	C <sup>(2)</sup>		
<b>Control units</b>	Brussels APP	<b>Call sign</b>	Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	<p>(1) Only active outside MIL OPR HR.</p> <p>(2) Partially airspace class G during activation of <a href="#">BEAUVECHAIN CLIMB-OUT SECTOR 1</a> and/or <a href="#">BEAUVECHAIN CLIMB-OUT SECTOR 2 / GOETSENHOVEN GLIDER AREA</a> (see ENR 5.5).</p>		

**BRUSSELS TMA NINE A**

<b>Lateral limits</b>	510634N 0045955E - 511332N 0045955E - 510933N 0050519E - 510634N 0045955E.		
<b>Vertical limits</b>	4500FT AMSL / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels APP	<b>Call sign</b>	Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>

**BRUSSELS TMA NINE B <sup>(1)</sup>**

<b>Lateral limits</b>	510251N 0045955E - 510634N 0045955E - 510933N 0050519E - 510605N 0051000E - 510122N 0051316E - 510251N 0045955E.		
<b>Vertical limits</b>	4500FT AMSL / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels APP	<b>Call sign</b>	Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	(1) Only active outside EBBL OPR HR.		



**CHARLEROI TMA ONE**

<b>Lateral limits</b>	502920N 0034840E - 503039N 0040151E - 503823N 0042917E - 503502N 0044248E - an arc of circle, 5.5 NM radius, centred on 502932N 0044215E and traced clockwise to 503018N 0045049E - 502316N 0045220E - 501842N 0041627E - 502920N 0034840E. <sup>(1)</sup>		
<b>Vertical limits</b>	FL 055 / 2500FT AMSL <sup>(2)</sup>		
<b>Airspace class</b>	C		
<b>Control units</b>	Charleroi APP	<b>Call sign</b>	Charleroi Approach (En)
		<b>OPR HR</b>	HS (see <a href="#">EBCI AD 2.3</a> )
		<b>FREQ</b>	See <a href="#">EBCI AD 2.18</a>
	Brussels APP <sup>(3)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	(1) AWY <a href="#">M617</a> and <a href="#">Y50</a> excl. (2) Upper limit 4500FT AMSL when higher than FL 055. (3) Controlled by Brussels APP outside EBCI ATS OPR HR.		

**CHARLEROI TMA TWO A <sup>(1)</sup>**

<b>Lateral limits</b>	503345N 0043228E - 503502N 0044248E - an arc of circle, 5.5 NM radius, centred on 502932N 0044215E and traced clockwise to 503122N 0045025E - 502928N 0044201E - an arc of circle, 5.5 NM radius, centred on 502817N 0043335E and traced counterclockwise to 503345N 0043228E.		
<b>Vertical limits</b>	2500FT AMSL / 2000FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Charleroi APP	<b>Call sign</b>	Charleroi Approach (En)
		<b>OPR HR</b>	HS (see <a href="#">EBCI AD 2.3</a> ) <sup>(2)</sup>
		<b>FREQ</b>	See <a href="#">EBCI AD 2.18</a>
<b>Remarks</b>	(1) Only active during EBCI ATS OPR HR. (2) Activation may be checked with Brussels FIC. OPR HR may vary. Therefore, outside activation times, pilots shall maintain a listening watch with Brussels FIC.		

**CHARLEROI TMA TWO B <sup>(1)</sup>**

<b>Lateral limits</b>	503823N 0042917E - 503623N 0042912E - 503345N 0043228E - 503502N 0044248E - 503823N 0042917E.		
<b>Vertical limits</b>	2500FT AMSL / 2000FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Charleroi APP	<b>Call sign</b>	Charleroi Approach (En)
		<b>OPR HR</b>	HS (see <a href="#">EBCI AD 2.3</a> ) <sup>(2)</sup>
		<b>FREQ</b>	See <a href="#">EBCI AD 2.18</a>
<b>Remarks</b>	(1) Only active during EBCI ATS OPR HR. (2) Activation may be checked with Brussels FIC. OPR HR may vary. Therefore, outside activation times, pilots shall maintain a listening watch with Brussels FIC.		

**CHARLEROI TMA THREE A**

<b>Lateral limits</b>	503823N 0042917E - 504048N 0043801E - 503640N 0045629E - 503053N 0045743E - 502900N 0045106E - 503018N 0045049E - an arc of circle, 5.5 NM radius, centred on 502932N 0044215E and traced counterclockwise to 503502N 0044248E - 503823N 0042917E. <sup>(1)</sup>		
<b>Vertical limits</b>	FL 055 / 3500FT AMSL <sup>(2)</sup>		
<b>Airspace class</b>	C		
<b>Control units</b>	Charleroi APP	<b>Call sign</b>	Charleroi Approach (En)
		<b>OPR HR</b>	HS (see <a href="#">EBCI AD 2.3</a> )
		<b>FREQ</b>	See <a href="#">EBCI AD 2.18</a>

**CHARLEROI TMA THREE A**

	Brussels APP <sup>(3)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	<p>(1) AWY <a href="#">M617</a> and <a href="#">M624</a> excl.                  (2) Upper limit 4500FT AMSL when higher than FL 055.                  (3) Controlled by Brussels APP outside EBCI ATS OPR HR.</p>		

**CHARLEROI TMA THREE B <sup>(1)</sup>**

<b>Lateral limits</b>	502900N 0045106E - 503053N 0045743E - 502407N 0045910E - 502316N 0045220E - 502900N 0045106E.		
<b>Vertical limits</b>	FL 055 / 3500FT AMSL <sup>(2)</sup>		
<b>Airspace class</b>	C		
<b>Control units</b>	Charleroi APP	<b>Call sign</b>	Charleroi Approach (En)
		<b>OPR HR</b>	HS (see <a href="#">EBCI AD 2.3</a> )
		<b>FREQ</b>	See <a href="#">EBCI AD 2.18</a>
	Brussels APP <sup>(3)</sup>	<b>Call sign</b>	Brussels Arrival, Brussels Departure (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBBR AD 2.18</a>
<b>Remarks</b>	<p>(1) Only active outside MIL OPR HR.                  (2) Upper limit 4500FT AMSL when higher than FL 055.                  (3) Controlled by Brussels APP outside EBCI ATS OPR HR.</p>		

**FLORENNES TMA <sup>(1)</sup>**

<b>Lateral limits</b>	501704N 0041035E - 501842N 0041627E - 502316N 0045220E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced clockwise to 500728N 0045635E - 500656N 0045209E - along the Belgian-French border - 500545N 0044211E - 500206N 0040902E - along the Belgian-French border - 501704N 0041035E.		
<b>Vertical limits</b>	4500FT AMSL / 2500FT AMSL <sup>(2)</sup>		
<b>Airspace class</b>	C		
<b>Control units</b>	Florennes APP	<b>Call sign</b>	Florennes Approach (En)
		<b>OPR HR</b>	HO <sup>(3)</sup>
		<b>FREQ</b>	See <a href="#">EBFS AD 2.18</a>
<b>Remarks</b>	<p>(1) Outside EBFS OPR HR, airspace is not active. As EBFS may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Aircraft shall maintain a listening watch with Florennes TWR when <a href="#">EBR06B</a> is activated. Upon activation of Florennes TMA, aircraft shall comply promptly with instructions from Florennes APP.                  (2) Lower limit 3500ft AMSL above Florennes CTR. Upper limit can be raised to FL 095 outside Steenokkerzeel ATCC OPR HR (see NOTAM).                  (3) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.</p>		

**KLEINE-BROGEL TMA ONE <sup>(1)</sup>**

<b>Lateral limits</b>	510251N 0045955E - 510634N 0045955E - 511551N 0051647E - along the Belgian-Dutch border - 510805N 0055036E - 510607N 0053455E - 510723N 0053455E - 510557N 0052255E - 510452N 0051951E - 505929N 0051951E - 510057N 0051655E - 510251N 0045955E.		
<b>Vertical limits</b>	4 500FT AMSL / 2500FT AMSL <sup>(2)</sup>		
<b>Airspace class</b>	C		
<b>Control units</b>	Kleine-Brogel APP	<b>Call sign</b>	Kleine-Brogel Approach (En)
		<b>OPR HR</b>	HO <sup>(3)</sup>
		<b>FREQ</b>	See <a href="#">EBBL AD 2.18</a>
<b>Remarks</b>	<p>(1) Outside EBBL OPR HR, airspace is not active. As EBBL may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Aircraft shall maintain a listening watch with Kleine-Brogel TWR when <a href="#">EBR07B</a> is activated. Upon activation of Kleine-Brogel TMA ONE, aircraft shall comply promptly with instructions from Kleine Brogel APP.                  (2) Upper limit can be raised to FL 075 outside Steenokkerzeel ATCC OPR HR (see NOTAM).                  (3) Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.</p>		

**KLEINE-BROGEL TMA TWO**

<b>Lateral limits</b>	510805N 0055036E - along the Belgian-Dutch border - 510333N 0054619E - 510157N 0053455E - 505929N 0051951E - 510452N 0051951E - 510557N 0052255E - 510723N 0053455E - 510607N 0053455E - 510805N 0055036E. <sup>(1)</sup>		
<b>Vertical limits</b>	4500FT AMSL / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Kleine-Brogel APP	<b>Call sign</b>	Kleine-Brogel Approach (En)
		<b>OPR HR</b>	HO <sup>(2)</sup>
		<b>FREQ</b>	See <u>EBBL AD 2.18</u>
<b>Remarks</b>	(1) <u>EBR05A</u> and <u>EBR05B</u> are excluded when active (activation can be checked with EBBL ATC or Steenokkerzeel ATCC). (2) Outside EBBL OPR HR, airspace is not active. Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.		

**KLEINE-BROGEL TMA THREE**

<b>Lateral limits</b>	510333N 0054619E - along the Belgian-Dutch border - 505655N 0054502E - 505528N 0053207E - 505533N 0051951E - 510122N 0051316E - 510057N 0051655E - 505929N 0051951E - 510157N 0053455E - 510333N 0054619E. <sup>(1)</sup>		
<b>Vertical limits</b>	4500FT AMSL / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Kleine-Brogel APP	<b>Call sign</b>	Kleine-Brogel Approach (En)
		<b>OPR HR</b>	HO <sup>(2)</sup>
		<b>FREQ</b>	See <u>EBBL AD 2.18</u>
<b>Remarks</b>	(1) <u>EBR05C</u> and <u>TRA17</u> are excluded when active (activation can be checked with EBBL ATC or Steenokkerzeel ATCC). (2) Outside EBBL OPR HR, airspace is not active. Activation can be checked with Steenokkerzeel ATCC or Brussels FIC.		

**LIÈGE TMA ONE <sup>(1)</sup>**

<b>Lateral limits</b>	503101N 0050701E - 503814N 0050408E - 504817N 0051953E - 505150N 0052933E - 505223N 0053408E - 505000N 0053854E - along the Belgian-Dutch border - 504935N 0053857E - 504851N 0053815E - 504611N 0054446E - 504519N 0054824E - 504503N 0055324E - 503917N 0054900E - 502426N 0052347E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E.		
<b>Vertical limits</b>	FL 055 / 2500FT AMSL <sup>(2)</sup>		
<b>Airspace class</b>	C		
<b>Control units</b>	Liège APP	<b>Call sign</b>	Liège Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBLG AD 2.18</u>
<b>Remarks</b>	(1) Partially situated in Amsterdam FIR. (2) Upper limit 4500FT AMSL below <u>TRA23</u> when active.		

**LIÈGE TMA TWO <sup>(1)</sup>**

<b>Lateral limits</b>	503802N 0053736E - an arc of circle, 5 NM radius, centred on 504137N 0053205E and traced counterclockwise to 504512N 0052633E - 505119N 0053615E - 505000N 0053854E - along the Belgian-Dutch border - 504935N 0053857E - 504851N 0053815E - 504611N 0054446E - 504519N 0054824E - 504516N 0054926E - 503802N 0053736E.		
<b>Vertical limits</b>	2500FT AMSL / 2000FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Liège APP	<b>Call sign</b>	Liège Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <u>EBLG AD 2.18</u>
<b>Remarks</b>	(1) Partially situated in Amsterdam FIR.		

**LIÈGE TMA THREE <sup>(1)</sup>**

<b>Lateral limits</b>	503917N 0054900E - 502426N 0052347E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E - 503814N 0050408E - 504817N 0051953E - 505150N 0052933E - 505223N 0053408E - 505000N 0053854E - along the Belgian-Dutch border - 505247N 0053956E - 505525N 0053956E - 505530N 0052754E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 503640N 0045629E - 502239N 0045928E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced clockwise to 501843N 0050539E - an arc of circle, 25 NM radius, centred on 503914N 0052814E and traced counterclockwise to 501418N 0053224E - 502118N 0054222E - 502627N 0053920E - 503917N 0054900E.		
<b>Vertical limits</b>	FL 055 / 2500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Liège APP	<b>Call sign</b>	Liège Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBLG AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Active daily 2200-0500 (2100-0400), except during activation of <a href="#">Beauvechain TMA</a> or <a href="#">TRA23</a> . Activation can be checked with Brussels ACC Supervisor (TEL +32 (0) 2 206 27 22) or Brussels ACC on FREQ 125.000 MHZ.		

**LIÈGE TMA FOUR <sup>(1)</sup>**

<b>Lateral limits</b>	504503N 0055324E - 504459N 0055454E - 504508N 0055956E - 503042N 0055956E - 502627N 0053920E - 504503N 0055324E.		
<b>Vertical limits</b>	FL 055 / 3000FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Liège APP	<b>Call sign</b>	Liège Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBLG AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Active daily 2200-0500 (2100-0400), except during activation of <a href="#">Beauvechain TMA</a> or <a href="#">TRA23</a> . Activation can be checked with Brussels ACC Supervisor (TEL +32 (0) 2 206 27 22) or Brussels ACC on FREQ 125.000 MHZ.		

**LIÈGE TMA FIVE <sup>(1)</sup>**

<b>Lateral limits</b>	503042N 0055956E - 504513N 0055956E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 503325N 0061027E - 503042N 0055956E. <sup>(2)</sup>		
<b>Vertical limits</b>	FL 055 / 3500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Liège APP	<b>Call sign</b>	Liège Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBLG AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Active daily 2200-0500 (2100-0400), except during activation of <a href="#">Beauvechain TMA</a> or <a href="#">TRA23</a> . Activation can be checked with Brussels ACC Supervisor (TEL +32 (0) 2 206 27 22) or Brussels ACC on FREQ 125.000 MHZ. <sup>(2)</sup> <a href="#">TSA28A</a> excluded.		

**LILLE TMA TWO**

<b>Lateral limits</b>	504115N 0032525E - 504009N 0032825E - 503146N 0032916E - along the Belgian-French border - 504048N 0031537E - 504115N 0032525E.		
<b>Vertical limits</b>	4500FT AMSL / 1500FT AMSL		
<b>Airspace class</b>	D		
<b>Control units</b>	Lille APP <sup>(1)</sup>	<b>Call sign</b>	
		<b>OPR HR</b>	
		<b>FREQ</b>	
<b>Remarks</b>	<sup>(1)</sup> For details, see <i>AIP France</i> .		

**LILLE TMA NINE**

<b>Lateral limits</b>	505038N 0024816E - 504302N 0025517E - 504148N 0025346E - along the Belgian-French border - 504901N 0023756E - 505038N 0024816E.		
<b>Vertical limits</b>	4500FT AMSL / 2000FT AMSL		
<b>Airspace class</b>	E		
<b>Control units</b>	Lille APP <sup>(1)</sup>	<b>Call sign</b>	
		<b>OPR HR</b>	
		<b>FREQ</b>	
<b>Remarks</b>	<sup>(1)</sup> For details, see <i>AIP France</i> .		

**LUXEMBOURG TMA ONE A**

<b>Lateral limits</b>	495152N 0061852E - along the German-Luxembourg border - 494921N 0062812E - 494833N 0063010E - 493808N 0062543E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-Luxembourg border - 494738N 0054729E - 494823N 0061000E - 495152N 0061852E.		
<b>Vertical limits</b>	FL 165 / 2500FT AMSL		
<b>Airspace class</b>	C/D <sup>(1)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Airspace class C above FL 095.		

**LUXEMBOURG TMA ONE B**

<b>Lateral limits</b>	500748N 0060816E - along the German-Luxembourg border - 495714N 0061208E - 495608N 0061204E - 495536N 0061319E - along the German-Luxembourg border - 495152N 0061852E - 494823N 0061000E - 494738N 0054729E - along the Belgian-Luxembourg border - 500748N 0060816E.		
<b>Vertical limits</b>	FL 145 / 3500FT AMSL		
<b>Airspace class</b>	C/D <sup>(1)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Airspace class C above FL 095.		

**LUXEMBOURG TMA FIVE <sup>(1)</sup>**

<b>Lateral limits</b>	494328N 0054955E - 494032N 0054956E - 493537N 0054356E - 493232N 0054520E - along the Belgian-French border - 493247N 0054907E - along the Belgian-Luxembourg border - 494328N 0054955E.		
<b>Vertical limits</b>	FL 165 / 2500FT AMSL		
<b>Airspace class</b>	C/D <sup>(2)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Delegation of ATS from Brussels ACC to Luxembourg APP. <sup>(2)</sup> Airspace class C above FL 095.		

**MAASTRICHT TMA 1 <sup>(1)</sup>**

<b>Lateral limits</b>	Part 1: 504935N 0053857E - 504851N 0053815E - 504724N 0054146E - along the Belgian-Dutch border - 504935N 0053857E. Part 2: 504611N 0054446E - along the Belgian-Dutch border - 504513N 0055956E - 504508N 0055956E - 504459N 0055454E 504519N 0054824E - 504611N 0054446E.		
<b>Vertical limits</b>	FL 095 / 1500FT AMSL		
<b>Airspace class</b>	D		
<b>Control units</b>	Maastricht APP <sup>(2)</sup>	<b>Call sign</b>	
		<b>OPR HR</b>	
		<b>FREQ</b>	
	Maastricht TWR <sup>(2)</sup>	<b>Call sign</b>	
		<b>OPR HR</b>	
		<b>FREQ</b>	
<b>Remarks</b>	<sup>(1)</sup> Part of Maastricht TMA 1 within the Brussels FIR. For complete description of Maastricht TMA 1, see <i>AIP the Netherlands</i> . <sup>(2)</sup> For details, see <i>AIP the Netherlands</i> .		

**OOSTENDE TMA ONE <sup>(1)</sup>**

<b>Lateral limits</b>	505900N 0024917E - 510043N 0023905E - 510148N 0021940E - 510618N 0021418E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505900N 0024917E. <sup>(2)</sup>		
<b>Vertical limits</b>	FL 055 / 1500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Oostende APP	<b>Call sign</b>	Oostende Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBOS AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Partially situated in France. <sup>(2)</sup> <a href="#">Koksijde CTR</a> excl during EBFN OPR HR.		

**OOSTENDE TMA TWO <sup>(1)</sup>**

<b>Lateral limits</b>	505900N 0024917E - 510043N 0023905E - 510148N 0021940E - 510618N 0021418E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505900N 0024917E. <sup>(2)</sup>		
<b>Vertical limits</b>	FL 095 / FL 055		
<b>Airspace class</b>	C		
<b>Control units</b>	Oostende APP	<b>Call sign</b>	Oostende Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBOS AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Partially situated in France. <sup>(2)</sup> AWY <a href="#">L607</a> , <a href="#">L179</a> , <a href="#">Y50</a> and <a href="#">Q70</a> excl.		

**2.4 Control Zones Not Described in AD 2****MAASTRICHT CTR <sup>(1)</sup>**

<b>Lateral limits</b>	504935N 0053857E - 504851N 0053815E - 504724N 0054146E - along the Belgian-Dutch border - 504935N 0053857E.		
<b>Vertical limits</b>	3000FT AMSL / GND		
<b>Airspace class</b>	C		
<b>Control units</b>	Maastricht TWR <sup>(2)</sup>	<b>Call sign</b>	
		<b>OPR HR</b>	
		<b>FREQ</b>	
<b>Remarks</b>	(1) Part of Maastricht CTR within the Brussels FIR. For complete description of Maastricht CTR, see <i>AIP the Netherlands</i> . (2) For details, see <i>AIP the Netherlands</i> .		

**3 FREQUENCIES OF ATS UNITS****Area Control and Flight Information Units**

<b>ATS unit</b>	<b>Call sign</b>	<b>OPR HR</b>	<b>Frequency (MHZ)</b>	<b>Remarks</b>
Brussels ACC (East Low)	Brussels Control	H24	129.575	
			387.050	UHF
Brussels ACC (East Holding)	Brussels Control	H24	129.575	
Brussels ACC (East High)	Brussels Control	H24	128.450	
			387.050	UHF
Brussels ACC (Huldenberg)	Brussels Control	H24	128.200	
Brussels ACC (Luxembourg)	Brussels Control	H24	125.000	
Brussels ACC (North Low)	Brussels Control	H24	128.805	8.33KHZ CH
			387.050	UHF
Brussels ACC (North Holding)	Brussels Control	H24	126.980	8.33KHZ CH
Brussels ACC (West Low)	Brussels Control	H24	131.100	
			387.050	UHF
Brussels ACC (West Holding)	Brussels Control	H24	125.780	8.33KHZ CH
Brussels ACC (West High)	Brussels Control	H24	127.230	8.33KHZ CH
			387.050	UHF
Brussels FIC	Brussels Information	H24	126.900	
			259.275	UHF
Maastricht UAC (Koksy Low Sector)	Maastricht Radar	H24	132.205	8.33KHZ CH
			336.350	UHF
Maastricht UAC (Koksy High Sector, ABV FL 355)	Maastricht Radar	H24	132.755	8.33KHZ CH
			336.350	UHF
Maastricht UAC (Lux Low Sector)	Maastricht Radar	H24	133.355	8.33KHZ CH
			338.875	UHF
Maastricht UAC (Lux High Sector, ABV FL 355)	Maastricht Radar	H24	132.315	8.33 KHZ CH
			338.875	UHF
Maastricht UAC (Nicky Low Sector)	Maastricht Radar	0400-2359 (0300-2259) <sup>(1)</sup>	135.980	8.33KHZ CH
			336.350	UHF
Maastricht UAC (Nicky High Sector, ABV FL 355)	Maastricht Radar	H24	132.755	8.33KHZ CH
			336.350	UHF
Maastricht UAC (Olno Low Sector)	Maastricht Radar	H24	132.855	8.33KHZ CH
			338.875	UHF

## Area Control and Flight Information Units

ATS unit	Call sign	OPR HR	Frequency (MHZ)	Remarks		
Maastricht UAC (Olno High Sector, ABV FL 355)	Maastricht Radar	H24	125.980	8.33KHZ CH		
			338.875	UHF		
Maastricht UAC (Delta Low Sector)	Maastricht Radar	H24	135.960	8.33KHZ CH		
			359.450	UHF		
Maastricht UAC (Delta Middle Sector, FL 335 / FL 365)	Maastricht Radar	H24	135.510	8.33KHZ CH		
			359.450	UHF		
Maastricht UAC (Delta High Sector, ABV FL 365)	Maastricht Radar	H24	132.085	8.33KHZ CH		
			359.450	UHF		
Maastricht UAC (Ruhr Low Sector)	Maastricht Radar	H24	124.435	8.33KHZ CH		
			342.650	UHF		
Maastricht UAC (Ruhr Middle Sector, FL 355 / FL 375)	Maastricht Radar	H24	122.815	8.33KHZ CH		
			342.650	UHF		
Maastricht UAC (Ruhr High Sector, ABV FL 375)	Maastricht Radar	H24	122.835	8.33KHZ CH		
			342.650	UHF		
Steenokkerzeel ATCC <sup>(2)</sup>	Belga Information	HO	129.325			
			121.500			
			243.000 374.400	UHF		
Steenokkerzeel ATCC <sup>(3)</sup>	Belga Radar	HO	129.325	Initial contact frequency (ICF)		
			130.580	8.33KHZ CH Climb and let down EBBE (TRA23)		
			374.400	Initial contact frequency (ICF) UHF		
			282.075 378.425 344.800 284.850 306.600 342.825 362.625 343.175 258.600	UHF Sector FREQ, Stand-by FREQ		
			(1) Outside OPR HR: Koksy Sector (132.205MHZ)			
			(2) Flight information service / Radar information service			
			(3) Radar control			

Note: For details on approach and aerodrome control units, see the AD 2.18 section of the relevant aerodrome.



## ENR 2.2 Other Regulated Airspace

### 1 ATS AIRSPACE

#### 1.1 The Netherlands

Belgium and the Netherlands have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Belgium in the following areas:

##### EIJSDEN AREA <sup>(1)</sup>

<b>Lateral limits</b>	504724N 0054146E - 504611N 0054446E - along the Dutch-Belgium border - 504724N 0054146E.		
<b>Vertical limits</b>	FL 095 / 2000FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC <sup>(2)</sup>	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1, § 3</a>
	Liège APP <sup>(3)</sup>	<b>Call sign</b>	Liège Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBLG AD 2.18</a>
<b>Remarks</b>	(1) Area forming part of <a href="#">Brussels CTA East Four</a> and <a href="#">Liège TMA</a> (see ENR 2.1 for full description). (2) Above FL 055. (3) Below FL 055.		

##### KLEINE-BROGEL CTR TWO <sup>(1)</sup>

<b>Lateral limits</b>	511743N 0053057E - an arc of circle, 5 NM radius, centred at 511421N 0053650E and traced clockwise to 511052N 0054231E - along the Belgian-Dutch border - 511743N 0053057E. <sup>(2)</sup>		
<b>Vertical limits</b>	3000FT AMSL / GND		
<b>Airspace class</b>	D		
<b>Control units</b>	Kleine-Brogel TWR	<b>Call sign</b>	Kleine-Brogel Tower (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See <a href="#">EBBL AD 2.18</a>
<b>Remarks</b>	(1) Outside EBBL OPR HR, no entry without permission from Dutch MIL INFO (132.350 MHz). (2) ATZ and AFIZ Budel excluded when active (see AIP the Netherlands).		

##### L179 AREA

<b>Lateral limits</b>	511521N 0053324E - 511455N 0055708E - 511100N 0055825E - 511100N 0054606E - along the FIR boundary - 511521N 0053324E.		
<b>Vertical limits</b>	FL 195 / FL 095		
<b>Airspace class</b>	B		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1, § 3</a>

##### MAASTRICHT AREA

<b>Lateral limits</b>	511521N 0053324E - 511446N 0060454E - along the Dutch-German border - 504516N 0060114E - along the Dutch-Belgian border - 511521N 0053324E.		
<b>Vertical limits</b>	FL 245 / FL 195		
<b>Airspace class</b>	C		

**MAASTRICHT AREA**

<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1. § 3</a>
	Steenokkerzeel ATCC <sup>(1)</sup>	<b>Call sign</b>	Belga Radar (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See <a href="#">ENR 2.1. § 3</a>
<b>Remarks</b>	(1) During activation of <a href="#">TRA NB</a> , a corridor between the northern limit of the Maastricht Area and a line from 510131N 0054635E to 510654N 0060336E is attributed to Steenokkerzeel ATCC.		

**Part of MAASTRICHT TMA 2**

<b>Lateral limits</b>	511100N 0054604E - 511100N 0055000E - 511100N 0055825E - 510515N 0060018E - along the Dutch-German border - 505518N 0060331E - 505140N 0060441E - along the Dutch-German border - 504515N 0060116E - along the Dutch-Belgian border - 511100N 0054604E.		
<b>Vertical limits</b>	FL 195 / FL 095 <sup>(1)</sup>		
<b>Airspace class</b>	B		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1. § 3</a>

**SASKI A AREA**

<b>Lateral limits</b>	513814N 0023000E - 512536N 0032403E - 511610N 0040650E - along the FIR boundary - 512719N 0023000E - 513814N 0023000E.		
<b>Vertical limits</b>	FL 245 / FL 055		
<b>Airspace class</b>	A (up to FL 195) C (above FL 195)		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1. § 3</a>

**ZEELAND AREA**

<b>Lateral limits</b>	512645N 0030752E - 512314N 0032241E - 511436N 0040157E - along the FIR boundary - 512356N 0030600E - 512645N 0030752E.		
<b>Vertical limits</b>	FL 055 / 3500FT AMSL		
<b>Airspace class</b>	E		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1. § 3</a>

**1.2 Germany**

Belgium and Germany have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Belgium in the following areas:

**MASKIRCHEN B AREA**

<b>Lateral limits</b>	510515N 0060018E - 505518N 0060331E - along the Dutch-German border - 510515N 0060018E.		
<b>Vertical limits</b>	FL 195 / FL 095		
<b>Airspace class</b>	E (up to FL 100) C (above FL 100)		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1. § 3</a>

## VAALS B AREA

<b>Lateral limits</b>	505047N 0060427E - 504516N 0060114E - along the Dutch-German border - 505047N 0060427E.		
<b>Vertical limits</b>	FL 195 / FL 095		
<b>Airspace class</b>	E (up to FL 100) C (above FL 100)		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1, § 3</a>

Luxembourg and Germany have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Luxembourg in the following areas:

## LUXEMBOURG TMA TWO A

<b>Lateral limits</b>	500748N 0060816E - 500748N 0061252E - 500149N 0061228E - 495714N 0061208E - along the German-Luxembourg border - 500748N 0060816E.		
<b>Vertical limits</b>	FL 145 / 2500FT AGL		
<b>Airspace class</b>	C/E <sup>(1)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Airspace class C above FL 095.		

## LUXEMBOURG TMA TWO B

<b>Lateral limits</b>	495536N 0061319E - 495228N 0062026E - 495152N 0061852E - along the German-Luxembourg border - 495536N 0061319E.		
<b>Vertical limits</b>	FL 145 / 1000FT AGL		
<b>Airspace class</b>	C/D/E <sup>(1)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Airspace class D at and above 5500 FT AMSL, airspace class C above FL 095.		

## LUXEMBOURG TMA TWO C1

<b>Lateral limits</b>	500149N 0061228E - 495719N 0062051E - 495528N 0061337E - 495608N 0061204E - 500149N 0061228E.		
<b>Vertical limits</b>	FL 095 / 5500FT AMSL		
<b>Airspace class</b>	E		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>

## LUXEMBOURG TMA TWO C2

<b>Lateral limits</b>	495528N 0061337E - 495228N 0062026E - 494833N 0063010E - 494708N 0063341E - 495032N 0063325E - 495107N 0063220E - 495719N 0062051E - 495528N 0061337E.		
<b>Vertical limits</b>	FL 095 / 5500FT AMSL		
<b>Airspace class</b>	D		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>

**LUXEMBOURG TMA TWO D**

<b>Lateral limits</b>	495228N 0062026E - 494921N 0062812E - along the German-Luxembourg border - 495152N 0061852E - 495228N 0062026E.		
<b>Vertical limits</b>	FL 165 / 1000FT AGL		
<b>Airspace class</b>	C/D/E <sup>(1)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Airspace class D at and above 5500 FT AMSL, airspace class C above FL 095.		

**LUXEMBOURG TMA TWO E1**

<b>Lateral limits</b>	494833N 0063010E - 494708N 0063341E - 494600N 0063347E - 493834N 0063423E - 493212N 0063453E - 493039N 0063055E - 493808N 0062543E - 494833N 0063010E.		
<b>Vertical limits</b>	FL 095 / 1000FT AGL <sup>(1)</sup>		
<b>Airspace class</b>	D/E <sup>(2)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Lower limit partially 2500FT AGL (see <i>AIP Germany</i> for further details). <sup>(2)</sup> Airspace class D at and above 3500FT AMSL.		

**LUXEMBOURG TMA TWO E2**

<b>Lateral limits</b>	493212N 0063453E - 492340N 0063534E - 493039N 0063055E - 493212N 0063453E.		
<b>Vertical limits</b>	FL 095 / 1000FT AGL <sup>(1)</sup>		
<b>Airspace class</b>	E		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Lower limit partially 2500FT AGL (see <i>AIP Germany</i> for further details).		

**LUXEMBOURG TMA TWO F1**

<b>Lateral limits</b>	493808N 0062543E - 493039N 0063055E - 492837N 0062541E - along the German-French border - 492810N 0062202E - along the German-Luxembourg border - 493808N 0062543E.		
<b>Vertical limits</b>	FL 165 / 1000FT AGL <sup>(1)</sup>		
<b>Airspace class</b>	C/D/E <sup>(2)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Lower limit partially 2500FT AGL (see <i>AIP Germany</i> for further details). <sup>(2)</sup> Airspace class D at and above 3500 FT AMSL, airspace class C above FL 095.		

**LUXEMBOURG TMA TWO F2**

<b>Lateral limits</b>	493039N 0063055E - 492340N 0063534E - 492340N 0063308E - along the German-French border - 492837N 0062541E - 493039N 0063055E.		
<b>Vertical limits</b>	FL 165 / 1000FT AGL <sup>(1)</sup>		
<b>Airspace class</b>	C/E <sup>(2)</sup>		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	<sup>(1)</sup> Lower limit partially 2500FT AGL (see <i>AIP Germany</i> for further details). <sup>(2)</sup> Airspace class C above FL 095.		

### 1.3 France

Luxembourg and France have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Luxembourg in the following areas:

#### LUXEMBOURG TMA THREE

<b>Lateral limits</b>	492717N 0062854E - 492705N 0061501E - 492652N 0060232E - along the French-Luxembourg border - 492810N 0062202E - along the French-German border - 492717N 0062854E.		
<b>Vertical limits</b>	FL 165 / 2500FT AMSL <sup>(1)</sup>		
<b>Airspace class</b>	D		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	(1) Excluding LF-R45 N3 when active.		

#### LUXEMBOURG TMA FOUR

<b>Lateral limits</b>	493233N 0054523E - along the French-Belgian border - 493247N 0054907E - along the French-Luxembourg border - 492652N 0060232E - 492706N 0055423E - 492708N 0055000E - 492709N 0054907E - 492710N 0054736E - 493233N 0054523E.		
<b>Vertical limits</b>	FL 165 / 2500FT AMSL <sup>(1)</sup>		
<b>Airspace class</b>	D		
<b>Control units</b>	Luxembourg APP	<b>Call sign</b>	Luxembourg Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ELLX AD 2.18</a>
<b>Remarks</b>	(1) Excluding LF-R45 N3 when active.		

Belgium and France have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Belgium in the following areas:

#### PART OF KOKSIJDE CTR <sup>(1)</sup>

<b>Lateral limits</b>	510130N 0023426E - 510227N 0022840E - an arc of circle, 5 NM radius, centred at 510717N 0023045E - and traced clockwise to - 510534N 0022358E - along the FIR boundary - 510130N 0023426E. <sup>(2)</sup>		
<b>Vertical limits</b>	FL 055 / GND		
<b>Airspace class</b>	D		
<b>Control units</b>	Koksijde APP	<b>Call sign</b>	Koksijde Approach (En)
		<b>OPR HR</b>	HO
		<b>FREQ</b>	See <a href="#">EBFN AD 2.18</a>
<b>Control units</b>	Oostende APP <sup>(3)</sup>	<b>Call sign</b>	Oostende Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBOS AD 2.18</a>
<b>Remarks</b>	(1) For full description of Koksijde CTR, see <a href="#">EBFN AD 2.17</a> . (2) The area overhead LFAK is excluded between GND and 800FT(510131N 0023419E - along the Belgian-French border - 510330N 0023344E - 510213N 0023003E - 510131N 0023419E). (3) Outside Koksijde APP OPR HR, the responsibility for providing ATS between 1500FT AMSL and FL 055 is transferred to Oostende APP (airspace class C).		

#### PART OF OOSTENDE TMA <sup>(1)</sup>

<b>Lateral limits</b>	510057N 0023417E - 510148N 0021940E - 510608N 0021430E - along the FIR boundary - 510057N 0023417E.		
<b>Vertical limits</b>	FL 065 / 1500FT AMSL		
<b>Airspace class</b>	C		
<b>Control units</b>	Oostende APP	<b>Call sign</b>	Oostende Approach (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">EBOS AD 2.18</a>
<b>Remarks</b>	(1) For full description of Oostende TMA, see <a href="#">ENR 2.1</a> .		

**(U)L607 AREA**

<b>Lateral limits</b>	510055N 0023429E - 510337N 0014427E - along the FIR boundary - 510055N 0023429E.		
<b>Vertical limits</b>	FL245 / FL 065		
<b>Airspace class</b>	C		
<b>Control units</b>	Brussels ACC	<b>Call sign</b>	Brussels Control (En)
		<b>OPR HR</b>	H24
		<b>FREQ</b>	See <a href="#">ENR 2.1. § 3</a>

Belgium and France have arranged, by bilateral agreement, to make available the following areas to Belgium for military use:

**EBR18A - FLORENNES <sup>(1)</sup>**

<b>Lateral limits</b>	500629N 0044421E - 500208N 0045007E - along the Belgian-French border - 500629N 0044421E.		
<b>Vertical limits</b>	FL 195 / 3500FT AMSL		
Type of restriction / nature of hazard	Climb-out sector for jet aircraft.		
<b>Remarks</b>	<i>(1)</i> For details, see <i>AIP France</i>		

**EBR18B - FLORENNES <sup>(1)</sup>**

<b>Lateral limits</b>	495850N 0040845E - an arc of circle, 25 NM radius, centred on 501437N 0043839E and traced clockwise to 501258N 0040000E - 501329N 0041041E - along the Belgian-French border - 495850N 0040845E.		
<b>Vertical limits</b>	FL 195 / FL 050		
Type of restriction / nature of hazard	Climb-out sector for jet aircraft and let-down procedure space for jet aircraft.		
<b>Remarks</b>	<i>(1)</i> For details, see <i>AIP France</i>		

**EBR24A - KOKSIJDE <sup>(1)</sup>**

<b>Lateral limits</b>	510225N 0022850E - 510131N 0023419E - along the Belgian-French border - 504848N 0023843E - 504322N 0023628E - an arc of circle, 22 NM radius, centered on position 510525N 0023910E and traced clockwise to 504957N 0021415E - 505813N 0022356E - 510225N 0022850E.		
<b>Vertical limits</b>	FL 105 / 1500FT AMSL <sup>(2)</sup>		
Type of restriction / nature of hazard	Let-down procedure space for jet aircraft.		
<b>Remarks</b>	<i>(1)</i> For details, see <i>AIP France</i> <i>(2)</i> Lower limit: 1500 ft AMSL from lateral limits of Koksijde CTR to 16 NM from the ARP, then a slope of 10°30' to the extreme limit of this sector. Upper limit: FL 055 below AWY <a href="#">L607</a> ; 1500 ft AMSL below <a href="#">Oostende TMA One</a> .		

**LFCBA16B - CROSS BORDER AREA 16 BRAVO <sup>(1)</sup>**

<b>Lateral limits</b>	494112N 0051434E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - along the Belgian-French border - 494112N 0051434E.		
<b>Vertical limits</b>	UNL / FL 065		
Type of restriction / nature of hazard	Climb-out sector for jet aircraft and let-down procedure space for jet aircraft.		
<b>Remarks</b>	<i>(1)</i> For details, see <i>AIP France</i>		

---

**2 TRANSPONDER MANDATORY ZONES**

---

**TMZ BRUSSELS FIR**

<b>Lateral limits</b>	<u>Brussels FIR</u>
<b>Vertical limits</b>	FL 195 / GND
<b>Time of Activity</b>	HN

**TMZ KORTRIJK**

<b>Lateral limits</b>		
<b>Vertical limits</b>		See <u>EBKT AD 2.17</u>
<b>Time of Activity</b>		

---

**3 RADIO MANDATORY ZONES**

---

**RMZ BRUSSELS FIR**

<b>Lateral limits</b>	<u>Brussels FIR</u>
<b>Vertical limits</b>	FL 195 / GND
<b>Time of Activity</b>	HN

**RMZ KORTRIJK**

<b>Lateral limits</b>		
<b>Vertical limits</b>		See <u>EBKT AD 2.17</u>
<b>Time of Activity</b>		

THIS PAGE INTENTIONALLY LEFT BLANK



---

# ENR 3 ATS ROUTES

---

## ENR 3.1 Conventional Navigation Routes

---

NIL

THIS PAGE INTENTIONALLY LEFT BLANK

---

## ENR 3.2 Area Navigation Routes

---

---

### 1 REMARKS ON RNAV ROUTES

---

#### 1.1 Flight Level Restrictions for Flights through the Brussels UIR

Due to the complexity of traffic handling at the Brussels UIR boundaries FL250 is not available as cruising level in the Brussels UIR.

#### 1.2 Conditional Routes

Conditional Routes (CDR) are non-permanent ATS routes. They are designed to complement the permanent ATS route network and to allow flights to be planned on ATS routes, or portions thereof, that are not always available.

In the ATS routes table hereafter, CDRs are indicated under "Route Availability" as "CDR1 H24" which is permanently plannable. Due to military or other activities, CDRs may be closed. The unavailability is published daily in the EAUP/EUUP (European Airspace Use Plan/European Updated airspace Use Plan). The EAUP/EUUP is published on the Network Operations Portal NOP. In the event of a short notice unavailability of a CDR, rerouting around an associated area will be made on ATC instructions.

**2 RNAV ROUTES**

Route designator {RNP type}	[Route usage notes]					Remarks
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	Initial track MAG	Geodesic DIST		↓	↑	
	↓	↑				
<b>L179</b> {RNAV 5}	(1) H24 (2) CDR1 H24					
△ SASKI	513253N 0023000E					(9)
						(3) (7)
△ KEGIT	512425N 0030624E					
	110° / 290°	10NM	<u>FL660</u> FL 055	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (3) (6) (8)
△ Costa DVOR/DME (COA)	512053N 0032119E					
	108° / 289°	20.5NM	<u>FL660</u> FL055	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (3) (6) (8)
△ HELEN	511407N 0035211E					
	109° / 289°	12.6NM	<u>FL660</u> FL055	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (3) (5) (6) (8)
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	085° / 266°	24.7NM	<u>FL660</u> 4500FT AMSL	Odd <sup>(2)</sup>	Even <sup>(2)</sup>	{class C} (5) (6)
△ SONDI	511126N 0045018E					
	086° / 266°	6.1NM	<u>FL660</u> 4500FT AMSL	Odd <sup>(2)</sup>	Even <sup>(2)</sup>	{class C} (5) (6)
△ ELSIK	511142N 0045955E					
	086° / 266°	22.6NM	<u>FL660</u> 4500FT AMSL	Odd <sup>(2)</sup>	Even <sup>(2)</sup>	{class C} (4) (5) (6)
△ SORAT Brussels FIR / Amsterdam FIR	511257N 0053548E					
						(7)
△ ROMIN	511328N 0055737E					(10)
<b>Route remarks:</b>						
Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245). Forward not available above FL 195.						
<b>Segment remarks:</b>						
(3) Forward: EBOS arrivals only, FL 110 MAX.						
(4) Lower limit FL 055 during activation of <u>Low Flying Area Golf One</u> and lower limit FL 075 during activation of <u>Low Flying Area Golf Two North</u> (see ENR 5.5).						
(5) Cruising levels below FL090 for crossing Brussels TMA are available only with prior permission request from Brussels APP.						
(6) FL 260 not available for flight planning purposes.						
(7) For details see <i>AIP the Netherlands</i> .						
(8) In Dutch airspace, class A below FL 195.						
<b>Point remarks:</b>						
(9) For continuation see <i>AIP United Kingdom</i> .						
(10) For continuation see <i>AIP the Netherlands</i> .						

Route designator {RNP type}	[Route usage notes]				
Significant point name	Significant point coordinates			Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series	
	↓   ↑			↓	↑
					Controlling unit {Airspace class} Remarks
<b>L191</b> {RNAV 5}	(1) H24				
△ Nicky DVOR/DME (NIK)	510954N 0041102E				
	323° / 143°	8.2NM	FL660 FL055	Even (1)	{class C}
△ PEVAD	511629N 0040317E				
<b>Route remarks:</b>					
Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245).					
Cruising levels below FL 090 for crossing Brussels TMA are available only with prior permission request from Brussels APP.					
FL 260 not available for flight planning purposes.					
In Dutch airspace, class A below FL 195.					

Route designator {RNP type}	[Route usage notes]				
Significant point name	Significant point coordinates			Remarks	
{RNP Type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series	
	↓   ↑			↓	↑
					Controlling unit {Airspace class} Remarks
<b>L607</b> {RNAV 5}	(1) H24				
△ KONAN London FIR / Brussels FIR	510751N 0020000E				
	094° / 274°	24.7NM	FL195 FL065	Odd (1)	Even (1) {class C} (2)
△ Koksy VORTAC (KOK)	510541N 0023906E				
	102° / 283°	32.9NM	FL195 FL055	Odd (1)	Even (1) {class C} (2) (6)
△ Mackel NDB (MAK)	505752N 0032947E				
	103° / 283°	4.7NM	FL195 4500FT AMSL	Odd (1)	Even (1) {class C} (6)
△ GOLEX	505643N 0033657E				
	103° / 283°	16.1NM	FL195 4500FT AMSL	Odd (1)	Even (1) {class C} (6)

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP Type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓   ↑			↓	↑	
△ DENOX	505246N 0040140E					
	104° / 284°	29.4NM	<u>FL 195</u> 4500FT AMSL	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (6)
△ GILOM	504507N 0044627E					
	104° / 285°	37.1NM	<u>FL 195</u> 4500FT AMSL	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (3) (5) (6)
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	136° / 316°	23.6NM	<u>FL 195</u> <u>FL 065</u>	Odd <sup>(1)</sup>		{class C} (4)
△ ARCKY	501757N 0060756E					
	098° / 278°	6.1NM	<u>FL 245</u> <u>FL 065</u>	Odd <sup>(1)</sup>		{class C} (4)
△ SUXIM Langen FIR / Brussels FIR	501658N 0061719E					(7)
<b>Route remarks:</b> Control unit: Brussels ACC.						
<b>Segment remarks:</b> (2) Forward: Unless otherwise instructed by Brussels ACC, Belgian traffic to EBAW or along <u>L179</u> shall proceed direct from KOK to NIK. (3) Lower limit FL 055 between 40 DME NIK and LNO. (4) Between FL 065 and FL 105: CDR 1 - H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: LNO-GESLO-LULAT). Lower limit FL 075 during activation of <u>Low Flying Area Golf Two South</u> (see ENR 5.5). (5) East of Brussels TMA until intersection of <u>M170</u> and <u>N852</u> , airway width is from 16NM to 18NM. (6) Cruising levels below FL090 for crossing Brussels TMA are available only with prior permission request from Brussels APP.						
<b>Point remarks:</b> (7) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓   ↑			↓	↑	
<b>L608</b> {RNAV 5}	(1) H24 (2) CDR 1 H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: M624-L179).					
△ SASKI	513253N 0023000E					(5)
						(4)
△ KEGIT	512425N 0030624E					
	110° / 290°	10.0NM	<u>FL 660</u> <u>FL 195</u>		Even <sup>(1)</sup>	{class C} (3)
△ Costa DVOR/DME (COA)	512053N 0032119E					
	120° / 300°	13.2NM	<u>FL 660</u> <u>FL 195</u>		Even <sup>(2)</sup>	{class C} (3)
△ DENUT	511410N 0033927E					
	120° / 300°	38.9NM	<u>FL 660</u> <u>FL 195</u>		Even <sup>(2)</sup>	{class C} (3)

Route designator {RNP type}	[Route usage notes]					Remarks
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	Initial track MAG ↓   ↑	Geodesic DIST		↓	↑	
△ Brussels DVOR/DME (BUB)	505408N 0043217E					
	105° / 286°	20.1NM	FL660 FL195		Even <sup>(1)</sup>	{class C} (3)
△ SOGRI	504823N 0050243E					
	106° / 287°	24.8NM	FL660 FL195		Even <sup>(1)</sup>	{class C} (3)
△ TERLA	504057N 0053956E					
	105° / 285°	7.3NM	FL660 FL195		Even <sup>(1)</sup>	{class C} (3)
△ BATTY	503857N 0055056E					
	139° / 319°	36.2NM	FL660 FL245		Even <sup>(1)</sup>	{class C} (3)
△ LIRSU	501112N 0062712E					(6)
<p><b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).</p> <p><b>Segment remarks:</b> (3) FL260 not available for flight planning purposes. (4) For details see <i>AIP the Netherlands</i>.</p> <p><b>Point remarks:</b> (5) For continuation see <i>AIP United Kingdom</i>. (6) For continuation see <i>AIP Germany</i>.</p>						

Route designator {RNP type}	[Route usage notes]					
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Remarks
	Initial track MAG ↓ ↑	Geodesic DIST		↓	↑	Controlling unit {Airspace class} Remarks
<b>L610</b> {RNAV 5}	(1) CDR 1 H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: L179).					
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	281° / 101°	20.3NM	$\frac{FL660}{FL105}$	Even <sup>(1)</sup>		{class C} (2) (4)
△ DENUT	511410N 0033927E					
	281° / 101°	9.7NM	$\frac{FL660}{FL105}$	Even <sup>(1)</sup>		{class C} (2) (3) (4)
△ LUMEN	511610N 0032424E					
	281° / 100°	25.2NM	$\frac{FL660}{FL105}$	Even <sup>(1)</sup>		{class C} (2) (3) (4)
△ BULAM	512109N 0024501E					
	280° / 100°	18.7NM	$\frac{FL660}{FL105}$	Even <sup>(1)</sup>		{class C} (3)
△ DIBLI	512443N 0021545E					
	280° / 100°	10.0NM	$\frac{FL660}{FL105}$	Even <sup>(1)</sup>		{class C} (3)
△ RAPIX Brussels FIR / London FIR	512635N 0020000E					(5)
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245). <b>Segment remarks:</b> (2) FL 260 not available for flight planning purposes. (3) Lowest usable level may be raised due to MIL requirements. (4) In Dutch airspace, class A below FL 195. <b>Point remarks:</b> (5) For continuation see <i>AIP United Kingdom</i>						



Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓   ↑			↓	↑	
<b>M150</b> {RNAV 5}	(1) CDR1 H24.					
△ Koksy VORTAC (KOK)	510541N 0023906E					
	117° / 299°	118.6NM	<u>FL 660</u> FL 195	Odd (1)	{class C}	
△ KOMOB	500838N 0052225E					
	119° / 300°	33.8NM	<u>FL 660</u> FL 195	Odd (1)	{class C}	
△ Diekirch DVOR/DME (DIK)	495141N 0060747E					
	117° / 297°	17.1NM	<u>FL 660</u> FL 075	Odd	{class C} (2) (3)	
△ PITES Brussels FIR-UIR / Langen FIR - Rhein UIR	494343N 0063110E				(4)	
<b>Route remarks:</b> Control units: Luxembourg APP (up to FL 145); Brussels ACC (between FL 165 - FL 245); Maastricht UAC (above FL 245).						
<b>Segment remarks:</b> (2) Airspace class D at and below FL 095 within Luxembourg TMA. (3) FL 150 not available.						
<b>Point remarks:</b> (4) For continuation see AIP Germany.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓   ↑			↓	↑	
<b>M170</b> {RNAV 5}	(1) H24 (2) CDR1 H24.					
△ PODAT Langen FIR - Hannover UIR / Brussels UIR	504145N 0060811E				(4)	
	247° / 067°	17.6NM	<u>FL 245</u> 4500FT AMSL	Even (1)	Odd (1) (3)	
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	197° / 017°	47.6NM	<u>FL 245</u> FL 195	Even (2)	{class C}	
△ DINAN	494955N 0051953E					
	197° / 017°	8.8NM	<u>FL 245</u> FL 195	Even (2)	{class C}	
△ KUDIN Brussels UIR / France UIR	494135N 0051546E				(5)	
<b>Route remarks:</b> Control unit: Brussels ACC.						
<b>Segment remarks:</b> (3) Lower limit FL 055 during activation of <u>Low Flying Area Golf One</u> (see ENR 5.5).						
<b>Point remarks:</b> (4) For continuation see AIP Germany. (5) For continuation see AIP France.						

Route designator {RNP type}	[Route usage notes]					
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Remarks
	Initial track MAG ↓ ↑	Geodesic DIST		↓	↑	Controlling unit {Airspace class} Remarks
<b>M617</b> {RNAV 5}	(1) H24					
△ Maastricht VOR/DME (MAS)	505819N 0055738E					(5)
						(4)
△ ROFAC	505330N 0054118E					
	244° / 064°	7.6NM	$\frac{FL\ 195}{FL\ 095}$	Even (1)		{class C}
△ ERIGO	505017N 0053022E					
	263° / 083°	17.6NM	$\frac{FL\ 195}{FL\ 095}$	Even (1)		{class C} (3)
△ SOGRI	504823N 0050243E					
	257° / 076°	15.7NM	$\frac{FL\ 195}{FL\ 095}$	Even (1)		{class C} (3)
△ Huldenberg DVOR/DME (HUL)	504458N 0043830E					
	250° / 070°	32.6NM	$\frac{FL\ 195}{FL\ 095}$	Even (1)		{class C} (3)
△ Chièvres DVOR (CIV)	503426N 0034958E					
	231° / 051°	9.7NM	$\frac{FL\ 195}{4500FT\ AMSL}$	Odd (1)	Even (1)	{class C} (2) (3)
△ ROBAL Brussels FIR / Paris FIR	502824N 0033800E					(6)
<b>Route remarks:</b> Control unit: Brussels ACC. <b>Segment remarks:</b> (2) Lower limit FL055 during activation of <u>Low Flying Area Golf One</u> (see ENR 5.5). (3) Cruising levels below FL 090 for crossing Brussels TMA are available only with prior permission request from Brussels APP. (4) For details see <i>AIP the Netherlands</i> . <b>Point remarks:</b> (5) For continuation see <i>AIP the Netherlands</i> . (6) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					Remarks
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	Initial track MAG	Geodesic DIST		↓	↑	
	↓ ↑					
<b>M624</b> {RNAV 5}	(1) H24 (2) H24 above FL 195, CDR1 H24 below FL 195					
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	139° / 319°	20.7NM	$\frac{\text{FL660}}{4500\text{FT AMSL}}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (3) (5)
△ Brussels DVOR/DME (BUB)	505408N 0043217E					
	134° / 314°	12.7NM	$\frac{\text{FL660}}{4500\text{FT AMSL}}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (3) (5)
△ GILOM	504507N 0044627E					
	134° / 314°	7.6NM	$\frac{\text{FL660}}{4500\text{FT AMSL}}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (3) (5)
△ REMBA	503944N 0045451E					
	134° / 315°	49.1NM	$\frac{\text{FL660}}{\text{FL145}}$	Odd <sup>(2)</sup>	Even <sup>(2)</sup>	{class C} (3)
△ RITAX	500440N 0054825E					
	135° / 315°	9.6NM	$\frac{\text{FL660}}{\text{FL145}}$	Odd <sup>(2)</sup>	Even <sup>(2)</sup>	{class C} (3) (4)
△ DEMUL	495747N 0055843E					
	135° / 315°	8.5NM	$\frac{\text{FL660}}{\text{FL145}}$	Odd <sup>(2)</sup>	Even <sup>(2)</sup>	{class C} (3) (4)
△ Diekirch DVOR/DME (DIK)	495141N 0060747E					
	180° / 360°	23.2NM	$\frac{\text{FL660}}{\text{FL195}}$		Even <sup>(1)</sup>	{class C}
△ ROUSY Brussels UIR / France UIR	492835N 0060654E					(7)
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Segment Remarks:</b> (3) FL 260 not available for flight planning purposes.. (4) Airspace class D at and below FL 095 within Luxembourg TMA.. (5) Cruising levels below FL 090 for crossing Brussels TMA are available only with prior permission from Brussels APP.						
<b>Point remarks:</b> (6) For continuation see <i>AIP the Netherlands</i> . (7) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					Remarks
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	Initial track MAG ↓ ↑	Geodesic DIST		↓	↑	
<b>N852</b> {RNAV 5}	(1) CDR1 H24. (2) H24					
△ LUTOM Amsterdam FIR / Brussels UIR	511556N 0052516E					(6)
	167° / 347°	5.1NM	<u>FL660</u> FL195	Odd (1)	Even (1)	{class C}
△ BROGY	511057N 0052656E					
	164° / 344°	31.2NM	<u>FL660</u> FL195	Odd (1)	Even (1)	{class C}
△ TERLA	504057N 0053956E					
	163° / 343°	6.1NM	<u>FL660</u> FL195	Odd (2)	Even (2)	{class C}
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	159° / 339°	32.5NM	<u>FL660</u> 4500FT AMSL	Odd (2)	Even (2)	{class C} (3) (4)
△ GESLO	500445N 0060018E					
	159° / 339°	7.2NM	<u>FL660</u> 4500FT AMSL	Odd (2)	Even (2)	{class C} (3)
△ GOPAS	495759N 0060411E					
	159° / 339°	6.7NM	<u>FL660</u> 4500FT AMSL	Odd (2)	Even (2)	{class C} (3)
△ Diekirch DVOR/DME (DIK)	495141N 0060747E					
	155° / 335°	14.7NM	<u>FL660</u> 4500FT AMSL	Odd (2)	Even (2)	{class C} (3)
△ LIMGO	493814N 0061654E					
	156° / 336°	11.1NM	<u>FL660</u> 4500FT AMSL	Odd (2)	Even (2)	{class C} (3) (5)
△ SUTAL Brussels UIR / France UIR	492800N 0062330E					(7)
<b>Route remarks:</b> Control units: Luxembourg APP (within Luxembourg TMA), Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Segment Remarks:</b> (3) Airspace class D at and below FL095 within Luxembourg TMA.. (4) Lower limit FL 055 during activation of <u>Low Flying Area Golf One</u> , lower limit FL 065 during activation of <u>Low Flying Area Golf Three</u> and lower limit FL 075 during activation of <u>Low Flying Area Golf Two South</u> (see ENR 5.5). (5) Airspace class E below FL 100 within Langen FIR.						
<b>Point remarks:</b> (6) For continuation see <i>AIP the Netherlands</i> . (7) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					Remarks
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	Initial track MAG	Geodesic DIST		↓	↑	
	↓ ↑					
<b>N853</b> {RNAV 5}	(1) H24					
△ IBERA Brussels UIR / France UIR	493030N 0061630E					(3)
	344° / 164°	22.0NM	FL660 FL195	Even (1)		{class C}
△ Diekirch DVOR/DME (DIK)	495141N 0060747E					
	359° / 179°	26.3NM	FL660 FL105	Odd (1)		{class C}
△ ARCKY	501757N 0060756E					
	008° / 188°	16.5NM	FL660 FL105	Odd (1)		{class C} (2)
△ KOGES Brussels FIR - UIR / Langen FIR - Hannover UIR	503412N 0061202E					(4)
<b>Route remarks:</b> Control units: Luxembourg APP (within Luxembourg TMA); Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Segment Remarks:</b> (2) CDR1 H24 below FL 175. Available as specified in daily German and Belgian EAUP/EUUP.						
<b>Point remarks:</b> (3) For continuation see <i>AIP France</i> . (4) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Remarks {Airspace class} Remarks
	Initial track MAG	Geodesic DIST		↓	↑	
	↓ ↑					
<b>N872</b> {RNAV 5}	(1) H24					
△ WOODY Amsterdam FIR / Brussels FIR	512420N 0042159E					(4)
	205° / 024°	6.0NM	$\frac{FL660}{4500FT\ AMSL}$	Odd (1)		{class C} (2) (3)
△ AMMOF	511855N 0041752E					
	205° / 024°	10.0NM	$\frac{FL660}{4500FT\ AMSL}$	Odd (1)		{class C} (2)
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	198° / 018°	18.2NM	$\frac{FL660}{4500FT\ AMSL}$	Odd (1)		{class C} (2)
△ DENOX	505246N 0040140E					
	201° / 021°	19.8NM	$\frac{FL660}{4500FT\ AMSL}$	Odd (1)		{class C} (2)
△ Chièvres DVOR (CIV)	503426N 0034958E					
	203° / 022°	15.2NM	$\frac{FL660}{FL115}$	Odd (1)		{class C}
△ MEDIL Brussels FIR / Paris FIR	502032N 0034030E					(5)
<p><b>Route remarks:</b> Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245). FL 260 not available for flight planning purposes.</p> <p><b>Segment remarks:</b> (2) Cruising levels below FL090 for crossing Brussels TMA are available only with prior permission request from Brussels APP. (3) In Dutch airspace, class E below FL 055 and class A between FL 055 and FL 195.</p> <p><b>Point remarks:</b> (4) For continuation see <i>AIP the Netherlands</i>. (5) For continuation see <i>AIP France</i>.</p>						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates			FL series		Remarks
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>N873</b> {RNAV 5}	(1) H24					
△ HELEN Amsterdam FIR / Brussels FIR	511407N 0035211E					(3)
	203° / 023°	21.3NM	FL660 FL085		Even (1)	{class C} (2)
△ FERDI	505445N 0033813E					
	203° / 023°	26.1NM	FL660 FL085		Even (1)	{class C}
△ ADUTO Brussels FIR / Paris FIR	503054N 0032142E					(4)
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245).						
<b>Segment remarks:</b> (2) In Dutch airspace, class A below FL 195.						
<b>Point remarks:</b> (3) For continuation see <i>AIP the Netherlands</i> . (4) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates			FL series		Remarks
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Q50</b> {RNAV 5}	(1) H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	123° / 303°	7.8NM	FL245 FL145	Odd (1)		{class C}
△ LAREP	502634N 0054739E					
	123° / 303°	15.6NM	FL245 FL145	Odd (1)		{class C}
△ ARCKY	501757N 0060756E					
<b>Route remarks:</b> Control unit: Brussels ACC.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Q70</b> {RNAV 5}	(1) H24 below FL 195; CDR 1 H24 above FL 195. TEMPO Closed on ATC instructions due to MIL requirements (alternate route: UL607).					
△ VABIK London FIR / Brussels FIR	511447N 002000E				(2)	
	093° / 274°	15.4NM	FL245 FL065	Odd (1)	{class C}	
△ MADUX	511336N 0022427E					
	130° / 310°	12.2NM	FL245 FL065	Odd (1)	{class C}	
△ Koksy VORTAC (KOK)	510541N 0023906E					
<b>Route remarks:</b> Control unit: Brussels ACC.						
<b>Point remarks:</b> (2) For continuation see <i>AIP United Kingdom</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Q763</b> {RNAV 5}	(1) H24					
△ EXCOS	493420N 0062814E				(5)	
	297° / 117°	8.3NM	FL105 FL055	Even (1)	Odd (1) {class C} (2)	
△ LIMGO	493814N 0061654E					
	266° / 085°	27.2NM	FL195 FL075	Even (1)	{class C} (3) (4)	
△ TILVI	493630N 0053503E					
	265° / 085°	6.4NM	FL195 FL075	Even (1)	{class C} (3)	
△ TALUD Brussels FIR / Paris FIR	493604N 0052514E				(6)	
<b>Route remarks:</b> Control units: Brussels ACC (above FL 165); Luxembourg APP (up to FL 165).						
<b>Segment remarks:</b> (2) Up to FL 095: class D between LIMGO and FIR boundary; class E between FIR boundary and EXCOS. (3) Lowest usable flight level may be raised, depending on activation of <u>EBR41A</u> . (4) Airspace class D at and below FL 095 within Luxembourg TMA.						
<b>Point remarks:</b> (5) For continuation see <i>AIP Germany</i> . (6) For continuation see <i>AIP France</i> .						



Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>T180</b> {RNAV 5}	(1) H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	105° / 286°	29.0NM	FL660 FL195	Odd (1)	{class C}	
△ PESOV Brussels UIR / Langen FIR - Rhein UIR	502239N 0062054E				(2)	
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>T181</b> {RNAV 5}	(1) H24					
△ ARCKY	501757N 0060756E					
	052° / 232°	7.3NM	FL195 FL065	Odd (1)	{class C} (2)	
△ IMVIX	502221N 0061706E					
	095° / 275°	3.1NM	FL195 FL065	Odd (1)	{class C} (2)	
△ BUGIB Brussels FIR / Langen FIR	502202N 0062158E					
<b>Route remarks:</b> Control unit: Brussels ACC.						
<b>Segment remarks:</b> (2) Between FL 065 and FL 105: CDR 1 - H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: LNO-GESLO-LULAT). Lower limit FL075 during activation of <u>Low Flying Area Golf Two South</u> (see ENR 5.5).						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>T853</b> {RNAV 5}	(1) H24					
△ ARCKY	501757N 0060756E					
	034° / 214°	13.5NM	<u>FL660</u> <u>FL105</u>	Odd <sup>(1)</sup>	{class C} (2) (3)	
△ IBESA Brussels FIR / Langen FIR	502939N 0061958E				(4)	
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245).						
<b>Segment remarks:</b> (2) H24 above FL175. (3) CDR 1 H24: below FL 175 available as specified in daily German and Belgian EAUP/EUUP.						
<b>Point remarks:</b> (4) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>T855</b> {RNAV 5}	(1) H24					
△ AGENI Brussels FIR / Langen FIR	504500N 0060200E				(2)	
	228° / 048°	9.3NM	<u>FL195</u> <u>FL095</u>	Even <sup>(1)</sup>	{class C}	
△ BATTY	503857N 0055056E					
	233° / 053°	6.5NM	<u>FL195</u> <u>FL095</u>	Even <sup>(1)</sup>	{class C}	
△ Olno DVOR/DME (LNO)	503509N 0054237E					
<b>Route remarks:</b> Control unit: Brussels ACC.						
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]				
Significant point name	Significant point coordinates			Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series	
	↓ ↑			↓	↑
Controlling unit {Airspace class} Remarks					
<b>T856</b> {RNAV 5}	(1) H24				
△ Diekirch DVOR/DME (DIK)	495141N 0060747E				
	023° / 203°	6.2NM	FL660 FL245	Odd (1)	{class C}
△ ADUSU Brussels UIR / Rhein UIR	495722N 0061146E			(2)	
<b>Route remarks:</b> Control unit: Maastricht UAC.					
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .					

Route designator {RNP type}	[Route usage notes]				
Significant point name	Significant point coordinates			Remarks	
{RNP Type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series	
	↓ ↑			↓	↑
Controlling unit {Airspace class} Remarks					
<b>T857</b> {RNAV 5}	(1) H24				
△ Sprimont DVOR/DME (SPI)	503053N 0053725E				
	071° / 251°	23.5NM	FL245 FL175	Odd (1)	{class C}
△ DENOVI Brussels FIR / Langen FIR	503812N 0061226E			(2)	
<b>Route remarks:</b> Control unit: Brussels ACC.					
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .					

Route designator {RNP type}	[Route usage notes]				
Significant point name	Significant point coordinates			Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series	
	↓ ↑			↓	↑
Controlling unit {Airspace class} Remarks					
<b>T859</b> {RNAV 5}	(1) CDR1 H24.				
△ KOMOB	500838N 0052225E				
	049° / 230°	45.2NM	FL660 FL245	Odd (1)	{class C}
△ LENDO Brussels UIR / Langen FIR - Hannover UIR	503731N 0061643E			(2)	
<b>Route remarks:</b> Control unit: Maastricht UAC.					
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .					

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP Type}	Initial track MAG ↓ ↑	Geodesic DIST	Upper limit / lower limit	FL series ↓ ↑		Controlling unit {Airspace class} Remarks
<b>T880</b> {RNAV 5}	(1) H24					
△ ASDAK Brussels UIR / Langen FIR	503608N 0061507E				(2)	
	280° / 099°	15.6NM	FL245 FL195	Even (1)	{class C}	
△ BATTY	503857N 0055056E					
<b>Route remarks:</b> Control unit: Brussels ACC. <b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					Remarks
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	Initial track MAG	Geodesic DIST		↓	↑	
	↓ ↑					
<b>UL607</b> {RNAV 5}	(1) H24					
△ KONAN London FIR - London UIR / Brussels UIR	510751N 0020000E					(2)
	094° / 274°	24.7NM	FL660 FL195	Odd (1)		{class C}
△ Koksy VORTAC (KOK)	510541N 0023906E					
	105° / 286°	38.9NM	FL660 FL195	Odd (1)		{class C}
△ FERDI	505445N 0033813E					
	106° / 287°	38.4NM	FL660 FL195	Odd (1)		{class C}
△ BUPAL	504323N 0043604E					
	106° / 286°	12.5NM	FL660 FL195	Odd (1)		{class C}
△ REMBA	503944N 0045451E					
	107° / 287°	28.5NM	FL660 FL195	Odd (1)		{class C}
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	100° / 280°	5.4 NM	FL660 FL245	Odd (1)		{class C}
△ PELIX	502949N 0054545E					
	100° / 281°	23.7NM	FL660 FL245	Odd (1)		{class C}
△ MATUG Brussels UIR / Rhein UIR	502500N 0062211E					
<b>Route remarks:</b>						
Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245). Belgian traffic destination EBAW shall proceed direct from KOK to NIK, unless otherwise instructed by ATC. FL 270 not available for flight planning purposes between KONAN and MATUG except for type jet via SUTAL.						
<b>Point remarks:</b>						
(2) For continuation see AIP United Kingdom.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UM163</b> {RNAV 5}	(1) H24					
△ LUTAX France UIR / Brussels UIR	493258N 0054858E				(2)	
	032° / 212°	22.4NM	<u>FL660</u> <u>FL195</u>	Odd (1)	{class C}	
△ Diekirch DVOR/DME (DIK)	495141N 0060747E					
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Point remarks:</b> (2) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UM617</b> {RNAV 5}	(1) H24					
△ Maastricht VOR/DME (MAS)	505819N 0055738E				(3)	
					(2)	
△ ANETS	505556N 0054412E					
	253° / 073°	27.3NM	<u>FL660</u> <u>FL195</u>	Even (1)	{class C}	
△ SOGRI	504823N 0050243E					
	253° / 072°	17.6NM	<u>FL660</u> <u>FL195</u>	Even (1)	{class C}	
△ BUPAL	504323N 0043604E					
	252° / 072°	21.7NM	<u>FL660</u> <u>FL195</u>	Even (1)	Odd (1) {class C}	
△ SISGA	503705N 0040324E					
	252° / 072°	9.0NM	<u>FL660</u> <u>FL195</u>	Even (1)	Odd (1) {class C}	
△ Chièvres DVOR (CIV)	503426N 0034958E					
	231° / 051°	9.7NM	<u>FL245</u> <u>FL195</u>	Odd (1)	Even (1) {class C}	
△ ROBAL Brussels UIR / France UIR	502824N 0033800E				(4)	
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Segment remarks:</b> (2) For details see <i>AIP the Netherlands</i> .						
<b>Point remarks:</b> (3) For continuation see <i>AIP the Netherlands</i> . (4) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]				
Significant point name	Significant point coordinates			Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series	
	↓ ↑			↓	↑
					Controlling unit {Airspace class} Remarks
<b>UN857</b> {RNAV 5}	(1) H24				
△ ARVUG Brussels UIR / Rhein UIR	495522N 0061345E			(2)	
	225° / 045°	5.3NM	FL660 FL195	Even (1)	{class C}
△ Diekirch DVOR/DME (DIK)	495141N 0060747E				
	234° / 053°	12.4NM	FL660 FL195	Even (1)	{class C}
△ IDOSA	494430N 0055211E				
	249° / 069°	20.6NM	FL660 FL195	Even (1)	{class C}
△ TOLVU Brussels UIR / France UIR	493731N 0052218E			(3)	
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).					
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> . (3) For continuation see <i>AIP France</i> .					

Route designator {RNP type}	[Route usage notes]				
Significant point name	Significant point coordinates			Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series	
	↓ ↑			↓	↑
					Controlling unit {Airspace class} Remarks
<b>UN858</b> {RNAV 5}	(1) H24				
△ LIPNI France UIR / Brussels UIR	493148N 0055045E			(2)	
	068° / 248°	18.2NM	FL660 FL195	Odd (1)	{class C}
△ LIMGO	493814N 0061654E				
	026° / 207°	12.1NM	FL660 FL195	Odd (1)	{class C}
△ BETEX Brussels UIR / Langen FIR - Rhein UIR	494857N 0062531E				
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).					
<b>Point remarks:</b> (2) For continuation see <i>AIP France</i> .					

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UT27</b> {RNAV 5}	(1) H24					
△ RITAX	500440N 0054825E					
	161° / 341°	38.1NM	FL660 FL195	Odd (1)	{class C}	
△ ROUSY Brussels UIR / France UIR	492835N 0060654E				(2)	
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Point remarks:</b> (2) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UY50</b> {RNAV 5}	(1) CDR1 H24. TEMPO closed on ATC instructions due to MIL requirements.					
△ DELOM Brussels UIR / France UIR	501853N 0040523E					
	327° / 147°	18.4NM	FL245 FL195		Odd (1) {class C}	
△ Chièvres DVOR (CIV)	503426N 0034958E					
	339° / 159°	21.7NM	FL660 FL195	Even (1)	Odd (1) {class C}	
△ FERDI	505445N 0033813E					
	337° / 157°	23.2NM	FL660 FL195	Even (1)	{class C}	
△ LUMEN	511610N 0032424E					
	337° / 157°	5.1NM	FL660 FL195	Even (1)	{class C}	
△ Costa DVOR/DME (COA)	512053N 0032119E					
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						



Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UY131</b> {RNAV 5}	(1) CDR1 H24.					
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	182° / 002°	9.8NM	FL 660 FL 195	Odd (1)		{class C}
△ BARTU	510011N 0041018E					
	182° / 002°	10.2NM	FL 660 FL 195	Odd (1)		{class C}
△ LERVO	504959N 0040931E					
	182° / 002°	32.3NM	FL 660 FL 195	Odd (1)		{class C}
△ NILEM Brussels UIR / France UIR	501748N 0040708E					(2)
<b>Route remarks:</b> Control unit: Brussels ACC.						
<b>Point remarks:</b> (2) For continuation see AIP France.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UY157</b> {RNAV 5}	(1) CDR1 H24.					
△ DINAN	494955N 0051953E					
	253° / 073°	12.5NM	FL 660 FL 245	Even (1)		{class C}
△ REMGO Brussels UIR / France UIR	494633N 0050116E					(2)
<b>Route remarks:</b> Control unit: Maastricht UAC.						
<b>Point remarks:</b> (2) For continuation see AIP France.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UY873</b> {RNAV 5}	(1) CDR1 H24.					
△ DENUT	511410N 0033927E					
	207° / 027°	35.9NM	FL660 FL195		Even <sup>(1)</sup>	{class C}
△ BELOB France UIR / Brussels UIR	504234N 0031252E					(2)
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Point remarks:</b> (2) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>UZ319</b> {RNAV 5}	(1) H24					
△ DENOX	505246N 0040140E					
	175° / 355°	15.8NM	FL 660 FL 195	Odd <sup>(1)</sup>		{class C}
△ SISGA	503705N 0040324E					
	175° / 355°	18.3NM	FL 660 FL 195	Odd <sup>(1)</sup>		{class C}
△ DELOM Brussels UIR / France UIR	501853N 0040523E					(2)
<b>Route remarks:</b> Control unit: Brussels ACC.						
<b>Point remarks:</b> (2) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Y18</b> {RNAV 5}	(1) H24					
△ DENUT	511410N 0033927E					
	181° / 001°	19.5NM	FL660 FL085		Even <sup>(1)</sup>	{class C}
△ FERDI	505445N 0033813E					
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245).						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates			FL series		Remarks
{RNP type}	Initial track MAG ↓ ↑	Geodesic DIST	Upper limit / lower limit	FL series ↓ ↑		Controlling unit {Airspace class} Remarks
<b>Y28</b> {RNAV 5}	(1) H24					
△ HELEN Brussels FIR / Amsterdam FIR	511407N 0035211E					
	142° / 323°	10.5NM	FL660 FL055		Even (1)	{class C} (2)
△ JAZFI	510544N 0040206E					
	120° / 301°	22.3NM	FL660 FL 055		Even (1)	{class C}
△ Brussels DVOR/DME (BUB)	505408N 0043217E					
<b>Route remarks:</b>						
Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245).						
Cruising levels below FL 090 for crossing Brussels TMA are available only with prior permission request from Brussels APP.						
FL 260 not available for flight planning purposes.						
<b>Segment remarks:</b>						
(2) In Dutch airspace, class A below FL 195.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates			FL series		Remarks
{RNP type}	Initial track MAG ↓ ↑	Geodesic DIST	Upper limit / lower limit	FL series ↓ ↑		Controlling unit {Airspace class} Remarks
<b>Y37</b> {RNAV 5}	(1) H24					
△ BATTY	503857N 0055056E					
	166° / 346°	48.6NM	FL660 FL195		Even (1)	{class C}
△ Diekirch DVOR/DME (DIK)	495141N 0060747E					
<b>Route remarks:</b>						
Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						

Route designator {RNP type}	[Route usage notes]					
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Remarks
	Initial track MAG ↓ ↑	Geodesic DIST		↓	↑	Controlling unit {Airspace class} Remarks
<b>Y50</b> {RNAV 5}	(1) H24					
△ IDOKO Brussels FIR / Paris FIR	502026N 0035223E					(6)
	353° / 173°	14.1NM	<u>FL 195</u> 4500FT AMSL		Odd (1)	{class C} (2) (4)
△ Chièvres DVOR (CIV)	503426N 0034958E					
	339° / 159°	21.7NM	<u>FL 195</u> <u>FL 055</u>	Even (1)	Odd (1)	{class C} (4)
△ FERDI	505445N 0033813E					
	337° / 157°	2.1NM	<u>FL 195</u> <u>FL 055</u>	Even (1)	Odd (1)	{class C} (4)
△ GOLEX	505643N 0033657E					
	337° / 157°	21.0NM	<u>FL 195</u> <u>FL 055</u>	Even (1)	Odd (1)	(3) (4)
△ LUMEN	511610N 0032424E					
	337° / 157°	5.1NM	<u>FL 195</u> <u>FL 055</u>	Even (1)	Odd (1)	{class C} (3) (5)
△ Costa DVOR/DME (COA)	512053N 0032119E					
<b>Route remarks:</b>						
Control unit: Brussels ACC.						
<b>Segment remarks:</b>						
(2) Lower limit FL055 during activation of <u>Low Flying Area Golf One</u> (see ENR 5.5).						
(3) Backward: FL 110 MAX.						
(4) Cruising levels below FL090 for crossing Brussels TMA are available only with prior permission request from Brussels APP.						
(5) In Dutch airspace, class A below FL 195.						
<b>Point remarks:</b>						
(6) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					Remarks
Significant point name {RNP type}	Significant point coordinates		Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	Initial track MAG	Geodesic DIST		↓	↑	
	↓ ↑					
<b>Y180</b> {RNAV 5}	(1) H24					
△ NISIV Langen FIR / Brussels FIR	495334N 0061435E					(3)
	246° / 066°	4.8NM	FL660 FL075	Even (1)		{class C} (2)
△ Diekirch DVOR/DME (DIK)	495141N 0060747E					
	234° / 053°	12.4NM	FL195 FL075	Even (1)	Odd (1)	{class C} (2)
△ IDOSA	494430N 0055211E					
	233° / 053°	13.7NM	FL195 FL075	Even (1)	Odd (1)	{class C}
△ TILVI	493630N 0053503E					
	233° / 053°	6.4NM	FL195 FL075	Even (1)	Odd (1)	{class C}
△ GEBKI Brussels FIR / Paris FIR	493246N 0052704E					(4)
<b>Route remarks:</b>						
Control units: Luxembourg APP (up to FL 145 within Luxembourg TMA), Brussels ACC (between FL 165 and FL 245), Maastricht UAC (above FL 245).						
FL 150 and FL 160 not available.						
Lowest usable flight level may be raised, depending on activation of <u>EBR41A</u> .						
<b>Segment remarks:</b>						
(2) Airspace class D at and below FL095 within Luxembourg TMA.						
<b>Point remarks:</b>						
(3) For continuation see <i>AIP Germany</i> .						
(4) For continuation see <i>AIP France</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Y181</b> {RNAV 5}	(1) H24					
△ MAKIK Langen FIR - Rhein UIR / Brussels UIR	495812N 0061002E				(3)	
	266° / 086°	3.8NM	FL660 FL075	Even (1)	{class C} (2)	
△ GOPAS	495759N 0060411E					
	266° / 086°	3.5NM	FL660 FL195	Even (1)	{class C}	
△ DEMUL	495747N 0055843E					
<b>Route remarks:</b> Control units: Luxembourg APP (up to FL 145); Brussels ACC (between FL 145 and FL 245); Maastricht UAC (above FL 245). FL 240 and FL 260 not AVBL for flight planning.						
<b>Segment Remarks:</b> (2) Airspace class D at and below FL 095 within Luxembourg TMA.						
<b>Point remarks:</b> (3) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Y862</b> {RNAV 5}	(1) H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	061° / 241°	22.3NM	FL660 FL195	Odd (1)	{class C}	
△ PODEN Brussels UIR / Langen FIR - Hannover UIR	504121N 0060825E				(2)	
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Y863</b> {RNAV 5}	(1) H24					
△ SOPOK	501510N 0054626E					
	104° / 284°	16.6NM	FL660 FL195	Odd (1)	{class C}	
△ ETENO Brussels UIR / Langen FIR - Rhein UIR	501055N 0061130E				(2)	
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Y868</b> {RNAV 5}	(1) H24					
△ MAPAD Amsterdam FIR / Langen FIR	504946N 0060109E				(3)	
					(2)	
△ NAVAK	504939N 0055505E					
					(2)	
△ OGBOL	504918N 0053917E					
	267° / 087°	23.2NM	FL660 FL095	Even (1)	{class C}	
△ SOGRI	504823N 0050243E					
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245), Maastricht UAC (above FL 245).						
<b>Segment remarks:</b> (2) For details see <i>AIP the Netherlands</i> .						
<b>Point remarks:</b> (3) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Z104</b> {RNAV 5}	(1) H24					
TIPUT	500450N 0061240E				(5)	
					(2)	
△ ROBON Langen FIR / Brussels FIR	500442N 0060712E				(5)	
	270° / 090°	4.4NM	$\frac{FL245}{FL075}$	Even <sup>(1)</sup>	(3) (4)	
△ GESLO	500445N 0060018E					
	268° / 088°	7.6NM	$\frac{FL245}{FL195}$	Even <sup>(1)</sup>	{class C} (4)	
△ RITAX	500440N 0054825E					
<b>Route remarks:</b> Control units: Brussels ACC (above FL 145); Luxembourg APP (up to FL 145).						
<b>Segment remarks:</b> (2) Airspace class E below FL 100. (3) Airspace class D at and below FL 095 within Luxembourg TMA. (4) FL 240 not available for flight planning.						
<b>Point remarks:</b> (5) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Z110</b> {RNAV 5}	(1) H24					
△ AMPUM Paris FIR / Brussels FIR	493227N 0054848E				(3)	
	071° / 252°	19.2NM	$\frac{FL195}{FL075}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup> (2)	
△ LIMGO	493814N 0061654E					
	026° / 207°	12.1NM	$\frac{FL195}{FL075}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup> (2)	
△ BETEX Brussels FIR / Langen FIR	494857N 0062531E				(4)	
<b>Route remarks:</b> Control units: Brussels ACC (above FL 165); Luxembourg APP (up to FL 165).						
<b>Segment remarks:</b> (2) Airspace class D at and below FL 095 within Luxembourg TMA.						
<b>Point remarks:</b> (3) For continuation see <i>AIP France</i> . (4) For continuation see <i>AIP Germany</i> .						



Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Z111</b> {RNAV 5}	(1) CDR1 H24.					
△ LIMGO	493814N 0061654E					
	058° / 238°	10.8NM	FL 660 FL 195	Odd (1)	{class C}	
△ PITES Brussels UIR / Rhein UIR	494343N 0063110E				(2)	
<b>Route remarks:</b> Control unit: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Point remarks:</b> (2) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Z283</b> {RNAV 5}	(1) H24					
SUMAS Langen FIR - △ Hannover UIR / Amsterdam FIR	505635N 0060059E				(3)	
					(2)	
△ NAVAK	504939N 0055505E					
					(2)	
△ PINUS Amsterdam FIR / Brussels UIR	504547N 0055145E					
	208° / 028°	12.1NM	FL 660 FL 095	Even (1)	{class C}	
△ Oino DVOR/DME (LNO)	503509N 0054237E					
	172° / 352°	20.2NM	FL 660 FL 195	Odd (1)	{class C}	
△ SOPOK	501510N 0054626E					
	172° / 352°	10.6NM	FL 660 FL 195	Odd (1)	{class C}	
△ RITAX	500440N 0054825E					
	172° / 352°	20.4NM	FL 660 FL 195	Odd (1)	{class C}	
△ IDOSA	494430N 0055211E					
<b>Route remarks:</b> Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						
<b>Segment remarks:</b> (2) For details see <i>AIP the Netherlands</i> .						
<b>Point remarks:</b> (3) For continuation see <i>AIP Germany</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Z310</b> {RNAV 5}	(1) H24					
△ BATAK	513416N 0044720E				(3)	
	237° / 057°	18.7NM	FL660 FL095	Odd (1)	{class C} (2)	
△ WOODY Amsterdam FIR / Brussels FIR	512420N 0042159E					
<b>Route remarks:</b> Control units: Amsterdam ACC (below FL 245); Maastricht UAC (above FL 245). <b>Segment remarks:</b> (2) In Dutch airspace, class A below FL 195. <b>Point remarks:</b> (3) For continuation see <i>AIP the Netherlands</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates				Remarks	
{RNP type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>Z311</b> {RNAV 5}	(1) CDR1 H24.					
△ BEKEM Amsterdam FIR / Brussels FIR	512556N 0043449E				(2)	
	222° / 042°	21.9NM	FL195 FL095	Odd (1)	{class C}	
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
<b>Route remarks:</b> Control unit: Brussels ACC. <b>Point remarks:</b> (2) For continuation see <i>AIP the Netherlands</i> .						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates			FL series		Remarks
{RNP type}	Initial track MAG ↓ ↑	Geodesic DIST	Upper limit / lower limit	↓	↑	Controlling unit {Airspace class} Remarks
<b>Z717</b> {RNAV 5}	(1) H24					
△ GOBNO Langen FIR / Amsterdam FIR	505856N 0055923E					(3)
						(2)
△ Maastricht VOR/DME (MAS)	505819N 0055738E					
<b>Route remarks:</b> Control unit: Brussels ACC. <b>Segment remarks:</b> (2) For details see <i>AIP the Netherlands</i> . <b>Point remarks:</b> (3) For continuation see <i>AIP Germany</i> .						

THIS PAGE INTENTIONALLY LEFT BLANK

## ENR 3.3 Other Routes

### 1 DIRECT ROUTES

In the Brussels FIR/UIR, direct routes are available if the following prerequisites are met:

- a. The direct routing to be cleared in the Brussels FIR/UIR shall begin (entry point) and end (exit point) at waypoints in the Brussels FIR/UIR or other FIR, determined for the purpose of defining en-route flight procedures in line with the applicable national legislation and listed in the relevant AIP (ENR 4.3 or ENR 4.4);
- b. The restrictions on the use of waypoints for direct routings which can be found in Appendix 4 (DCT limits) of the *Route Availability Document (RAD)* shall be complied with. More details on the RAD can be found in [ENR 1.10, § 1.3.3](#);
- c. The direct routing shall be indicated in item 15 of the flight plan;
- d. The traffic situation must permit the issuance of an ATC clearance for a direct routing in line with the requirements for safe, orderly and expeditious handling of air traffic.

### 2 MILITARY ROUTES

	Rotary Wing		Fixed Wing	
	Heli		15W Tpt Aircraft	Jet Aircraft
General	Night flying is allowed in any of following conditions: <ul style="list-style-type: none"> <li>• In controlled airspace</li> <li>• Along a network of pre-determined routes</li> <li>• In pre-determined areas.</li> </ul>			
Timings	Mon & Tue: night flight possible as per flying window. Wed – Fri: 15W transport aircraft; others when authorized by COMOPSAIR.			
Flight planning	FPL to be filed not later than 1100 day of flight. AMC to share FPL between participating squadrons for awareness.			
Pre-determined routes	Yearly assessed			BENE, Falcon and Dark Falcon routes
Route – altitude	NVG: 200FT above highest obstacle < 1KM NO NVG: 500FT above highest obstacle < 3KM		NVG: 500FT above highest obstacle < 1NM NO NVG: 1000FT above highest obstacle < 5km	1000FT above highest obstacle < 5km
Areas	In NVG only: HTAs + LFA11 +NOTAM		In NVG only: Above LFAs lateral limits	N/A
Areas – altitude	In NVG only: See ACOT-GID-TRGMST-AOLG-200		In NVG only: 500ft above obstacle < 1NM	N/A
Airbase – circuit training	After prior coordination with local ATC			
Deconfliction during flight (MIL only)	All flights in uncontrolled airspace: to check in on “night flight frequency” = 362,35 <ul style="list-style-type: none"> <li>• At each reporting point: broadcast callsign, route + direction, reporting point + altitude.</li> <li>• When crossing: Heli stay lowest, transport aircraft above, Jet aircraft highest.</li> </ul>			
Foreign ACFT	Not allowed, unless approval from COA			

## 2.1 BENE ROUTES

The BENE routes consist of an integrated system of low flying routes which have been agreed by the Belgian Air Component and Royal Netherlands Air Force and flown by jet Aircraft by night over the Netherlands and Belgium below 4500FT AMSL.

All BENE routes, except BENE THREE and SIX, may be flown by day at VFR levels.

In order to provide awareness, all night flights will be announced by the night flight message sent by Steenokkerzeel ATCC each THU for the next week. Also, a FPL needs to be filed for any night flight not later than 1100 on the day of flight. AMC will:

- provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing Aircraft.

Aircraft which have not been allocated a specific route segment shall avoid these night low flying routes, unless the respective route segment is not activated or the Aircraft is under RIS/RC.

If the pilot cannot maintain the en-route altitude for technical or other reasons, he shall assume the ESA, squawk A/7700 and request immediate ATC assistance.

Radio contact with Belga Information is mandatory for the complete formation throughout the flight, except when crossing controlled airspace.

All altitudes depicted are minimum altitudes, aircraft may fly above the minimum altitude provided that they remain outside controlled airspace.

The BENE routes are depicted on the chart in [ENR 6-ENRC.05a](#).

*Note: Only that part of the BENE routes situated within the Brussels FIR is published.*

### 2.1.1 BENE Routes

#### BENE ONE

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	2000
	1a	512818.6N 0043949.2E	2000
		512213.2N 0055154.0E	2000
	BBL	511003.6N 0052808.4E	

*Note: High level return from Vliehors direct via VKL to BBL can be flown when a flight plan has been filed accordingly.*

#### BENE TWO

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	4000
	2a	504442.0N 0054116.2E	4000
	2b	502226.4N 0053103.0E	3300
	2c	494324.6N 0053236.0E	4000
	2d	495216.8N 0045552.2E	3000
	2e	501702.4N 0050536.0E	4000
	2f	501646.2N 0041734.8E	2300
	2g	502705.4N 0034520.4E	2000
	2h	505603.0N 0032554.0E	2200
	2j	504957.0N 0025955.8E	3000
	2k	511122.2N 0033325.8E	3000
	2l	511724.0N 0043219.8E	3000
	2m	505820.4N 0052140.8E	3000
	2n	505853.4N 0054223.4E	3000
	EXIT to Kleine-Brogel - Wildenrath - Volkel	510255.8N 0052836.0E	3000

**BENE TWO SHORT**

Speed (KT)	Turning point	Position	Altitude (FT)
Proceed as BENE TWO till			
420	2s	502855.8N 0053607.8E	4000
	2t	502304.8N 0045950.4E	4000
then follow BENE TWO.			

**BENE THREE**

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	4000
	3a	504615.0N 0051904.2E	2000/4000 (*)
	3b	503012.6N 0035943.2E	2000
	3c	505922.2N 0033625.2E	2000
	3d	511346.8N 0034828.2E	2000
	BBL	512210.8N 0055155.8E	2000
	BBL	511003.6N 0052808.4E	
(*) To provide separation between BENE THREE and BENE FOUR.			

**BENE FOUR**

Speed (KT)	Turning point	Position	Altitude (FT)
420	GATE	504600.0N 0055900.0E	4000
	4a	504442.0N 0054116.2E	4000
	4b	494324.6N 0053236.0E	4000
	4c	501558.2N 0051009.0E	4000
	4d	502020.4N 0044350.4E	2000/4000 (*)
	4e	501758.2N 0041615.0E	2000/4000 (*)
	4f	503004.2N 0034023.4E	2000/4000 (*)
	4g	505344.4N 0032403.6E	3000
	Boundary	511833.6N 0033349.8E	2000
(*) To provide separation between BENE THREE and BENE FOUR.			

**BENE FOUR SHORT**

From position 4a

- proceed via position 502200N 0051200E to position 4d at 4000 FT AMSL
- then proceed as BENE FOUR.

**BENE FIVE**

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	2000
	5a	512718.6N 0044316.8E	2000
	5b	511936.0N 0041255.2E	2000
	5c	504500.0N 0035200.0E	2000
	5d	511600.0N 0032300.0E	2000
	VKL	513924.0N 0054224.0E	FL 260
	BBL	511003.6N 0052808.4E	

**BENE SIX**

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	3000
	6a	504441.4N 0054117.4E	3000
	6b	503557.0N 0055455.8E	3000
	6c	501759.4N 0060752.8E	4000
	6d	494256.4N 0052150.4E	4000
	6e	500557.0N 0050055.2E	4000
	6f	500748.0N 0043053.4E	4000
	6g	501457.0N 0041155.8E	2000
	6h	503055.2N 0034001.8E	2000
	6j	505401.8N 0031511.4E	3000
	Boundary	511451.6N 0034806.6E	3000
520	6o	510757.0N 0055155.8E	1000
	6p	510255.8N 0052836.0E	1000
	BBL	511003.6N 0052808.4E	

**BENE SIX SHORT**

Speed (KT)	Turning point	Position	Altitude (FT)
Proceed as BENE SIX till			
420	6a	504441.4N 0054117.4E	4000
	6a'	502246.8N 0050650.4E	4000
	6g'	501841.4N 0040813.2E	2000
	6h	503055.2N 0034001.8E	2000
then follow BENE SIX			

**BENE SIX EBFS**

Speed (KT)	Turning point	Position	Altitude (FT)
420	BFS	501428.9N 0043911.4E	4000
	6g FS	501756.9N 0040955.5E	2000
	6h	503055.2N 0034001.8E	2000
then proceed as BENE SIX till			
420	6o	505157.0N 0053755.6E	3000
	6a	504441.4N 0054117.4E	3000
then proceed as BENE SIX till			
420	6e	500557.0N 0050055.2E	4000
	BFS	501428.9N 0043911.4E	



## 2.1.2 BENE Routes (Belgian Air Component jet aircraft only)

### BENE II

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	2000
	2a	504442.0N 0054116.2E	2600
	2b	502226.4N 0053103.0E	3300
	2c	494324.6N 0053236.0E	2500
	2d	495216.8N 0045552.2E	2700
	2e	501702.4N 0050536.0E	2400
	2f	501646.2N 0041734.8E	2300
	2g	502705.4N 0034520.4E	1600
	2h	505603.0N 0032554.0E	2200
	2j	504957.0N 0025955.8E	2200
	2k	511122.2N 0033325.8E	1700
	2l	511724.0N 0043219.8E	2700
	2m	505820.4N 0052140.8E	2000
	2n	505853.4N 0054223.4E	2000

### BENE II SHORT

Speed (KT)	Turning point	Position	Altitude (FT)
Proceed as BENE TWO till			
420	2s	502855.8N 0053607.8E	2300
	2t	502304.8N 0045950.4E	2400
then follow BENE TWO.			

## 2.2 FALCON Routes

### 2.2.1 FALCON Routes

The FALCON routes consist of an integrated system of low flying routes, flown at day or night by Belgian Air Component jet aircraft in IMC or VMC, using two different levels.

FALCON routes may be flown at the first two usable FL in IMC.

For flights in uncontrolled airspace a Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed night flight altitudes: Along predetermined routes using NVG: minimum altitude of 1000FT above the highest obstacle within a radius of 5KM of the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas.
- Obstacle sheets per respective route;
- Thorough map study;
- Emergency Safety Altitude (ESA).

The proposed routes will be flown by daylight on a yearly basis in order to update the Obstacle clearance sheet.

In order to provide awareness, all night flights will be announced by the night flight message sent by Steenokkerzeel ATCC each THU for the next week. Also, a FPL needs to be filed for any night flight not later than 1100 on the day of flight. AMC will:

- provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing Aircraft.

Radio contact with Belga Information is mandatory for the complete formation throughout the flight, except when crossing controlled airspace.

All altitudes depicted are minimum altitudes, aircraft may fly above the minimum altitude provided that they remain outside controlled airspace.

The FALCON routes are depicted on the chart in [ENR 6-ENRC.05b](#).

Note: Only that part of the FALCON routes situated within the Brussels FIR is published..

**FALCON ROUTE**

Speed (KT)	Turning point	Position	FL or altitude (FT)		
			in IMC	in VMC	
420	A	510100.0N 0051600.0E	3000 and 4000	3000 and 4000	
	B	502226.4N 0053103.0E	FL 050 and FL 060	3000 and 4000	
	C	494324.6N 0053236.0E	FL 050 and FL 060	3000 and 4000	
	D	495216.8N 0045552.2E	FL 050 and FL 060	3000 and 4000	
	E	501702.4N 0050536.0E	FL 050 and FL 060	3000 and 4000	
	F	501646.2N 0041734.8E	FL 050 and FL 060	3000 and 4000	
	G	502705.4N 0034520.4E	FL 050 and FL 060	3000 and 4000	
	H	505603.0N 0032554.0E	FL 050 and FL 060	3000 and 4000	
	J	504957.0N 0025955.8E	FL 050 and FL 060	3000 and 4000	
	K	511122.2N 0033325.8E	FL 050 and FL 060	3000 and 4000	
			511400.0N 0035900.0E (Entry Brussels TMA Three)	4000 and FL 050	3000 and 4000
			511500.0N 0041300.0E (Entry Brussels TMA Two)	3000 and 4000	3000 and 4000
		L	511724.0N 0043219.8E (Entry Brussels TMA Four)	3000 and 4000	3000 and 4000
	M	510400.0N 0050000.0E (Exit to Kleine-Brogel TMA)	3000 and 4000	3000 and 4000	

**FALCON ROUTE SHORT**

Speed (KT)	Turning point	Position	FL or altitude (FT)	
			in IMC	in VMC
Proceed as FALCON till				
420	S	502855.8N 0053607.8E	FL 050 and FL 060	3000 and 4000
	T	502304.8N 0045950.4E	FL 050 and FL 060	3000 and 4000

**2.2.2 DARK FALCON Routes (Belgian F16 only)**

The DARK FALCON routes consist of an integrated system of low flying routes, flown at day or night by Belgian Air Component jet aircraft in VMC only.

For flights in uncontrolled airspace a Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed night flight altitudes: Along predetermined routes using NVG: minimum altitude of 1000FT above the highest obstacle within a radius of 5KM of the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas.
- Obstacle sheets per respective route;
- Thorough map study;
- Emergency Safety Altitude (ESA).

The proposed routes will be flown by daylight on a yearly basis in order to update the Obstacle clearance sheet.

In order to provide awareness, all night flights will be announced by the night flight message sent by Steenokkerzeel ATCC each THU for the next week. Also, a FPL needs to be filed for any night flight not later than 1100 on the day of flight. AMC will:

- provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing Aircraft.

Radio contact with Belga Information is mandatory for the complete formation throughout the flight, except when crossing controlled airspace.

All altitudes depicted are minimum altitudes, aircraft may fly above the minimum altitude provided that they remain outside controlled airspace.

This route can be flown by night with NVG. VMC conditions are mandatory.

Only to be flown clockwise.

The approval of SOF to perform VFR OPS within the CTR is not required to use this particular route when passing inside the CTR.

Climb-outs are allowed from this route (e.g. to reach a TSA...) provided that a pre-coordination is done with Steenokkerzeel ATCC prior take-off.

The DARK FALCON routes are depicted on the chart in [ENR 6-ENRC.05c](#).

*Note: Only that part of the FALCON routes situated within the Brussels FIR is published.*

### DARK FALCON

Speed (KT)	Turning point	Landmark	Position	Altitude (FT)
420	7A	Stree	5016.5557N 00417.9130E	1800
	7B	Highway exit	5027.0422N 00343.7557E	1600
	7C	Road crossing	5032.8103N 00336.2393E	1600
	7D	Highway crossing	5104.5163N 00327.0206E	1600
	7E	Docks	5108.7643N 00347.4314E	1800
	7F	Loenhout	5123.9191N 00438.6253E	1400
	7G	Postel	5117.1687N 00511.3622E	1700
	7H	Y Canal	5105.6429N 00508.2832E	1600
	7I	Airfield	5047.3865N 00511.8103E	1700
	7J	Crossing Eghezee	5035.5006N 00454.7498E	2200
	7K	Highway exit	5019.0992N 00507.7858E	2900
	7L	Dam Coo	5023.4087N 00552.3129E	3400
	7M	Bridge	4941.0657N 00530.7939E	2400
	7N	Castle	4947.6150N 00503.9759E	2500
	7O	Railroad	4959.0288N 00458.6793E	2800
	7P	Railroad	5007.8642N 00516.6229E	2500
7Q	Y junction	5021.8959N 00452.3775E	2400	
	7A	Stree	5016.5557N 00417.9130E	

### DARK FALCON SHORT NORTH

Speed (KT)	Turning point	Landmark	Position	Altitude (FT)
420	7A	Stree	5016.5557N 00417.9130E	1800
	7B	Highway exit	5027.0422N 00343.7557E	1600
	7C	Road crossing	5032.8103N 00336.2393E	1600
	7D	Highway crossing	5104.5163N 00327.0206E	1600
	7E	Docks	5108.7643N 00347.4314E	1800
	7F	Loenhout	5123.9191N 00438.6253E	1400
	7G	Postel	5117.1687N 00511.3622E	1700
	7H	Y Canal	5105.6429N 00508.2832E	1600
	7I	Airfield	5047.3865N 00511.8103E	1700
	7J	Crossing Eghezee	5035.5006N 00454.7498E	2200
	7K	Highway exit	5019.0992N 00507.7858E	2500
	7Q	Y junction	5021.8959N 00452.3775E	

### DARK FALCON SHORT SOUTH

Speed (KT)	Turning point	Landmark	Position	Altitude (FT)
420	7K	Highway exit	5019.0992N 00507.7858E	2900
	7L	Dam Coo	5023.4087N 00552.3129E	3400
	7M	Bridge	4941.0657N 00530.7939E	2400
	7N	Castle	4947.6150N 00503.9759E	2500
	7O	Railroad	4959.0288N 00458.6793E	2800
	7P	Railroad	5007.8642N 00516.6229E	2500
	7Q	Y junction	5021.8959N 00452.3775E	

## 2.3 Navigation Routes 15W TPT

A Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed night flight altitudes:
  - Along predetermined routes using NVG: minimum altitude of 500FT above the highest obstacle within a radius of 1NM of the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas.
  - Along predetermined routes without NVG or outside predetermined routes: minimum altitude of 1000FT above the highest obstacle within a radius of 5KM of the aircraft as indicated on the Obstacle sheets per leg.
  - Above the lateral limits of the LFA Ardennes: Minimum Safety Height to be respected is 500FT above the highest obstacle within a radius of 1NM of the aircraft.
- Obstacle sheets per respective route;
- Thorough map study;
- Emergency Safety Altitude (ESA).

The proposed routes will be flown by daylight on a yearly basis in order to update the obstacle clearance sheet.

In order to provide awareness, all night flights for the next week will be coordinated and announced by the night flight message sent by Steenokkerzeel ATCC each THU for the next week. Also, a Flight Plan needs to be filed for any night flight not later than 1100 (1000) on the day of flight.:

AMC will:

- provide Brussels FIC with details on MIL low level night flights activities;
- coordinate night flights between helicopters and fixed wing aircraft.

Aircraft which have not been allocated a specific route segment shall avoid these night low flying routes, unless the respective route segment is not activated or the aircraft is under RIS/RC.

If the pilot can not maintain the enroute altitude for technical or other reasons, he shall assume the ESA, squawk A/7700 and request immediate ATC assistance.

Only pre-planned deviations will be allowed:

- For planned deviations of the routes and corridors an appropriate advance request shall be made to Steenokkerzeel ATCC not later than 24 HR prior take-off. All deviations are subject to approval of Steenokkerzeel ATCC;
- Upon instruction of Steenokkerzeel ATCC, the proposed TAP shall be aborted and the flight shall be continued at the enroute altitude, ESA or the allocated flight altitude depending on the instructions received.

The 15W Navigation Routes are depicted on the chart in [ENR 6-ENRC.05e](#).

### ROUTE 1

Turning point	Position		Emergency
AFI	5054.47N	00408.33E	Climb to ESA
BE066	5043.00N	00411.20E	
BE068	5032.40N	00414.00E	
BE069	5029.80N	00407.80E	
BE057	5022.45N	00401.87E	
BE071	5018.60N	00408.20E	
FSEW	5013.10N	00423.10E	

### ROUTE 2

Turning point	Position		Emergency
BUN	5107.12N	00450.52E	Climb to ESA
YANKE	5105.64N	00508.25E	
BE120	5100.00N	00513.40E	
NVG04	5050.74N	00520.32E	
BE164	5044.70N	00541.00E	
BE171	5014.90N	00543.80E	
BE181	4943.20N	00535.50E	
BE136	4948.60N	00500.30E	
FNENE	5017.10N	00453.00E	

**ROUTE 3**

Turning point	Position		Emergency
BE163	5051.20N	00530.00E	Climb to ESA
BEEXS	5027.91N	00455.01E	
FNENE	5017.10N	00453.00E	

**ROUTE 4**

Turning point	Position		Emergency
AFI	5054.47N	00408.33E	Climb to ESA
BE036	5057.40N	00334.00E	
DIKSM	5102.04N	00251.89E	

**2.4 NVG Link Routes Belgian Military Helicopters**

A Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed Night Flight altitudes:
  - Along predetermined routes using NVG: minimum altitude of 200FT above the highest obstacle within a radius of 1KM of the aircraft as indicated on the Obstacle sheets per leg.
  - Along predetermined routes without NVG or outside predetermined routes: minimum altitude of 500FT above the highest obstacle within a radius of 3KM of the aircraft as indicated on the Obstacle sheets per leg.
  - In the HTAs: at an altitude between GND and 500FT AGL, adapting speed and height in function of the contours and cover of the ground.
- Obstacle sheets per respective route
- Thorough map study
- Minimum Safe Altitude (MSA)

The proposed routes will be flown by daylight on a yearly basis in order to update the Obstacle clearance sheet.

In order to provide awareness, all night flights will be announced by the night flight message sent by Steenokkerzeel ATCC each Thursday for the next week. Also, a Flight Plan needs to be filed for any night flight not later than 1100 (1000) on the day of flight. AMC will:

- Provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing aircraft.

aircraft which have not been allocated a specific route segment shall avoid these night low flying routes, unless the respective route segment is not activated or the aircraft is under RIS/RC.

If the pilot cannot maintain the en-route altitude for technical or other reasons, he shall assume the MSA, squawk A/7700 and request immediate ATC assistance.

Only pre-planned deviations will be allowed:

- *For planned deviations of the routes and corridors an appropriate advance request shall be made to COMOPSAIR not later than 24HR prior take-off. All deviations are subject to approval by COMOPSAIR.*
- *Upon instruction of Steenokkerzeel ATCC, the proposed TAP shall be aborted and the flight shall be continued at the en-route altitude, ESA or the allocated flight altitude depending on the instructions received.*

The Belgian Military Helicopter NVG Routes are depicted on the chart in [ENR 6-ENRC.05d](#).

To allow maximum training value and to reduce repetitive overflights of the same route, a set of reporting points is established. The link routes are any acceptable combination of routes between those published points. Full priority will be given to night flights planned to follow route BENE TWO (see [§ 2.1.1](#) above).

**NORTH SECTOR**

Reporting point	Landmark	Position	Remark
N1	Cheratte	504025N 0053916E	Road crossing
N2	Tongeren	504725N 0053123E	Road crossing
N3	Zutendaal	505630N 0053400E	
N4	Remicourt	504102N 0051825E	
N5	Walshoutem	504226N 0050427E	Road crossing
N6	Sint-Truiden	504711N 0051122E	
N7	Goetsenhoven	504632N 0045717E	
N8	Lummen	510002N 0051230E	Road crossing
N9	Aarschot	505731N 0044919E	Road crossing

**NORTH SECTOR**

Reporting point	Landmark	Position	Remark
N10	Schaffen	505934N 0050334E	
N11	Balen Keiheuvel	511025N 0051309E	
N12	Postel	511705N 0051111E	Road crossing
N13	Weelde	512323N 0045720E	
N14	Heist o/d Berg	510421N 0044234E	Road crossing
N15	Duffel	510532N 0042923E	
N16	Zoersel	511532N 0044507E	
N17	Entry east	512316N 0043435E	
N18	Entry south	511700N 0043129E	
N19	Entry west	511911N 0042525E	
N20	Helchteren	514000N 0052400E	
N21	Kinrooi	510827N 0054416E	
N22	Lanaken	505329N 0053904E	
N23	Flora	505221N 0050800E	

**SOUTH SECTOR**

Reporting point	Landmark	Position	Remark
S1	Villers-le-Bouillet	503431N 0051219E	Road crossing
S2	Marche-les-Dames	512901N 0045732E	
S3	Namur Suarlée	502910N 0044605E	
S4	Gembloux	503403N 0044206E	
S5	Ivoi	502230N 0045548E	
S6	Sovet	501707N 0050215E	
S7	Tinlot	502828N 0052223E	Road crossing
S8	Spa	502834N 0055422E	
S9	Manhay	501720N 0054008E	
S10	Marche-en-Famenne	501407N 0052101E	Road crossing
S11	Saint-Hubert	500202N 0052614E	
S12	Bastogne	500018N 0054100E	Road crossing
S13	Bertrix	495318N 0051316E	
S14	Stockem	494035N 0054625E	
S15	Agimont	501000N 0044734E	
S16	Rance	500824N 0041627E	

**WEST SECTOR**

Reporting point	Landmark	Position	Remark
W1	Stekene	511326N 0040313E	Road crossing
W2	Zelee	510405N 0040210E	
W3	Wetteren	505820N 0034922E	Road crossing
W4	Overboelare	504428N 0035115E	
W5	Amougies	504413N 0032906E	
W6	Moorsele	505106N 0030830E	
W7	Ursel	510823N 0032819E	
W8	Leers-et-Fosteau	501800N 0041500E	
W9	Carrefours Mons	502318N 0035800E	
W10	Lion de Waterloo	504029N 0042414E	

For safety and de-confliction reasons only the following route based on a set combination of points can be flown Night VFR assisted by NVG:

All routes may be flown clockwise and counter-clockwise.

**Night VFR assisted by NVG**

West 1 - 22		West 1 - 04		North 1 - 22		North 1 - 04		South 1 - 22		South 1 - 04	
Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL
EBBE		EBBE		EBBE		EBBE		EBBE		EBBE	
BIERB.	900	GAST.	900	BIERB.	900	HOEG.	900	LONG.	900	HOEG.	900
N14	800	W10	1300	N14	800	N23	800	S4	1400	N23	800
W2	800	W4	1500	N16	700	N8	800	S3	1400	N2	1000
W4	900	W2	900	N13	700	N11	900	S2	1700	N1	1300
W10	1500	N14	800	N12	600	N12	900	S7	1600	S7	1900
GAST.	1300	BIERB.	800	N11	900	N13	600	N1	1900	S2	1600
EBBE	900	EBBE	900	N8	900	N16	700	N2	1300	S3	1700
EET: 0100 MSA: 1500 FT		EET: 0100 MSA: 1500 FT		N23	800	N14	700	N23	1000	S4	1400
				HOEG.	800	BIERB.	800	HOEG.	800	LONG.	1400
				EBBE	900	EBBE	900	EBBE	900	EBBE	900
				EET: 0100 MSA: 900 FT		EET: 0100 MSA: 900 FT		EET: 0100 MSA: 1900 FT		EET: 0100 MSA: 1900 FT	

**Night VFR assisted by NVG**

West 2 - 22		West 2 - 04		North 2 - 22		North 2 - 04		South 2 - 22		South 2 - 04	
Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL
EBBE		EBBE		EBBE		EBBE		EBBE		EBBE	
BIERB.	900	GAST.	900	BIERB.	900	HOEG.	900	LONG.	900	HOEG.	900
N14	800	W10	1300	N14	800	N23	800	S4	1400	N23	800
W2	800	W4	1500	N16	700	N2	1000	S15	1900	N2	1000
W7	800	W5	1100	N18	1100	N3	1300	EBFS D	1900	N1	1300
W5	900	W7	900	N19	1000	N21	1300	S13	2000	S9	2600
W4	1100	W2	800	N17	1100	N12	900	S11	2400	S11	2600
W10	1500	N14	800	N13	1100	N13	600	S9	2600	S13	2400
GAST.	1300	BIERB.	800	N12	600	N17	1100	N1	2600	EBFS D	2000
EBBE	900	EBBE	900	N21	900	N19	1100	N2	1300	S15	1900
EET: 0130 MSA: 1500 FT		EET: 0130 MSA: 1500 FT		N3	1300	N18	1000	N23	1000	S4	1900
				N2	1300	N16	1100	HOEG.	800	LONG.	1400
				N23	1000	N14	700	EBBE	900	EBBE	900
				HOEG.	800	BIERB.	800	EET: 0130 MSA: 2600 FT		EET: 0130 MSA: 2600 FT	
				EBBE	900	EBBE	900				
				EET: 0130 MSA: 1300 FT		EET: 0130 MSA: 1300 FT					

**Night VFR assisted by NVG**

West 3 - 22		West 3 - 04	
Turning Point	FT AMSL	Turning Point	FT AMSL
EBBE		EBBE	
BIERB.	900	GAST.	900
N14	800	W10	1300
N18	900	W9	1300
N19	1000	W6	1100
W1	1000	W7	800
W7	800	W1	800

**Night VFR assisted by NVG**

West 3 - 22		West 3 - 04	
Turning Point	FT AMSL	Turning Point	FT AMSL
W6	800	N19	1000
W9	1100	N18	1000
W10	1300	N14	900
GAST.	1300	BIERB.	800
EBBE	900	EBBE	900
EET: 0145 MSA: 1500 FT		EET: 0145 MSA: 1500 FT	

**2.5 TACAN ROUTES**

Note: State aircraft traffic between Belgium, Luxembourg and France along TACAN routes must be transferred as GAT flights. Following rules apply:  
 - OAT flying on TG1 will be routed to France via DIK on UA242 and becomes GAT from intersection of TG-1 and UA24.  
 - State aircraft traffic transiting Luxembourg and south of Belgium will be routed as GAT on UR110 via NTM, LUX, MMD and vice versa.

Route designator {RNP Type}	[Route usage notes]					
Significant Point Name	Significant point coordinates				Remarks	
{RNP Type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>TG1</b>	(1) HX					
△ Koksy TACAN (KOK)	510557N 0023920E					
	123/305	92.0NM	$\frac{UNL}{FL260}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup> {class C}	
△ Florennes TACAN (BFS)	501429N 0043912E					
	100/281	58.2NM	$\frac{UNL}{FL260}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup> {class C} (2)	
△ FEWUZ	500405N 0060726E					
<b>Route remarks:</b> Control unit: Steenokkerzeel ATCC. (1) Route closed when <u>TSA26A</u> is active.						
<b>Segment remarks:</b> (2) For continuation see <i>AIP Germany</i> .						



Route designator {RNP Type}	[Route usage notes]					
Significant Point Name	Significant point Coordinates				Remarks	
{RNP Type}	Initial track MAG	Geodesic DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
<b>TL4</b>	(1) HX					
△ NPT London UIR / Brussels UIR	512941N 0020000E				(3)	
	134/314	34.4 NM	$\frac{UNL}{FL260}$	Odd <sup>(1)</sup>	Even <sup>(1)</sup>	{class C} (2)
△ Koksy TACAN (KOK)	510557N 0023920E					
<p><b>Route remarks:</b> Control unit: Steenokkerzeel ATCC.</p> <p><b>Segment remarks:</b> (2) Minimum IFR cruising level FL270.</p> <p><b>Point remarks:</b> (3) For continuation see <i>AIP United Kingdom</i>.</p>						

THIS PAGE INTENTIONALLY LEFT BLANK

---

**ENR 3.4 En-route Holding**


---

**BRUSSELS - NICKY**

Fix	Inbound track (MAG)	Turn	Holding level (MNM / MAX)	Control unit
BUB DVOR/DME - NIK DVOR/DME	112° / 292°	Left	FL 150 / FL 440	Maastricht UAC (ABV FL 245) Brussels ACC (BLW FL 245)

**BRUSSELS - COSTA**

Fix	Inbound track (MAG)	Turn	Holding level (MNM / MAX)	Control unit
BUB DVOR/DME - COA DVOR/DME	112° / 292°	Left	FL 150 / FL 440	Maastricht UAC (ABV FL 245) Brussels ACC (BLW FL 245)

**GOSLY**

Fix	Inbound track (MAG)	Turn	Holding level (MNM / MAX)	Control unit
GSY DVOR/DME	358°	Left	FL 100 / FL 230 <sup>(1)</sup>	Brussels ACC
<small>(1) MNM level FL 130 during MIL operational hours.</small>				

THIS PAGE INTENTIONALLY LEFT BLANK

# ENR 4 RADIO NAVIGATION AIDS / SYSTEMS

## ENR 4.1 Radio Navigation Aids - En-route

Name of station (MAG VAR/year)	ID	Frequency (CH)	Hours of operation	Coordinates	DME antenna ELEV	Remarks
1	2	3	4	5	6	7
Affligem DVOR/DME (1°E/2020)	AFI	114.900MHZ (CH 96X)	H24	505428N 0040820E	300FT AMSL	DOC: 40NM - FL250 Sector E: 90NM - FL250.
Antwerpen DVOR/DME (1°E/2020)	ANT	113.500MHZ (CH 82X)	H24	511126N 0042821E	100FT AMSL	DOC: 40NM - FL250
Beauvechain TACAN (2°E/2022)	BBE	(CH 107X)	H24	504525N 0044607E	300FT AMSL	DOC: 100NM - FL250 OPR: Belgian Air Component. Might present azimuth unlocks in sector 094-096, 104-110, 128-130, 169-171, 192-196 DEG. No OPR limitation. Pilots are requested to report any abnormality to ATC.
Kleine-Brogel TACAN (2°E/2019)	BBL	(CH 33X)	H24	511003N 0052751E	200FT AMSL	DOC: 40NM - FL250 OPR: Belgian Air Component.
Florennes TACAN (2°E/2020)	BFS	(CH 52X)	H24	501429N 0043912E	1000FT AMSL	DOC: 100NM - FL600 Sector SE: 200NM - FL600. OPR: Belgian Air Component. TACAN restricted due to azimuth unlocks may be observed in sector R341-R347
Brussels DVOR/DME (1°E/2020)	BUB	114.600MHZ (CH 93X)	H24	505408N 0043217E	200FT AMSL	DOC: 100NM - FL500 FRA (IDA)
Bruno DVOR/DME (1°E/2020)	BUN	110.600MHZ (CH 43X)	H24	510707N 0045032E	100FT AMSL	DOC: 40NM - FL250
Chièvres DVOR (1°E/2020)	CIV	113.200MHZ	H24	503426N 0034958E		DOC: 60NM - FL500 DVOR is located 808M from TACAN. Both aids can therefore not be considered as collocated. FRA (ID)
Chièvres TACAN (2°E/2022)	CIV	(CH 79X)	H24	503420N 0034918E	200FT AMSL	DOC: 60NM - FL500 TACAN unreliable: 056°-234° and 315°-326° beyond 30NM BLW 3000FT. OPR: USAF
Costa DVOR/DME (1°E/2020)	COA	110.050MHZ (CH 37Y)	H24	512053N 0032119E	0FT AMSL	DOC: 60NM - FL500
Diekirch DVOR/DME (2°E/2020)	DIK	114.400MHZ (CH 91X)	H24	495141N 0060747E	1100FT AMSL	DOC DVOR: 100NM - FL500 FRA (IDA)
Flora DVOR/DME (2°E/2020)	FLO	112.050MHZ (CH 57Y)	H24	505236N 0050804E	100FT AMSL	DOC: 50NM - FL250
Gosly DVOR/DME (1°E/2020)	GSY	115.700MHZ (CH 104X)	H24	502714N 0042629E	600FT AMSL	DOC: 30NM - FL260

Name of station (MAG VAR/year)	ID	Frequency (CH)	Hours of operation	Coordinates	DME antenna ELEV	Remarks
1	2	3	4	5	6	7
Huldenberg DVOR/DME (1°E/2020)	HUL	117.550MHZ (CH 122Y)	H24	504458N 0043830E	400FT AMSL	DOC: 40NM - FL250 Sector NNW-NE: 32NM - FL250.
Koksy VORTAC (1°E/2020)	KOK	114.500MHZ (CH 92X)	H24	510541N 0023906E	0FT AMSL	DOC: 80NM - FL500 Sector SE: 100NM - FL500. FRA (I)
Koksy TACAN (1°E/2017)	KOK	(CH 92X)	H24	510557N 0023920E	0FT AMSL	DOC: 80NM - FL500 Sector SE: 100NM - FL500. OPR: Belgian Air Component.
Liège DME	LIE	CH 85Y	H24	504203N 0053258E	700 FT AMSL	DOC: 40NM - FL250
Olno DVOR/DME (2°E/2020)	LNO	112.800MHZ (CH 75X)	H24	503509N 0054237E	900FT AMSL	DOC: 60NM - FL500 Sector NW-SW: 80NM - FL500. FRA (ID)
Luxembourg DVOR/DME (2°E/2020)	LUX	112.250MHZ (CH 59Y)	H24	493822N 0061450E	1200FT AMSL	DOC: 60NM - FL250
Mackel NDB	MAK	360.500KHZ	H24	505752N 0032947E		DOC: 50NM
Maastricht VOR/DME (2°E/2020)	MAS	108.600MHZ (CH 23X)	H24	505819N 0055738E		DOC: 40NM - FL250 OPR: See <i>AIP the Netherlands</i> .
Nicky DVOR/DME (1E°/2020)	NIK	117.400MHZ (CH 121X)	H24	510954N 0041102E	100FT AMSL	DOC: 60NM - FL500 Sector E: 100NM - FL500. FRA (ID)
Charleroi NDB	ONC	323.000KHZ	H24	502922N 0043319E		DOC: 25NM
Liège NDB	ONL	290.000KHZ	H24	504204N 0053257E		DOC: 25NM
Oostende NDB	ONO	399.500KHZ	H24	511313N 0030042E		DOC: 50NM
Antwerpen NDB	ONW	355.000KHZ	H24	511003N 0043358E		DOC: 50NM
Sprimont DVOR/DME (2°E/2020)	SPI	113.100MHZ (CH 78X)	H24	503053N 0053725E	1000FT AMSL	DOC: 60NM - FL500 Sector NW-SW: 80NM - FL500. FRA (IDA)

---

## ENR 4.2 Special Navigation Systems

---

NIL - Not-applicable

THIS PAGE INTENTIONALLY LEFT BLANK



---

**ENR 4.3 Global Navigation Satellite System (GNSS)**

---

<b>Name of GNSS element</b>	<b>Frequency</b>	<b>Coverage area</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
GPS	1575.42 MHZ	All state airspace	OPR: U.S. Department of Defense
EGNOS	1575.42 MHZ	All state airspace	OPR: ESSP – European Satellite Service Provider S.A.S.

THIS PAGE INTENTIONALLY LEFT BLANK

## ENR 4.4 Name-code Designators for Significant Points

Name-code designator	Coordinates	ATS route (ENR 3.2)	ATS route (other)
1	2	3	4
ABLAZ	503338N 0052553E		IAP EBLG
ABLIX	502652N 0041023E		IAP EBCI
ADIXO	503453N 0050220E		SID EBBR
ADUSU	495722N 0061146E	T856	
ADUTO	503054N 0032142E	N873	FRA (E)
AGENI	504500N 0060200E	T855	
AKELU	492201N 0062750E		SID/STAR ELLX
AKOVI	504450N 0034307E		STAR EBBR, STAR EBAW
ALFAS	505207N 0032126E		IAP EBKT
ALHUV	503914N 0052814E		STAR EBLG, IAP EBLG
AMMOF	511855N 0041752E	N872	
AMPUM	493227N 0054848E	Z110	
ANETS	505556N 0054412E	UM617	
ARCKY	501757N 0060756E	L607, N853, Q50, T181, T853	FRA (I), SID ELLX
ARDEN	495143N 0045128E		FRA (E)
ARPUR	511132N 0040505E		IAP EBAW
ARVOL	503245N 0032949E		STAR EBAW, STAR EBBR, STAR EBCI
ARVUG	495522N 0061345E	UN857	
ASDAK	503608N 0061507E	T880	
ASMOX	495410N 0061634E		SID ELLX
ASPIX	502907N 0052500E		SID EBCI
AUZON	510915N 0023417E		IAP EBOS
BARTU	510011N 0041018E	UY131	
BATTY	503857N 0055056E	L608, T855, T880, Y37	STAR EBAW, STAR EBBR, STAR EBCI
BEKEM	512556N 0043449E	Z311	STAR EBBR

Name-code designator	Coordinates	ATS route (ENR 3.2)	ATS route (other)
1	2	3	4
BELOB	504234N 0031252E	UY873	FRA (E)
BETEX	494857N 0062531E	UN858, Z110	STAR ELLX FRA (I)
BEVRI	511522N 0041011E		IAP EBAW
BIBOS	502838N 0041625E		IAP EBCI
BITBU	495859N 0063342E		STAR ELLX
BREDI	493120N 0061730E		STAR ELLX
BROGY	511057N 0052656E	N852	
BUGIB	502202N 0062158E	T181	
BULAM	512109N 0024501E	L610	
BULUX	503534N 0051505E		SID EBBR, SID EBCI
BUPAL	504323N 0043604E	UL607, UM617	
BURUS	504252N 0042515E		IAP EBBR
DELOM	501853N 0040523E	UY50, UZ319	FRA (X)
DEMUL	495747N 0055843E	M624, Y181	FRA (ID)
DENOX	505246N 0040140E	L607, N872, UZ319	FRA (I)
DENOV	503812N 0061226E	T857	
DENUT	511410N 0033927E	L608, L610, UY873, Y18	SID EBBR, STAR EBOS FRA (I)
DIBLI	512443N 0021545E	L610	
DIKBO	505849N 0045234E		IAP EBBR
DINAN	494955N 0051953E	M170, UY157	FRA (I)
EFFAP	494530N 0054210E		STAR ELLX
EGZOV	510303N 0043217E		IAP EBBR
ELSIK	511142N 0045955E	L179	SID EBBR FRA (ID)
ERIGO	505017N 0053022E	M617	
ETENO	501055N 0061130E	Y863	
EVSEN	502451N 0051832E		IAP EBLG
EXCOS	493420N 0062814E	Q763	SID/STAR ELLX

Name-code designator	Coordinates	ATS route (ENR 3.2)	ATS route (other)
1	2	3	4
FAMEN	495830N 0043400E		DCT (see <a href="#">ENR 3.3. § 1</a> )
FERDI	505445N 0033813E	N873, UL607, UY50, Y18, Y50	SID/STAR EBOS FRA (IA)
FEWUZ	500405N 0060726E	TG1	
GEBKI	493246N 0052704E	Y180	SID ELLX
GESLO	500445N 0060018E	N852, Z104	STAR EBLG, SID ELLX FRA (IA)
GIGAD	505142N 0025731E		IAP EBKT
GIKLI	504207N 0054402E		IAP EBLG
GIKNU	505738N 0044724E		IAP EBBR
GILOM	504507N 0044627E	L607, M624	STAR EBLG, SID EBAW
GIREL	501514N 0053229E		STAR EBLG
GIRVI	504644N 0030356E		DCT (see <a href="#">ENR 3.3. § 1</a> ) FRA (E)
GIVOR	483931N 0062329E		STAR ELLX
GOBNO	505856N 0055923E	Z717	
GOLEX	505643N 0033657E	L607, Y50	
GOPAS	495759N 0060411E	N852, Y181	
GUGNO	502821N 0044842E		IAP EBCI
HELEN	511407N 0035211E	L179, N873, Y28	SID EBBR FRA (I)
IBERA	493030N 0061630E	N853	FRA (I)
IBESA	502939N 0061958E	T853	FRA (I)
IDOKO	502026N 0035223E	Y50	
IDOSA	494430N 0055211E	UN857, Y180, Z283	FRA (I)
IKIFE	504650N 0025918E		IAP EBKT
IMVIX	502221N 0061706E	T181	
INRAB	510614N 0044115E		IAP EBBR
IPLAN	504657N 0052501E		IAP EBLG
IRTON	493300N 0053300E		STAR ELLX
JAZFI	510544N 0040206E	Y28	

Name-code designator	Coordinates	ATS route (ENR 3.2)	ATS route (other)
1	2	3	4
KAQZI	503226N 0051727E		IAP EBLG
KEGIT	512425N 0030624E	L179, L608	
KERKY	505537N 0035933E		IAP EBBR, STAR EBBR, STAR EBCI
KOGES	503412N 0061202E	N853	
KOMOB	500838N 0052225E	M150, T859	FRA (IDA)
KONAN	510751N 0020000E	L607, UL607	SID EBOS FRA (E)
KUDIN	494135N 0051546E	M170	FRA (X)
LAREP	502634N 0054739E	Q50	
LAVTO	504547N 0053822E		IAP EBLG
LEBVU	505419N 0041934E		IAP EBBR
LENDO	503731N 0061643E	T859	FRA (I)
LERVO	504959N 0040931E	UY131	
LIBVA	504542N 0053830E		IAP EBLG
LIMGO	493814N 0061654E	N852, Q763, UN858, Z110, Z111	STAR ELLX FRA (IA)
LIPNI	493148N 0055045E	UN858	FRA (EX)
LITPO	503605N 0050958E		IAP EBLG
LOLGI	503946N 0050913E		STAR EBCI
LIRSU	501112N 0062712E	L608	FRA (I)
LUMEN	511610N 0032424E	L610, UY50, Y50	
LUTAX	493258N 0054858E	UM163	FRA (E)
LUTOM	511556N 0052516E	N852	
MADUX	511336N 0022427E	Q70	
MAGIP	504512N 0024820E		IAP LFQT
MAKIK	495812N 0061002E	Y181	
MAKOB	503726N 0042549E		IAP EBBR
MAPAD	504946N 0060109E	Y868	
MAPUP	502905N 0051156E		IAP EBLG

Name-code designator	Coordinates	ATS route (ENR 3.2)	ATS route (other)
1	2	3	4
MATUG	502500N 0062211E	UL607	FRA (I)
MEDIL	502032N 0034030E	N872	SID EBCI FRA (EX)
MINLU	504745N 0030527E		IAP EBKT
MIRZO	505428N 0032821E		IAP EBKT, SID EBKT
MOSET	493247N 0062039E		STAR ELLX
NAVAK	504939N 0055505E	Y868, Z283	
NAXOD	510101N 0045154E		IAP EBBR
NEPIV	502805N 0052335E		IAP EBLG
NILEM	501748N 0040708E	UY131	FRA (X)
NISIV	495334N 0061435E	Y180	
NIVOR	504138N 0041727E		IAP EBBR, STAR EBCI
NOYON	511443N 0031038E		IAP EBOS
NPT	512941N 0020000E	TL4	
OGBOL	504918N 0053917E	Y868	
OKLUP	510525N 0044253E		IAP EBBR
OLBUS	503611N 0032206E		IAP LFQQ
OLPUN	503918N 0053933E		IAP EBLG
ORVOS	493024N 0052956E		
OSLID	503020N 0032407E		IAP LFQQ, STAR LFQQ
OSNIZ	510427N 0043513E		IAP EBAW
OSTAT	503312N 0050529E		IAP EBLG
OSVAM	502617N 0044135E		IAP EBCI
OXCAM	494954N 0063018E		STAR ELLX
OXUBA	504717N 0024405E		IAP LFQT
PABLI	503547N 0045543E		SID EBBR
PELIX	502949N 0054545E	UL607	
PESOV	502239N 0062054E	T180	

Name-code designator	Coordinates	ATS route (ENR 3.2)	ATS route (other)
1	2	3	4
PETAN	493310N 0055238E		STAR ELLX
PEVAD	511629N 0040317E	L191	
PINUS	504547N 0055145E	Z283	
PITES	494343N 0063110E	M150, Z111	SID EBBR FRA (I)
PIZVE	503021N 0052044E		IAP EBLG
PODAT	504145N 0060811E	M170	
PODEN	504121N 0060825E	Y862	
PONIG	494536N 0063410E		IAP ELLX, STAR ELLX
PUTTY	512157N 0042015E		SID EBAW
RAPIX	512635N 0020000E	L610	FRA (X)
RAPOR	493529N 0051247E		SID ELLX
RASCA	500845N 0045252E		FRA (X)
REKPI	502325N 0041251E		IAP EBCI
REMBA	503944N 0045451E	M624, UL607	SID EBBR, STAR ELLX FRA (IDA)
REMGO	494633N 0050116E	UY157	
RERTI	505036N 0053050E		IAP EBLG
RITAX	500440N 0054825E	M624, UT27, Z104, Z283	SID EBBR, SID EBCI, STAR EBLG, STAR ELLX FRA (IDA)
ROBAL	502824N 0033800E	M617, UM617	
ROBON	500442N 0060712E	Z104	
RODRI	505236N 0035146E		STAR EBBR
ROFAC	505330N 0054118E	M617	
ROUSY	492835N 0060654E	M624, UT27	SID EBBR FRA (I)
RUBUT	504905N 0024033E		DCT (see ENR 3.3. § 1) FRA (E)
RUDEL	504101N 0041337E		IAP EBBR
RUDIX	502504N 0050607E		STAR EBLG
SASKI	513253N 0023000E	L179, L608	SID EBOS FRA (X)
SISGA	503705N 0040324E	UM617, UZ319	FRA (I)



Name-code designator	Coordinates	ATS route (ENR 3.2)	ATS route (other)
1	2	3	4
SKARD	510952N 0031229E		IAP EBOS
SOGRI	504823N 0050243E	L608, M617, UM617, Y868	FRA (IDA)
SONDI	511126N 0045018E	L179	SID EBAW
SOPOK	501510N 0054626E	Y863, Z283	SID EBBR, SID EBCI FRA (ID)
SORAL	490650N 0062616E		STAR ELLX
SORAT	511257N 0053548E	L179	
SUMAS	505635N 0060059E	Z283	
SUTAL	492800N 0062330E	N852	SID ELLX FRA (I)
SUXIM	501658N 0061719E	L607	
TALUD	493604N 0052514E	Q763	SID ELLX
TERLA	504057N 0053956E	L608, N852	
TILVI	493630N 0053503E	Q763, Y180	SID ELLX
TOLVU	493731N 0052218E	UN857	FRA (X)
TOSCO	510424N 0023608E		IAP EBOS
TULNI	503327N 0031656E		STAR EBAW, STAR EBBR
TUTSO	502900N 0051204E		IAP EBLG
UBOLT	511934N 0030846E		IAP EBOS
ULPEN	504520N 0055539E		SID EHBK
UMPES	510356N 0044548E		IAP EBBR
UPMIT	503907N 0032105E		IAP LFQQ
UVETI	505914N 0044542E		IAP EBBR
VABIK	511447N 0020000E	Q70	
VAMKA	503252N 0044528E		IAP EBCI
VAMVO	510713N 0043513E		IAP EBBR
VAVOT	492913N 0053400E		STAR ELLX
WOODY	512420N 0042159E	N872, Z310	STAR EBAW, STAR EBBR FRA (I)
ZAFRI	511407N 0023227E		IAP EBOS

THIS PAGE INTENTIONALLY LEFT BLANK

---

## ENR 4.5 Aeronautical Ground Lights - En-route

---

NIL

THIS PAGE INTENTIONALLY LEFT BLANK

# ENR 5 NAVIGATION WARNINGS

## ENR 5.1 Prohibited, Restricted and Danger Areas

### 1 PROHIBITED AREAS

NIL

### 2 RESTRICTED AREAS

#### EBR01 - BRUSSELS CITY

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505311N 0042013E - an arc of circle, 0.8NM radius, centred on 505311N 0042130E and traced clockwise to 505316N 0042247E - an arc of circle, 2.7NM radius, centred on 505039N 0042142E and traced clockwise to 505311N 0042013E.	UNL / GND	Entry prohibited, unless instructed by ATC.	PERM

#### EBR02 - ROYAL ESTATE OF CIERGNON

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.8NM radius, centred on 500958N 0050628E.	UNL / GND	Entry prohibited, unless instructed by ATC.	PERM

#### EBR03 - DIEST

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 505957N 0050355E. <sup>(1)</sup>	3500FT AMSL / GND	Parachute dropping zone and air exercises area. Entry prohibited, unless instructed by Schaffen Radio or Brussels APP. <sup>(2)</sup>	MON 0001 (SUN 2301) - SAT SR (HOL excl) <sup>(3)</sup>

(1) Brussels CTA East One excl. Beauvechain TMA One A and Kleine-Brogel TMA One excl during activation.

(2) Aircraft operating in the EBR03 situated in Class G airspace shall contact Steenokkerzeel ATCC or Brussels FIC before entering the area.

(3) Additional activation possible (see NOTAM).

**EBR04 - ELSENBORN 01 <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503117N 0061200E - along the Belgian-German border - 502557N 0062234E - 502557N 0060956E - 502657N 0060841E - 503117N 0061200E.	FL 170 / GND <sup>(2)(3)</sup>	Gunnery area, destruction centre of explosives, air exercises and UAS area. Entry prohibited to all aircraft. <sup>(4)</sup>	Weekly programme announced by NOTAM <sup>(5)</sup>
<p>(1) This airspace can be activated simultaneously with <u>TSA28A</u>, therefore UAS operators shall contact Shooting Range Safety Office Elsenborn, TEL + 32 (0) 2 442 76 70 or + 32 (0) 2 442 76 73 or <u>FREQ 138.975MHZ</u> to coordinate UAS operations with gunnery/destruction activities.</p> <p>(2) Upper limit may be restricted to FL 105 (see NOTAM).</p> <p>(3) Highest usable altitude for UAS is 4 500 FT AMSL.</p> <p>(4) Except MIL aircraft transiting to/from Camp Elsenborn and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Elsenborn, TEL +32 (0) 2 442 76 70 or TEL + 32 (0) 2 442 76 73. During CAS Air exercises, MIL aircraft shall obtain an additional entry clearance from the ALO "RINGO Range" on <u>FREQ 241.700MHZ</u> (back up <u>377.725MHZ</u>).</p> <p>(5) Activation can be checked with Steenokkerzeel ATCC or Brussels ACC Supervisor. This area is contiguous to EDR117 (see <i>AIP Germany</i>). Activation of EDR117 will be announced by NOTAM and can be checked with Steenokkerzeel ATCC or Brussels ACC Supervisor.</p>			

**EBR05A - HELCHTEREN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510723N 0053455E - 510157N 0053455E - 505929N 0051951E - 510452N 0051951E - 510557N 0052255E - 510723N 0053455E.	FL 100 / GND <sup>(1)</sup>	Firing and bombing exercises. Entry prohibited to non-participating aircraft.	HX <sup>(2)(3)</sup>
<p>(1) Upper limit may be restricted to 5000 FT AMSL.</p> <p>(2) Announced by NOTAM. May be activated MON to FRI (HOL excl) at irregular times. Activation can be checked with Brussels FIC, Steenokkerzeel ATCC or Kleine-Brogel APP.</p> <p>(3) Outside activation and between 2500 FT and 4500 FT AMSL, during EBBL OPR HR, <u>Kleine-Brogel TMA TWO</u> will be activated.</p>			

**EBR05B - HELCHTEREN RUN-IN <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510805N 0055036E - along the Belgian-Dutch border - 510333N 0054619E - 510157N 0053455E - 510607N 0053455E - 510805N 0055036E.	3300FT AMSL / 2050FT AMSL	Run-in lane for bombing exercises. Entry prohibited to non-participating aircraft.	HX <sup>(2)(3)(4)</sup>
<p>(1) Military aircraft proceeding to Helchteren range shall avoid to fly east of the river Meuse.</p> <p>(2) Announced by NOTAM. May be activated MON to FRI (HOL excl) at irregular times. Activation can be checked with Brussels FIC, Steenokkerzeel ATCC or Kleine-Brogel APP.</p> <p>(3) <u>EBR05B</u> will be activated automatically with <u>EBR05A</u>, unless <u>EBR05A</u> is limited to 5000 FT for firing exercises.</p> <p>(4) Outside activation and between 2500FT and 4500FT AMSL, during EBBL OPR HR, <u>Kleine-Brogel TMA TWO</u> will be activated.</p>			

**EBR05C - HELCHTEREN DOWNWIND<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510333N 0054619E - along the Belgian-Dutch border - 505655N 0054502E - 505528N 0053207E - 505530N 0052752E - 505533N 0051951E - 505929N 0051951E - 510157N 0053455E - 510333N 0054619E.	FL050 / 2850FT AMSL	Downwind lane for bombing exercises. Entry prohibited to non-participating aircraft.	HX <sup>(2)(3)(4)</sup>
<p>(1) Military aircraft proceeding to Helchteren range shall avoid to fly east of the river Meuse.</p> <p>(2) Announced by NOTAM. May be activated MON to FRI (HOL excl) at irregular times. Activation can be checked with Brussels FIC, Steenokkerzeel ATCC or Kleine-Brogel APP.</p> <p>(3) <u>EBR05C</u> will be activated automatically with <u>EBR05A</u>, unless <u>EBR05A</u> is limited to 5000 FT for firing exercises.</p> <p>(4) Outside activation and between 2500FT and 4500FT AMSL, during EBBL OPR HR, <u>Kleine-Brogel TMA THREE</u> will be activated.</p>			

**EBR05D - HELCHTEREN LOFT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505929N 0051951E - 510157N 0053455E - 505547N 0053455E - 505528N 0053207E - 505530N 0052754E - 505929N 0051951E.	FL075 / FL050	High intensity flights of jet aircraft during loft exercises. Entry prohibited to non-participating aircraft.	HX <sup>(1)(2)</sup>
<p>(1) May be activated MON to FRI (HOL excl) at irregular times. Activation can be checked with Brussels FIC, Steenokkerzeel ATCC or Kleine-Brogel APP.</p> <p>(2) Whenever the loft procedure is requested by Helchteren RANGE and approved by Steenokkerzeel ATCC the EBR05D is automatically activated. ACT can be checked with Kleine-Brogel APP or with Steenokkerzeel ATCC.</p>			

**EBR05E - HELCHTEREN MEDIUM LEVEL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505929N 0051951E - 510157N 0053455E - 511015N 0053455E - 510838N 0052127E - 510557N 0051658E - 510057N 0051655E - 505929N 0051951E.	FL240 / FL100	High intensity flights of jet aircraft during medium level bombing exercises. Entry prohibited to non-participating aircraft.	HX <sup>(1)</sup>
<p>(1) May be activated MON to FRI (HOL excl) at irregular times. Activation can be checked with Steenokkerzeel ATCC or Kleine-Brogel APP.</p>			

**EBR05F - HELCHTEREN STRAFING**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505929N 0051951E - 510157N 0053455E - 505547N 0053455E - 505528N 0053207E - 505530N 0052754E - 505929N 0051951E.	FL 155 / FL 075	High intensity flights of jet aircraft during strafing exercises. Entry prohibited to non-participating aircraft.	HX <sup>(1)(2)(3)</sup>
<p>(1) May be activated MON to FRI (HOL excl) at irregular times. Activation can be checked with Brussels FIC, Steenokkerzeel ATCC or Kleine-Brogel APP.</p> <p>(2) Whenever the strafing procedure is requested by Helchteren RANGE and approved by Steenokkerzeel ATCC the EBR05F is automatically activated. ACT can be checked with Kleine-Brogel APP or with Steenokkerzeel ATCC.</p> <p>(3) EBR05F requires simultaneous activation of <u>EBR05E</u>.</p>			

**EBR06A - FLORENNES**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 501436N 0043845E.	FL095 / GND	Entry prohibited. <sup>(1)</sup> Military aerodrome.	Outside EBFS OPR HR <sup>(2)</sup>
<p>(1) Entry prohibited unless authorized by the Ministry of Defence.</p> <p>(2) EBFS OPR HR can be checked with Brussels FIC.</p>			

**EBR06B - FLORENNES**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5 NM radius, centred on 501436N 0043845E. <sup>(1)</sup>	FL095 / GND	Entry restricted to aircraft maintaining a listening watch with EBFS TWR. <sup>(2)(3)</sup> Military aerodrome.	HX <sup>(4)</sup>
<p>(1) <u>EBR06A</u> excl.</p> <p>(2) As EBFS may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Upon activation of Florennes CTR and TMA, aircraft in EBR06B shall comply promptly with instructions from Florennes TWR.</p> <p>(3) With the exception of traffic on frequency of Brussels ACC.</p> <p>(4) Activation announced by NOTAM.</p>			

**EBR07A - KLEINE-BROGEL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 511006N 0052812E.	FL075 / GND	Entry prohibited. <sup>(1)</sup> Military aerodrome.	Outside EBBL OPR HR <sup>(2)</sup>
(1) Entry prohibited unless authorized by the Ministry of Defence.			
(2) EBBL OPR HR can be checked with Brussels FIC.			

**EBR07B - KLEINE-BROGEL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5 NM radius, centred on 511006N 0052812E. <sup>(1)</sup>	FL075 / GND	Entry restricted to aircraft maintaining a listening watch with EBBL TWR. <sup>(2)(3)</sup> Military aerodrome.	HX <sup>(4)</sup>
(1) <u>EBR07A</u> excl.			
(2) As EBBL may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Upon activation of Kleine-Brogel CTR One and TMA One, aircraft in EBR07B shall comply promptly with instructions from Klein-Brogel TWR.			
(3) With the exception of traffic on frequency of Brussels ACC.			
(4) Activation announced by NOTAM.			

**EBR08 - KOKSIJDE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 510525N 0023910E.	1500FT AMSL / GND	Entry prohibited. <sup>(1)</sup> Military aerodrome.	Outside EBFN OPR HR <sup>(2)</sup>
(1) Entry prohibited unless authorized by the Ministry of Defence.			
(2) EBFN OPR HR can be checked with Brussels FIC.			

**EBR10 - BEAUVECHAIN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 504528N 0044601E.	2500FT AMSL / GND	Entry prohibited. <sup>(1)</sup> Military aerodrome.	Outside EBBE OPR HR <sup>(2)</sup>
(1) Entry prohibited unless authorized by the Ministry of Defence.			
(2) EBBE OPR HR can be checked with Brussels FIC.			

**EBR11 - TIHANGE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 503203N 0051625E.	2300FT AMSL / GND	Entry prohibited, unless instructed by ATC. <sup>(1)</sup> Nuclear installation.	PERM
(1) Not applicable to police flights.			

**EBR12 - CHIEVRES**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 503433N 0034952E.	2500FT AMSL / GND	Entry prohibited. <sup>(1)</sup> Military aerodrome.	Outside EBCV OPR HR <sup>(2)</sup>
(1) Entry prohibited unless authorized by the Ministry of Defence.			
(2) EBCV OPR HR can be checked with Brussels FIC.			



**EBR13 - REDU**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.8NM radius, centred on 500004N 0050841E.	4500FT AMSL / GND	Prohibited to MIL aircraft. Satellite ground station.	PERM

**EBR16 - MOL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 511232N 0050456E.	4500FT AMSL / GND	Entry prohibited to MIL aircraft. Nuclear installations in Mol, Dessel and Geel.	PERM

**EBR17A - LOMBARDSIJDE SECTOR ALPHA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510907N 0024349E - 511015N 0023959E - an arc of circle, 2.5NM radius, centred on 510919N 0024340E and traced clockwise to 511055N 0024645E - 511008N 0024631E - 510907N 0024349E.	2500FT AMSL / SFC	Entry prohibited. <sup>(1)</sup> Gunnery and air exercises area.	HX <sup>(2)</sup>
<p>(1) Except MIL aircraft transiting to/from Shooting Range Lombardsijde and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lombardsijde, TEL + 32 (0) 2 442 37 26.</p> <p>(2) Announced by NOTAM. Shooting Range Safety Office Lombardsijde will inform MIL NOF (Steenokkerzeel ATCC) via ATS EBFN in due time.</p>			

**EBR17B - LOMBARDSIJDE SECTOR BRAVO <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510907N 0024349E - 511139N 0023503E - an arc of circle, 7.5NM radius, centred on 510839N 0024601E and traced clockwise to 511602N 0024819E - 511008N 0024631E - 510907N 0024349E.	FL240 / SFC <sup>(2)</sup>	Entry prohibited. <sup>(3)</sup> Gunnery and air exercises area.	HX <sup>(4)</sup>
<p>(1) This area includes <u>EBR17A</u>.</p> <p>(2) Upper limit may be restricted to FL 065 (see NOTAM).</p> <p>(3) Except MIL aircraft transiting to/from Shooting Range Lombardsijde and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lombardsijde, TEL + 32 (0) 2 442 37 26.</p> <p>(4) Announced by NOTAM. Shooting Range Safety Office Lombardsijde will inform MIL NOF (Steenokkerzeel ATCC) via ATS EBFN in due time.</p>			

**EBR17C - LOMBARDSIJDE SECTOR CHARLIE <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510907N 0024349E - 511351N 0022721E - an arc of circle, 12.8NM radius, centred on 510839N 0024601E and traced clockwise to 512114N 0024957E - 511008N 0024631E - 510907N 0024349E.	FL240 / SFC <sup>(2)(3)</sup>	Entry prohibited. <sup>(4)</sup> Gunnery and air exercises area.	HX <sup>(5)</sup>
<p>(1) This area includes <u>EBR17A</u> and <u>EBR17B</u>.</p> <p>(2) Firing activity may take place higher than FL240 (see NOTAM).</p> <p>(3) Upper limit may be restricted to FL065 (see NOTAM).</p> <p>(4) Except MIL aircraft transiting to/from Shooting Range Lombardsijde and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lombardsijde, TEL + 32 (0) 2 442 37 26.</p> <p>(5) Announced by NOTAM. Shooting Range Safety Office Lombardsijde will inform MIL NOF (Steenokkerzeel ATCC) via ATS EBFN in due time.</p>			

**EBR19 - MARCHE-EN-FAMENNE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501757N 0052355E - 501642N 0052625E - 501412N 0052310E - 501557N 0052155E - 501757N 0052355E.	3250FT AMSL / GND	Entry prohibited. <sup>(1)</sup> Gunnery and air exercises area.	MON to FRI (HOL excl), 0730-2300 (0630-2200) <sup>(2)</sup>
<p>(1) Except MIL aircraft transiting to/from Camp Marche and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Marche-en-Famenne, email <a href="mailto:campmarche-trg-securite@mil.be">campmarche-trg-securite@mil.be</a> (office hours and outside office hours) or TEL + 32 (0) 2 442 28 64 (only office hours).</p> <p>(2) Activation outside these hours announced by NOTAM.</p>			

**EBR20 - BRASSCHAAT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511827N 0043155E - 511857N 0043055E - 511957N 0043155E - 512327N 0043655E - 512217N 0043855E - 511827N 0043155E.	FL 140 / GND <sup>(1)</sup>	Entry prohibited. Gunnery and air exercises area. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) Upper limit may be restricted to FL070 (see NOTAM).</p> <p>(2) Except MIL aircraft transiting to/from Shooting Range Brasschaat and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Brasschaat, TEL + 32 (0) 2 442 16 37 or + 32 (0) 477 40 42 03.</p> <p>(3) Announced by NOTAM.</p>			

**EBR22 - CASTEAU**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 4NM radius, centred on 502957N 0035855E.	2500FT AMSL / GND	Entry prohibited. Supreme Headquarters Allied Powers Europe (SHAPE). <sup>(1)</sup>	PERM
<p>(1) Not applicable to State aircraft or if authorized by Chièvres TWR on ATC frequency.</p>			

**EBR23 - DOEL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle radius 1 NM centered on 511930N 0041532E.	2000FT AMSL / GND	Prohibited to MIL aircraft. Nuclear installation.	PERM

**EBR24B - KOKSIJDE LET-DOWN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510131N 0023419E - along the Belgian-French border - 504848N 0023843E - 505957N 0024337E - 510131N 0023419E.	4500FT AMSL / 1500FT AMSL	Let-down procedure space for jet aircraft. <sup>(1)</sup>	During EBFN OPR HR <sup>(2)</sup>
<p>(1) Crossing clearance shall be requested from Koksijde APP.</p> <p>(2) EBFN OPR HR can be checked with Brussels FIC or Steenokkerzeel ATCC.</p>			

**EBR25 - KOKSIJDE CLIMB-OUT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504235N 0025545E - 510045N 0023852E - 505900N 0024917E - 504626N 0030102E - along the Belgian-French border - 504235N 0025545E.	4500FT AMSL / 1100FT AMSL <sup>(1)</sup>	Climb-out sector for jet aircraft. <sup>(2)</sup>	During EBFN OPR HR <sup>(3)</sup>
<p>(1) 1100FT AMSL from lateral limits of Koksijde CTR to 16NM from the ARP on an axis of 150 DEG GEO, then a slope of 5°30' to the extreme limit of this sector.</p> <p>(2) Crossing clearance shall be requested from Koksijde APP.</p> <p>(3) EBFN OPR HR can be checked with Brussels FIC or Steenokkerzeel ATCC.</p>			

**EBR27 - LOKEREN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510627N 0035909E - 510734N 0040144E - 510625N 0040310E - 510517N 0040122E - 510627N 0035909E.	2500FT AMSL / GND	Entry prohibited to manned balloons. <sup>(1)</sup>	PERM
<p>(1) Above 1500FT AMSL manned free balloons flights are allowed if the pilot makes use either of a fully operational GPS with altitude registration or a fully operational FAI certified GPS logger or a fully operational transponder mode C with code setting A7000. Pilots using a transponder shall establish and maintain two-way radio communication with Brussels FIC on FREQ 126.900MHZ.</p>			

**EBR31 - WESTROZEBEKE-HOUTHULST**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1.2NM radius, centred on 505752N 0025735E.	2 600FT AMSL / GND	Entry prohibited. <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup> Destruction centre of explosives.	PERM
<p>(1) Except State aircraft in real-life operations.</p> <p>(2) PPR 60 MIN.</p> <p>(3) Prior entering coordination is mandatory with Current Ops Poelkapelle: +32 (0) 2 442 68 13.</p>			

**EBR41A - LAGLAND-ARLON**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
493901N 0054000E - 494053N 0054438E - 493939N 0054601E - 493745N 0054236E - 493901N 0054000E.	3 750 FT AMSL / GND <sup>(1)</sup>	Entry prohibited. <sup>(2)</sup> Gunnery and air exercises area.	<b>MON-FRI (HOL excl)</b> 0700-2300 (0600-2200) <b>SAT, SUN and HOL</b> 0700-1600 (0600-1500) <sup>(3)</sup>
<p>(1) Upper limit may occasionally be raised to FL 075 or FL 095, to be announced by NOTAM.</p> <p>(2) Except MIL aircraft transiting to/from Camp Lagland and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lagland, TEL + 32 (0) 2 441 49 01 or + 32 (0) 499 58 01 24.</p> <p>(3) Activation outside these hours will be announced by NOTAM.</p>			

**EBR41B - LAGLAND-ARLON**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
493901N 0053945E - 494111N 0054259E - 494114N 0054724E - 493939N 0054601E - 493745N 0054236E - 493901N 0053945E.	3 750 FT AMSL / GND	Entry prohibited. <sup>(1)</sup> Gunnery, UAS and air exercises area.	<b>MON-FRI (HOL excl)</b> 0000-2359 (2300-2259) <sup>(2)</sup>
<p>(1) Except MIL aircraft transiting to/from Camp Lagland and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lagland, TEL + 32 (0) 2 441 49 01 or + 32 (0) 499 58 01 24.</p> <p>(2) Activation outside these hours will be announced by NOTAM.</p>			

**EBR42 - BEVERLO 01**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510927N 0051530E - 510927N 0052125E - 510737N 0052125E - 510703N 0051530E - 510927N 0051530E.	FL065 / GND <sup>(1)</sup>	Entry prohibited. <sup>(2)</sup> Gunnery and air exercises area.	<b>MON-FRI (HOL excl)</b> JAN, FEB, NOV and DEC: 0700-1500 and 1700-2000 MAR and OCT: 0700-1500 (0600-1400) and 1900-2200 (1800-2100) APR and SEP: 0600-1400 and 1900-2200 MAY, JUN, JUL and AUG: 0600-1400 and 2000-2300 <b>SAT, SUN and HOL</b> 0730-1530 (0630-1430) <sup>(3)</sup>

(1) Upper limit 2700FT AMSL on MON to FRI (HOL excl), unless announced by NOTAM.

(2) Except MIL aircraft transiting to/from Camp Beverlo and those participating in combined Land and Air Component A/A exercises, after coordination with Shooting Range Safety Office Beverlo, TEL + 32 (0) 2 442 49 43 or + 32 (0) 2 442 49 15.

(3) Activation outside these hours will be announced by NOTAM.

**EBR44 - MARCHOVELETTE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.3NM radius, centred on 503023N 0045615E.	1550FT AMSL / GND	Entry prohibited. Destruction centre of explosives.	MON to FRI (HOL excl), 0730-1600 (0630-1500)

**EBR45 - BEVERLO 02**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 510438N 0052046E.	1450FT AMSL / GND	Entry prohibited. Demolition of explosives.	HX <sup>(1)</sup>

(1) Announced by NOTAM.

**EBR49 - ZUTENDAAL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 505638N 0053555E.	2000FT AMSL / GND	Entry prohibited. <sup>(1)</sup> Fulminate and cartridge manufacturer.	PERM

(1) Except State aircraft in real-life operations and glider aircraft from and to EBSL.

**EBR50 - CLERMONT-LEZ-HUY**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 503342N 0052310E.	2000FT AMSL / GND	Entry prohibited, unless instructed by ATC. <sup>(1)</sup> Powder mill.	PERM

(1) Except State aircraft in real-life operations.

## EBR52 - PETIT-RŒULX

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 503357N 0041935E.	2000FT AMSL / GND	Entry prohibited. <sup>(1)</sup> Fulminate manufacturer and shooting range.	PERM
(1) Except State aircraft in real-life operations.			

## EBR54 - ANTWERP HARBOUR

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512238N 0041815E - 512229N 0041435E - 512108N 0041512E - 512057N 0041603E - 511900N 0041706E - 511813N 0041354E - 511737N 0041234E - 511554N 0041141E - 511452N 0041153E - 511450N 0041122E - 511422N 0041124E - 511433N 0041457E - 511428N 0041612E - 511336N 0042025E - 511433N 0042110E - 511418N 0042354E - 511431N 0042443E - 511456N 0042501E - 511537N 0042509E - 511552N 0042503E - 511552N 0042419E - 511634N 0042419E - 511716N 0042433E - 511738N 0042425E - 511842N 0042124E - 512011N 0042046E - 512000N 0041828E - 512238N 0041815E.	1000FT AMSL / GND	Unless instructed by ATC, prohibited for all aircraft, except: <ul style="list-style-type: none"> <li>inspection flights, landing and take-off of helicopters, environmental control missions carried out on behalf of government agencies, (aircraft to/from EBHN and EBHF), with prior approval of Port Authority<sup>(1)/(2)</sup>;</li> <li>State aircraft missions, SAR, medical flights, evacuations and fire-fighting intervention, prior notification to Port Authority<sup>(1)</sup> as soon as practically possible.</li> </ul>	PERM

(1) Contact Port Authority Antwerp: TEL +32 (0) 3 229 67 33 or email [geozone.antwerpen@portofantwerpbruges.com](mailto:geozone.antwerpen@portofantwerpbruges.com).

(2) See webpage: [www.portofantwerpbruges.com/helikopters](http://www.portofantwerpbruges.com/helikopters).

## EBR55 - GHENT HARBOUR

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510422N 0034403E - 510433N 0034502E - 510511N 0034530E - 510623N 0034543E - 510633N 0034801E - 510730N 0034813E - 511054N 0035008E - 511113N 0034959E - 511133N 0034913E - 511132N 0034830E - 511248N 0034821E - 511238N 0034804E - 511133N 0034755E - 511141N 0034702E - 511137N 0034646E - 511050N 0034529E - 511014N 0034517E - 510838N 0034420E - 510820N 0034450E - 510757N 0034513E - 510726N 0034428E - 510616N 0034309E - 510544N 0034314E - 510422N 0034403E.	1000FT AMSL / GND	Prohibited for all aircraft, except: <ul style="list-style-type: none"> <li>inspection flights, landing and take-off of helicopters, environmental control missions carried out on behalf of government agencies, with prior approval of Port Authority<sup>(1)</sup>;</li> <li>State aircraft missions, SAR, medical flights, evacuations and fire-fighting intervention, prior notification to Port Authority<sup>(1)</sup> as soon as practically possible.</li> </ul>	PERM

(1) Contact Port Authority Ghent: TEL +32 (0) 9 251 56 39 or email [geozone@northseaport.com](mailto:geozone@northseaport.com).

**EBR56 - ZEEBRUGGE HARBOUR**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511939N 0031105E - 512103N 0030959E - 512153N 0031118E - 512136N 0031339E - 511934N 0031347E - 511752N 0031540E - 511623N 0031250E - 511458N 0031312E - 511502N 0031338E - 511440N 0031340E - 511438N 0031325E - 511332N 0031340E - 511320N 0031325E - 511325N 0031254E - 511415N 0031243E - 511446N 0031222E - 511607N 0031203E - 511612N 0031241E - 511827N 0031207E - 511842N 0031144E - 511800N 0031136E - 511902N 0031037E - 511938N 0031052E - 511939N 0031105E.	1000FT AMSL / GND	Prohibited for all aircraft, except: <ul style="list-style-type: none"> <li>inspection flights, landing and take-off of helicopters, environmental control missions carried out on behalf of government agencies, with prior approval of Port Authority<sup>(1)(2)</sup>;</li> <li>State aircraft missions, SAR, medical flights, evacuations and fire-fighting intervention, prior notification to Port Authority<sup>(1)</sup> as soon as practically possible.</li> </ul>	PERM

(1) Contact Port Authority Zeebrugge: TEL +32 (0) 50 54 68 67 or email [HKD.zeebrugge@portofantwerpbruges.com](mailto:HKD.zeebrugge@portofantwerpbruges.com).

(2) See webpage: [www.portofantwerpbruges.com/helikopters](http://www.portofantwerpbruges.com/helikopters).

**EBR57 - EEPOEL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.3NM radius, centred on 511121N 0041919E.	400FT AMSL / GND	Entry prohibited. Destruction centre of explosives.	MON to FRI (HOL excl), 0700-1600 (0600-1500)

**EBR61 - SINT-TRUIDEN 1**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504752N 0051121E - 504739N 0051136E - 504731N 0051133E - 504732N 0051113E - 504743N 0051114E - 504752N 0051121E.	1000FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft.	HJ <sup>(1)</sup>

(1) ACT can be checked with EBST local authorities (see [EBST AD 2.2](#)).

**EBR62 - SINT-TRUIDEN 2**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504745N 0051214E - 504722N 0051116E - 504743N 0051113E - 504800N 0051125E - 504803N 0051154E - 504745N 0051214E.	2000FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft.	activation announced by NOTAM <sup>(1)</sup>

(1) ACT can be checked with EBST local authorities (see [EBST AD 2.2](#)).

**EBR63 - SINT-TRUIDEN 3**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504635N 0050920E - 504632N 0050957E - 504621N 0051026E - 504558N 0050956E - 504617N 0050855E - 504635N 0050920E.	650FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft.	activation announced by NOTAM <sup>(1)</sup>

(1) ACT can be checked with EBST local authorities (see [EBST AD 2.2](#)).

**EBR64 - SINT-TRUIDEN 4**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504836N 0050925E - 504902N 0051151E - 504835N 0051338E - 504657N 0051555E - 504355N 0051545E - 504709N 0050621E - 504836N 0050925E.	2000FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft, except when approved by duty aerodrome commander of EBST.	activation announced by NOTAM <sup>(1)</sup>
(1) ACT can be checked with EBST local authorities (see <a href="#">EBST AD 2.2</a> ).			

**EBR65 - LIERNU**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1 NM radius, centred on 503436N 0044811E.	1500FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft.	HX <sup>(1)</sup>
(1) Activation announced by NOTAM. May be activated from MON to FRI (HOL excl) between 0800-2300 (0700-2200).			

**EBR66 - SINT-TRUIDEN 5**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504745N 0051214E - 504802N 0051119E - 504816N 0051207E - 504752N 0051233E - 504745N 0051214E.	550FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft.	activation announced by NOTAM <sup>(1)</sup>
(1) ACT can be checked with EBST local authorities (see <a href="#">EBST AD 2.2</a> ).			

**EBR67 - NIVELLES**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.75 NM radius, centred on 503517N 0042115E.	400 FT AGL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft. <sup>(1)</sup>	HX <sup>(2)</sup>
(1) Non-participating aircraft requiring access can request PPR with Nivelles RPAS Test Center on TEL +32 (0) 67 88 36 36.			
(2) Activation announced by NOTAM.			

**EBR68 - TONGEREN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5 NM radius, centred on 504752N 0052849E.	2500 FT AMSL / GND	Radio controlled model aircraft training zone. Prohibited to non-participating aircraft.	SAT, SUN and HOL SR-SS <sup>(1)(2)</sup>
(1) In VMC only.			
(2) Activation announced by NOTAM.			

**EBR69 - WIEKEVORST**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5 NM radius, centred on 510527N 0044812E.	1500 FT AMSL / GND	Radio controlled model aircraft training zone. Prohibited to non-participating aircraft.	SAT, SUN and HOL SR-SS <sup>(1)(2)</sup>
(1) In VMC only.			
(2) Activation announced by NOTAM.			

**EBR70 - POTTES**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5 NM radius, centred on 504316N 0032601E.	2500 FT AMSL / GND	Radio controlled model aircraft training zone. Prohibited to non-participating aircraft.	SAT, SUN and HOL SR-SS <sup>(1)(2)(3)</sup>
<p>(1) Outside activation <u>HTA10D</u> only.</p> <p>(2) In VMC only.</p> <p>(3) Activation announced by NOTAM.</p>			

**EBR71 - ANTHISNES**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.33 NM radius, centred on 502937N 0053124E.	2400 FT AMSL / GND	Radio controlled model aircraft training zone. Prohibited to non-participating aircraft.	SAT, SUN and HOL SR-SS <sup>(1)(2)</sup>
<p>(1) In VMC only.</p> <p>(2) Activation announced by NOTAM.</p>			

**EBR72 - SINT-TRUIDEN 6 (NORTH)**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504836N 0050925E - 504902N 0051151E - 504835N 0051338E - 504822N 0051356E - 504622N 0050838E - 504709N 0050621E - 504836N 0050925E.	2000 FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft.	activation announced by NOTAM <sup>(1)</sup>
<p>(1) Activation can be checked with EBST local authorities (see <u>EBST AD 2.2</u>).</p>			

**EBR73 - SINT-TRUIDEN 7 (SOUTH)**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504355N 0051545E - 504622N 0050838E - 504822N 0051356E - 504657N 0051555E - 504355N 0051545E.	2000 FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft. Zone allowed for manned traffic when RPAS ACT in EBR72 after coordination with and approved by the Duty Aerodrome Commander (DAC) of EBST. Solo training flights prohibited. Permanent 2-way radio contact with EBST mandatory.	activation announced by NOTAM <sup>(1)</sup>
<p>(1) Activation can be checked with EBST local authorities (see <u>EBST AD 2.2</u>).</p>			

**EBR74 - SUMMIT1**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505356N 0042900E - 505314N 0042930E - 505154N 0042817E - 505115N 0042552E then a counter-clockwise arc radius 2.7 NM centered on 505039N 0042142E - 505219N 0042506E - 505339N 0042750E - 505356N 0042900E	700 FT AMSL / GND	Federal Police helicopter activity during international summits. Only Federal Police helicopters and MIL helicopters stationed at EBMB during QRH mission allowed. <sup>(1)</sup>	HX <sup>(2)</sup>
<p>(1) Ground taxi at EBBR inside the EBR74 allowed.</p> <p>(2) Activation can be checked with Brussels TWR.</p>			



**EBR75 - SUMMIT2**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505427N 0042814E - 505413N 0042824E - 505252N 0042807E - 505136N 0042708E - 505115N 0042552E then a counter-clockwise arc radius 2.7 NM centered on 505039N 0042142E - 505307N 0042326E - 505427N 0042814E	700 FT AMSL / GND	Federal Police helicopter activity during international summits. Only Federal Police helicopters and MIL helicopters stationed at EBMB during QRH mission allowed. <sup>(1)</sup>	HX <sup>(2)</sup>
(1) Ground taxi at EBBR inside the EBR75 allowed.			
(2) Activation can be checked with Brussels TWR.			

**EBR77 - TEMPORARY VFR PROHIBITED ZONE <sup>(1)(2)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle radius 13 NM centered on 505218N 0042524E.	FL 195 / GND	International summits.	HX <sup>(3)</sup>
(1) VFR flights prohibited, excl. SAR, State, medical, humanitarian, NATO flights and flights with a specific approval from the Crisis Cell of the Federal Public Service Interior. Those flights shall contact the appropriate ATS unit before entering.			
(2) Companies flying on State flight status shall contact CRC Beauvechain 30 MIN before departure on + 32 (0) 2 443 86 51 (or 650 or 653) and the Crisis Cell on + 32 (0) 506 47 11 and add STS/STATE in their flight plan. Those flights shall contact the appropriate ATS unit before entering.			
(3) Activated by NOTAM after coordination between Crisis Cell, skeyes and Defence.			

**EBR78 - TEMPORARY VFR RESTRICTED ZONE <sup>(1)(2)(3)(4)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511245N 0035029E along border BELGIUM_NETHERLANDS - 512220N 0042538E then a clockwise arc radius 30 NM centered on 505218N 0042524E - 511245N 0035029E.	FL 195 / GND	International summits.	HX <sup>(5)</sup>
(1) VFR flights intending to enter this TRA shall submit a flight plan to Brussels ARO (EBBRZPX) at least 60 MIN before departure. This flight plan shall additionally be send to Steenokkerzeel ATCC via AFTN (EDYYBAFA and EBMIZGF). Add RMK/RSQ64XX to item 18 of the flight plan.			
(2) All flights shall be transponder mode A/C (designated SSR code given by Air Navigation Service Provider), mode S optional use.			
(3) All flights in airspace class G shall establish and maintain 2-way radio communication with BELGA Information on FREQ 129.325 MHZ. Flights must follow ATC instructions received from BELGA Information.			
(4) CIV aerobatic flights, CIV UAS, crop dusters, gliders, ULM, motorized delta planes, paramotors, banner towing, CIV paradrops and manned free balloons prohibited.			
(5) Activated by NOTAM after coordination between Crisis Cell, skeyes and Defence.			

**EBR79A - BEVERLO UAS 90**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510711N 0051719E - 510724N 0051930E - 510634N 0052038E - 510620N 0051803E - 510630N 0051728E - 510711N 0051719E.	500 FT AGL / GND <sup>(1)</sup>	BVLOS military UAS training zone. Entry prohibited to non-participating aircraft. <sup>(2)(3)</sup>	HX <sup>(4)</sup>
(1) UAS maximum operating height is 300 FT AGL.			
(2) Except MIL aircraft transiting to/from Camp Beverlo, after coordination with Shooting Range Safety Office Beverlo, TEL +32 (0) 2 442 49 43 or +32 (0) 2 442 49 15 and notification to EBBL TWR +32 (0) 443 31 35.			
(3) Implies the closure of EBLE AD.			
(4) Activation announced by NOTAM.			

**EBR79B - BEVERLO UAS 91**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510707N 0051635E - 510711N 0051719E - 510630N 0051728E - 510642N 0051640E - 510707N 0051635E.	500 FT AGL / GND <sup>(1)</sup>	BVLOS military UAS training zone. Entry prohibited to non-participating aircraft. <sup>(2)/(3)</sup>	HX <sup>(4)</sup>
<p>(1) UAS maximum operating height is 300 FT AGL.</p> <p>(2) Except MIL aircraft transiting to/from Camp Beverlo, after coordination with Shooting Range Safety Office Beverlo, TEL +32 (0) 2 442 49 43 or +32 (0) 2 442 49 15 and notification to EBBL TWR +32 (0) 443 31 35.</p> <p>(3) Implies the closure of EBLE AD.</p> <p>(4) Activation announced by NOTAM.</p>			

**EBR79C - BEVERLO UAS 20**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510634N 0052038E - 510620N 0051803E - 510546N 0051933E - 510613N 0052106E - 510634N 0052038E.	500 FT AGL / GND <sup>(1)</sup>	BVLOS military UAS training zone. Entry prohibited to non-participating aircraft. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) UAS maximum operating height is 300 FT AGL.</p> <p>(2) Except MIL aircraft transiting to/from Camp Beverlo, after coordination with Shooting Range Safety Office Beverlo, TEL +32 (0) 2 442 49 43 or +32 (0) 2 442 49 15 and notification to EBBL TWR +32 (0) 443 31 35.</p> <p>(3) Activation announced by NOTAM.</p>			

**EBR79D - BEVERLO UAS 30**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510620N 0051803E - 510551N 0051612E - 510517N 0051645E - 510501N 0051859E - 510546N 0051933E - 510620N 0051803E.	500 FT AGL / GND <sup>(1)</sup>	BVLOS military UAS training zone. Entry prohibited to non-participating aircraft. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) UAS maximum operating height is 300 FT AGL.</p> <p>(2) Except MIL aircraft transiting to/from Camp Beverlo, after coordination with Shooting Range Safety Office Beverlo, TEL +32 (0) 2 442 49 43 or +32 (0) 2 442 49 15 and notification to EBBL TWR +32 (0) 443 31 35.</p> <p>(3) Activation announced by NOTAM.</p>			

**EBR79E - BEVERLO UAS 40**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510546N 0051933E - 510613N 0052105E - 510436N 0052315E - 510247N 0052052E - 510410N 0051819E - 510501N 0051859E - 510546N 0051933E.	500 FT AGL / GND <sup>(1)</sup>	BVLOS military UAS training zone. Entry prohibited to non-participating aircraft. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) UAS maximum operating height is 300 FT AGL.</p> <p>(2) Except MIL aircraft transiting to/from Camp Beverlo, after coordination with Shooting Range Safety Office Beverlo, TEL +32 (0) 2 442 49 43 or +32 (0) 2 442 49 15 and notification to EBBL TWR +32 (0) 443 31 35.</p> <p>(3) Activation announced by NOTAM.</p>			

**3 DANGER AREAS****EBD26 - ARDENNES 05 <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501808N 0051710E - 500118N 0054241E - 494735N 0054237E - 494137N 0051624E - along the Belgian-French border - 500656N 0045209E - 500728N 0045635E - an arc of circle, 8NM radius, centred on 501521N 0045417E and traced counterclockwise to 501627N 0050641E - 501808N 0051710E.	4500FT AMSL / 1000FT AGL	High performance flights. <sup>(2)</sup>	HX <sup>(3)</sup>
(1) Can be activated from MON to FRI (HOL excl) between 0800-2300 (0700-2200).			
(2) Flights within this area have to stay clear of controlled airspace, prohibited, restricted zones and conflicting TSA's.			
(3) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.			

**EBD29 - ARDENNES 07**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500723N 0041207E - 501035N 0043103E - 501059N 0043322E - an arc of circle, 5NM radius, centred on 501436N 0043845E and traced counterclockwise to 501218N 0044540E - 501320N 0045527E - 501918N 0045328E - 502231N 0045226E - 503001N 0052456E - 502627N 0053920E - 503042N 0055956E - 501955N 0055956E - 501324N 0060343E - 501011N 0060832E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 500120N 0055102E - 500118N 0054241E - 494735N 0054237E - 494137N 0051624E - along the Belgian-French border - 500723N 0041207E.	4500FT AMSL / 1000FT AGL	CSAR exercises. <sup>(1)</sup>	HX <sup>(2)</sup>
(1) Flights within this area have to stay clear of controlled airspace, prohibited, restricted zones and conflicting TSA's.			
(2) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.			

**EBD37 - TRAINING SECTOR**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503941N 0044955E - 503457N 0044956E - 502758N 0045957E - 502902N 0050637E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E - 503357N 0050551E - 504355N 0051545E - 504709N 0050621E - 504157N 0045525E - 503941N 0044955E.	2500FT AMSL / GND <sup>(1)</sup>	MIL training sector for light aircraft. <sup>(2)</sup>	MON-FRI (HOL excl) 0730-1630 (0630-1530) <sup>(3)</sup>
(1) Military users: Minimum safety height is 500FT AGL, except for Practice Forced Landing (see ENR 1.2, § 2.4), in which case the minimum safety height will be 200FT AGL.			
(2) Mandatory RIS on EBBE APP for transiting OAT flights.			
(3) Additional activation will be announced by NOTAM. Activity can be checked with Steenokkerzeel ATCC, EBBE TWR or Brussels FIC.			

**EBD38 - NORTH SEA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512100N 0020500E - 512100N 0021300E - 512200N 0021900E - 512819N 0021900E - 512833N 0021630E - 512907N 0020500E - 512100N 0020500E.	FL 150 / SFC <sup>(1)</sup>	Gunnery area, parachuting and coastguard flights.	HX <sup>(2)</sup>
(1) Activation limited to 4500FT AMSL maximum when <u>TSA13</u> is active (see NOTAM).			
(2) Announced by NOTAM, which must include a POC during the activation.			

**EBD39 - KOKSIJDE AREA <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512719N 0023000E - 512704N 0023246E - 512258N 0025030E - 511010N 0024630E - 510955N 0024539E - 511042N 0024029E - 511050N 0023815E - 511307N 0023000E - 512719N 0023000E.	FL245 / 2500FT AMSL <sup>(2)</sup>	Marshalling area for air exercises.	HX <sup>(3)</sup>
(1) Flights in this danger area are subject to ATS provided by Steenokkerzeel ATCC.			
(2) First usable level is 3000FT AMSL.			
(3) Announced by NOTAM. May be active MON to FRI (HOL excl). Only active during exercises flown from DOB (Deployed Operating Base) Koksijde.			

**4 UAS GEOGRAPHICAL ZONES**

The zones depicted in the ENR 5.1 section of AIP Belgium & Luxembourg, are not applicable to UAS.

For Belgium, the dimensions of the UAS geographical zones are defined as regulated in the *Commission Implementing Regulation (EU) 2019/947* art 15 and are publicly made available via the following weblink: <https://map.droneguide.be/>.

In Luxembourg, the dimensions of the UAS geographical zones are defined as regulated in the *Commission Implementing Regulation (EU) 2019/947* art 15 and are publicly made available via the following weblink, compatible with ED269 format: <https://drones.geoportail.lu/zones>.

For Belgium, the corresponding conditions and procedures to request prior flight authorization of the UAS geographical zones are defined as regulated in the *Commission Implementing Regulation (EU) 2019/947* art 15 and are publicly made available via the following weblink: <https://es.mobiliteit.fgov.be/geozones/>.

In Luxembourg, the conditions and procedures related to the UAS geographical zones are defined as regulated in the *Commission Implementing Regulation (EU) 2019/947* art 15 and are publicly made available via the following weblink: <https://g-o.lu/uas>.

**5 RESERVATION SPECIFICATIONS (MILITARY ONLY)**

**EBD26 - Ardennes 05:** The reservation request should be forwarded to CRC Beauvechain and to COMOPSAIR Air Operations Support for approval. This airspace can only be activated together with TSA26B or TSA25C as a navigation warning.

**EBD29 - Ardennes 07:** The reservation request should be forwarded to COMOPSAIR Air Operations Support at least one month in advance. This airspace can only be activated together with TSA29A, TSA29B and TSA29C as a navigation warning. 'Heavy jet traffic ddmmyy xx.xxZ - xx.xxZ in Brussels FIR outside controlled airspace between 1000FT AGL and 4500FT AMSL'.

**EBD39 - Koksijde Area:** FPL are to be made available to Steenokkerzeel ATCC 60 MIN before EOBT.

## ENR 5.2 Military Exercise and Training Areas and Air Defence Identification Zone

### 1 TEMPORARY RESERVED AREAS AND TEMPORARY SEGREGATED AREAS

In temporary reserved areas (TRA), military activities that are dangerous to other aircraft take place at specified times. Crossing restrictions apply to non-participating aircraft.

In temporary segregated areas (TSA), military activities that require the reservation of the airspace for the exclusive use take place at specified times. During their activation, these areas are not accessible to non-participating aircraft.

A cross-border area (CBA) is a TRA / TSA covering airspace of two or more adjacent states.

#### 1.1 Areas

##### TRA NA - TRA NORTH ALPHA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512908N 0044913E - along the Belgian-Dutch border - 505000N 0053854E - 510057N 0051655E - 510251N 0045955E - 511835N 0043325E - 511807N 0043011E - 512136N 0043011E - 512908N 0044913E. <sup>(1)</sup>	FL 195 / 4500FT AMSL <sup>(2)</sup>	Air exercises. Crossing clearance shall be requested in-flight from Steenokkerzeel ATCC.	HX <sup>(3)</sup>
(1) Brussels TMA Four excl.			
(2) Upper limit FL 095 in area 505000N 0053854E - 505513N 0052827E - 510023N 0054559E - along the Belgian-Dutch border - 505000N 0053854E. Lower limit FL145 in area 511835N 0043325E - 511938N 0044052E - 505408N 0043217E, along arc 26 DME DUB, 511332N 0045955E - 510251N 0045955E - 511835N 0043325E.			
(3) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.			

##### TRA NB - TRA NORTH BRAVO

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511032N 0042037E - 512049N 0042812E - 512254N 0043326E - 512649N 0044320E - 512650N 0044925E - along the Belgian-Dutch border - 512651N 0050018E - 512651N 0050400E - 512603N 0050610E - 511857N 0052158E - 511654N 0052630E - along the Belgian-Dutch border - 510133N 0054629E - 505729N 0052350E - 505342N 0050316E - 505830N 0043650E - 511032N 0042037E.	UNL / FL 195	Air exercises. Crossing clearance shall be requested in-flight from Steenokkerzeel ATCC. <sup>(1)</sup>	HX <sup>(2)</sup>
(1) Airspace within the Amsterdam FIR is delegated for ATC provision to Steenokkerzeel ATCC.			
(2) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.			

##### TRA/TSA N1 - BRUSSELS AREA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512254N 0043326E - 511835N 0043325E - 510251N 0045955E - 510057N 0051655E - 505729N 0052350E - 505342N 0050316E - 505830N 0043650E - 511032N 0042037E - 512049N 0042812E - 512254N 0043326E.	UNL / FL 195	Aerobatic area. <sup>(1)</sup>	HX <sup>(2)</sup>
(1) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.			
(2) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.			

**TRA/TSA N2 - BALEN AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511857N 0052158E - 512603N 0050610E - 512651N 0050400E - 512649N 0044320E - 512254N 0043326E - 511835N 0043325E - 510251N 0045955E - 510634N 0045955E - 511551N 0051647E - 511857N 0052158E.	UNL / FL075 <sup>(1)(2)</sup>	Aerobatic area. <sup>(3)</sup>	HX <sup>(4)</sup>
<p>(1) Subject to availability of <u>Brussels TMA Four</u>.</p> <p>(2) Lower FL is FL 095 in Dutch FIR.</p> <p>(3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.</p> <p>(4) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			

**TRA/TSA N3 - MEEUWEN AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511857N 0052158E - 511654N 0052630E - along the Belgian-Dutch border - 510133N 0054629E - 505729N 0052350E - 510057N 0051655E - 510251N 0045955E - 510634N 0045955E - 511551N 0051647E - 511857N 0052158E.	UNL / FL075 <sup>(1)(2)</sup>	Aerobatic area. <sup>(3)</sup>	HX <sup>(4)</sup>
<p>(1) Lower limit FL 110 during activation of <u>EBR05A</u> and FL 250 during activation of <u>EBR05E</u>.</p> <p>(2) Lower FL is FL 095 in Dutch FIR.</p> <p>(3) Airspace within the Amsterdam FIR is delegated for ATC provision to Steenokkerzeel ATCC. Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.</p> <p>(4) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			

**TRA SA - TRA SOUTH ALPHA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503019N 0035834E - 503039N 0040151E - 504048N 0043801E - 503001N 0052456E - 502627N 0053920E - 500426N 0055210E - along the Belgian-Luxembourg border - 494738N 0054729E - 494106N 0053116E - 494038N 0051741E - along the Belgian-French border - 502101N 0040008E - 503019N 0035834E.	FL 195 / 4500FT AMSL <sup>(1)</sup>	Air exercises. Crossing clearance shall be requested in-flight from Steenokkerzeel ATCC.	HX <sup>(2)</sup>
<p>(1) Lower limit FL 100 above <u>Brussels CTA South One</u> and FL 060 above <u>Liège TMA One</u>. Upper limit FL 155 in area 494131N 0051633E - 494809N 0054507E - along the Belgian-Luxembourg border - 494738N 0054729E - 494106N 0053116E - 494038N 0051741E - along the Belgian-French border - 494131N 0051633E.</p> <p>(2) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			

**TRA SB - TRA SOUTH BRAVO**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - 500853N 0041028E - 503205N 0040655E - 503335N 0041212E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 494735N 0054237E.	UNL / FL 195	Air exercises. Crossing clearance shall be requested in-flight from Steenokkerzeel ATCC.	HX <sup>(1)</sup>
<p>(1) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			

## TRA SBZ - TRA SOUTH BRAVO FBZ

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - 500853N 0041028E - 503205N 0040655E - 503335N 0041212E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 494735N 0054237E	UNL / FL245	For IFR flight planning purposes only.	HX <sup>(1)</sup>
503418N 0040504E - 503423N 0040517E - 503555N 0041053E - 503929N 0042926E - 504036N 0043514E - 504040N 0043543E - 504042N 0043633E - 504040N 0043652E - 504036N 0043721E - 503739N 0045203E - 503727N 0045237E - 503712N 0045311E - 500253N 0054544E - 500210N 0054625E - 500113N 0054639E - 494728N 0054632E - 494646N 0054618E - 494607N 0054545E - 494533N 0054455E - 493812N 0051315E - 493805N 0051246E - 493758N 0051136E - 493807N 0045105E - 493809N 0045025E - 493814N 0044951E - 494707N 0041631E - 494723N 0041601E - 494745N 0041526E - 495739N 0040537E - 495756N 0040524E - 495816N 0040515E - 495846N 0040510E - 495928N 0040506E - 495946N 0040508E - 500706N 0040619E - 503207N 0040304E - 503238N 0040310E - 503316N 0040330E - 503344N 0040401E - 503407N 0040438E - 503418N 0040504E	FL245 / FL195	For IFR flight planning purposes only.	
(1) Activation can be checked via EAUP/EUUP.			

## TRA/TSA S1 - NAMUR AREA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503705N 0043024E - 503813N 0043620E - 503519N 0045040E - 501808N 0051710E - 501208N 0044021E - 503705N 0043024E.	UNL / 4500FT AMSL <sup>(1)</sup>	Aerobatic area. Crossing clearance shall be requested in-flight from Steenokkerzeel ATCC. <sup>(2)</sup>	HX <sup>(3)</sup>
(1) Lower limit FL 100 above <u>Brussels CTA South One</u> . Above <u>TRA23</u> first usable level FL 100.			
(2) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.			
(3) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.			

## TRA/TSA S2 - BEAURAING AREA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501208N 0044021E - 501808N 0051710E - 500118N 0054241E - 495854N 0054241E - 494927N 0044914E - 501208N 0044021E.	UNL / 4500FT AMSL <sup>(1)</sup>	Aerobatic area. <sup>(2)(3)</sup>	HX <sup>(4)</sup>
(1) Lower limit FL 065 within CBA16B (see <i>AIP France</i> ).			
(2) May be announced by NOTAM for medium level CAS in case of COMOPSAIR Calendar exercise in conjunction with <u>TSA32A</u> , <u>TSA32B</u> and <u>TSA34A</u> , <u>TSA34B</u> .			
(3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.			
(4) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.			

**TRA/TSA S3 - GIVET AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500703N 0041011E - 501208N 0044021E - 494927N 0044914E - 494604N 0043047E - 494920N 0041830E - 495835N 0040853E - 500703N 0041011E.	UNL / 4500FT AMSL <sup>(1)</sup>	Aerobatic area. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) Lower limit FL065 within CBA16B (see AIP France).</p> <p>(2) GAT is allowed to cross TRA/TSA S3 on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL 195. Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.</p> <p>(3) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			

**TRA/TSA S4 - CHARLEROI AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503205N 0040655E - 503335N 0041214E - 503705N 0043024E - 501208N 0044021E - 500703N 0041011E - 500853N 0041028E - 503205N 0040655E.	UNL / 4500FT AMSL <sup>(1)</sup>	Aerobatic area. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) Lower limit FL 100 above <u>Brussels CTA South One</u>.</p> <p>(2) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.</p> <p>(3) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			

**TRA/TSA S5 - NEUFCHATEAU AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494604N 0043047E - 495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494604N 0043047E.	UNL / 4500FT AMSL <sup>(1)</sup>	Aerobatic area. <sup>(2)(3)</sup>	HX <sup>(4)</sup>
<p>(1) Lower limit FL065 within CBA16B (see AIP France).</p> <p>(2) May be announced by NOTAM for medium level CAS in case of COMOPSAIR Calendar exercise in conjunction with <u>TSA32A</u>, <u>TSA32B</u>.</p> <p>(3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic. GAT is allowed to cross TRA/TSA S5 on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL 195.</p> <p>(4) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			

**TRA/TSA S6 - DURBUY AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502536N 0050543E - 503001N 0052456E - 502627N 0053920E - 500426N 0055210E - along the Belgian-Luxembourg border - 500120N 0055102E - 500118N 0054241E - 502536N 0050543E.	FL 165 / FL055 <sup>(1)(2)</sup>	Aerobatic area. <sup>(3)(4)</sup>	HX <sup>(5)</sup>
<p>(1) Above <u>TRA23</u> first usable level is FL 100.</p> <p>(2) GAT traffic on SID departing from EBBR is passing over the area.</p> <p>(3) May be announced by NOTAM for medium level CAS in case of COMOPSAIR Calendar exercise in conjunction with <u>TSA34A</u>, <u>TSA34B</u>.</p> <p>(4) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.</p> <p>(5) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.</p>			



**TRA W - TRA WEST**

Lateral limits	Vertical limits <sup>(1)</sup>	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505152N 0032551E - 505047N 0032649E - 503549N 0031628E - along the Belgian-French border - 510056N 0023429E.	UNL / 4500 FT AMSL	Air exercises. Crossing clearance shall be requested in-flight from Steenokkerzeel ATCC.	HX <sup>(2)</sup>
(1) Area will not be activated above FL115 when <u>CBA1C</u> is active.			
(2) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.			

**TRA WD - TRA WEST DELTA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
513036N 0020000E - 512804N 0022709E - 511622N 0031752E - 510825N 0033918E - 510047N 0033351E - 511037N 0024032E - 511243N 0020000E - 513036N 0020000E.	UNL / FL195	Air exercises. Crossing clearance shall be requested in-flight from Steenokkerzeel ATCC.	HX <sup>(1)</sup>
(1) Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04) or Brussels FIC.			

**CBA1A - CROSS BORDER AREA ONE ALPHA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510310N 0014100E - 510056N 0023429E - 505035N 0023658E - 504343N 0030756E - 501342N 0023048E - 501342N 0022321E - 503855N 0014913E - 505417N 0012759E - 510000N 0012800E - 510310N 0014100E.	UNL / FL115	Air exercises and unmanned remote controlled French State aircraft operations above French national territory.	HX <sup>(1)</sup>
(1) Activation can be checked with Paris UAC or Reims UAC (see <i>AIP France</i> ). Detailed schedule is communicated via AUP France.			

**CBA1B - CROSS BORDER AREA ONE BRAVO**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504343N 0030756E - 504059N 0032002E - 503549N 0031628E - 501342N 0024856E - 501342N 0023048E - 504343N 0030756E.	UNL / FL225	Air exercises and unmanned remote controlled French State aircraft operations above French national territory.	HX <sup>(1)</sup>
(1) Activation can be checked with Paris UAC or Reims UAC (see <i>AIP France</i> ). Detailed schedule is communicated via AUP France.			

**CBA1C - CROSS BORDER AREA ONE CHARLIE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505152N 0032551E - 505047N 0032649E - 504059N 0032002E - 505035N 0023658E - 510056N 0023429E.	UNL / FL115	Air exercises.	HX <sup>(1)</sup>
(1) Activation can be checked with Paris UAC or Reims UAC (see <i>AIP France</i> ). Detailed schedule is communicated via AUP France.			

**TRA/TSA11 - URSEL <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 510840N 0032820E.	4500FT AMSL / GND	Air exercises and UAS flights. During UAS activity, prohibited to all manned aircraft. During air exercises, prohibited to non-participating aircraft.	HX <sup>(2)</sup>

(1) Status of the area can be checked with Brussels FIC or Steenokkerzeel ATCC.

(2) Announced by NOTAM. May be active MON to FRI (HOL excl), 0700 (0600)-SS. Not in JUL or AUG.

**TRA/TSA13A - CHANNEL A <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512907N 0020500E - 512833N 0021630E - 512719N 0023000E - 511820N 0023000E - 511933N 0020500E - 512907N 0020500E.	FL 105 / 4500FT AMSL <sup>(2)</sup>	Air exercises and RPAS flights. <sup>(3)</sup>	HX <sup>(4)</sup>

(1) Status of the area can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).

(2) First usable level is FL060.

(3) Other traffic may be allowed inside the TSA for transit purposes. Flights in the TSA are subject to ATS provided by Steenokkerzeel ATCC. During air exercises, prohibited to non-participating aircraft. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. May be active MON to FRI (HOL excl).

**TRA/TSA13B - CHANNEL B <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512719N 0023000E - 512521N 0025114E - 512114N 0024957E - an arc of circle, 12.8NM radius, centred on 510839N 0024601E and traced counterclockwise to 511637N 0023000E - 512719N 0023000E.	FL 105 / 4500FT AMSL <sup>(2)</sup>	Air exercises and RPAS flights. <sup>(3)</sup>	HX <sup>(4)</sup>

(1) Status of the area can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).

(2) First usable level is FL060.

(3) Other traffic may be allowed inside the TSA for transit purposes. Flights in the TSA are subject to ATS provided by Steenokkerzeel ATCC. During air exercises, prohibited to non-participating aircraft. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. May be active MON to FRI (HOL excl).

**TRA/TSA13C - CHANNEL C <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512521N 0025114E - 512309N 0031403E - 512009N 0031237E - 511946N 0031105E - 511905N 0030630E - 512114N 0024957E - 512521N 0025114E.	FL 105 / 4500FT AMSL <sup>(2)</sup>	Air exercises and RPAS flights. <sup>(3)</sup>	HX <sup>(4)</sup>

(1) Status of the area can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).

(2) First usable level is FL060.

(3) Other traffic may be allowed inside the TSA for transit purposes. Flights in the TSA are subject to ATS provided by Steenokkerzeel ATCC. During air exercises, prohibited to non-participating aircraft. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. May be active MON to FRI (HOL excl).

TRA/TSA13D - CHANNEL D <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511646N 0031603E - 511905N 0030630E - 511946N 0031105E - 512009N 0031237E - 512309N 0031403E - 512239N 0031911E - 511646N 0031603E.	FL 105 / 4500FT AMSL (2)(3)	Air exercises and RPAS flights. <sup>(4)</sup>	HX <sup>(5)</sup>
<p>(1) Status of the area can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p> <p>(2) First usable level is FL 060.</p> <p>(3) FL 070 and lower only available after approval of Oostende APP.</p> <p>(4) Other traffic may be allowed inside the TSA for transit purposes. Flights in the TSA are subject to ATS provided by Steenokkerzeel ATCC. During air exercises, prohibited to non-participating aircraft. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.</p> <p>(5) Announced by NOTAM. May be active MON to FRI (HOL excl).</p>			

TRA/TSA15 - LO-RENINGE RPAS AREA <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505641N 0030000E - 504548N 0030000E - along the Belgian-French border - 510056N 0023429E.	FL 095 / 4500FT AMSL	Air exercises and RPAS flights. During RPAS activity, prohibited to all manned aircraft. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) Status of the area can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p> <p>(2) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.</p> <p>(3) Announced by NOTAM. Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p>			

## TRA17 - AWACS AREA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505957N 0053955E - 505957N 0054601E - along the Belgian-Dutch border - 505246N 0053955E - 505957N 0053955E.	3500FT AMSL / 1500FT AMSL	Procedural airspace for AWACS IFR approach on ETNG RWY 09. Crossing clearance shall be obtained from Beek APP (see <i>AIP the Netherlands</i> ).	HX <sup>(1)</sup>
<p>(1) Activation can be checked with Brussels FIC or Steenokkerzeel ATCC.</p>			

TRA/TSA22 - BERTRIX-JEHONVILLE <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 495333N 0051325E.	4500FT AMSL / GND	Air exercises and UAS flights. During UAS activity, prohibited to all manned aircraft. During air exercises, prohibited to non- participating aircraft.	HX <sup>(2)(3)</sup>
<p>(1) Status of the area can be checked with Brussels FIC or Steenokkerzeel ATCC.</p> <p>(2) Announced by NOTAM. May be active MON to FRI (HOL excl), 0700 (0600)-SS. Not in JUL or AUG.</p> <p>(3) May not be active at the same time as <u>TSA34A</u> or <u>TSA34B</u>.</p>			

**TRA23 - TIENEN AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502323N 0051322E - 502112N 0045247E - 502316N 0045220E - 502900N 0045106E - 503053N 0045743E - 503353N 0050818E - 503231N 0051326E - 502323N 0051322E.	FL090 / 4500FT AMSL	VMC training sector for EBBE based aircraft. Flights in this area shall maintain two-way radio contact with Steenokkerzeel ATCC.	HX <sup>(1)</sup>
(1) May be active during MIL OPR HR. Activation can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).			

**TSA24 - ARDENNES 02**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503705N 0043024E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 495854N 0054241E - 494927N 0044914E - 503705N 0043024E.	UNL / FL095 <sup>(1)</sup>	High performance flights. <sup>(2)</sup>	HX <sup>(3)</sup>
(1) First usable level is FL 100. (2) Not permeable. (3) Activation can be checked with Steenokkerzeel ATCC.			

**TSA25A - ARDENNES 03A**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 500118N 0054241E - 501808N 0051710E - 500703N 0041011E - 495835N 0040853E - 494920N 0041830E - 494604N 0043047E - 495854N 0054241E.	UNL / FL095 <sup>(1)</sup>	High performance flights. <sup>(2)</sup>	HX <sup>(3)</sup>
(1) First usable level is FL 100. (2) GAT is allowed to cross TSA25A on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL 195. Not permeable. Transits from and to France via RSL01 will not be allowed during TSA25A ACT. (3) Activation can be checked with Steenokkerzeel ATCC.			

**TSA25B - ARDENNES 03B**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494604N 0043047E - 495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494604N 0043047E.	UNL / FL095 <sup>(1)</sup>	High performance flights. <sup>(2)</sup>	HX <sup>(3)</sup>
(1) First usable level is FL 100. (2) GAT is allowed to cross TSA25B on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL 195. Not permeable. (3) Activation can be checked with Steenokkerzeel ATCC.			

**TSA25C - ARDENNES 03C**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 500118N 0054241E - 501808N 0051710E - 500703N 0041011E - 495835N 0040853E - 494920N 0041830E - 494604N 0043047E - 494040N 0045055E - 494030N 0051133E - 494137N 0051624E - 494735N 0054237E - 495854N 0054241E. <sup>(1)</sup>	FL095 / 4500FT AMSL <sup>(2)</sup>	High performance flights. <sup>(3)</sup>	HX <sup>(4)</sup>
<p>(1) Flights within TSA25C shall stay clear of controlled airspace, prohibited areas, danger areas and conflicting TRA and TSA.</p> <p>(2) Lower limit FL065 within <u>LFCBA16B</u> (see AIP France).</p> <p>(3) Area may be crossed by flights TKOF from EBFS and flights with ADES EBFS, military traffic to/from <u>TSA28A</u> and <u>TSA28B</u>, and military traffic to/from Germany via Northern Window.</p> <p>(4) Activation can be checked with Steenokkerzeel ATCC.</p>			

**TSA26A - ARDENNES 01**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - 500853N 0041028E - 503205N 0040655E - 503335N 0041214E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 495854N 0054241E.	UNL / FL095 <sup>(1)</sup>	High performance flights. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) First usable level is FL 100.</p> <p>(2) GAT is allowed to cross TSA26A on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL 195. Not permeable. Transits from and to France via RSL01 and RSL10 will not be allowed during TSA26A ACT, except if PPR has been received from CRC mission supervisor TEL +32 (0) 2 443 86 52 (back-up +32 (0) 443 86 51) at least 1 HR prior for OAT or except for Belgian OAT if unable to request PPR due to operational reason. Transits from and to Germany via EXCOS (Southern Corridor) will not be allowed during TSA26A ACT.</p> <p>(3) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.</p>			

**TSA26B - ARDENNES 04**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - 500853N 0041028E - 503205N 0040655E - 503335N 0041214E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 495854N 0054241E. <sup>(1)</sup>	FL095 / 4500FT AMSL <sup>(2)</sup>	High performance flights. <sup>(3)</sup>	HX <sup>(4)</sup>
<p>(1) Flights within TSA26B shall stay clear of controlled airspace, prohibited areas, danger areas and conflicting TRA and TSA.</p> <p>(2) Lower limit FL065 within <u>CBA16B</u> (see AIP France).</p> <p>(3) Area may be crossed by flights TKOF from EBFS and flights with ADES EBFS.</p> <p>(4) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.</p>			

**TSA27A - LEGLISE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 494735N 0054237E - 494137N 0051624E - along the Belgian-French border - 494957N 0045159E - 495854N 0054241E.	FL095 / 4500FT AMSL	RPAS flights. Prohibited to all manned aircraft. <sup>(1)</sup>	HX <sup>(2)</sup>
<p>(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.</p> <p>(2) Announced by NOTAM. Area will only be activated when <u>TRA SA</u> is active. Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p>			

**TSA27B - RONCHAMP**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502125N 0051209E - 501416N 0052304E - 500613N 0053516E - 495734N 0053456E - 495313N 0051015E - 502125N 0051209E.	FL095 / 4500FT AMSL	RPAS flights. Prohibited to all manned aircraft. <sup>(1)</sup>	HX <sup>(2)</sup>
<p>(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.</p> <p>(2) Announced by NOTAM. Area will only be activated when <u>TRA SA</u> is active. Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p>			

**TSA27C - HOTTON**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502125N 0051209E - 502441N 0052449E - 502236N 0053314E - 500618N 0054251E - 500613N 0053516E - 501416N 0052304E - 502125N 0051209E.	FL095 / 4500FT AMSL	RPAS flights. Prohibited to all manned aircraft. <sup>(1)</sup>	HX <sup>(2)</sup>
<p>(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.</p> <p>(2) Announced by NOTAM. Area will only be activated when <u>TRA SA</u> is active. Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p>			

**TSA27D - GEDINNE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502108N 0045210E - 502300N 0050943E - 502125N 0051209E - 495313N 0051015E - 494957N 0045200E - along the Belgian-French border - 500913N 0045232E - 501912N 0045235E - 502108N 0045210E.	FL095 / 4500FT AMSL	RPAS flights. Prohibited to all manned aircraft. <sup>(1)</sup>	HX <sup>(2)</sup>
<p>(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.</p> <p>(2) Announced by NOTAM. Area will only be activated when <u>TRA SA</u> is active. Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p>			

**TSA27E - COUVIN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500206N 0040902E - 500545N 0044211E - along the Belgian-French border - 500007N 0040903E - 500206N 0040902E	FL095 / 4500FT AMSL	RPAS flights. Prohibited to all manned aircraft. <sup>(1)</sup>	HX <sup>(2)</sup>
<p>(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the RPAS and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.</p> <p>(2) Announced by NOTAM. Area will only be activated when <u>TRA SA</u> is active. Activation can be checked pre-flight with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p>			

**TSA28A - ELSNBORN 02**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503420N 0055956E - 503754N 0061308E - along the Belgian-German border - 502557N 0062234E - 502557N 0060648E - 503042N 0055956E - 503420N 0055956E.	FL 105 / GND	During air exercises, prohibited to non-participating aircraft. <sup>(1)(2)</sup>	HX <sup>(3)</sup>
<p>(1) During CAS Air exercises, all aircraft (participating or transiting) shall obtain an additional entry clearance from the ALO "RINGO Range" on FREQ 241.700 (back up 377.725).</p> <p>(2) Military aircraft transiting to or from Camp Elsenborn are allowed. Military pilots shall contact Steenokkerzeel ATCC to verify the activity of the area and to obtain transit directives.</p> <p>(3) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC or Brussels FIC. This airspace could be activated simultaneously with <u>EBR04</u>, users of TSA28A intending to enter <u>EBR04</u> shall contact Elsenborn Sécurité des tirs, TEL + 32 (0) 2 442 76 70 or TEL + 32 (0) 2 442 76 73 and FREQ 138.975MHZ prior activities to coordinate operations with gunnery/destruction activities/UAS.</p>			

**TSA28B - ELSNBORN 03**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503042N 0055956E - 502557N 0060648E - 502557N 0062234E - along the Belgian-German border - 501011N 0060832E - 501324N 0060343E - 501955N 0055956E - 503042N 0055956E.	FL 105 / GND	During air exercises, prohibited to non-participating aircraft. <sup>(1)(2)</sup>	HX <sup>(3)</sup>
<p>(1) During CAS Air exercises, all aircraft (participating or transiting) shall obtain an additional entry clearance from the ALO "RINGO Range" on FREQ 241.700 (back up 377.725).</p> <p>(2) Military aircraft transiting to or from Camp Elsenborn are allowed. Military pilots shall contact Steenokkerzeel ATCC to verify the activity of the area and to obtain transit directives.</p> <p>(3) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC or Brussels FIC. This airspace could be activated simultaneously with <u>TSA28A</u>.</p>			

**TSA28C - ELSNBORN 04**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502913N 0055429E - 503235N 0061041E - along the Belgian-German border - 502221N 0062130E - 501911N 0061910E - along the Belgian-German border - 501616N 0061656E - 501555N 0061133E - 501741N 0060114E - 501955N 0055956E - 502913N 0055429E.	FL 175 / FL 095	Air exercises. During air exercises, prohibited to non-participating aircraft. <sup>(1)</sup>	HX <sup>(2)(3)(4)</sup>
<p>(1) During CAS Air exercises, all aircraft (participating or transiting) shall obtain an additional entry clearance from the ALO "RINGO Range" on FREQ 241.700 (back up 377.725).</p> <p>(2) <u>TSA28C</u> can only be activated together with <u>TSA28A</u>, <u>TSA28B</u>, <u>EBR04</u> and EDR117.</p> <p>(3) During activation of <u>TSA28C</u> the <u>TRA/TSA S6</u> and the <u>TRA SA</u> part that corresponds with lateral limits of <u>TRA/TSA S6</u> between 4 500 FT AMSL and FL 055 shall be delegated to Brussels ACC.</p> <p>(4) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC or Brussels ACC supervisor.</p>			

**TSA28CZ - ELSNBORN 04 FBZ**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503738N 0061041E - 503235N 0061041E - 503115N 0061218E - 503052N 0061240E - 503030N 0061300E - 503025N 0061305E - 502958N 0061330E - 502947N 0061341E - 502957N 0061510E - 503005N 0061620E - 503010N 0061704E - 502956N 0061805E - 502916N 0062052E - 502830N 0062048E - 502744N 0062043E - 502700N 0062237E - 502610N 0062241E - 502557N 0062234E - 502500N 0062202E - 502300N 0062100E - 502221N 0062131E - 501918N 0061900E - 501811N 0061757E - 501715N 0061725E - 501700N 0061800E - 501607N 0061700E - 501604N 0061630E - 501539N 0061325E - 501114N 0061239E - 501114N 0061127E - 501249N 0060150E - 501343N 0055628E - 501409N 0055542E - 501438N 0055501E - 501511N 0055427E - 501546N 0055400E - 501623N 0055340E - 502755N 0054654E - 502834N 0054642E - 502913N 0054637E - 502952N 0054642E - 503031N 0054654E - 503108N 0054713E - 503143N 0054741E - 503216N 0054815E - 503245N 0054856E - 503311N 0054942E - 503333N 0055033E - 503738N 0061041E.	FL 175 / FL 095	For flight planning purposes only.	HX <sup>(1)</sup>
<i>(1)</i> Activated by AUP/UUP.			

**TSA29A - ARDENNES 06**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495835N 0040853E - 500338N 0040939E - 501425N 0043911E - 502231N 0045226E - 503001N 0052456E - 502627N 0053920E - 500426N 0055210E - along the Belgian-Luxembourg border - 500120N 0055102E - 500118N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E. <sup>(1)</sup>	FL 145 / 4500FT AMSL <sup>(2)</sup>	CSAR exercises.	HX <sup>(3)</sup>
<i>(1)</i> Flights within TSA29A shall stay clear of controlled airspace, prohibited areas, danger areas and conflicting TRA and TSA.			
<i>(2)</i> Lower limit FL065 within CBA16B (see AIP France).			
<i>(3)</i> Announced by NOTAM. May be active MON to FRI (HOL excl). Activation can be checked with Steenokkerzeel ATCC.			

**TSA29B - ARDENNES 07**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502627N 0053920E - 503042N 0055956E - 501955N 0055956E - 501324N 0060343E - 501011N 0060832E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 500426N 0055210E - 502627N 0053920E.	FL095 / 4500FT AMSL <sup>(1)</sup>	CSAR exercises.	HX <sup>(2)</sup>
<i>(1)</i> Upper limit may be lowered to FL075 (see NOTAM).			
<i>(2)</i> Announced by NOTAM. May be active MON to FRI (HOL excl). Activation can be checked with Steenokkerzeel ATCC.			

**TSA29C - LUXEMBOURG**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500748N 0060816E - along the German-Luxembourg border - 500118N 0060843E - 500120N 0055102E - along the Belgian-Luxembourg border - 500748N 0060816E.	FL095 / 3500FT AMSL <sup>(1)</sup>	COMAO exercises.	HX <sup>(2)</sup>
<i>(1)</i> Upper limit may be lowered to FL065 (see NOTAM).			
<i>(2)</i> Announced by NOTAM. May be active MON to FRI (HOL excl). Activation can be checked with Steenokkerzeel ATCC.			



**TSA32A - LIBRAMONT WEST (1)**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495900N 0050700E - 495900N 0052200E - 494700N 0052200E - 494700N 0050700E - 495300N 0050400E - 495900N 0050700E.	4500FT AMSL (2) / GND (3)	CAS exercises target zone. Prohibited to non-participating aircraft. (4)	HX (5)(6)
<p>(1) May be active MON 1230-1600 (1130-1500), TUE to THU 0800-1100 (0700-1000) and 1230-1600 (1130-1500), FRI 0800-1100 (0700-1000).</p> <p>(2) May be activated up to FL 065.</p> <p>(3) Military users: during opening hours and within the lateral limits of LFA Ardennes the lowest usable level is 250 FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500 FT AGL. For non-Belgian participants the lowest usable level is 1000 FT AGL at all times.</p> <p>(4) When medium level CAS is performed in combination with <u>TSA32A</u>, the <u>TRA/TSA S5 - NEUFCHATEAU AREA</u> and <u>TRA/TSA S2 - BEAURAING AREA</u> have to be booked from 4500 FT AMSL (or FL065) within the Brussels FIR and FL065 within the <u>LFCBA16B</u> up to FL 150. Radio contact with Steenokkerzeel ATCC is compulsory for medium level CAS. When CAS is combined with and Air Defense Mission, <u>TSA26A</u>, <u>TSA26B</u> and <u>EBD26</u> have to be booked and Tactical Air Control is provided by CRC Beauvechain.</p> <p>(5) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.</p> <p>(6) May not be active at the same time as <u>TSA34A</u> or <u>TSA34B</u>.</p>			

**TSA32B - LIBRAMONT EAST (1)**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495900N 0052200E - 495900N 0053700E - 495300N 0054000E - 494700N 0053700E - 494700N 0052200E - 495900N 0052200E.	4500FT AMSL (2) / GND (3)	CAS exercises target zone. Prohibited to non-participating aircraft. (4)	HX (5)(6)
<p>(1) May be active MON 1230-1600 (1130-1500), TUE to THU 0800-1100 (0700-1000) and 1230-1600 (1130-1500), FRI 0800-1100 (0700-1000).</p> <p>(2) May be activated up to FL 065.</p> <p>(3) Military users: during opening hours and within the lateral limits of LFA Ardennes the lowest usable level is 250 FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500 FT AGL. For non-Belgian participants the lowest usable level is 1000 FT AGL at all times.</p> <p>(4) When medium level CAS is performed in combination with <u>TSA32B</u>, the <u>TRA/TSA S5 - NEUFCHATEAU AREA</u> and <u>TRA/TSA S2 - BEAURAING AREA</u> have to be booked from 4500 FT AMSL (or FL065) within the Brussels FIR and FL065 within the <u>LFCBA16B</u> up to FL 150. Radio contact with Steenokkerzeel ATCC is compulsory for medium level CAS. When CAS is combined with and Air Defense Mission, <u>TSA26A</u>, <u>TSA26B</u> and <u>EBD26</u> have to be booked and Tactical Air Control is provided by CRC Beauvechain.</p> <p>(5) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.</p> <p>(6) May not be active at the same time as <u>TSA34A</u> or <u>TSA34B</u>.</p>			

**TSA34A - CHAMPLON WEST (1)**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501500N 0051200E - 501400N 0052700E - 500500N 0052700E - 500500N 0052200E - 500300N 0051900E - 500300N 0051200E - 500900N 0050900E - 501500N 0051200E.	4500FT AMSL (2) / GND (3)	CAS exercises target zone. Prohibited to non-participating aircraft. (4)	HX (5)(6)
<p>(1) May be active MON 1230-1600 (1130-1500), TUE to THU 0800-1100 (0700-1000) and 1230-1600 (1130-1500), FRI 0800-1100 (0700-1000).</p> <p>(2) May be activated up to FL 065.</p> <p>(3) Military users: during opening hours and within the lateral limits of LFA Ardennes the lowest usable level is 250 FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500 FT AGL. For non-Belgian participants the lowest usable level is 1000 FT AGL at all times.</p> <p>(4) When medium level CAS is performed in combination with <u>TSA34A</u>, the <u>TRA/TSA S6 - DURBUY AREA</u> and <u>TRA/TSA S2 - BEAURAING AREA</u> have to be booked from 4500 FT AMSL (or FL065) within the Brussels FIR and FL065 within the <u>LFCBA16B</u> up to FL 150. Radio contact with Steenokkerzeel ATCC is compulsory for medium level CAS. Can not be booked for combined CAS and Air Defense Mission.</p> <p>(5) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.</p> <p>(6) May not be active at the same time as <u>TSA32A</u> or <u>TSA32B</u> or <u>TRA/TSA22</u>.</p>			

**TSA34B - CHAMPLON EAST <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501400N 0052700E - 501500N 0054200E - 500900N 0054500E - 500300N 0054200E - 500300N 0052900E - 500500N 0052700E - 501400N 0052700E.	4500 FT AMSL <sup>(2)</sup> / GND <sup>(3)</sup>	CAS exercises target zone. Prohibited to non-participating aircraft. <sup>(4)</sup>	HX <sup>(5)(6)</sup>
<p>(1) May be active MON 1230-1600 (1130-1500), TUE to THU 0800-1100 (0700-1000) and 1230-1600 (1130-1500), FRI 0800-1100 (0700-1000).</p> <p>(2) May be activated up to FL 065.</p> <p>(3) Military users: during opening hours and within the lateral limits of LFA Ardennes the lowest usable level is 250 FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500 FT AGL. For non-Belgian participants the lowest usable level is 1000 FT AGL at all times.</p> <p>(4) When medium level CAS is performed in combination with <u>TSA34B</u>, the <u>TRA/TSA S6 - DURBUY AREA</u> and <u>TRA/TSA S2 - BEAURAING AREA</u> have to be booked from 4500 FT AMSL (or FL065) within the Brussels FIR and FL065 within the <u>LFCA16B</u> up to FL 150. Radio contact with Steenokkerzeel ATCC is compulsory for medium level CAS. Can not be booked for combined CAS and Air Defense Mission.</p> <p>(5) Announced by NOTAM. Activation can be checked with Steenokkerzeel ATCC.</p> <p>(6) May not be active at the same time as <u>TSA32A</u> or <u>TSA32B</u> or <u>TRA/TSA22</u>.</p>			

**TSA35 - SAINT-HUBERT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle radius 2 NM centered on 500214N 0052434E.	1000 FT AGL / GND	BVLOS military UAS training zone. Entry prohibited to non-participating aircraft.	HX <sup>(1)(2)</sup>
<p>(1) Activation announced by NOTAM. May be activated from SS+30 to 0800 (0700).</p> <p>(2) 3 calendar days prior notification to <u>EBSH</u> mandatory for activation between SR-30 and 0800 (0700).</p>			

**TSA36 - FLAWINNE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502818N 0044834E - 502809N 0044908E - 502751N 0044908E - 502739N 0044815E - 502801N 0044758E - 502818N 0044834E.	500 FT AGL / GND	BVLOS military UAS training zone. Entry prohibited to non-participating aircraft.	HX <sup>(1)</sup>
<p>(1) Activation announced by NOTAM.</p>			

**TRA/TSA37A - WEELDE LOW**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512450N 0044947E along border BELGIUM_NETHERLANDS - 512816N 0050037E then a clockwise arc radius 5 NM centered on 512339N 0045733E - 512451N 0050519E along border BELGIUM_NETHERLANDS - 512247N 0050525E then a clockwise arc radius 5 NM centered on 512339N 0045733E - 512450N 0044947E.	4500 AMSL / GND	Air exercises and UAS flights. Entry prohibited to non-participating aircraft.	HX <sup>(1)</sup>
<p>(1) Activation announced by NOTAM. Status of the area can be checked with Brussels FIC or Steenokkerzeel ATCC.</p>			

**TRA/TSA37B - WEELDE RECTA<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511932N 0044132E - 512232N 0043953E - 512452N 0045023E along border BELGIUM_NETHERLANDS - 511915N 0051217E - 511833N 0051239E - 511505N 0045653E then a counter-clockwise arc radius 26 NM centered on 505408N 0043217E - 511932N 0044132E.	4500 AMSL / 1500 AMSL	Air exercises and UAS flights. Entry prohibited to non-participating aircraft.	HX <sup>(2)</sup>

(1) TRA/TSA37B requires simultaneous activation of TRA/TSA37A.

(2) Activation announced by NOTAM. Status of the area can be checked with Brussels FIC or Steenokkerzeel ATCC. May be active outside EBZR operational hours (see EBZR AD 2.3).

**TRA/TSA37C - WEELDE HIGH<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511811N 0044813E then a clockwise arc radius 8 NM centered on 512339N 0045733E - 512656N 0044553E - 512656N 0044926E along border BELGIUM_NETHERLANDS - 512656N 0050018E - 512656N 0050536E along border BELGIUM_NETHERLANDS - 511905N 0050803E then a clockwise arc radius 8 NM centered on 512339N 0045733E - 511546N 0045518E then a counter-clockwise arc radius 26 NM centered on 505408N 0043217E - 511811N 0044813E.	FL095 / 4500 AMSL <sup>(2)</sup>	Air exercises and UAS flights. Entry prohibited to non-participating aircraft.	HX <sup>(3)</sup>

(1) TRA/TSA37C requires simultaneous activation of TRA/TSA37A and TRA NA.

(2) Highest usable Flight Level for paradrop is FL090.

(3) Activation announced by NOTAM. Status of the area can be checked with Brussels FIC or Steenokkerzeel ATCC.

**ELTSA03 - HOFFELT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 500515N 0055444E.	3500FT AMSL / GND	RPAS flights.	HX <sup>(1)</sup>

(1) Activated by NOTAM

**ELTSA04 - WEILER**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 500629N 0055747E.	3500FT AMSL / GND	RPAS flights.	HX <sup>(1)</sup>

(1) Activated by NOTAM

**ELTSA05 - WEISWAMPACH**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 500804N 0060233E.	3500FT AMSL / GND	RPAS flights.	HX <sup>(1)</sup>

(1) Activated by NOTAM

**ELTSA06 – DIEKIRCH NORTH**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495644N 0060433E - 495752N 0061003E - 495451N 0061158E - 495341N 0060625E - 495644N 0060433E.	3000FT AMSL / GND	RPAS flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM			

**ELTSA07 – DIEKIRCH SOUTH**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495341N 0060625E - 495451N 0061158E - 495203N 0061142E - 495115N 0060756E - 495341N 0060625E.	3000FT AMSL / GND	RPAS flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM			

**1.2 Permeability of Areas**

An area can be defined as either being “permeable” or “not permeable”.

Permeable means that an area can be transited by civil or military traffic while the area is occupied by booked traffic. These transits are subject to tactical co-ordination between the agency controlling the area and the agency (civil or military) controlling the transiting traffic. There will be a delegation of provision of ATS for parts of the affected area unless the controller responsible for the area decides to assume control of the transiting traffic. Temporary restrictions can be imposed on the booked traffic.

Not permeable means that the area cannot be transited by non booked traffic. However, an emergency stop of activities can always be ordered by the ATCC supervisor and/or CRC FA when air safety is endangered (aircraft in distress, weather phenomena or dangerous traffic situations).

**1.3 Booking procedure**

**1.3.1 ARES**

ARES (Airspace Reservation) means a defined volume of airspace temporarily reserved for exclusive or specific use by categories of users. ARES as defined above is generally used to facilitate the segregation of non-compatible air traffic, leaving the respective ATCO with the responsibility to ensure that prescribed minimum separation requirements towards the ARES boundary are maintained at all times by non-participating air traffic.

Within an ARES aircraft can perform aerial manoeuvres at their own discretion and separation responsibility, after MARSAs has been declared (see ENR 1.1, § 2.1.2.2 for national exceptions to EUROAT). Aircraft cleared to operate inside an ARES shall stay within its confines (maintaining a prescribed safety distance from the ARES boundary as nationally required) until cleared otherwise by the appropriate ATC unit. ARES is generally of a temporary nature and should be scheduled, activated and deactivated through the appropriate national or regional channels, using the respective Flexible Use of Airspace (FUA) arrangements.

An ARES can be a TRA or TSA, which could be classified as an Airspace Restriction i.a.w. the respective ICAO classification.

**1.3.2 Airspace Reservation**

**1.3.2.1 General**

Belgian military users have access to LARA, and can book their airspace via this application.

In case of CAS exercises, the AOLT or the point of contact indicated for the CAS exercise will make all airspace reservations for the CAS exercise using the LARA, or when no access to LARA, will ask the AMC to do it.

Foreign military users or civil users will send an email (fax as back-up) to Steenokkerzeel ATCC for airspace reservations or to CRC Beauvechain for Tactical Air Ops and exercises requiring an ACU and to COMOPSAIR if the request is subject to a COMOPSAIR approval.

Airspace reservations that require a status of segregation will use the TSAXX, denomination of the area. Other reservations will use the TRAXX. The reasons for a TSA booking instead of a TRA are:

- Tactical Air Operations missions under control of an ACU;
- CAS missions under control of a FAC/AOLT (Forward Area Controller/ Air Operations Liaison Team);
- Airspace reservation for a RPAS flights.

e.g. An airspace reservation for a Tactical Air Ops for the Balen and Meeuwen Area's will use the TSA N2 and TSA N3, and for a training mission under the control of Steenokkerzeel ATCC using the same volume of airspace, will use TRA N2 and TRA N3.

### 1.3.2.2 **Tactical Air Ops**

CRC Beauvechain is the responsible agency for planning tactical air exercises requiring ACU. This includes the processing of air-space requests, the airspace reservations, confirmations and cancellations with the airspace users and with the Steenokkerzeel ATCC supervisor in accordance with the rules in the paragraphs hereafter.

#### 1.3.2.2.1 *Booking Procedures Applicable to:*

- TSA N1
- TSA N2
- TSA N3
- TSA S1
- TSA S2
- TSA S3
- TSA S4
- TSA S5
- TSA S6
- TSA24
- TSA25A/B/C
- TSA26A/B

The reservation of a TSA or a combination of TSA under the control of an ACU has to be made by THU of the preceding week, before 1000 (0900). In case this THU is a Belgian HOL, the reservation should be made on the last working day before that THU, before 1000 (0900). All reservations shall be done via the Current Ops Weapons at CRC Beauvechain. Every THU not later than 1400 (1300) or in case this THU is a Belgian HOL, the last working day before that THU not later than 1400 (1300), the ATCC NOF shall publish a NOTAM for TSA26 with the information received from the AMC. Changes after THU 1000 (0900) can be requested to the Current Ops Weapons Officer at CRC Beauvechain, or in case of non-availability to the Mission Supervisor (MS) / Fighter Allocator (FA) of CRC Beauvechain who will request the approval of the AMC or the Steenokkerzeel ATCC supervisor.

Requests for TSA made on the day of the planned mission (for TSA24, TSA25A/B/C and TSA26A/B after THU 1000 (0900) preceding week) will be treated on a 'first come, first served' basis. The request has to be made at least 3 HR prior the start of the reservation (exception: TSA26 until not later than 24 HR prior slot activation) to the Current Ops Weapons Officer at CRC Beauvechain who will request the approval of the Steenokkerzeel ATCC supervisor.

Except for foreign military users requesting TSA24, TSA25A/B and TSA26A, all other requests by foreign military users or civil users need the approval of COMOPSAIR. The request has to be forwarded 7 working days prior the execution of the flight adding the reason for the reservation request and, if applicable, a description of the priority request. The approval with the applicable priority will be given not later than D-1 1600 (1500) by COMOPSAIR.

#### 1.3.2.2.2 *Additional Booking Procedures and Restrictions for TSA24, TSA25 and TSA26 (TRA South A/B)*

TSA24 may not be used in conjunction with TSA25.

TSA25A/B may not be used in conjunction with TSA24. TSA25B can only be booked together with TSA25A.

TSA25C can only be booked together with TSA25A/B.

TSA26B can only be booked together with TSA26A.

TSA24, TSA25 and TSA26 are limited to top FL 190 during GAT EAW on busy Fridays.

If TSA26 is not available due to GOSLY holding, a booked TSA26 will be automatically converted into a TSA25A/B/C.

### 1.3.2.3 **Other than Tactical Air Ops**

#### 1.3.2.3.1 *Booking Procedures Applicable to:*

- TRA N1
- TRA N2
- TRA N3
- TRA S1
- TRA S2
- TRA S3
- TRA S4
- TRA S5
- TRA S6

The reservation request of a TRA or a combination of TRA shall preferably be made by THU of the preceding week, before 1000 (0900). In case this THU is a Belgian public HOL, the reservation should be made on the last working day before that THU, before 1000 (0900). All reservations have to be done via the Current Ops Weapons at CRC Beauvechain.

CRC shall make the initial de-confliction and insert the reservation requests in LARA before THU 1100 (1000). Requests made after Thursday 1100 (1000) are to be made via LARA by the flying units.

Planned exercises (ex calendar) and special approvals of COMOPSAIR are not subject to this procedure and are inserted directly in LARA by AMC.

The request for D+1 or later shall include the priority ranking (see § 1.3.7). At the end of DOF-1 the AMC will solve all equal priority requests for airspace that have not been solved by the users.

Requests for TRA made on the day of the planned mission will be treated on a 'first-come, first-served' basis by the AMC. The request has to be made at least three hours prior the start of the reservation.

Foreign military users or civil users requesting an airspace reservation, subject to a COMOPSAIR waiver (e.g. supersonic flights) and/or requesting a priority, need the approval of COMOPSAIR. The request has to be forwarded 7 working days prior the execution of the flight adding the reason for the reservation request and/or a description of the priority request. The approval with the applicable priority will be given not later than D-1 1600 (1500) by COMOPSAIR.

Other airspace requests by foreign military users or civil users can be booked via the AMC till H-3 and approval is only given after H-3.

The requests for one or more TRA will be forwarded through LARA to the AMC (back-up email or TEL see [ENR 1.9. § 4.3](#)).

#### 1.3.2.3.2 *Booking Procedures Applicable to:*

- TRA W

TRA W reservations can only be made up to FL 115 when CBA 1C is active.

The units shall forward their requests to the ATCC (ARAC) not later than DAY-2 before 1000 (0900).

Requests for TRA W made on the day of the planned mission will be treated on a 'first-come, first-served' basis by the AMC. The request has to be made at least three hours prior the start of the reservation.

Foreign military users or civil users (air test, paratroop, photomissions,...) requesting an airspace reservation subject to a COMOPSAIR waiver (e.g. supersonic flights) and/or requesting a priority need the approval of COMOPSAIR. The request has to be forwarded 7 working days prior the execution of the flight adding the reason for the reservation request and/or a description of the priority request. The approval with the applicable priority will be given not later than D-1 1600 (1500) by COMOPSAIR.

Other airspace requests by foreign military users or civil users can be booked via the AMC till H-3 and approval is only given after H-3 by the ATCC supervisor.

- TRA WD

Reservation request for TRA WD shall be forwarded to COMOPSAIR Air Operations Support at least 14 days in advance and can only be used after approval of COMOPSAIR Ops Division (A3).

#### 1.3.2.3.3 *Booking Procedure Applicable to EBR05*

Slots are to be requested to 10W Tac Current Ops (national and international), before WED W-1 1100 (1000). Slots will be allocated, in accordance with the priority list of the Pampa Range orders.

Requests, later than WED W-1 1100 (1000), will be handled on a 'first come, first served' basis.

Info on additional airspace requests ([EBR05D](#), [EBR05E](#) or [EBR05E](#)) has to be initiated, together with the initial demand.

#### 1.3.2.4 **Large Scale Exercises**

All airspace reservations concerning large scale exercises shall be made at least one month in advance to COMOPSAIR Air Operations Support Current Ops Officer.

TEL: +32 (0) 2 441 66 42

Email: [comopsair-a3-air-ctrl-ops@mil.be](mailto:comopsair-a3-air-ctrl-ops@mil.be)

### 1.3.3 **Reservation specifications**

#### 1.3.3.1 **TRA/TSA**

**TRA/TSA S4:** Not available during GOSLY holding.

**TRA/TSA13A/B/C:** FPL with 'TSA RPAS' shall be made available to Steenokkerzeel ATCC and Brussels FIC 60 MIN before EOBT.

**TSA28A:** Reservation of the airspace shall be requested to EBSZ NOF via S3 Camp Elsenborn TEL + 32 (0) 2 442 76 70 or TEL + 32 (0) 2 442 76 73.

**TSA28B:** Reservation of the airspace shall be requested to EBSZ NOF via S3 Camp Elsenborn TEL + 32 (0) 2 442 76 70 or TEL + 32 (0) 2 442 76 73.

**TSA29A:** The reservation request should be forwarded to COMOPSAIR Air Operations Support at least one month in advance.

**TSA29B:** The reservation request should be forwarded to COMOPSAIR Air Operations Support at least one month in advance to allow coordination with Brussels ACC, who decide on the top level. This airspace can only be activated together with TSA29A.

**TSA29C:** The reservation request should be forwarded to ANA Luxembourg at least one month in advance to allow coordination and decision on availability, while Luxembourg Armed Forces need to be informed of any request via [opscell@armee.etat.lu](mailto:opscell@armee.etat.lu) and [dair@armee.etat.lu](mailto:dair@armee.etat.lu). This airspace can only be activated together with TSA29A.

### 1.3.4 Airspace Regulations

#### 1.3.4.1 TRA North A/B and South A/B

ATC will strive to avoid transits through active TRA areas. For details regarding the permeability of reserved airspace, see § 1.2. Depending on the permeability of the area by non-participating traffic, temporary limitations can be imposed upon the traffic using the affected area (e.g. Large scale exercise departures/recoveries).

Steenokkerzeel ATCC will not accept more than three aircraft in a single TRA, and maximum four aircraft in two TRA.

#### 1.3.4.2 TSA N1/N2/N3 and TSA S1/S2/S3/S4/S5/S6

ATC will strive to avoid transits through active TSA areas. For details regarding the permeability of reserved airspace, see § 1.2. Depending on the permeability of the area by non-participating traffic, temporary limitations can be imposed upon the traffic using the affected area.

### 1.3.5 Confirmation and cancellation

#### 1.3.5.1 Tactical Air Ops

All bookings shall be confirmed by the military user at least three hours before the activation time of the slot, including the requested airspace and number of aircraft participating to CRC. When CRC Beauvechain does not receive the confirmation, the reservation will automatically be cancelled. CRC Beauvechain will check if all conditions for the reservation are met and confirm the reservation to the AMC. If not all conditions are met, CRC Beauvechain will adapt the reservation in coordination with the user, to make sure that all conditions are met before the airspace can be confirmed. Cancellation of missions (especially in TSA26, TSA25B and TSA25C) shall be notified ASAP to CRC Beauvechain in order to allow other airspace users to occupy the airspace. CRC Beauvechain will inform the AMC (before H-3) or the ATCC supervisor (after H-3), who will contact the Steenokkerzeel ATCC NOF for modification of the current TSA26 NOTAM.

#### 1.3.5.2 Other than Tactical Air Ops except EBR05

All bookings shall be confirmed by the military user at least three hours before the activation time of the slot, including the requested airspace and number of aircraft participating to the AMC. When the AMC does not receive the confirmation, the reservation will automatically be cancelled. The AMC will check if all conditions for the reservation are met. If not all conditions are met, the AMC will adapt the reservation in coordination with the user, to make sure that all conditions are met before the airspace can be confirmed. Cancellation of missions (especially in TRA S5) shall be notified ASAP to the AMC (before H-3) or ATCC Supervisor (after H-3) in order to allow other airspace users to occupy the airspace.

#### 1.3.5.3 EBR05

Booking of EBR05 will be confirmed by the military user at least three hours prior activation time of the slot, including the requested airspace and number of aircraft participating directly to Pampa Range- Range Officer.

#### 1.3.5.4 Changes to Reservations

Exceptionally, additional reservations for TSA-slots can be booked (TSA26 until not later than 24 hours prior slot activation, other TSAs until 3 hours prior activation) on a first come, first serve basis via the CRC Beauvechain Current Operations weapons office.

### 1.3.6 Contact Information

#### 1.3.6.1 CRC Beauvechain Current Operations Weapons Office

Contact info for booking

TEL: +32 (0) 2 443 86 34

Email: [CRC-11SQN-CURROPS-WEAPONS@mil.be](mailto:CRC-11SQN-CURROPS-WEAPONS@mil.be)

#### 1.3.6.2 Master Controller Assistant

Information about the TRA/TSA airspace regulations can be obtained via:

TEL: +32 (0) 2 443 86 51

#### 1.3.6.3 Steenokkerzeel ATCC Supervisor

TEL: +32 (0) 2 443 82 04

Email: [atcc-atc-flops-secatm-datco@mil.be](mailto:atcc-atc-flops-secatm-datco@mil.be)

Email: [atcc-atc-flnof-ais@mil.be](mailto:atcc-atc-flnof-ais@mil.be)

Note: Send email to both addresses.

**1.3.6.4 COMOPSAIR Air Operations Support Current Ops Officer**

TEL: +32 (0) 2 441 66 42  
Email: [comopsair-a3-air-ctrl-ops@mil.be](mailto:comopsair-a3-air-ctrl-ops@mil.be)

**1.3.6.5 10 W Tac Current Ops**

TEL: +32 (0) 2 443 31 03 or 30 08  
TEL: 9-6321-33103 or 33008 (MIL)  
Email: [10WTAC-VGP-COMDO-OPSTRG-CUR@mil.be](mailto:10WTAC-VGP-COMDO-OPSTRG-CUR@mil.be)

**1.3.6.6 10 W Tac - Pampa Range Range Officer**

TEL: +32 (0) 2 443 32 72  
TEL: 9-6321-33272 (MIL)  
Email: [10WTAC-VGP-COMDO-OPSTRG-CUR@mil.be](mailto:10WTAC-VGP-COMDO-OPSTRG-CUR@mil.be)

**1.3.6.7 2 W Tac Current Ops**

TEL: +32 (0) 2 442 64 05 or 65 77  
TEL: 9-6321-26405 or 26577 (MIL)  
Email: [2wtac-gpv-currentopssqn-woc@mil.be](mailto:2wtac-gpv-currentopssqn-woc@mil.be)

**1.3.7 Priority Guidelines**

See table 1.3.7.1 for general guidelines on airspace allocation.

Requests are only valid when they are received by the appropriate agency (see column d) within the delays (as stated in column c).

Requests on D-7 to D-1 are accepted according to the priority of the mission, as inserted by the user during the reservation in LARA (see table 1.3.7.2). Reservations on D can only book still available airspace, and are on a 'first come, first served' basis.

Booking requests can either be:

- accepted as requested;
- accepted with limitations (laterally, horizontally, timing, number of aircraft,...);
- refused.

Airspace requests for flights not included in the LARA priority list (see table 1.3.7.2) such as civil glider competitions, civil photo missions, Geographical & Environmental Surveillance flights...) will obtain a case by case priority by COMOPSAIR.

The ATCC Supervisor can himself reserve "manoeuvring" airspace for holding, separating or sequencing aircraft whenever he expects high traffic density in a specific area (for instance when large formations are returning from abroad to land at a Belgian airfield). The ATCC Supervisor will in that case make the airspace unavailable to other users through LARA. Cancellations of already confirmed airspace to create manoeuvring airspace is only allowed when flight safety would otherwise be endangered. Airspace can also be made unavailable to accommodate GAT avoiding bad weather (thunderstorms).

Overlapping requests for aerobatic areas prior D will be solved using the priority list in LARA (see table 1.3.7.2).

Airspace users should avoid to book airspace already requested by other users. If this occurs the AMC or the ATCC Supervisor should contact the users and try to find a solution. If the users have different priority, the AMC or the ATCC Supervisor shall approve the mission with the highest priority. If users with equal priority cannot agree, the AMC or the ATCC Supervisor will take the final decision

Operations within TSA26B will take priority over RPAS operations within TSA27A/B/D/E if the TSA26B airspace reservation is made prior THU Week -1 1100 (1000). TSA27A/B/D/E airspace reservations will have priority over TSA26B airspace



reservations made after THU Week -1 1100 (1000) until D -1. Reservations made on D will be treated on a 'first-come first-served basis'.

### 1.3.7.1 Airspace Allocation Procedures

a	b	c	d	e	f
PRIO in LARA	Type of Exercise (Exercises for which specific airspace requests are made)	Airspace Requests		Confirmation (acceptance or refusal)	
		Not later than	To	Not later than	By
N/A	QRA (A and T) scrambles	N/A	N/A	N/A	N/A
2	Foreign military users requesting TSAN1-N3, S1-S6 or TSA26A/B/D	7 working days	COMOPSAIR	Preceding day 1600 (1500)	COMOPSAIR
	Civil users requesting TSAN1-N3, S1-S6, TSA24, TSA25A/B/C or TSA26A/B/EBD26				
	Foreign military users or civil users requesting TRA N1-N3, S1-S6 or TRA W for missions subject to COMOPSAIR approval and /or requesting prio				
10	Exercise calendar airspace requirements	10 working days prior	ATCC	Preceding THU 1400 (1300)	ATCC (LARA)
11-14	Scheduled TSA24/25/26 or CBA1 slots	THU of the preceding week 1000 (0900)	CRC		CRC (LARA)
15	Foreign military users requesting TSA24, TSA25 A/B or TSA26A				
20	Belgian Air Force COMAO departures and recoveries	Preceding day 1500 (1400)	ATCC	Preceding day 1600 (1500)	ATCC (LARA)
21	Military paradrops	10 working days prior			
30-34	Exercises requesting one or more aerobatic areas (or portions thereof).	Preferably on D-1 1500 (1400) at the latest	ATCC (LARA)	Preceding day 1600 (1500)	ATCC (LARA)
35	Foreign military users or civil users requesting TRA N1-N3, S1-S6 or TRA W for missions NOT subject to COMOPSAIR approval and/or NOT requesting prio.	NLT H-3	ATCC	After H-3	ATCC (LARA)
40	Military opportunity traffic requesting airspace before TKOF.	30 MIN prior TKOF	ATCC (LARA)	ASAP	ATCC (LARA)
50	Military opportunity traffic in flight	In flight		In flight	R/T

### 1.3.7.2 Airspace Reservation Priorities (as defined in LARA)

1	Airspace Management	(ATC)
2	COMOPSAIR Waiver	(ATC and Air Defence)
10	Exercise Calendar Ex	(ATC and Air Defence)
11	Syllabus A-Jet	(ATC and Air Defence)
12	TSA or CBA1 slot for L16 COMAO	(Air Defence)
13	TSA or CBA1 slot for OCU F-16	(Air Defence)
14	TSA or CBA1 slot for other Belgian aircraft	(Air Defence)
15	TSA or CBA1 slot for foreign aircraft	(Air Defence)
20	Belgian Air Force COMAO	(ATC and Air Defence)
21	Military Paradrup	(ATC)
30	FCF/Calibration TRA S	(ATC)
31	Navaid Calibration	(ATC)

**1.3.7.2 Airspace Reservation Priorities (as defined in LARA)**

32	Syllabus Flight OCU	(ATC and Air Defence)
33	Qualification Training	(ATC and Air Defence)
34	Continuity Training	(ATC and Air Defence)
35	Visiting Aircrew	(ATC and Air Defence)
40	Opportunity Traffic	(ATC and Air Defence)
50	In Flight Request	(ATC and Air Defence)

**2 HELICOPTER TRAINING AREAS**

**2.1 Areas**

Within helicopter training areas (HTA), military helicopters operate at very low altitude. Other airspace users should keep a sharp look-out when crossing.

**HTA01 - ARDENNES 01**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502240N 0045228E - 502057N 0045113E - 501918N 0045328E - 501320N 0045527E - 501603N 0050204E - 501715N 0050528E - 501536N 0050755E - 501457N 0051552E - 501222N 0051905E - 501317N 0052037E - 502635N 0052036E - 503001N 0052335E then a clockwise arc radius 5 NM centered on 503447N 0052110E - 503057N 0051606E then a clockwise arc radius 1 NM centered on 503157N 0051556E - 503136N 0051428E - 502935N 0050415E - 502804N 0045453E - 502730N 0045125E - 502240N 0045228E.	250FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
<i>(1)</i> Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA02 - ARDENNES 02**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501317N 0052037E - 501006N 0052221E - 500855N 0052638E - 500625N 0052825E - 500754N 0052903E - 500949N 0053334E - 501137N 0053423E - 501300N 0053623E - 501223N 0053754E - 501453N 0054353E - 502339N 0054046E - 502852N 0054302E - 502931N 0053638E - 503218N 0053352E - 503001N 0052335E - 502635N 0052036E - 501317N 0052037E.	250FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
<i>(1)</i> Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA03A - ARDENNES 03A**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502852N 0054302E - 502815N 0054428E - 502533N 0054343E - 502354N 0055244E - 502220N 0055224E - 502021N 0055410E - 501306N 0055504E - 501149N 0055702E - 501023N 0055756E along border BELGIUM_LUXEMBOURG - 495917N 0055021E - 495848N 0054651E - 495939N 0054319E - 500011N 0054102E - 500556N 0054532E - 500725N 0054517E - 500916N 0054750E - 501344N 0054611E - 501453N 0054353E - 502339N 0054046E - 502852N 0054302E.	250FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
<i>(1)</i> Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

## HTA03B - ARDENNES 03B

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502220N 0055224E - 502347N 0055625E - 502335N 0055853E - 502005N 0060523E - 501753N 0060451E - 501544N 0060750E - 501536N 0060955E - 501411N 0061050E along border BELGIUM_GERMANY - 501026N 0060839E - 501014N 0060609E along border BELGIUM_LUXEMBOURG - 501023N 0055756E - 501149N 0055702E - 501306N 0055504E - 502021N 0055410E - 502220N 0055224E.	250FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

## HTA04A - ARDENNES 04A

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501320N 0045527E - 501241N 0044918E - 501009N 0044927E - along the Belgian-French border - 494540N 0050418E - 495128N 0050550E - 495158N 0051323E - 495407N 0051935E - 495522N 0051415E - 495853N 0051417E - 500357N 0051134E - 500730N 0050530E - 501603N 0050204E - 501320N 0045527E. <sup>(1)(2)</sup>	250FT AGL / GND	Low level flights.	HX <sup>(3)</sup>
(1) <u>EBR13</u> excl.			
(2) <u>TRA/TSA22</u> excl when active.			
(3) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

## HTA04B - ARDENNES 04B

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495407N 0051935E - 495445N 0052113E - 495647N 0052047E - 495753N 0052215E - 500232N 0052316E - 500625N 0052825E - 500855N 0052638E - 501006N 0052221E - 501317N 0052037E - 501222N 0051905E - 501457N 0051552E - 501536N 0050755E - 501715N 0050528E - 501603N 0050204E - 500730N 0050530E - 500357N 0051134E - 495853N 0051417E - 495522N 0051415E - 495407N 0051935E. <sup>(1)(2)</sup>	250FT AGL / GND	Low level flights.	HX <sup>(3)</sup>
(1) <u>EBR02</u> excl.			
(2) <u>TRA/TSA22</u> excl when active.			
(3) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

## HTA05A - ARDENNES 05A

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495407N 0051935E - 495146N 0053025E - 495711N 0053906E - 500011N 0054102E - 500308N 0053238E - 500529N 0053205E - 500535N 0052920E - 500625N 0052825E - 500232N 0052316E - 495753N 0052215E - 495647N 0052047E - 495445N 0052113E - 495407N 0051935E. <sup>(1)</sup>	250FT AGL / GND	Low level flights.	HX <sup>(2)</sup>
(1) <u>TRA/TSA22</u> excl when active.			
(2) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA05B - ARDENNES 05B**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500011N 0054102E - 500556N 0054532E - 500725N 0054517E - 500916N 0054750E - 501344N 0054611E - 501453N 0054353E - 501223N 0053754E - 501300N 0053623E - 501137N 0053423E - 500949N 0053334E - 500754N 0052903E - 500625N 0052825E - 500535N 0052920E - 500529N 0053205E - 500308N 0053238E - 500011N 0054102E.	250FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA06 - ARDENNES 06**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494540N 0050418E along border BELGIUM_FRANCE - 494546N 0050541E - 494514N 0051219E - 494157N 0051620E - 494149N 0051916E - 493751N 0052047E along border BELGIUM_FRANCE - 493657N 0052353E - 493724N 0052726E - 493329N 0053019E - 493526N 0053733E - 493745N 0054236E - 493939N 0054601E - 494018N 0054641E - 494118N 0054430E - 494304N 0053517E - 494904N 0053055E - 495146N 0053025E - 495407N 0051935E - 495158N 0051323E - 495128N 0050550E - 494540N 0050418E. <sup>(1)</sup>	250FT AGL / GND	Low level flights.	HX <sup>(2)</sup>
(1) <u>TRA/TSA22</u> excl when active.			
(2) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA07 - ARDENNES 07**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494018N 0054641E - 494202N 0054829E - 494729N 0054519E along border BELGIUM_LUXEMBOURG - 495020N 0054428E - 495321N 0054159E - 495939N 0054319E - 500011N 0054102E - 495711N 0053906E - 495146N 0053025E - 494904N 0053055E - 494304N 0053517E - 494118N 0054430E - 494018N 0054641E.	250FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA08 - HANNUT HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502804N 0045453E - 503201N 0045220E - 503706N 0044557E - 503941N 0044955E - 504157N 0045525E - 504332N 0045844E - 504157N 0051009E - 504225N 0051445E - 504201N 0052128E - 503821N 0051538E then a counter-clockwise arc radius 5 NM centered on 503447N 0052110E - 503213N 0051425E then a counter-clockwise arc radius 1 NM centered on 503157N 0051556E - 503136N 0051428E - 502935N 0050415E - 502804N 0045453E.	500FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA10A - COASTAL HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505900N 0024917E - 510131N 0023419E along the Belgian-French border - 510521N 0023243E along the coastline - 510859N 0024257E - 510635N 0025022E - 510812N 0030119E then a counter-clockwise arc radius 5 NM centered on 511305N 0025929E - 511412N 0030716E then a counter-clockwise arc radius 8 NM centered on 511221N 0025450E - 511749N 0030411E along the coastline - 511952N 0031055E - 511939N 0031105E - 511938N 0031052E - 511902N 0031037E - 511800N 0031136E - 511842N 0031144E - 511827N 0031207E - 511612N 0031241E - 511607N 0031203E - 511446N 0031222E - 511415N 0031243E - 511325N 0031254E - 511320N 0031325E - 511332N 0031340E - 511438N 0031325E - 511440N 0031340E - 511502N 0031338E - 511458N 0031312E - 511623N 0031250E - 511752N 0031540E - 511934N 0031347E - 512025N 0031344E along the coastline - 512223N 0032147E along border Belgian-Dutch - 511635N 0032236E.	500 FT AGL / GND	Training area for helicopters.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation).			

**HTA10B - AALTER HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505334N 0032421E - 510314N 0032818E - 510838N 0034420E - 511014N 0034517E - 511050N 0034529E - 511137N 0034646E - 511141N 0034702E - 511133N 0034755E - 511238N 0034804E along the Belgian-Dutch border - 511635N 0032236E.	500 FT AGL / GND	Training area for helicopters.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation).			

**HTA10C - IEPER HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510131N 0023419E - 505900N 0024917E - 510357N 0025825E - 505334N 0032421E - 505120N 0032729E - 504532N 0031017E - along the Belgian-French border - 510131N 0023419E. <sup>(1)</sup>	500 FT AGL / GND	Training area for helicopters.	HX <sup>(2)</sup>
(1) <u>EBR31</u> excl.			
(2) Activated by NOTAM (not later than 1500 (1400) the day before activation).			

**HTA10D - TOURNAI HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504532N 0031017E - 505120N 0032729E - 504028N 0034236E - 503147N 0032913E - along the Belgian-French border - 504532N 0031017E.	500 FT AGL / GND	Training area for helicopters.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation).			

**HTA10E - OOSTENDE HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510859N 0024257E along the coastline - 511749N 0030411E then a clockwise arc radius 8 NM centered on 511221N 0025450E - 511412N 0030716E then a clockwise arc radius 5 NM centered on 511305N 0025929E - 510812N 0030119E - 510635N 0025022E - 510859N 0024257E.	500 FT AGL / GND	Training area for helicopters.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation).			

**HTA12A - HERK-DE-STAD HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505507N 0045856E - 505713N 0045955E - 505635N 0050132E - 510005N 0051255E - 505454N 0051921E - 505429N 0052029E - 505104N 0051436E - 504928N 0051342E - 504836N 0050925E then a counter-clockwise arc radius 7.7 NM centered on 504654N 0045728E - 505356N 0050240E - 505507N 0045856E.	500 FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA12B - SINT-TRUIDEN HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504836N 0050925 E - 504928N 0051342E - 505104N 0051436E - 505429N 0052029E - 505220N 0052946E - 504803E 0053112E - 504634N 0053321E then a counter-clockwise arc radius 5 NM centred on 504137N 0053205E - 504512N 0052633E - 504201N 0052128E - 504225N 0051445E - 504157N 0051009E - 504332E 0045844E - 504836N 0050925E. <sup>(1)</sup>	500 FT AGL / GND	Low level flights.	HX <sup>(2)</sup>
(1) <u>EBR61</u> , <u>EBR62</u> , <u>EBR63</u> and <u>EBR64</u> excl when active.			
(2) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA13 - WESTERLO HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505713N 0045955E - 505752N 0044910E - 505921N 0044837E - 510008N 0045002E - 510756N 0043625E - 511005N 0044746E - 511019N 0044902E - 510625N 0050313E - 510536N 0050817E - 510443N 0050817E - 510156N 0051153E - 510005N 0051255E - 505635N 0050132E - 505713N 0045955E.	500 FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA14A - TURNHOUT HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511435N 0044200E - 512058N 0044536E - 512329N 0044518E - 512454N 0044616E along border BELGIUM_NETHERLANDS - 511856N 0050804E - 511801N 0050834E - 511738N 0045212E - 511441N 0044700E - 511435N 0044200E.	500 FT AGL / GND	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**HTA14B - GEEL HELICOPTER TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511400N 0044110E - 511435N 0044200E - 511441N 0044700E - 511738N 0045212E - 511801N 0050834E - 511224N 0051036E - 510536N 0050817E - 510625N 0050313E - 511019N 0044902E - 511005N 0044746E - 511400N 0044110E. <sup>(1)</sup>	500 FT AGL / GND	Low level flights.	HX <sup>(2)</sup>
(1) EBR16 excl.			
(2) Activated by NOTAM (not later than 1500 (1400) the day before activation). May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

**2.2 Booking Procedures (MIL only)**

The HTA will be booked according to the Air Traffic Management Instruction 3 Annex J through LARA or via Steenokkerzeel ATCC (TEL: +32 (0) 2 443 82 04).

COMOPSAIR may grant authorisation for operations with foreign helicopters. Requests shall be made by FAX/mail to the Military Aviation Authority (see [GEN 1.1, § 1.1.2](#)) at least 10 working days in advance.

Priority will be given to 1 W Operations.

**2.2.1 Accessibility**

The HTA are only accessible for operations involving Belgian military helicopters. However, COMOPSAIR may grant authorisation for operations with foreign helicopters.

The HTA are not accessible for foreign helicopters from 01 JUL until 31 AUG.

**2.2.2 Subdivision of the HTA Ardennes**

In order to ease reservation, four grouped areas are defined within the HTA Ardennes:

- HTA Ardennes West: HTA01 + HTA04A + HTA04B + HTA06
- HTA Ardennes East: HTA02 + HTA03A + HTA03B + HTA05A + HTA05B + HTA07
- HTA Ardennes North: HTA01 + HTA02 + HTA03A + HTA3B
- HTA Ardennes South: HTA04A + HTA04B + HTA05A + HTA05B + HTA06 + HTA07

**2.2.3 Maximum Authorised Occupation of the HTA Ardennes**

Complete HTA Ardennes: eight helicopters operating together as one talking unit.

When using three or four areas or one grouped area: four helicopters working individually (four talking units).

### 3 LOW FLYING AREAS

#### 3.1 Areas

Within the military low flying areas (LFA), jet aircraft operate at very low altitude. Other airspace users should keep a sharp look-out when crossing.

##### LFA01 - ARDENNES 01

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502231N 0045226E - 502723N 0051325E - 503001N 0052456E - 502845N 0053003E - 502846N 0053517E - 501008N 0051653E - 500954N 0045424E - 501320N 0045527E - 501918N 0045328E - 502231N 0045226E.	500FT AGL / 250FT AGL	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

##### LFA02 - ARDENNES 02

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502846N 0053517E - 502846N 0054240E - 502237N 0055236E - 501030N 0055833E - along the Belgian-Luxembourg border - 495959N 0054917E - 500000N 0054318E - 501059N 0053428E - 501008N 0051653E - 502846N 0053517E.	500FT AGL / 250FT AGL	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

##### LFA03 - ARDENNES 03

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502237N 0055236E - 502534N 0060141E - 502542N 0062226E - along the Belgian-German border - 500748N 0060816E - along the Belgian- Luxembourg border - 501030N 0055833E - 502237N 0055236E.	500FT AGL / 250FT AGL	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

##### LFA04 - ARDENNES 04

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500954N 0045424E - 501008N 0051653E - 495442N 0052348E - 494714N 0050434E - 495410N 0045336E - 500954N 0045424E. <sup>(1)</sup>	500FT AGL / 250FT AGL	Low level flights.	HX <sup>(2)</sup>
(1) <u>TRA/TSA22</u> excl when active.			
(2) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			



**LFA05 - ARDENNES 05**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501008N 0051653E - 501059N 0053428E - 500000N 0054318E - 495442N 0052348E - 501008N 0051653E.	500FT AGL / 250FT AGL	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

**LFA06 - ARDENNES 06**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494714N 0050434E - 495442N 0052348E - 493826N 0053833E - 493514N 0053041E - 494520N 0051208E - 494714N 0050434E. <sup>(1)</sup>	500FT AGL / 250FT AGL	Low level flights.	HX <sup>(2)</sup>
(1) <u>TRA/TSA22</u> excl when active.			
(2) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

**LFA07 - ARDENNES 07**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495442N 0052348E - 500000N 0054318E - 495117N 0054157E - 494211N 0054751E - 493826N 0053833E - 495442N 0052348E.	500FT AGL / 250FT AGL	Low level flights.	HX <sup>(1)</sup>
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

**LFA11 - KOKSIJDE TRAINING AREA**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E along the coastline - 512025N 0031344E - 512136N 0031339E - 512153N 0031118E - 512103N 0030959E - 511952N 0031055E along the coastline - 510521N 0023244E.	500FT AMSL / 10FT AMSL	Training area for helicopters and fixed-wing aircraft. <sup>(1)</sup>	HX <sup>(2)</sup>
(1) Can be activated for rotary wing and fixed wing aircraft at the same time.			
(2) Activated by NOTAM.			

**3.2 Booking procedures (MIL only)**

The LFA will be booked according to the Air Traffic Management Instruction 3 through LARA or via Steenokkerzeel ATCC (TEL: +32 (0) 2 443 82 04).

COMOPSAIR may grant authorisation for operations with foreign fixed wing aircraft or helicopters (in LFA11). Requests shall be made by FAX/mail to the Military Aviation Authority (see GEN 1.1. § 1.1.2) at least 10 working days in advance.

**3.2.1 Accessibility**

The LFA are only accessible for operations involving Belgian Air Force fixed wing aircraft or helicopters (in LFA11). However, COMOPSAIR may grant authorisation for operations with foreign fixed wing aircraft or helicopters (in LFA11).

**3.2.2 Subdivision of the LFA Ardennes**

In order to ease reservation, four grouped areas are defined within the LFA Ardennes:

- LFA Ardennes West: LFA01 + LFA04 + LFA06
- LFA Ardennes East: LFA02 + LFA03 + LFA05 + LFA07
- LFA Ardennes North: LFA01 + LFA02 + LFA03
- LFA Ardennes South: LFA04 + LFA05 + LFA06 + LFA07

**3.2.3 Maximum Authorised Occupation of the LFA Ardennes**

Complete LFA Ardennes: 4 formations of 4 aircraft or 3 C-130 / A400M aircraft.

When using three or four areas or one grouped area: 2 formations of 4 aircraft or 2 C-130 / A400M aircraft.

**3.3 Areas to be avoided in the LFA Ardennes (MIL only)**

In addition to the areas situated within the LFA Ardennes specified in [ENR 5.1](#) and [ENR 5.2](#), following areas shall be avoided:

**Below 2000FT AGL - 1NM radius**

Arlon	494100N	0054900E
Barvaux / Durbuy	502100N	0052845E
Bastogne	500000N	0054300E
Beauraing	500630N	0045800E
Bertrix	495115N	0051515E
Bouillon	494800N	0050400E
Ciney	501800N	0050600E
Florenville	494200N	0051800E
Habay-la-Neuve	494400N	0053900E
Han-sur-Lesse	500700N	0051200E
Houffalize	500800N	0054725E
La Roche	501100N	0053500E
Malmedy	502530N	0060200E
Marche-en-Famenne	501330N	0052100E
Neufchâteau	495100N	0052600E
Rochefort	500930N	0051320E
Stavelot	502330N	0055600E
Sankt-Vith	501700N	0060700E
Vielsalm	501730N	0055500E

**Below 2000FT AGL - 2NM radius**

Dinant	501445N	0045450E
Saint-Hubert	500140N	0052230E

**3.4 Limitations of Simulated Attacks (MIL only)**

It is forbidden to simulate attacks on, even temporary, populated locations or on helicopter operating in the HTA.

**4 AIR DEFENCE IDENTIFICATION ZONE**

NIL

**ENR 5.3 Other Activities of a Dangerous Nature and Other Potential Hazards****1 OTHER ACTIVITIES OF A DANGEROUS NATURE**

NIL

**2 OTHER POTENTIAL HAZARDS****UCCLE - WEATHER BALLOONS**

Lateral limits / coordinates	Vertical limits	Advisory measures	Authority responsible for INFO
5048N 00421E	FL 115 (MAX)	Radiosonde / upperwind radio observations <sup>(1)</sup> Diameter 10 M MAX WT 1.2 KG ROC 5 to 6 MPS	Koninklijk Meteorologisch Instituut / Institut Royal Météorologique Post: Avenue Circulaire / Ringlaan 3 1180 Brussels BELGIUM TEL: +32 (0) 2 373 05 08
<i>(1)</i> Launched MON, WED and FRI at 1130 (1030). Flight duration APRX 2.5 HR.			

**BEAUVECHAIN - WEATHER BALLOONS**

Lateral limits / coordinates	Vertical limits	Advisory measures	Authority responsible for INFO
5046N 00448E	FL 082 (APRX)	Radiosonde / upperwind radio observations <sup>(1)</sup> Diameter 1.25 M at release WT 0.35 KG ROC 320 MPM	Belgian Defence - Meteo Center Post: Defence Air Component - COMOPSAIR Meteo Wing Base Charles Roman Rue de la Grande Leck 1 1320 Beauvechain BELGIUM TEL: +32 (0) 2 442 54 41 (Supervisor) TEL: +32 (0) 2 442 54 28 (Tech)
<i>(1)</i> Launched DLY at 2300 (2200) and TUE at 1100 (1000). Additional balloons can be launched HX for operational requirements in coordination with EBBE TWR..			

THIS PAGE INTENTIONALLY LEFT BLANK

## ENR 5.4 Air Navigation Obstacles

### 1 IN BELGIUM

#### 1.1 Area 1 Obstacles

The area 1 obstacle data set for Belgium can be obtained online from the Belgian National Geographical Institute in AIXM 5.1 format and as shapefile:

URL: <https://www.geo.be/catalog/details/94bc04de-a424-11eb-a0b2-24418cae2e72?l=en>

Additional area 1 obstacle data received by third parties, but not yet verified by the National Geographical Institute are included in the following file:

URL: [https://ops.skeyes.be/html/belgocontrol\\_static/eaip/eAIP\\_Product/Obstacles/ObstacleDataArea1Belgium18APR2024additionalinfo.xlsx](https://ops.skeyes.be/html/belgocontrol_static/eaip/eAIP_Product/Obstacles/ObstacleDataArea1Belgium18APR2024additionalinfo.xlsx)

#### 1.2 Dynamic Obstacle Lighting

Obstacles in the list below are obstacles whose lighting is only required to ensure the safety of military flying activities. To reduce the impact on the surrounding area, the lighting of these obstacles is therefore linked to a central command and will only be switched on in function of military needs.

Municipality	Obstacle type	Obstacle position	ELEV /HGT (FT)
Ciney-Pessoux	Wind turbine	501754N 0051036E	1518 / 489
Ciney-Pessoux	Wind turbine	501754N 0051105E	1498 / 489
Ciney-Pessoux	Wind turbine	501751N 0051129E	1548 / 489
Ciney-Pessoux	Wind turbine	501743N 0051037E	1517 / 489
Ciney-Pessoux	Wind turbine	501741N 0051055E	1556 / 489
Ciney-Pessoux	Wind turbine	501737N 0051118E	1548 / 488
Dorinne-Dinant	Wind turbine	501816N 0045827E	1329 / 457
Dorinne-Dinant	Wind turbine	501755N 0045812E	1320 / 457
Dorinne-Dinant	Wind turbine	501753N 0045859E	1320 / 457
Dorinne-Dinant	Wind turbine	501743N 0045838E	1303 / 457
Dorinne-Dinant	Wind turbine	501739N 0045925E	1319 / 457
Dorinne-Dinant	Wind turbine	501739N 0045902E	1329 / 457
Eghezee-Boneffe	Wind turbine	503900N 0045659E	931 / 493
Eghezee-Boneffe	Wind turbine	503847N 0045715E	970 / 493
Eghezee-Boneffe	Wind turbine	503836N 0045728E	957 / 493
Eghezee-Boneffe	Wind turbine	503839N 0045633E	957 / 493
Eghezee-Boneffe	Wind turbine	503826N 0045643E	973 / 493
Eghezee-Boneffe	Wind turbine	503815N 0045653E	947 / 493
Eghezee-Boneffe	Wind turbine	503821N 0045602E	980 / 493
Eghezee-Boneffe	Wind turbine	503810N 0045610E	963 / 493
Eghezee-Boneffe	Wind turbine	503756N 0045621E	980 / 493
Fauvillers	Wind turbine	495259N 0054159E	2029 / 493
Fauvillers	Wind turbine	495243N 0054209E	1977 / 493
Fauvillers	Wind turbine	495228N 0054222E	2010 / 493
Fauvillers	Wind turbine	495155N 0054212E	2010 / 493
Fauvillers	Wind turbine	495142N 0054238E	2020 / 493
Gesves	Wind turbine	502416N 0050546E	1358 / 489
Gesves	Wind turbine	502426N 0050606E	1361 / 489
Gesves	Wind turbine	502437N 0050633E	1341 / 490
Gingelom	Wind turbine	504233N 0050654E	884 / 492
Gingelom	Wind turbine	504231N 0050708E	903 / 492
Gingelom	Wind turbine	504228N 0050723E	880 / 492
Gingelom	Wind turbine	504200N 0050825E	946 / 492
Gingelom	Wind turbine	504156N 0050843E	936 / 492

Municipality	Obstacle type	Obstacle position	ELEV / HGT (FT)
Gingelom	Wind turbine	504153N 0050859E	957 / 491
Gingelom	Wind turbine	504153N 0050915E	933 / 492
Lincet	Wind turbine	504335N 0045916E	758 / 491
Lincet	Wind turbine	504330N 0045933E	769 / 493
Lincet	Wind turbine	504314N 0050050E	806 / 493
Lincet	Wind turbine	504311N 0050115E	797 / 493
Lincet	Wind turbine	504308N 0050223E	821 / 493
Lincet	Wind turbine	504307N 0050243E	867 / 493
Lincet	Wind turbine	504306N 0050306E	858 / 493
Lincet	Wind turbine	504225N 0050608E	910 / 476
Lincet	Wind turbine	504220N 0050623E	894 / 476
Molembaix - Celles	Wind turbine	504212N 0032316E	546 / 491
Molembaix - Celles	Wind turbine	504221N 0032341E	543 / 491
Molembaix - Celles	Wind turbine	504148N 0032312E	547 / 490
Molembaix - Celles	Wind turbine	504207N 0032412E	549 / 491
Molembaix - Celles	Wind turbine	504214N 0032433E	546 / 491
Neufchateau	Wind turbine	495150N 0052959E	2093 / 493
Neufchateau	Wind turbine	495114N 0053018E	2141 / 493
Neufchateau	Wind turbine	495121N 0053056E	2081 / 493
Neufchateau	Wind turbine	495155N 0053102E	2000 / 493
Neufchateau	Wind turbine	495206N 0053117E	1990 / 493
Ohey	Wind turbine	502447N 0050648E	1338 / 490
Ohey	Wind turbine	502500N 0050704E	1340 / 490
Tinlot	Wind turbine	502753N 0052133E	1340 / 493
Tinlot	Wind turbine	502749N 0052216E	1301 / 493
Tinlot	Wind turbine	502746N 0052144E	1337 / 493
Tinlot	Wind turbine	502805N 0052154E	1340 / 493
Tinlot	Wind turbine	502806N 0052219E	1337 / 493

## 2 IN LUXEMBOURG

No Area 1 electronic obstacle sets are currently available in Luxembourg. The list below contains all obstacles with a height exceeding 100 M that are known to ANA AIM.

Designation	Municipality	Obstacle type	Obstacle position	ELEV / HGT (FT)	Marked	Remarks
EL0001	Beidweiler	Radio mast	494343N 0061904E	1844 / 952	Yes	
EL0002	Beidweiler	Radio mast	494349N 0061915E	1838 / 952	Yes	
EL0003	Beidweiler	Radio mast	494356N 0061926E	1825 / 952	Yes	
EL0005	Dudelange	Radio tower	492748N 0060545E	2353 / 985	Yes	
EL0006	Parc Hosingen	Radio mast	500115N 0060617E	2694 / 985	Yes	
EL0007	Junglinster	Radio tower	494300N 0061529E	1857 / 716	Yes	
EL0008	Junglinster	Radio tower	494307N 0061540E	1894 / 716	Yes	
EL0009	Junglinster	Radio tower	494313N 0061551E	1913 / 716	Yes	
EL0010	Wintrange	Wind turbine	500428N 0055946E	2014 / 338	Yes	
EL0011	Wintrange	Wind turbine	500344N 0055824E	2014 / 338	Yes	
EL0012	Wintrange	Wind turbine	500411N 0055628E	1996 / 339	Yes	
EL0013	Wintrange	Wind turbine	500412N 0055711E	1999 / 339	Yes	
EL0017	Weiswampach	Wind turbine	500659N 0060101E	2199 / 598	Yes	
EL0018	Weiswampach	Wind turbine	500626N 0060138E	2233 / 598	Yes	
EL0019	Weiswampach	Wind turbine	500626N 0060201E	2208 / 598	Yes	
EL0020	Weiswampach	Wind turbine	500621N 0060115E	2189 / 598	Yes	
EL0021	Weiswampach	Wind turbine	500609N 0060059E	2175 / 598	Yes	
EL0037	Weiswampach	Wind turbine	500730N 0060511E	2243 / 598	Yes	

Designation	Municipality	Obstacle type	Obstacle position	ELEV / HGT (FT)	Marked	Remarks
EL0038	Bourscheid	Wind turbine	495346N 0060721E	1926 / 614	Yes	
EL0039	Bourscheid	Wind turbine	495432N 0060551E	2143 / 614	Yes	
EL0040	Bourscheid	Wind turbine	495542N 0060500E	2040 / 516	Yes	
EL0051	Mompach	Wind turbine	494554N 0062932E	1654 / 498	Yes	
EL0052	Mompach	Wind turbine	494550N 0062950E	1644 / 498	Yes	
EL0053	Mompach	Wind turbine	494528N 0062923E	1646 / 498	Yes	
EL0054	Mompach	Wind turbine	494507N 0062924E	1615 / 498	Yes	
EL0059	Wiltz	Wind turbine	495652N 0055458E	2273 / 642	Yes	
EL0060	Wiltz	Wind turbine	495651N 0055618E	2177 / 642	Yes	
EL0061	Goesdorf	Wind turbine	495643N 0055952E	2079 / 642	Yes	
EL0062	Goesdorf	Wind turbine	495550N 0055717E	2230 / 642	Yes	
EL0063	Putscheid	Wind turbine	495626N 0060704E	2199 / 614	Yes	
EL0064	Parc Hosingen	Wind turbine	495749N 0060441E	2240 / 642	Yes	
EL0065	Putscheid	Wind turbine	495818N 0060638E	2274 / 614	Yes	
EL0066	Parc Hosingen	Wind turbine	495946N 0060412E	2279 / 642	Yes	
EL0067	Parc Hosingen	Wind turbine	500058N 0060413E	2282 / 642	Yes	
EL0068	Parc Hosingen	Wind turbine	500155N 0060522E	2332 / 642	Yes	
EL0069	Clervaux	Wind turbine	500237N 0060243E	2263 / 642	Yes	
EL0070	Clervaux	Wind turbine	500308N 0060610E	2207 / 665	Yes	
EL0071	Weiswampach	Wind turbine	500603N 0060232E	2245 / 598	Yes	
EL0072	Clervaux	Wind turbine	500452N 0060452E	2350 / 614	Yes	
EL0073	Clervaux	Wind turbine	500603N 0060428E	2330 / 614	Yes	
EL0074	Luxembourg	Building	493718N 0060836E	1401 / 348	Yes	
EL0075	Luxembourg	Building	493719N 0060838E	1411 / 348	Yes	
EL0076	Wincrange	Wind turbine	500638N 0055738E	2304 / 663	Yes	
EL0077	Wincrange	Wind turbine	500650N 0055730E	2320 / 663	Yes	
EL0078	Wincrange	Wind turbine	500703N 0055710E	2343 / 663	Yes	
EL0079	Wincrange	Wind turbine	500715N 0055701E	2353 / 663	Yes	
EL0080	Wincrange	Wind turbine	500717N 0055636E	2343 / 663	Yes	
EL0081	Wincrange	Wind turbine	500724N 0055620E	2330 / 663	Yes	
EL0082	Wincrange	Wind turbine	500728N 0055602E	2307 / 663	Yes	
EL0083	Feulen	Wind turbine	495242N 0060125E	2218 / 653	Yes	
EL0084	Luxembourg	Building	493720N 0060840E	1440 / 362	Yes	
EL0085	Wincrange	Wind turbine	500423N 0055618E	2150 / 560	Yes	
EL0086	Mompach	Wind turbine	494533N 0062651E	1983 / 679	Yes	
EL0087	Garnich	Wind turbine	493656N 0055535E	1980 / 677	Yes	
EL0088	Garnich	Wind turbine	493650N 0055443E	1927 / 677	Yes	
EL0089	Esch-sur-Sûre	Wind turbine	495340N 0055920E	2396 / 752	Yes	
EL0090	Clervaux	Wind turbine	500650N 0060606E	2365 / 752	Yes	
EL0091	Clervaux	Wind turbine	500636N 0060436E	2395 / 752	Yes	
EL0092	Esch-sur-Sûre	Wind turbine	495401N 0060043E	2392 / 752	Yes	
EL0093	Bourscheid	Wind turbine	495333N 0060100E	2398 / 752	Yes	
EL0094	Bourscheid	Wind turbine	495308N 0060113E	2364 / 752	Yes	
EL0095	Tandel	Wind turbine	495523N 0060910E	2241 / 752	Yes	
EL0096	Mondercange	Wind turbine	493232N 0060331E	1822 / 752	Yes	
EL0097	Roeser	Wind turbine	493055N 0060752E	1604 / 679	Yes	
EL0098	Vallée de l'Ernz	Wind turbine	494959N 0061507E	2011 / 677	Yes	
EL0099	Vallée de l'Ernz	Wind turbine	494946N 0061413E	1990 / 677	Yes	
EL0100	Vallée de l'Ernz	Wind turbine	494943N 0061513E	1983 / 677	Yes	

Designation	Municipality	Obstacle type	Obstacle position	ELEV / HGT (FT)	Marked	Remarks
EL0101	Dalheim	Wind turbine	493148N 0061710E	1608 / 679	Yes	
EL0102	Dalheim	Wind turbine	493157N 0061548E	1727 / 679	Yes	
EL0103	Dalheim	Wind turbine	493251N 0061408E	1683 / 679	Yes	
EL0104	Dalheim	Wind turbine	493323N 0061403E	1728 / 679	Yes	
EL0105	Dalheim	Wind turbine	493320N 0061448E	1764 / 679	Yes	



## ENR 5.5 Aerial Sporting and Recreational Activities

### 1 GENERAL

#### BALEN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 511051N 0051315E.	2500FT AMSL/ GND	Glider activity. Glider towing. Glider winching up to 2200FT AMSL.	HX. In VMC only <sup>(1)</sup>
(1) OPR HR can be checked with EBKH OPR (see AD 2.PVT-EBKH).			

#### BEAUVECHAIN CLIMB-OUT SECTOR 1 <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504139N 0045603E - an arc of circle, 40NM radius, centred on position 510954N 0041102E and traced clockwise to 503810N 0044949E - 504354N 0044405E - 504702N 0044759E - 504825N 0045614E - an arc of circle, 1.7NM radius, centred on position 504654N 0045728E and traced counterclockwise to 504740N 0045503E - 504341N 0045156E - 504139N 0045603E.	4500 FT AMSL / 3500 FT AMSL	Glider activity.	HX <sup>(2)</sup>
(1) Airspace class G during activation.			
(2) Outside MIL OPR HR and SAT, SUN, HOL from 0800 (0700) till SS only. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

#### BEAUVECHAIN CLIMB-OUT SECTOR 2 / GOETSENHOVEN GLIDER AREA <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504848N 0050505E - an arc of circle, 40NM radius, centred on position 510954N 0041102E and traced clockwise to 504138N 0045603E - 504341N 0045156E - 504740N 0045503E - an arc of circle, 1.7NM radius, centred on position 504654N 0045728E and traced clockwise to 504836N 0045721E - 504848N 0050505E.	FL 055 / 3500 FT AMSL	Glider activity.	HX <sup>(2)</sup>
(1) Airspace class G during activation.			
(2) Outside MIL OPR HR and SAT, SUN, HOL from 0800 (0700) till SS only. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

#### BELŒIL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502945N 0033156E - an arc of circle, 8NM radius, centred on position 503250N 0034333E and traced clockwise to 502506N 0034014E - along the Belgian-French border - 502945N 0033156E.	1000FT AGL / GND	Training area for free manned balloons.	HJ. In VMC only <sup>(1)</sup>
(1) By arrangement with Chièvres TWR and Brussels FIC.			

**BERTRIX**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 10NM radius, centred on 495330N 0051326E.	4500FT AMSL / GND	Glider activity.	HX. In VMC only <sup>(1)</sup>
<i>(1)</i> During OPR HR of the Belgian Cadets at EBBX. Activation will be announced by NOTAM			

**BRASSCHAAT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 512027N 0043015E.	2500FT AMSL / GND <sup>(1)</sup>	Glider activity. Glider towing. Glider winching up to 2500FT AMSL	HJ (SAT, SUN and HOL). In VMC only
<i>(1)</i> Upper limit 3500FT AMSL below <u>Brussels TMA Three A</u> and 4500FT AMSL below <u>Brussels LCTA</u> .			

**CERFONTAINE AREA THREE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501110N 0042333E - 500957N 0042355E - 501010N 0042556E - an arc of circle, 2 NM radius, centred on position 500910N 0042314E and traced clockwise to 501110N 0042333E.	2500FT AMSL / GND	Glider activity. Glider towing.	See <u>AD 2.PVT-EBCF</u>

**CÉROUX-MOUSTY**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 4NM radius, centred on 503933N 0043051E.	1500FT AMSL / GND	Training area for free manned balloons.	HJ. In VMC only <sup>(1)</sup>
<i>(1)</i> By arrangement with Beauvechain TWR and Brussels FIC.			

**DIEST**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1.5NM radius, centred on 505957N 0050355E.	FL 150 / GND	Parachuting, glider towing and winching activity. Glider winching up to 2500FT AMSL	SAT, SUN and HOL, SR-SS + 30MIN. In VMC only <sup>(1)</sup>
<i>(1)</i> Area may be temporarily inactive due to MIL requirements (see ENR 5.1, <u>EBR03</u> ).			
<b>Operator:</b> Post: PCV Schaffen Nieuwe Dijkstraat 77 3290 Diest BELGIUM TEL: +32 (0) 13 33 75 43 TEL: +32 (0) 474 75 61 52 Email: <a href="mailto:schaffen@pcv.be">schaffen@pcv.be</a>			

**FEITSCH**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500242N 0055346E - 500105N 0055334E - 500108N 0055244E - 500244N 0055256E - 500242N 0055346E.	FL070 / 3500FT AMSL <sup>(1)</sup>	Aerobatic sector for light aircraft.	HX. In VMC only <sup>(2)</sup>
<i>(1)</i> Release between 3500FT AMSL and FL070 subject to approval from Luxembourg APP (CH 120.885).			
<i>(2)</i> Any conflicting areas announced by NOTAM are excluded for aerobatic use during activation.			

**GENK - ZWARTBERG**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 510055N 0053135E.	2500FT AMSL / GND	Glider activity. Glider towing.	See <a href="#">AD 2.PVT-EBZW</a>

**GERAARDSBERGEN <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 504517N 0035145E.	2500FT AMSL / GND <sup>(2)</sup>	Glider activity. Glider towing. Glider winching up to 1600FT AMSL.	SAT, SUN and HOL, HJ (daily from APR to OCT). In VMC only.

(1) Use of the area is subject to prior permission of the operator of EBGG. Local instructions should be known and complied with.

(2) Altimeter setting based on QNH provided by Brussels APP.

**GOETSENHOVEN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 504652N 0045724E.	2500FT AMSL / GND	Glider activity. Glider towing. Glider winching up to 2000FT AMSL.	SAT, SUN and HOL, HJ

**GRINGLAY**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 495456N 0060530E.	3500FT AMSL / GND	Paragliding.	HJ. In VMC only

**HASSELT - KIEWIT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 505812N 0052230E.	2500FT AMSL / GND	Glider activity. Glider towing. Glider winching up to 2000 FT AMSL.	See <a href="#">AD 2.PVT-EBZH</a>

**HOEVENEN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 511820N 0042313E.	FL 130 / GND	Parachuting.	HJ. In VMC only <sup>(1)</sup>

(1) By arrangement with Brussels ACC and Brussels APP.

**Operator:**

Post: Sportparachutistenclub Hoevenen  
Pauwelsdreef 86  
2940 Hoevenen  
BELGIUM

TEL: +32 (0) 36 65 23 09

TEL: +32 (0) 477 32 09 76

Email: [skydivehoevenen@gmail.com](mailto:skydivehoevenen@gmail.com)

**KONZ / KÖNEN GLIDER SECTOR NORTH**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494801N 0063129E - 494708N 0063341E - 494203N 0063405E - 494203N 0063022E - along the German-Luxembourg border - 494801N 0063129E.	4000FT AMSL / 1000FT AGL <sup>(1)</sup>	Glider activity.	HX. In VMC only <sup>(2)</sup>
(1) 1000FT AGL or lower limit of class E airspace if higher (see <i>AIP Germany</i> ).			
(2) HJ only. On request of the "Aero-Club Trier und Konz". Activation can be checked with Luxembourg APP on CH 120.885.			

**KONZ / KÖNEN GLIDER SECTOR SOUTH**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494203N 0063022E - 494203N 0063405E - 493212N 0063453E - 493018N 0063000E - 494203N 0063022E.	4000FT AMSL / 1000FT AGL <sup>(1)</sup>	Glider activity.	HX. In VMC only <sup>(2)</sup>
(1) 1000FT AGL or lower limit of class E airspace if higher (see <i>AIP Germany</i> ).			
(2) HJ only. On request of the "Aero-Club Trier und Konz". Activation can be checked with Luxembourg APP on CH 120.885.			

**KONZ / KÖNEN AEROBATICS SECTOR**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494203N 0063405E - 493900N 0063420E - 493858N 0063015E - 494203N 0063022E - 494203N 0063405E.	5000FT AMSL / 1000FT AGL <sup>(1)</sup>	Aerobatics.	HX. In VMC only <sup>(2)</sup>
(1) 1000FT AGL or lower limit of class E airspace if higher (see <i>AIP Germany</i> ).			
(2) HJ only. On request of the "Aero-Club Trier und Konz". Activation can be checked with Luxembourg APP on CH 120.885.			

**LEOPOLDSBURG**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 510712N 0051825E.	FL 100 / GND	Parachuting.	SAT, SUN and HOL, HJ. In VMC only <sup>(1)</sup>
(1) By arrangement with Brussels ACC and Brussels FIC.			
<b>Operator:</b>			
Post: Sanicole (Leopoldsburg) Kamperbaan 153 3940 Hechtel BELGIUM			
TEL: +32 (0) 11 34 27 39			
Email: <a href="mailto:info@sanicole.be">info@sanicole.be</a>			

**MEEUWEN-GRUITRODE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 510212N 0053121E.	FL 150 / GND	Parachuting.	SAT, SUN and HOL, HJ. In VMC only
<b>Operator:</b>			
Post: PCV Zwartberg Nieuwe Dijkstraat 77 3290 Diest BELGIUM			
TEL: +32 (0) 13 33 75 43			
TEL: +32 (0) 474 75 61 52			
Email: <a href="mailto:zwartberg@pcv.be">zwartberg@pcv.be</a>			

**MICHELAU <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500336N 0060645E - 495635N 0055817E - 495326N 0060551E - 495426N 0061353E - along the German-Luxembourg border - 500336N 0060645E.	FL050 / 3500FT AMSL	Paragliding. <sup>(2)</sup>	HX <sup>(3)(4)</sup>
<p>(1) Non-public sector. All other VFR traffic shall contact Luxembourg APP on CH 120.885.</p> <p>(2) No traffic information on individual paraglider flights will be issued by ATC.</p> <p>(3) HJ only. On request of the "Cumulux Paragliding Club". Activation can be checked with Luxembourg APP on CH 120.885.</p> <p>(4) Any conflicting areas announced by NOTAM are excluded for paragliding during activation.</p>			

**MOORSELE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 505110N 0030850E.	FL 150 / GND	Parachuting.	SAT, SUN, public- and school HOL, 0800-2000 (0700-1900) or SS (whatever comes first). On FRI 1500-2000 (1400-1900) or SS (whatever comes first). On WED from 01 MAY to 30 JUN and from 01 to 30 SEP, 1300-SS + 30 MIN.
<p><b>Operator:</b></p> <p>Post: PCV Moorsele Nieuwe Dijkstraat 77 3290 Diest BELGIUM</p> <p>TEL: +32 (0) 13 33 75 43 TEL: +32 (0) 474 75 61 52 Email: <a href="mailto:moorsele@pcv.be">moorsele@pcv.be</a></p>			

**NAMUR AREA ONE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 502917N 0044626E.	FL 135 / GND	Parachuting.	FRI BTN 1500 and SS, outside MIL activities. SAT, SUN and HOL, HJ. In VMC only <sup>(1)</sup>
<p>(1) Permission for dropping shall be obtained from Charleroi ATC by TEL. MET OBS of EBCI is taken into consideration only. Continuous listening watch is compulsory as dropping may be suspended for traffic reasons.</p> <p><b>Operator:</b></p> <p>Post: CERPS Namur Rue Capitaine Aviateur Jacquet 44 5020 Suarlée BELGIUM</p> <p>TEL: +32 (0) 475 82 44 53 Email: <a href="mailto:info@paraclubnamur.com">info@paraclubnamur.com</a></p>			

**NAMUR AREA TWO**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502928N 0044201E - 503121N 0045022E - 502320N 0045219E - 502147N 0044008E - 502259N 0044043E - 502332N 0044040E - 502428N 0044015E - 502437N 0044006E - an arc of circle, 5.5NM radius, centred on 502817N 0043335E and traced counterclockwise to 502928N 0044201E.	2500FT AMSL / GND <sup>(1)</sup>	Glider activity. Glider towing. Glider winching up to 2000 FT AMSL.	MON to THU, 0800-1900 (0700-1800). FRI to SUN and HOL, 0800 (0700)-SS. In VMC only <sup>(2)</sup>
(1) For operational reasons, highest suitable altitude for glider activity is 2000FT AMSL.			
(2) MET OBS of EBCI is taken into consideration only.			

**NOERTRANGE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 495847N 0055456E.	FL 145 / GND <sup>(1)</sup>	Parachuting.	HJ. In VMC only <sup>(2)</sup>
(1) Release between 3500FT AMSL and FL 145 subject to approval from Luxembourg APP.			
(2) SSR Mode A/C compulsory. Permission for dropping shall be obtained from Luxembourg APP (CH 120.885). Continuous listening watch is compulsory as dropping may be suspended for traffic reasons.			

**RIPPWEILER**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494532N 0055753E - 494506N 0055723E - 494601N 0055521E - 494628N 0055548E - 494532N 0055753E.	FL070 / 2500FT AMSL <sup>(1)</sup>	Aerobatic sector for gliders.	HX. In VMC only
(1) Release between 2500FT AMSL and FL070 subject to approval from Luxembourg APP (CH 120.885).			

**SAINT-GHISLAIN**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502758N 0035215E then a clockwise arc radius 2 NM centered on 502727N 0034913E - 502924N 0034829E - 502758N 0035215E.	4500 FT AMSL <sup>(1)</sup> / GND	Parachuting.	During EBSG OPR HR. In VMC only. <sup>(2)(3)</sup>
(1) Upper limit FL 055 outside MIL OPR HR.			
(2) OPR HR can be checked with Brussels FIC.			
(3) Activation announced by NOTAM.			
<b>Operator:</b>			
Post: SKYDIVE2FLY Rue des 4 fils Aymon 0/P006 5000 Namur BELGIUM			
TEL: +32 (0) 475 27 89 12 (P.Marien)			

**SAINT-HUBERT**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 10NM radius, centred on 500209N 0052415E.	4500FT AMSL/ GND	Glider activity.	During EBSH OPR HR. In VMC only. <sup>(1)</sup>
(1) See <u>AD 2.PVT-EBSH</u> .			

## SEPT MEUSES

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2km radius, centred on 502115N 0045135E.	1000FT AGL / GND	Delta wings.	HJ. In VMC only

## SPA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 502857N 0055437E.	FL 145 / GND <sup>(1)</sup>	Parachuting.	During EBSP OPR HR. In VMC only <sup>(2)</sup>
<p>(1) MAX usable level: FL 140.</p> <p>(2) See <a href="#">AD 2.PVT-EBSP</a>.</p> <p><b>Operator:</b></p> <p>Post: Skydiving Promotion (Spa) Rue de la Sauvenière 122 4900 Spa BELGIUM</p> <p>TEL: +32 (0) 87 26 99 06 TEL: +32 (0) 476 62 71 67 Email: <a href="mailto:info@skydivespa.be">info@skydivespa.be</a></p>			

## TOURNAI - MAUBRAY

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503042N 0032702E - an arc of circle, 2 NM radius, centred on 503147N 0032940E and traced clockwise to 502947N 0032953E - along the Belgian French border - 503042N 0032702E.	1500FT AMSL / GND	Glider activity. Glider towing. Glider winching up to 1500 FT AMSL.	See <a href="#">AD 2.PVT-EBTY</a>

USELDANGE GLIDER SECTOR NORTH <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494738N 0054729E - along the Belgian-Luxembourg border - 500748N 0060816E - along the German-Luxembourg border - 495656N 0061151E - 495422N 0055755E - 494804N 0060000E - 494738N 0054729E <sup>(2)</sup> .	FL 065 / 3500FT AMSL	Glider activity. <sup>(3)</sup>	HX <sup>(4)(5)</sup>
<p>(1) Non-public glider sector. Use of the sector is subject to prior permission of the operator of <a href="#">ELUS</a>. All other VFR traffic shall contact Luxembourg APP on CH 120.885.</p> <p>(2) Noertrange Area excl.</p> <p>(3) No traffic information on individual glider flights will be issued by ATC.</p> <p>(4) HJ only. On request of the "Cercle Luxembourgeois de Vol à Voile". Activation can be checked with Luxembourg APP on CH 120.885.</p> <p>(5) Any conflicting areas announced by NOTAM are excluded for glider use during activation.</p>			

USELDANGE GLIDER SECTOR SOUTH <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494738N 0054729E - 494804N 0060000E - 494430N 0060000E - 494430N 0054958E - along the Belgian-Luxembourg border - 494738N 0054729E.	5000 FT AMSL / 2500FT AMSL	Glider activity. <sup>(2)</sup>	HX <sup>(3)</sup>
<p>(1) Non-public glider sector. Use of the sector is subject to prior permission of the operator of <a href="#">ELUS</a>. All other VFR traffic shall contact Luxembourg APP on CH 120.885.</p> <p>(2) No traffic information on individual glider flights will be issued by ATC.</p> <p>(3) HJ only. On request of the "Cercle Luxembourgeois de Vol à Voile". Activation can be checked with Luxembourg APP on CH 120.885.</p>			

**VERVIERS - THEUX**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 503309N 0055118E.	3000FT AMSL / GND	Glider activity. Glider Towing.	See <a href="#">AD 2.PVT-EBTX</a>

**WEELDE**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512620N 0045943E - an arc of circle, 3NM radius, centred on 512339N 0045733E and traced clockwise to 512455N 0045311E - along the Belgian-Dutch border - 512620N 0045943E.	3500FT AMSL / GND	Glider activity. Glider towing. Glider winching up to 3000FT AMSL	HJ. In VMC only <sup>(1)</sup> <sup>(2)</sup>

(1) See [AD 2.MIL-EBWE](#).

(2) Additional activities of the Belgian Air Cadets at EBWE will be announced by NOTAM.

(3) It is recommended not to cross the RWY axis below 3000FT AMSL during glider activity (winch launch). Take prior contact with Weelde radio 119.605 (8.33 KHZ CH).

**ZOERSEL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511837N 0043336E - 511938N 0044052E - an arc of circle, 26NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 511253N 0045955E - 511253N 0044512E - an arc of circle, 3NM radius, centred on 511553N 0044512E and traced clockwise to 511342N 0044156E - 511837N 0043336E.	2500FT AMSL / GND	Glider activity.	SAT, SUN and HOL, HJ. In JUL and AUG, HJ. FRI, 1600 (1500)-SS. In VMC only

**ZUTENDAAL**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 505651N 0053526E.	3000FT AMSL / GND	Glider activity. Winch launching up to 2300FT AGL.	FRI, 1600 (1500)-SS+30MIN. SAT, SUN and HOL, SR-30MIN until SS+30MIN. In VMC only



## 2 LOW FLYING AREAS GOLF

### LOW FLYING AREA GOLF ONE <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505900N 0024917E - 510043N 0023905E - 510059N 0023428E - along the Belgian-French border - 493232N 0054520E - 493537N 0054356E - 494032N 0054956E - 494328N 0054956E - along the Belgian-Luxembourg border - 500748N 0060816E - along the Belgian-German border - 504515N 0060116E - 504259N 0055149E - 503917N 0054900E - 502426N 0052347E - an arc of circle, 6.5NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E - 503814N 0050408E - 504817N 0051953E - 505150N 0052933E - 505223N 0053407E - 505000N 0053854E - along the Belgian-Dutch border - 512844N 0043011E - 511807N 0043011E - 511835N 0043325E - 511938N 0044052E - an arc of circle, 26NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 510605N 0051000E - 510122N 0051315E - an arc of circle, 40NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 503640N 0045629E - 502407N 0045910E - 501842N 0041627E - 502920N 0034840E - 503059N 0034410E - 504012N 0033609E - 505334N 0032421E - 510314N 0032818E - 511257N 0035731E - along the Belgian-Dutch border - 511635N 0032236E. <sup>(2)</sup>	FL055 (excl) / 4500FT AMSL	Glider activity.	HJ (outside MIL OPR HR) <sup>(3)</sup>

(1) Airspace class G during activation.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM. Liège TMA Three, Four and Five excluded during activation.

(3) Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

### LOW FLYING AREA GOLF TWO NORTH <sup>(1)</sup>

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512844N 0043011E - 511807N 0043011E - 511835N 0043325E - 511938N 0044052E - an arc of circle, 26NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 510605N 0051000E - 510122N 0051315E - 510057N 0051655E - 505000N 0053854E - along the Belgian-Dutch border - 512844N 0043011E. <sup>(2)</sup>	FL075 (excl) / FL055	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) Only during activation of Low Flying Area Golf One. Brussels ACC will release Low Flying Area Golf Two North up to FL070 on request of the "Liga van Vlaamse zweefclubs" with 30 MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Areas Golf Two activates Low Flying Area Golf Three and shall only be requested when meteorological services expect thermal activity above FL050. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**LOW FLYING AREA GOLF TWO SOUTH <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500206N 0040901E - 502317N 0052111E - an arc of circle, 6.5NM radius, centred on 502912N 0051650E and traced counterclockwise to 502426N 0052347E - 503029N 0053401E - 503053N 0053725E - 503726N 0061055E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 494328N 0054955E - 494032N 0054956E - 493702N 0054540E - 493258N 0052644E - along the Belgian-French border - 500206N 0040901E. <sup>(2)</sup>	FL075 (excl) / FL055	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) Only during activation of Low Flying Area Golf One. Brussels ACC will release Low Flying Area Golf Two South up to FL070 on request of the "Fédération des Clubs francophones de Vol à voile" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor.

Activation of Low Flying Areas Golf Two activates Low Flying Area Golf Three and shall only be requested when meteorological services expect thermal activity above FL050. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**LOW FLYING AREA GOLF TWO WEST <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510059N 0023428E - 510043N 0023905E - 505900N 0024917E - 505334N 0032421E - 503548N 0033959E - 503119N 0033107E - along the Belgian-French border - 510059N 0023428E. <sup>(2)</sup>	FL075 (excl) / FL055	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) Only during activation of Low Flying Area Golf One. Brussels ACC will release Low Flying Area Golf Two West up to FL070 on request of the "Liga van Vlaamse zweefclubs" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Areas Golf Two activates Low Flying Area Golf Three and shall only be requested when meteorological services expect thermal activity above FL050. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**LOW FLYING AREA GOLF THREE <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503053N 0053725E - 503343N 0055152E - 503420N 0055956E - 501955N 0055956E - 501324N 0060343E - 501011N 0060832E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 500426N 0055210E - 502810N 0053819E - 503053N 0053725E. <sup>(2)</sup>	FL065 (excl) / 4500FT AMSL	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) HJ only. Brussels ACC will release Low Flying Area Golf Three up to FL060 on request of EBTX with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. EBTX shall inform the Brussels ACC Supervisor of the end of the activity. During MIL activity, Brussels ACC will inform MIL ATC of activation of Low Flying Area Golf Three. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**LOW FLYING AREA GOLF FIVE EAST <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503318N 0055610E - 503754N 0061308E - along the Belgian-German border - 502134N 0062204E - 502240N 0061131E - 503318N 0055610E. <sup>(2)</sup>	FL095 (excl) / FL075	Glider activity.	HX <sup>(3)</sup>
<p>(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.</p> <p>(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.</p> <p>(3) Only during activation of Low Flying Area Golf One and Two. Brussels ACC will release Low Flying Area Golf Five up to FL090 on request of the "Fédération des Clubs francophones de Vol à voile" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Area Golf Five shall only be requested when meteorological services expect thermal activity above FL070. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.</p>			

**LOW FLYING AREA GOLF FIVE WEST <sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500206N 0040901E - 502810N 0053819E - 500426N 0055210E - along the Belgian-Luxembourg border - 494809N 0054507E - 494137N 0051624E - along the Belgian-French border - 500206N 0040901E. <sup>(2)</sup>	FL095 (excl) / FL075	Glider activity.	HX <sup>(3)</sup>
<p>(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.</p> <p>(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.</p> <p>(3) Only during activation of Low Flying Area Golf One and Two. Brussels ACC will release Low Flying Area Golf Five up to FL090 on request of the "Fédération des Clubs francophones de Vol à voile" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Area Golf Five shall only be requested when meteorological services expect thermal activity above FL070. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.</p>			

**3 MILITARY LOW FLYING AREAS GOLF****MILFAG11 - BERTRIX GLIDING AREA<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 495330N 0051326E.	FL095 / 4500FT AMSL <sup>(2)</sup>	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation.

(2) Upper limit may be limited to FL075 (active level can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).

(3) Activation can be checked with Steenokkerzeel ATCC or in case of early closure of Steenokkerzeel ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**MILFAG12 - SAINT-HUBERT GLIDING AREA<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 500209N 0052415E.	FL095 / 4500FT AMSL <sup>(2)</sup>	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation.

(2) Upper limit may be limited to FL075 (active level can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).

(3) Activation can be checked with Steenokkerzeel ATCC or in case of early closure of Steenokkerzeel ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**MILFAG13 - JOINT BERTRIX - SAINT-HUBERT GLIDING AREA<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495021N 0051928E - an arc of circle, 5NM radius, centred on 495330N 0051326E and traced clockwise to 495638N 0050723E - 500518N 0051811E - an arc of circle, 5NM radius, centred on 500209N 0052415E and traced clockwise to 495900N 0053018E - 495021N 0051928E.	FL095 / 4500FT AMSL <sup>(2)</sup>	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation.

(2) Upper limit may be limited to FL075 (active level can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).

(3) Activation can be checked with Steenokkerzeel ATCC or in case of early closure of Steenokkerzeel ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**MILFAG14 - LIBIN GLIDING AREA<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501922N 0054330E - 500912N 0054924E - 494435N 0050652E - along the Belgian-French border - 494926N 0045208E - 501922N 0054330E.	FL095 / 4500FT AMSL <sup>(2)</sup>	Glider activity.	HX <sup>(3)</sup>

(1) Airspace class G during activation.

(2) Upper limit may be limited to FL075 (active level can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).

(3) Activation can be checked with Steenokkerzeel ATCC or in case of early closure of Steenokkerzeel ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

**MILFAG15 - SANKT VITH GLIDING AREA<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502152N 0055956E - 502154N 0062159E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 501010N 0060535E - 501955N 0055956E - 502152N 0055956E.	FL095 / 4500FT AMSL <sup>(2)</sup>	Glider activity.	HX <sup>(3)</sup>
<p>(1) Airspace class G during activation.</p> <p>(2) Upper limit may be limited to FL075 (active level can be checked with Steenokkerzeel ATCC (TEL +32 (0) 2 443 82 04).</p> <p>(3) Activation can be checked with Steenokkerzeel ATCC or in case of early closure of Steenokkerzeel ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.</p>			

**MILFAG16 - ELSENBORN GLIDING AREA<sup>(1)</sup>**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503420N 0055956E – 503754N 0061308E - along the Belgian-German border – 502154N 0062159E – 502152N 0055956E – 503420N 0055956E. <sup>(2)</sup>	FL065 / 4500FT AMSL	Glider activity.	HX <sup>(3)</sup>
<p>(1) Airspace class G during activation.</p> <p>(2) Excluding <u>EBR04</u> when activated.</p> <p>(3) Activation can be checked with Steenokkerzeel ATCC or in case of early closure of Steenokkerzeel ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.</p>			

**4 RADIO CONTROLLED MODEL AIRCRAFT****4.1 In Belgium**

Location	Lateral limits	Vertical limits	Time of activity
ANLIER	A circle, 400M radius, centred on 494621N 0053743E	400FT AGL / GND	HJ. In VMC only
ANTHISNES	A circle, 400M radius, centred on 502937N 0053124E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504255N 0055026E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504153N 0055347E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504201N 0055344E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504214N 0055336E	400FT AGL / GND	HJ. In VMC only
BASSE - BODEUX	A circle, 400M radius, centred on 502050N 0054724E	400FT AGL / GND	HJ. In VMC only
BATTICE	A circle, 400M radius, centred on 503847N 0054954E	400FT AGL / GND	HJ. In VMC only
BAULERS	A circle, 400M radius, centred on 503707N 0042230E	400FT AGL / GND	HJ. In VMC only
BAULERS	A circle, 400M radius, centred on 503752N 0041913E	400FT AGL / GND	HJ. In VMC only
BAVEGEM	A circle, 400M radius, centred on 505710N 0035117E	400FT AGL / GND	HJ. In VMC only
BELSELE	A circle, 400M radius, centred on 510802N 0040544E	400FT AGL / GND	HJ. In VMC only
BERTRIX	A circle, 400M radius, centred on 495125N 0051724E	400FT AGL / GND	HJ. In VMC only
BETEKOM	A circle, 400M radius, centred on 505846N 0044617E	400FT AGL / GND	HJ. In VMC only
BORNEM	A circle, 400M radius, centred on 510450N 0041532E	400FT AGL / GND	HJ. In VMC only
BOSSIÈRE	A circle, 400M radius, centred on 503146N 0044032E	400FT AGL / GND	HJ. In VMC only
BRECHT	A circle, 400M radius, centred on 512232N 0044146E	400FT AGL / GND	HJ. In VMC only
BRECHT	A circle, 400M radius, centred on 511844N 0043836E	400FT AGL / GND	0900 (0800) till 1800 (1700). In VMC only
BREE	A circle, 400M radius, centred on 510709N 0053356E	400FT AGL / GND	HJ. In VMC only
BÜLLINGEN	A circle, 400M radius, centred on 502452N 0061635E	400FT AGL / GND	HJ. In VMC only
COUTHUIN	A circle, 400M radius, centred on 503113N 0050906E	400FT AGL / GND	HJ. In VMC only
DIEPENBEEK	A circle, 400M radius, centred on 505327N 0052323E	400FT AGL / GND	HJ. In VMC only
DILSEN	A circle, 400M radius, centred on 510152N 0054021E	400FT AGL / GND	HJ. In VMC only
DOTTIGNIES	A circle, 400M radius, centred on 504430N 0031651E	400FT AGL / GND	HJ. In VMC only
DUDZELE	A circle, 400M radius, centred on 511735N 0031422E	400FT AGL / GND	HJ. In VMC only
EEKLO	A circle, 400M radius, centred on 511156N 0033546E	400FT AGL / GND	HJ. In VMC only
FRANIÈRE	A circle, 400M radius, centred on 502509N 0044254E	400FT AGL / GND	HJ. In VMC only
FREUX	A circle, 400M radius, centred on 495844N 0052527E	400FT AGL / GND	HJ. In VMC only
GEEST-GERMONPONT-PETIT-ROSIERE	A circle, 400M radius, centred on 503850N 0045004E	400FT AGL / GND	HJ. In VMC only
GENTINNES	A circle, 400M radius, centred on 503521N 0043500E	400FT AGL / GND	HJ. In VMC only
GERPINNES	A circle, 400M radius, centred on 501905N 0043113E	400FT AGL / GND	HJ. In VMC only
GINGELOM	A circle, 400M radius, centred on 504426N 0050642E	400FT AGL / GND	HJ. In VMC only
GOUY-LEZ-PIÉTON	A circle, 400M radius, centred on 502900N 0041806E	400FT AGL / GND	HJ. In VMC only
GRAND-LEEZ	A circle, 400M radius, centred on 503517N 0044548E	400 FT AGL / GND	HJ. In VMC only
GRANDRIEU	A circle, 400M radius, centred on 501224N 0041138E	400FT AGL / GND	HJ. In VMC only
GRUITRODE	A circle, 400M radius, centred on 510517N 0053547E	400FT AGL / GND	HJ. In VMC only
HAMME-MILLE	A circle, 400M radius, centred on 504751N 0044402E	400FT AGL / GND	HJ. In VMC only
HANEFFE	A circle, 400M radius, centred on 503819N 0051745E	400FT AGL / GND	HJ. In VMC only
HASSELT	A circle, 400M radius, centred on 505515N 0052152E	400FT AGL / GND	HJ. In VMC only
HAULCHIN	A circle, 400M radius, centred on 502339N 0040356E	400FT AGL / GND	HJ. In VMC only
HAUSET	A circle, 400M radius, centred on 504156N 0060314E	400FT AGL / GND	HJ. In VMC only
HAVAY	A circle, 400M radius, centred on 502110N 0035952E	400FT AGL / GND	HJ. In VMC only
HAVERSIN	A circle, 400M radius, centred on 501437N 0051229E	400FT AGL / GND	HJ. In VMC only
HEES	A circle, 400M radius, centred on 505129N 0053603E	400FT AGL / GND	HJ. In VMC only

Location	Lateral limits	Vertical limits	Time of activity
HELCHTEREN	A circle, 400M radius, centred on 510306N 0052648E	400FT AGL / GND	HJ. In VMC only
HELDERGEM	A circle, 400M radius, centred on 505158N 0035648E	400FT AGL / GND	HJ. In VMC only
HEMPTINNE-LEZ-FLORENNES	A circle, 400M radius, centred on 501321N 0043257E	400FT AGL / GND	HJ. In VMC only
HENIS	A circle, 400M radius, centred on 504752N 0052849E	400FT AGL / GND	HJ. In VMC only
HENRI-CHAPELLE	A circle, 400M radius, centred on 504031N 0055456E	400FT AGL / GND	HJ. In VMC only
HERENTALS	A circle, 400M radius, centred on 511058N 0045214E	400FT AGL / GND	HJ. In VMC only
HONNAY	A circle, 400M radius, centred on 500436N 0050134E	400FT AGL / GND	HJ. In VMC only
HOOGSTADE	A circle, 400M radius, centred on 505852N 0024217E	400FT AGL / GND	HJ. In VMC only
HOTTON	A circle, 400M radius, centred on 501626N 0052808E	400FT AGL / GND	HJ. In VMC only
HOUTHEM	A circle, 400M radius, centred on 504728N 0025844E	400FT AGL / GND	HJ. In VMC only
IDDERGEM	A circle, 400M radius, centred on 505205N 0040214E	400FT AGL / GND	HJ. In VMC only
INCOURT	A circle, 400M radius, centred on 504044N 0044450E	400FT AGL / GND	HJ. In VMC only
JANDRAIN - JANDRENOUILLE	A circle, 400M radius, centred on 503920N 0045721E	400FT AGL / GND	HJ. In VMC only
JURBISE	A circle, 400M radius, centred on 503129N 0035542E	400FT AGL / GND	HJ. In VMC only
KIELDRECHT	A circle, 400M radius, centred on 511709N 0041114E	400FT AGL / GND	HJ. In VMC only
KOEKELARE	A circle, 400M radius, centred on 510654N 0025715E	400FT AGL / GND	HJ. In VMC only
KOKSIJDE	A circle, 400M radius, centred on 510512N 0023847E	400FT AGL / GND	HJ. In VMC only
KONINGSHOOIKT	A circle, 400M radius, centred on 510603N 0043600E	400FT AGL / GND	HJ. In VMC only
LEEFDAAL	A circle, 400M radius, centred on 505004N 0043622E	400FT AGL / GND	HJ. In VMC only
LEMBEEK	A circle, 400M radius, centred on 504347N 0041210E	400FT AGL / GND	HJ. In VMC only
LENDELEDE	A circle, 400M radius, centred on 505250N 0031542E	400FT AGL / GND	HJ. In VMC only
LENS	A circle, 400M radius, centred on 503326N 0035137E	400FT AGL / GND	HJ. In VMC only
LES WALEFFES	A circle, 400M radius, centred on 503725N 0051304E	400FT AGL / GND	HJ. In VMC only
LESSINES	A circle, 400M radius, centred on 504225N 0034831E	400FT AGL / GND	HJ. In VMC only
LICHTERVELDE	A circle, 400M radius, centred on 510354N 0030943E	400FT AGL / GND	HJ. In VMC only
LIER	A circle, 400M radius, centred on 510651N 0043347E	400FT AGL / GND	HJ. In VMC only
LOMMEL	A circle, 400M radius, centred on 511243N 0051510E	400 FT AGL / GND	HJ. In VMC only
LOMMEL	A circle, 400M radius, centred on 511201N 0051604E	400FT AGL / GND	HJ. In VMC only
LOMMERSWEILER	A circle, 400M radius, centred on 501451N 0060959E	400FT AGL / GND	HJ. In VMC only
LONGUEVILLE	A circle, 400M radius, centred on 504208N 0044546E	400FT AGL / GND	HJ. In VMC only
LONGVILLY	A circle, 400M radius, centred on 500240N 0054714E	400FT AGL / GND	HJ. In VMC only
LOUETTE-SAINT-DENIS	A circle, 400M radius, centred on 495708N 0045812E	400FT AGL / GND	HJ. In VMC only
LUBBEEK	A circle, 400M radius, centred on 505122N 0044911E	400FT AGL / GND	HJ. In VMC only
MACON	A circle, 400M radius, centred on 500336N 0041314E	400FT AGL / GND	HJ. In VMC only
MARCHE-EN-FAMENNE	A circle, 400M radius, centred on 501330N 0052343E	400FT AGL / GND	HJ. In VMC only
MARCQ	A circle, 400M radius, centred on 504108N 0040208E	400FT AGL / GND	HJ. In VMC only
MAZÉE	A circle, 400M radius, centred on 500606N 0044239E	400FT AGL / GND	HJ. In VMC only
MEERHOUT	A circle, 400M radius, centred on 510921N 0050455E	400FT AGL / GND	HJ. In VMC only
MERBES-LE-CHATEAU	A circle, 400M radius, centred on 502027N 0041042E	400FT AGL / GND	HJ. In VMC only
MERCHTEM	A circle, 400M radius, centred on 505627N 0041238E	400FT AGL / GND	HJ. In VMC only
MEULEBEKE	A circle, 400M radius, centred on 505724N 0032057E	400FT AGL / GND	HJ. In VMC only
MOERZEKE	A circle, 400M radius, centred on 510338N 0041032E	400FT AGL / GND	HJ. In VMC only
MOLLEM	A circle, 400M radius, centred on 505530N 0041237E	400FT AGL / GND	HJ. In VMC only
MONTZEN	A circle, 400M radius, centred on 504138N 0055559E	400FT AGL / GND	HJ. In VMC only
MOORSELE	A circle, 400M radius, centred on 505106N 0030909E	400FT AGL / GND	HJ. In VMC only
MY	A circle, 400M radius, centred on 502458N 0053358E	400FT AGL / GND	HJ. In VMC only
NIMY	A circle, 400M radius, centred on 502856N 0035742E	400FT AGL / GND	HJ. In VMC only
NIVELLES	A circle, 400M radius, centred on 503437N 0042227E	400FT AGL / GND	HJ. In VMC only
OBAIX	A circle, 400M radius, centred on 503147N 0041949E	400FT AGL / GND	HJ. In VMC only

Location	Lateral limits	Vertical limits	Time of activity
OEDELEM	A circle, 400 M radius, centred on 510858N 0032305.8E	400FT AGL / GND	HJ. In VMC only
OLEYE	A circle, 400M radius, centred on 504328N 0051638E	400FT AGL / GND	HJ. In VMC only
OOSTERZELE	505707N 0034715E - 505709N 0034719E - 505704N 0034724E - 505703N 0034724E - 505707N 0034715E	400FT AGL / GND	HJ. In VMC only
OOSTKAMP	A circle, 200M radius, centred on 510851N 0031257E	400FT AGL / GND	HJ. In VMC only
OOSTMALLE	A circle, 400M radius, centred on 511923N 0044341E	400FT AGL / GND	HJ. In VMC only
ORBAIS	A circle, 400M radius, centred on 503853N 0044435E	400FT AGL / GND	HJ. In VMC only
PETIT-ENGHIEN	A circle, 400M radius, centred on 503955N 0040433E	400FT AGL / GND	HJ. In VMC only
POTTES	A circle, 400M radius, centred on 504316N 0032601E	400FT AGL / GND	HJ. In VMC only
RANST	A circle, 400M radius, centred on 511220N 0043231E	400FT AGL / GND	HJ. In VMC only
RAVELS	A circle, 400M radius, centred on 512301N 0050156E	400FT AGL / GND	HJ. In VMC only
ROGNÉE	A circle, 400M radius, centred on 501542N 0042349E	400FT AGL / GND	HJ. In VMC only
RUNKELEN	A circle, 400M radius, centred on 505058N 0050840E	400FT AGL / GND	HJ. In VMC only
SAINT-VINCENT	A circle, 400M radius, centred on 493940N 0052816E	400FT AGL / GND	HJ. In VMC only
SCHAFFEN	A circle, 400M radius, centred on 510019N 0050347E	400FT AGL / GND	HJ. In VMC only
SCLAYN	A circle, 400M radius, centred on 502902N 0050226E	400FT AGL / GND	HJ. In VMC only
SINT-GILLIS-DENDERMONDE	A circle, 400M radius, centred on 510048N 0040803E	400FT AGL / GND	HJ. In VMC only
SINT-HUIBRECHTS-LILLE	A circle, 400M radius, centred on 511252N 0052811E	400FT AGL / GND	HJ. In VMC only
SINT-LENAARTS	A circle, 400M radius, centred on 512232N 0044146E	400FT AGL / GND	HJ. In VMC only
SINT-LENAARTS	A circle, 400M radius, centred on 511935N 0043951E	400FT AGL / GND	HJ. In VMC only
SPONTIN	A circle, 400M radius, centred on 501854N 0045958E	400FT AGL / GND	HJ. In VMC only
STAVE	A circle, 400M radius, centred on 501639N 0043856E	400FT AGL / GND	HJ. In VMC only
STEENKERQUE	A circle, 400M radius, centred on 503902N 0040348E	400FT AGL / GND	HJ. In VMC only
TERNAT	A circle, 400M radius, centred on 505127N 0041042E	400FT AGL / GND	HJ. In VMC only
THUMAIDE	A circle, 400M radius, centred on 503228N 0033701E	400FT AGL / GND	HJ. In VMC only
TIELT	A circle, 400M radius, centred on 505438N 0045447E	400FT AGL / GND	HJ. In VMC only
TISELT	A circle, 400M radius, centred on 510216N 0042001E	400FT AGL / GND	HJ. In VMC only
TREMELO	A circle, 400M radius, centred on 505912N 0044028E	400 FT AGL / GND	HJ. In VMC only
VERLAINE	A circle, 400M radius, centred on 503635N 0051725E	400FT AGL / GND	HJ. In VMC only
VERREBROEK	A circle, 400M radius, centred on 511556N 0041032E	400FT AGL / GND	HJ. In VMC only
VIERSSET-BARSE	A circle, 400M radius, centred on 502717N 0051844E	400FT AGL / GND	HJ. In VMC only
VILLERS-LA-LOUE	A circle, 400M radius, centred on 493444N 0052847E	400FT AGL / GND	HJ. In VMC only
VLAMERTINGE	A circle, 400M radius, centred on 505008N 0024922E	400FT AGL / GND	HJ. In VMC only
VORSELAAR	A circle, 400M radius, centred on 511429N 0044524E	400FT AGL / GND	HJ. In VMC only
VOSELAAR	A circle, 400M radius, centred on 511933N 0045305E	400FT AGL / GND	HJ. In VMC only
WAARSCHOOT	A circle, 400M radius, centred on 510906N 0033802E	400FT AGL / GND	HJ. In VMC only
WALHORN	A circle, 400M radius, centred on 503947N 0060207E	400FT AGL / GND	HJ. In VMC only
WERCHTER	A circle, 400M radius, centred on 505853N 0044546E	400FT AGL / GND	HJ. In VMC only
WIEKEVORST	A circle, 400M radius, centred on 510527N 0044812E	400FT AGL / GND	HJ. In VMC only
WOLKRANGE	A circle, 400M radius, centred on 493839N 0054753E	400FT AGL / GND	HJ. In VMC only
ZEDELGEM	A circle, 400M radius, centred on 510751N 0030733E	400FT AGL / GND	HJ. In VMC only
ZOLDER	A circle, 400M radius, centred on 510215N 0051901E	400FT AGL / GND	HJ. In VMC only
ZOMERGEM	A circle, 400M radius, centred on 510612N 0033456E	400FT AGL / GND	HJ. In VMC only
ZWARTBERG	A circle, 400M radius, centred on 510102N 0053130E	400FT AGL / GND	HJ. In VMC only



## 4.2 In Luxembourg

Location	Coordinates	Vertical limits	Time of activity
OLM	493941N 0055954E	1 000 FT AGL / GND	SR-30 MIN - SS+30 MIN
BERDORF	494947N 0062217E	1 000 FT AGL / GND	SR-30 MIN - SS+30 MIN
FEULEN	495155N 0060341E	1 000 FT AGL / GND	SR-30 MIN - SS+30 MIN
DUDELANGE	492951N 0060354E	1 000 FT AGL / GND	SR-30 MIN - SS+30 MIN
BECH	494415N 0062141E	1 000 FT AGL / GND	HX

## 5 OTHER ACTIVITIES

### 5.1 In Belgium

Location	Coordinates	Operator	Type and Remarks
WOMMELGEM / Bedrijventerrein	511227N 0043121E	Post: Danny Bertels Ballooning BVBA Kapelstraat 87 2160 Wommelgem BELGIUM TEL: +32 (0) 3 353 85 35 Email: <a href="mailto:info@bertelsballooning.be">info@bertelsballooning.be</a>	Balloon
SINT-NIKLAAS / Grote Markt	510952N 0040825E	Post: Stadbestuur Sint-Niklaas Grote Markt 1 9100 Sint-Niklaas BELGIUM TEL: +32 (0) 3 778 30 00 Email: <a href="mailto:info@sint-niklaas.be">info@sint-niklaas.be</a>	Balloon
HOUTHAIEN-HELCHTEREN / Domein Kelchterhoef	510140N 0052616E	Post: Gemeentebestuur Houthalen-Helchteren NAC Nieuw Administratief Centrum Pastorijstraat 30 3530 Houthalen-Helchteren BELGIUM TEL: +32 (0) 11 49 20 00	Balloon

### 5.2 In Luxembourg

#### BETTENDORF

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495133N 0061340E.	3 500 FT AMSL / GND	Paragliding.	HJ. In VMC only.

#### CONSTHUM

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495828N 0060338E.	3 500 FT AMSL / GND	Paragliding.	HJ. In VMC only.

#### GOESDORF

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495556N 0060030E.	3 500 FT AMSL / GND	Paragliding.	HJ. In VMC only.

**WALDBILLIG**

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494849N 0061731E.	2 500 FT AMSL / GND	Paragliding.	HJ. In VMC only.

---

## ENR 5.6 Bird Migration and Areas with Sensitive Fauna

---

---

### 1 BIRD MIGRATION

---

The spring migration takes place between mid-FEB and the end of MAY, the most active part being in APR and MAY. This migration is more dispersed and less spectacular than the autumn one. The principal direction over Belgium is NE.

The autumn migration lasts for more than three months. The first flight movements can already be seen from the end of JUL, while the last movements of any significance are completed by the end of NOV. They have a typical stream of movement with periods of relative calm interspersed with periods of very intense migration. Between mid-AUG and mid-NOV migratory birds are particularly active. The movement takes place in a mostly SW direction.

When on actual migration, most birds make long flights at often high levels in contrast to their flying at relative low altitudes during their stay in the concentration areas.

Although a great part of the bird population that is dangerous to aircraft, start migrating from concentration areas, according to radar observations migration often appears to take place over a broad front, covering nearly the entire Belgian territory.

As a result of radar observations it is known that mass migration takes place when

- tail winds are not exceeding 5M/SEC;
- the barometric pressure is above 1020HPA;
- the temperature is at least 2 degrees below the average in autumn or above the average in spring;
- clouds are covering less than 4 octas.

This can be completely in contrast to what will be observed visually.

Heavy night migration may occur early in autumn (from mid-AUG onwards) and later in spring (till the end of MAY). During the winter months sudden snow and frost may stimulate very large numbers of water- and open land birds (geese, ducks, waders, starlings, thrushes and larks) to move to the south.

The bird strike risk resulting from these winter flights (during a period of sudden thaw, in opposite direction) is particularly high in the northern part of the country.

---

### 2 CONCENTRATIONS

---

As elsewhere in the world, headlands, inland waters and shallow estuaries attract flocks of birds for breeding, roosting and feeding at various times of the year. Within 10NM or so of such locations concentrations of birds flying mostly below 1000FT may be encountered.

In order to lessen the risk of bird strikes, pilots of low flying aircraft should, whenever possible, avoid flying at less than 1000FT above surface level over areas where birds are likely to concentrate. Where it is necessary to fly lower than this, pilots should bear in mind that the risk of bird strike increases with speed (it is a fact that birds rarely hit an object moving slower than 80KT).

Apart from endangering aircraft by flying close to bird colonies, the breeding of the birds may be upset and the practice should be avoided on conservation grounds. It should also be appreciated that, especially in the case of sea bird colonies, concentrations of birds may be soaring on lee waves downwind of the areas where they breed.

### 3 AREAS WITH SENSITIVE FAUNA

Identification	Area	Bird species
Damme	A circle, 2000 M radius, centred on 511520N 0031639E	Waterfowls
Ettenhovense polder	A circle, 200 M radius, centred on 511858N 0042122E	Blue throats
Kuifeend	A circle, 1000 M radius, centred on 511756N 0042114E	Blue throats, ducks, swans, herons, raptors
Molsbroek	A circle, 2000 M radius, centred on 510550N 0040130E	Waterfowls
Uitkerkse Polder	A circle, 2000 M radius, centred on 511732N 0030704E	Waterfowls
Zwin	512139N 0031938E - 512132N 0031923E - 512124N 0031917E - 512126N 0031903E - 512125N 0031858E - 512116N 0031913E - 512111N 0031932E - 512056N 0031938E - 512016N 0031929E - 511943N 0032029E - 512004N 0032129E - 512041N 0032244E - 512057N 0032243E - 512109N 0032229E - 512130N 0032242E - 512147N 0032241E - 512157N 0032225E - 512200N 0032221E - 512207N 0032227E - 512225N 0032218E - 512139N 0031938E	Highest concentration of birds along the coast (ducks, swans, gulls, mergansers, shorebirds)

### 4 MILITARY BIRD MIGRATION OBSERVATION SYSTEM

Military training and flight operations usually take place at low altitudes, where a lot of birds are present, especially near coasts and during migration periods. To prevent bird strikes, the Aviation Safety Directorate (ASD) of Belgian Defence has put in place a warning system in cooperation with national and/or international agencies.

#### 4.1 BIRD MIGRATION OBSERVATION SYSTEM

The bird migration observation system is based upon the following networks and technical means:

- a. General studies:
  - According to scientific studies, probable altitudes and migration routes are determined for each bird species, in relation with the weather and geographical conditions;
  - Daily collection of data by the Bird Control Section (BCS) from ornithological sites on the internet provides the aviation world with useful information on bird activities;
- b. Radar observation:
  - A computer programme called 'Radar Observation of Bird Intensity' (ROBIN) uses specific software to monitor moving targets and detect movements of bird flocks;
  - The precision approach radars at the military aerodromes can detect important bird movements in the approach zone of the RWY axes;
- c. Visual observation:
 

In the aerodrome vicinity zones in-flight reports by aircrews, reports by ATC, weather observers and the local Bird Control Units (BCU) remain concrete sources of information;
- d. Warning and reporting system:
 

It remains a national decision to establish or not bird strike warning/risk organization and procedures for its area of responsibility. Belgian Defence has put in place a warning and reporting system in cooperation with national and/or international agencies. Its zone of responsibility has been divided in GEOREF squares and for each one a BIRDTAM can be issued;
- e. For the squares above the Brussels FIR, the BCS within Aviation Safety Directorate is responsible to issue the BIRDTAM based upon:
  - the ROBIN system;
  - the general ornithological situation;
  - foreign BIRDTAM concerning the Brussels FIR;
  - any other useful information;
- f. For each military aerodrome and shooting range:
 

A Local Bird Intensity (LBI) warning can be proposed by the BCU and officially issued by the Supervisor of Flying Activities (SOF) based upon visual observations and possible local radar observations and being in force for the local very close traffic pattern of the related aerodrome. If no LBI is issued, the general BIRDTAM applicable to the GEOREF square where the aerodrome is located, remains in force.

#### 4.2 FLYING RESTRICTIONS

Based on the risk level, local authorities apply flying restrictions that are published in the COMOPSAIR directive ACOT-GID-DOCSOP-ASBD-200.

### 4.3 BIRD INTENSITY SCALE

The military NOF will provide bird strike risk warning (BIRDTAM) based on the following observation intensity scale:

**Bird Intensity Scale**

0	Practically no risk
1	Extremely small risk
2	Very small risk
3	Small risk
4	Fairly small risk
5	Fairly great risk
6	Great risk
7	Very great risk
8	Extremely great risk

The intensity digit is acquired after interpretation of Meteo Radar data by ASD / BIRDTAM office (located in Beauvechain) and relayed to the military NOF (Steenokkerzeel ATCC). It relates only to the bird migration in the Brussels FIR.

### 4.4 GEOGRAPHIC REFERENCE

The Brussels FIR is situated within the following geographic references (GEOREF):

GEOREF	Square defined by	
	Parallels	Meridians
NKCG	510000N to 515959N	0020000E to 0025959E
NKDG	510000N to 515959N	0030000E to 0035959E
NKEG	510000N to 515959N	0040000E to 0045959E
NKFG	510000N to 515959N	0050000E to 0055959E
NKCF	500000N to 505959N	0020000E to 0025959E
NKDF	500000N to 505959N	0030000E to 0035959E
NKEF	500000N to 505959N	0040000E to 0045959E
NKFF	500000N to 505959N	0050000E to 0055959E
NKGF	500000N to 505959N	0060000E to 0065959E
NKEE	490000N to 495959N	0040000E to 0045959E
NKFE	490000N to 495959N	0050000E to 0055959E
NKGE	490000N to 495959N	0060000E to 0065959E

### 4.5 BIRDTAM TEXT AND FORMAT

BIRDTAM will only be issued when migrations reach intensity 5 or higher.

The text will include a serial number preceded by the word 'BIRDTAM'. This serial number begins, each calendar year, with 0001.

The format will be the ICAO NOTAM format with special code 'QBIRD' in the military NOTAM serie M, originator EBSZYNYX and

**BIRDTAM**

ITEM 'A'	FIR
ITEM 'B'	Valid from (DTG - UTC)
ITEM 'C'	Valid till (DTG - UTC)
ITEM 'E'	BIRDTAM nr BIRD INTENSITY BELGIUM Intensity of Bird migration (see § 4.3) Geographic reference (see § 4.4) per square Additional information
ITEM 'F'	Lower height limit of the hazard (in feet AGL)
ITEM 'G'	Upper height limit of the hazard (in feet AGL)

The BIRDTAMs are always issued with the priority 'DD', through the Aeronautical Fixed Telecommunication Network (AFTN) to the group address EBZZALEB.

This group address contains the following AFTN addresses:

Group Address for BIRDTAM		
	EBZZAL	IDENTIFICATION
1	EBBEZPZX	W OPS BEAUVECHAIN
2	EBBLZPZX	W OPS KLEINE-BROGEL
3	EBBRYNYN	skeyes NOF
4	EBCIZPZX	AIS CHARLEROI/BRUSSELS SOUTH
5	EBCIZTZX	TWR CHARLEROI/BRUSSELS SOUTH
6	ETARYXYX KRCHYXYX	BASE OPS - ATS CHIEVRES
7	EBFNZPZX	ATC KOKSIJDE
8	EBFSZPZX	W OPS FLORENNES
9	EBGLZGZX	AIS CRC
10	EBMBZPZX	W OPS MELS BROEK
11	EBMIZGZF	STEENOKKERZEEL ATCC ARO
12	EDDFYFYJ	GROUP ADDRESS
13	EGVCYOYX	AIDU NORTHOLT
14	EGZZAKXX	GROUP ADDRESS
15	EHZZNTXX	DUTCH GROUP ADDRESS
16	EKMCYOYX	KARUP
17	ELLXYNYX	LUXEMBOURG
18	ETAAYOYX	USAFE NOTAM CENTRE
19	ETAAZPZX	USAFE
20	ETCKYFYX	GROUP ADDRESS
21	ETCZYOYX	GERMAN MIL NOF
22	ETGTYTYX	MIL MET COMM CENTRE
23	ETNGZPZX	GEILENKIRCHEN MIL
24	EUECYIYN	EUROCONTROL EAD
25	KCNFYNYX	US NOF WASHINGTON DC
26	LFLFSITX	ORLEANS COMM
27	LFZZNQEB	GROUP ADDRESS
28	LIZZNCEB	GROUP ADDRESS
29	LPAMYNYX	LISBON MIL AIS

Group Address for BIRDTAM		
	EBZZAL	IDENTIFICATION
30	LSZZNAEB	SWISS GROUP
31	LTAAYNYX	ANKARA NOF
32	LZIBYWYA	GROUP ADDRESS
33	RKZZNKXX	KOREA GROUP
34	UDDDYNYX	ARMENIA NOF
35	UGTBYNYX	GEORGIA NOF
36	UTTAYNYX	UKRAINE NOF

THIS PAGE INTENTIONALLY LEFT BLANK



---

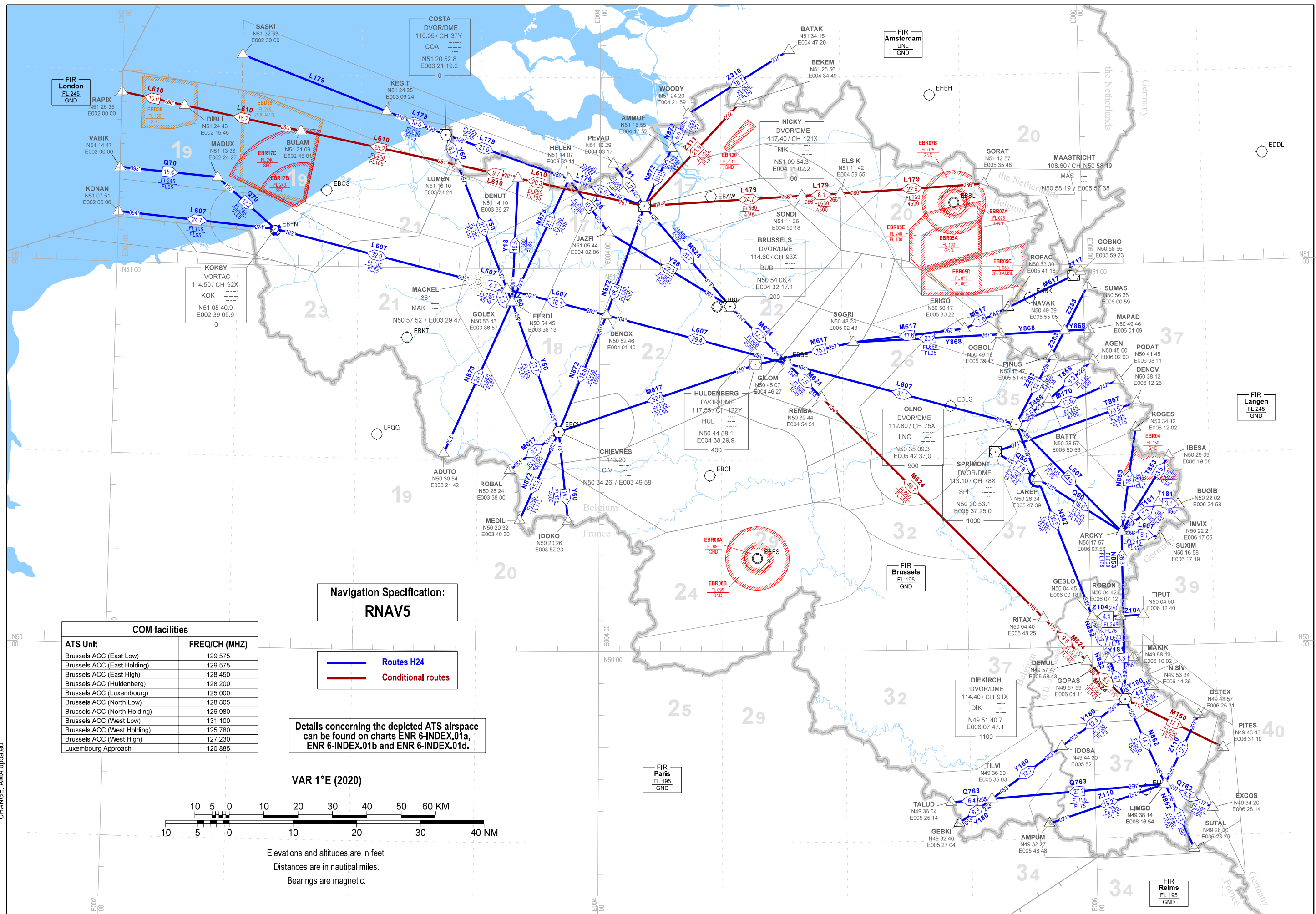
## ENR 6 EN-ROUTE CHARTS

---

ENR 6-ENRC.01	En-Route Chart - ICAO. RNAV Routes in the Lower Airspace
ENR 6-ENRC.02	En-Route Chart - ICAO. RNAV Routes in the Upper Airspace (H24)
ENR 6-ENRC.03	En-Route Chart - ICAO. RNAV Routes in the Upper Airspace (H24)
ENR 6-ENRC.04	En-Route Chart - ICAO. RNAV Routes in the Upper Airspace (CDR)
ENR 6-ENRC.05a	En-Route Chart. Military BENE routes
ENR 6-ENRC.05b	En-Route Chart. Military FALCON routes
ENR 6-ENRC.05c	En-Route Chart. Military DARK FALCON routes
ENR 6-ENRC.05d	En-Route Chart. Military NVG routes BEL MIL HELI
ENR 6-ENRC.05e	En-Route Chart. Military Navigation routes 15W Tpt
ENR 6-ENRC.05f	En-Route Chart. Military TACAN routes
ENR 6-INDE.X.01a	Index Chart. ATS Airspace: Control Zones
ENR 6-INDE.X.01b	Index Chart. ATS Airspace: Civil TMA
ENR 6-INDE.X.01c	Index Chart. ATS Airspace: Military TMA
ENR 6-INDE.X.01d	Index Chart. ATS Airspace: Other Control Areas
ENR 6-INDE.X.02	Index Chart. Prohibited, Restricted and Danger Areas
ENR 6-INDE.X.03a	Index Chart. Military Exercise and Training Areas: TRA and TSA
ENR 6-INDE.X.03b	Index Chart. Military Exercise and Training Areas: TRA/ TSA North, South and West
ENR 6-INDE.X.03c	Index Chart. Military Exercise and Training Areas: Helicopter Training Areas and Low Flying Areas
ENR 6-INDE.X.04a	Index Chart. Aerial Sporting and Recreational Activities
ENR 6-INDE.X.04b	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Area Golf One
ENR 6-INDE.X.04c	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Area Golf Two
ENR 6-INDE.X.04d	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Area Golf Three
ENR 6-INDE.X.04e	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Area Golf Five
ENR 6-INDE.X.04f	Index Chart. Aerial Sporting and Recreational Activities: Military Low Flying Area Golf
ENR 6-INDE.X.05	Index Chart. Radio and Transponder Mandatory Zones
ENR 6-INDE.X.06	Index Chart. En-route Radio Navigation Aids
ENR 6-INDE.X.07	Index Chart. Sectorisation in Brussels ACC and Maastricht UAC
ENR 6-INDE.X.08	Index Chart. Military VFR flights below 4500 FT AMSL
ENR 6-INDE.X.09	Index Chart. Aerodromes and Heliports
ENR 6-INDE.X.10	Index Chart. Areas Prohibited to Supersonic Flight

THIS PAGE INTENTIONALLY LEFT BLANK

### En-route Chart - ICAO RNAV ROUTES IN THE LOWER AIRSPACE

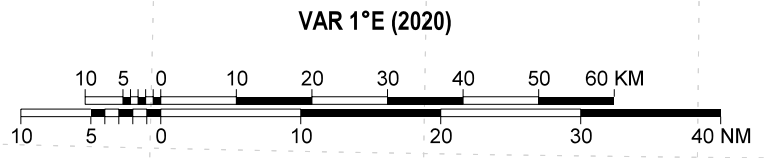


Navigation Specification:  
**RNAV5**

— Routes H24  
— Conditional routes

Details concerning the depicted ATS airspace can be found on charts ENR 6-INDEX.01a, ENR 6-INDEX.01b and ENR 6-INDEX.01d.

COM facilities	
ATS Unit	FREQ/CH (MHZ)
Brussels ACC (East Low)	129.575
Brussels ACC (East Holding)	129.575
Brussels ACC (East High)	128.450
Brussels ACC (Huldenberg)	128.200
Brussels ACC (Luxembourg)	125.000
Brussels ACC (North Low)	128.805
Brussels ACC (North Holding)	126.980
Brussels ACC (West Low)	131.100
Brussels ACC (West Holding)	125.780
Brussels ACC (West High)	127.230
Luxembourg Approach	120.885

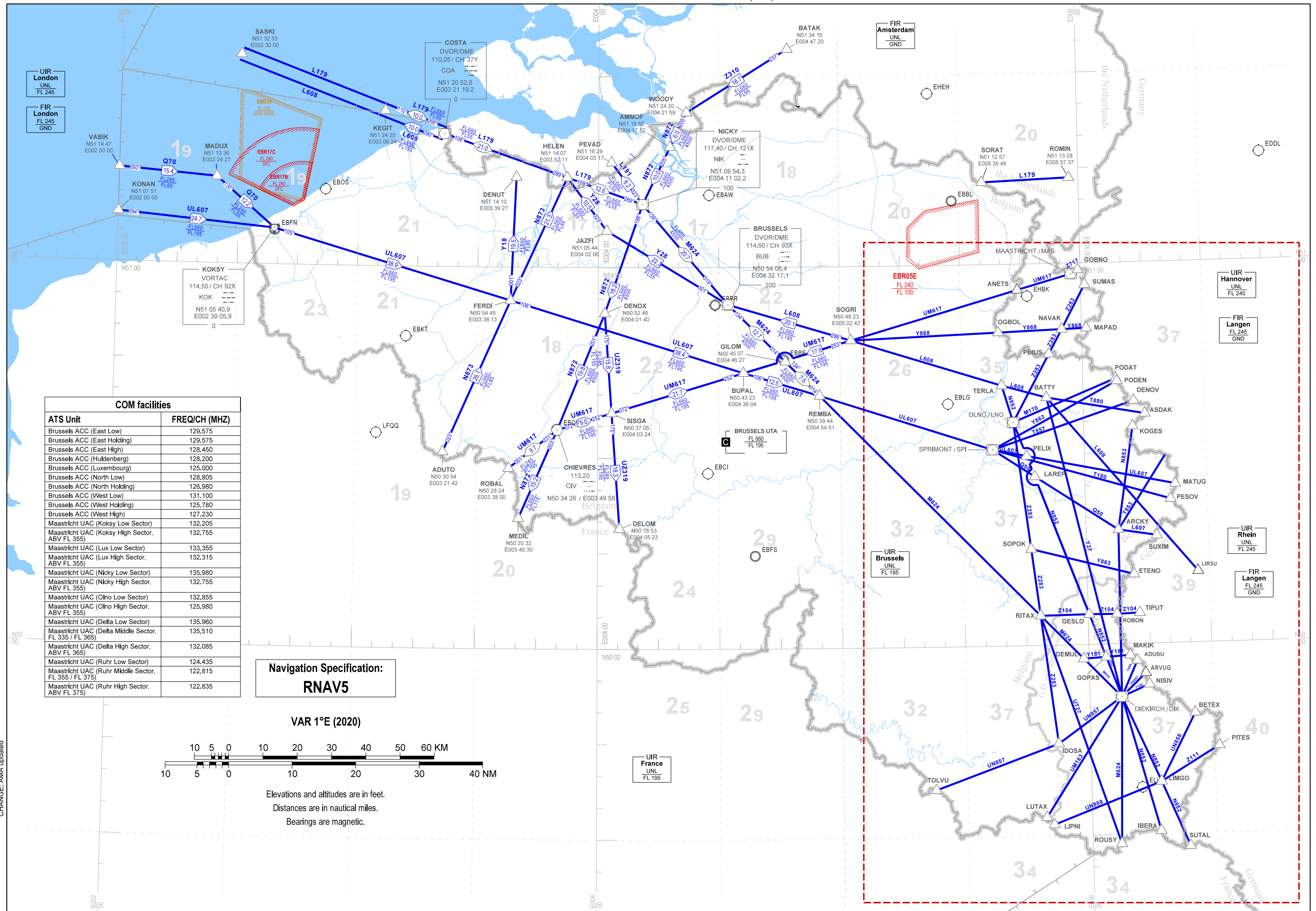


Elevations and altitudes are in feet.  
 Distances are in nautical miles.  
 Bearings are magnetic.

CHANGE: AMA updated

THIS PAGE INTENTIONALLY LEFT BLANK

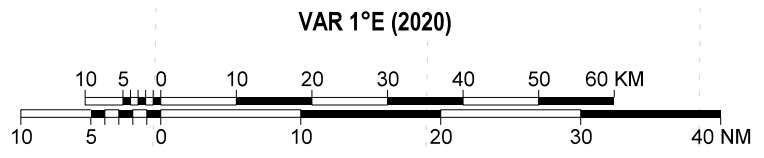
En-route Chart - ICAO  
RNAV ROUTES IN THE UPPER AIRSPACE (H24)



**COM facilities**

ATS Unit	FREQ/CH (MHZ)
Brussels ACC (East Low)	129.575
Brussels ACC (East Holding)	129.575
Brussels ACC (East High)	128.450
Brussels ACC (Huldenberg)	128.200
Brussels ACC (Luxembourg)	125.000
Brussels ACC (North Low)	128.805
Brussels ACC (North Holding)	126.980
Brussels ACC (West Low)	131.100
Brussels ACC (West Holding)	125.780
Brussels ACC (West High)	127.230
Maastricht UAC (Koksy Low Sector)	132.205
Maastricht UAC (Koksy High Sector, ABV FL 355)	132.755
Maastricht UAC (Lux Low Sector)	133.355
Maastricht UAC (Lux High Sector, ABV FL 355)	132.315
Maastricht UAC (Nicky Low Sector)	135.980
Maastricht UAC (Nicky High Sector, ABV FL 355)	132.755
Maastricht UAC (Olno Low Sector)	132.855
Maastricht UAC (Olno High Sector, ABV FL 355)	125.980
Maastricht UAC (Delta Low Sector)	135.960
Maastricht UAC (Delta Middle Sector, FL 335 / FL 365)	135.510
Maastricht UAC (Delta High Sector, ABV FL 365)	132.085
Maastricht UAC (Ruhr Low Sector)	124.435
Maastricht UAC (Ruhr Middle Sector, FL 355 / FL 375)	122.815
Maastricht UAC (Ruhr High Sector, ABV FL 375)	122.835

Navigation Specification:  
**RNAV5**



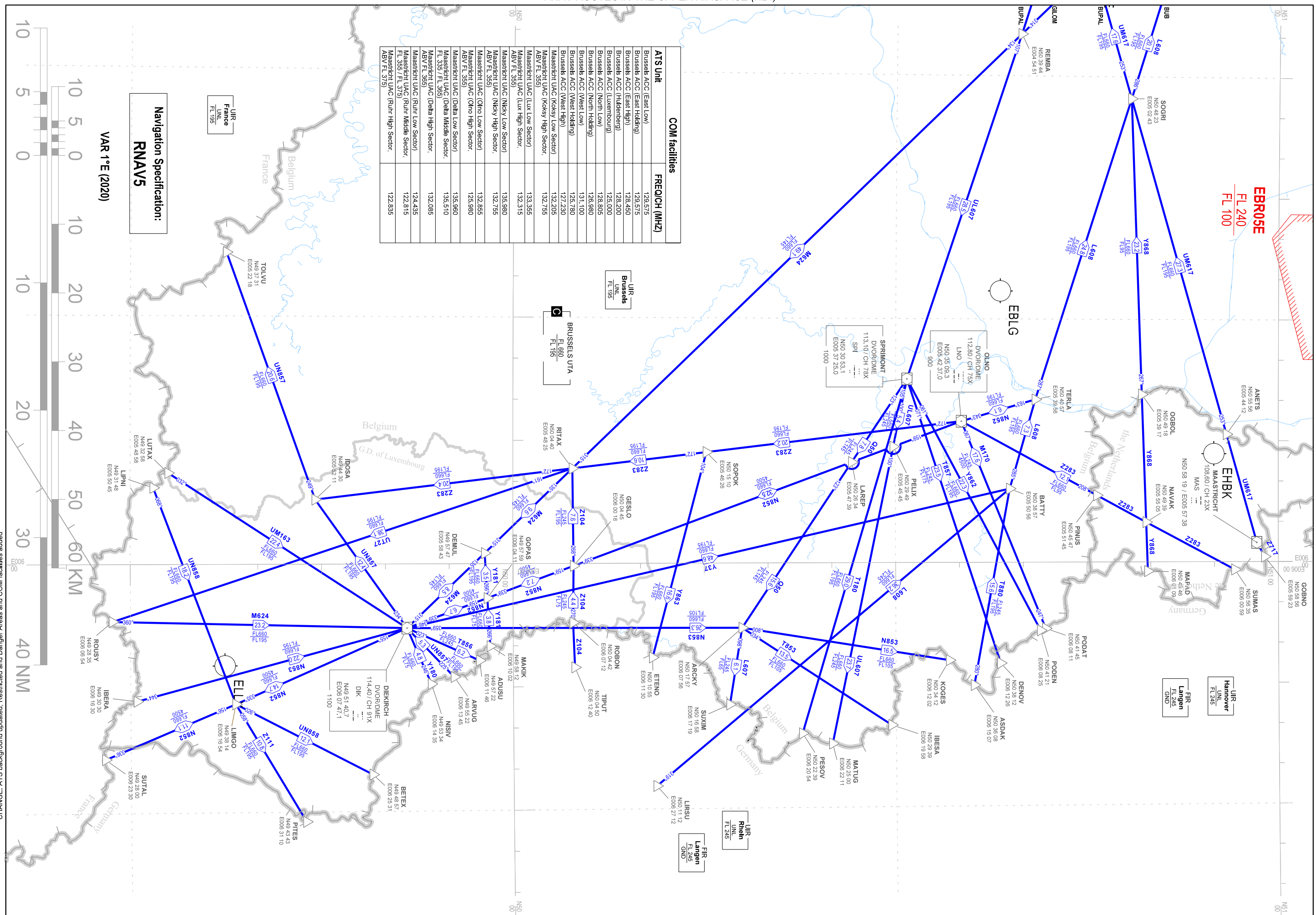
Elevations and altitudes are in feet.  
Distances are in nautical miles.  
Bearings are magnetic.

CHANGE: AMA updated

THIS PAGE INTENTIONALLY LEFT BLANK



En-route Chart - ICAO  
RNAV ROUTES IN THE UPPER AIRSPACE (H24)



ATS Unit	FREQU (MHZ)
Brussels ACC (East Low)	128.575
Brussels ACC (East Holding)	128.575
Brussels ACC (East High)	128.450
Brussels ACC (Huldenberg)	128.200
Brussels ACC (Luxembourg)	125.000
Brussels ACC (North Low)	128.905
Brussels ACC (North Holding)	128.980
Brussels ACC (West Holding)	131.100
Brussels ACC (West Low)	125.780
Brussels ACC (Koksy High Sector)	132.205
Brussels ACC (Koksy High Sector, ABV FL 355)	132.755
Brussels ACC (Lux Low Sector)	133.355
Brussels ACC (Lux High Sector, ABV FL 355)	132.315
Brussels UAC (Nerky Low Sector)	135.980
Brussels UAC (Nerky High Sector, ABV FL 355)	132.755
Brussels UAC (Ohio Low Sector)	132.855
Brussels UAC (Ohio High Sector, ABV FL 355)	125.980
Brussels UAC (Delta Low Sector)	135.980
Brussels UAC (Delta Middle Sector, FL 335 / FL 385)	135.510
Brussels UAC (Delta High Sector, ABV FL 365)	132.085
Brussels UAC (Ruhr Low Sector)	124.435
Brussels UAC (Ruhr Middle Sector, FL 355 / FL 375)	122.815
Brussels UAC (Ruhr High Sector, ABV FL 375)	122.835

Navigation Specification:  
**RNAV5**

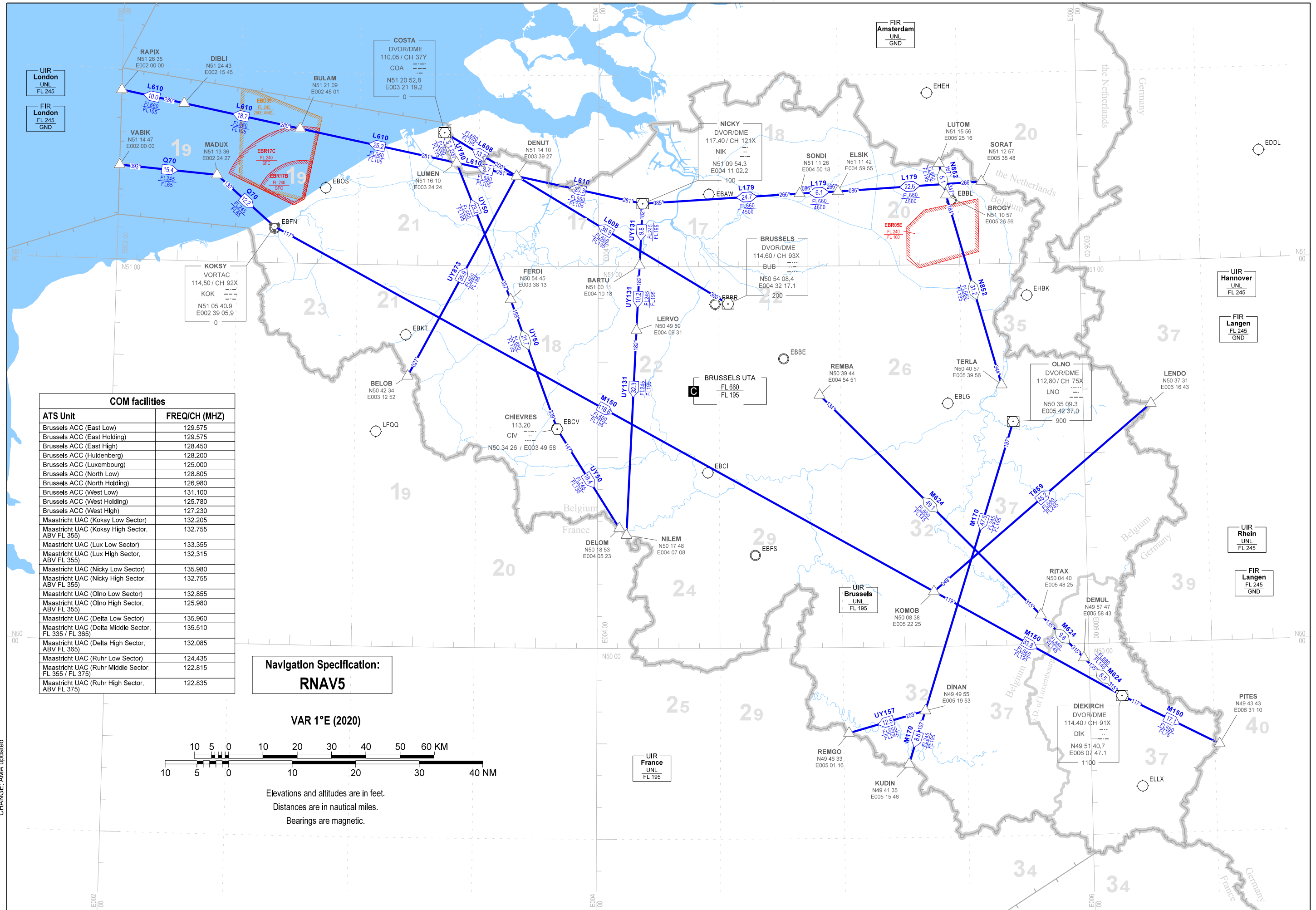
VAR 1°E (2020)

CHANGE: ATS background updated; Restricted and Danger Areas and COM facilities added

THIS PAGE INTENTIONALLY LEFT BLANK



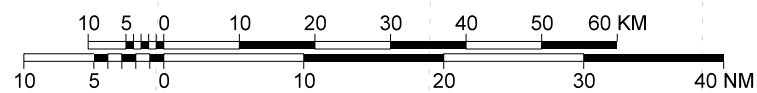
**En-route Chart - ICAO**  
RNAV ROUTES IN THE UPPER AIRSPACE (CDR)



COM facilities	
ATS Unit	FREQ/CH (MHZ)
Brussels ACC (East Low)	129.575
Brussels ACC (East Holding)	129.575
Brussels ACC (East High)	128.450
Brussels ACC (Huldenberg)	128.200
Brussels ACC (Luxembourg)	125.000
Brussels ACC (North Low)	128.805
Brussels ACC (North Holding)	126.980
Brussels ACC (West Low)	131.100
Brussels ACC (West Holding)	125.780
Brussels ACC (West High)	127.230
Maastricht UAC (Koksy Low Sector)	132.205
Maastricht UAC (Koksy High Sector, ABV FL 355)	132.755
Maastricht UAC (Lux Low Sector)	133.355
Maastricht UAC (Lux High Sector, ABV FL 355)	132.315
Maastricht UAC (Nicky Low Sector)	135.980
Maastricht UAC (Nicky High Sector, ABV FL 355)	132.755
Maastricht UAC (Olno Low Sector)	132.855
Maastricht UAC (Olno High Sector, ABV FL 355)	125.980
Maastricht UAC (Delta Low Sector)	135.960
Maastricht UAC (Delta Middle Sector, FL 335 / FL 365)	135.510
Maastricht UAC (Delta High Sector, ABV FL 365)	132.085
Maastricht UAC (Ruhr Low Sector)	124.435
Maastricht UAC (Ruhr Middle Sector, FL 355 / FL 375)	122.815
Maastricht UAC (Ruhr High Sector, ABV FL 375)	122.835

Navigation Specification:  
**RNAV5**

VAR 1°E (2020)

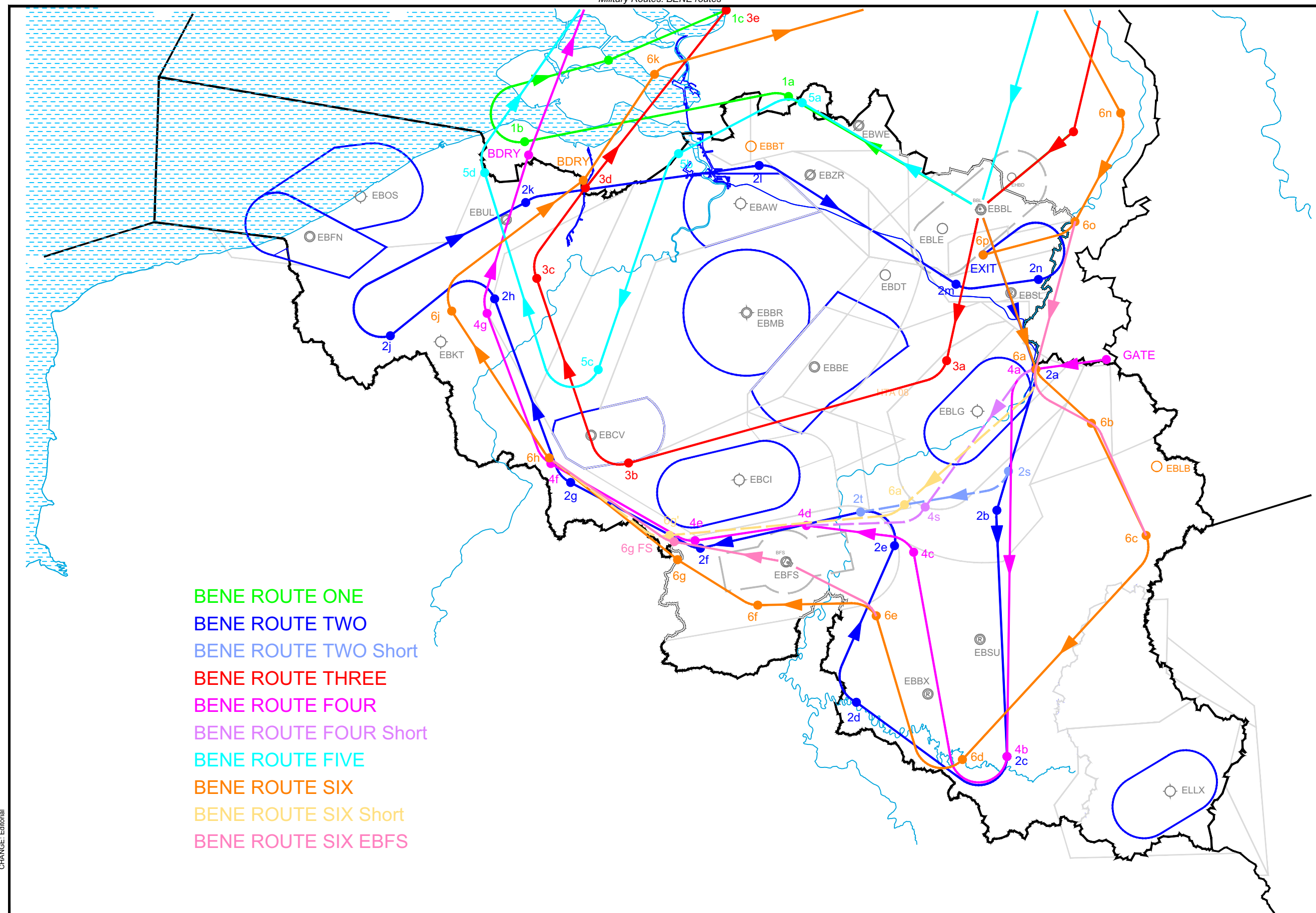


Elevations and altitudes are in feet.  
Distances are in nautical miles.  
Bearings are magnetic.

CHANGE: AMA updated

THIS PAGE INTENTIONALLY LEFT BLANK

**En-route Chart**  
Military Routes: BENE routes

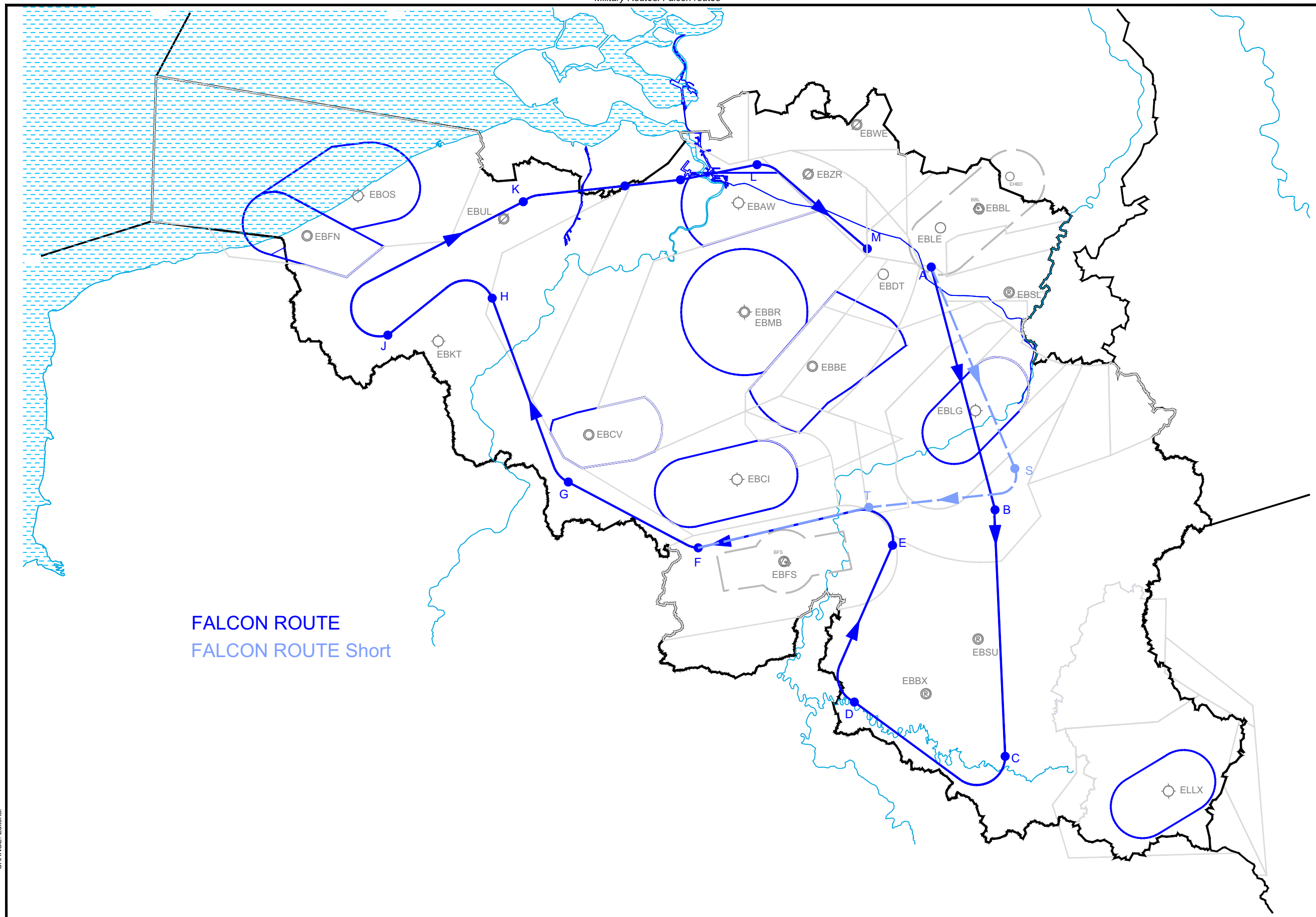


- BENE ROUTE ONE
- BENE ROUTE TWO
- BENE ROUTE TWO Short
- BENE ROUTE THREE
- BENE ROUTE FOUR
- BENE ROUTE FOUR Short
- BENE ROUTE FIVE
- BENE ROUTE SIX
- BENE ROUTE SIX Short
- BENE ROUTE SIX EBFS

CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK

**En-route Chart**  
Military Routes: Falcon routes

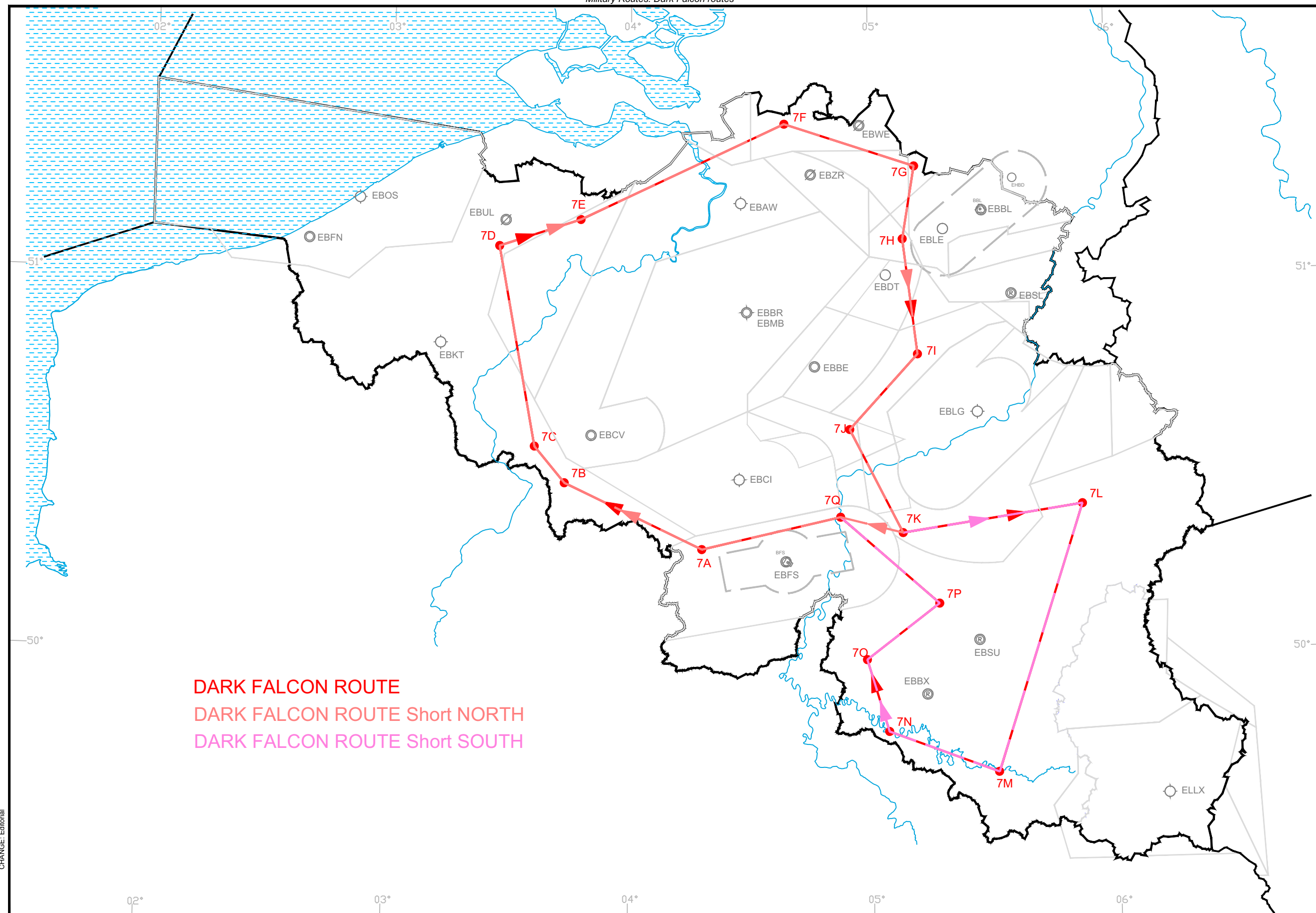


FALCON ROUTE  
FALCON ROUTE Short

THIS PAGE INTENTIONALLY LEFT BLANK



**En-route Chart**  
Military Routes: Dark Falcon routes



**DARK FALCON ROUTE**  
DARK FALCON ROUTE Short NORTH  
DARK FALCON ROUTE Short SOUTH

CHANGE: Editorial

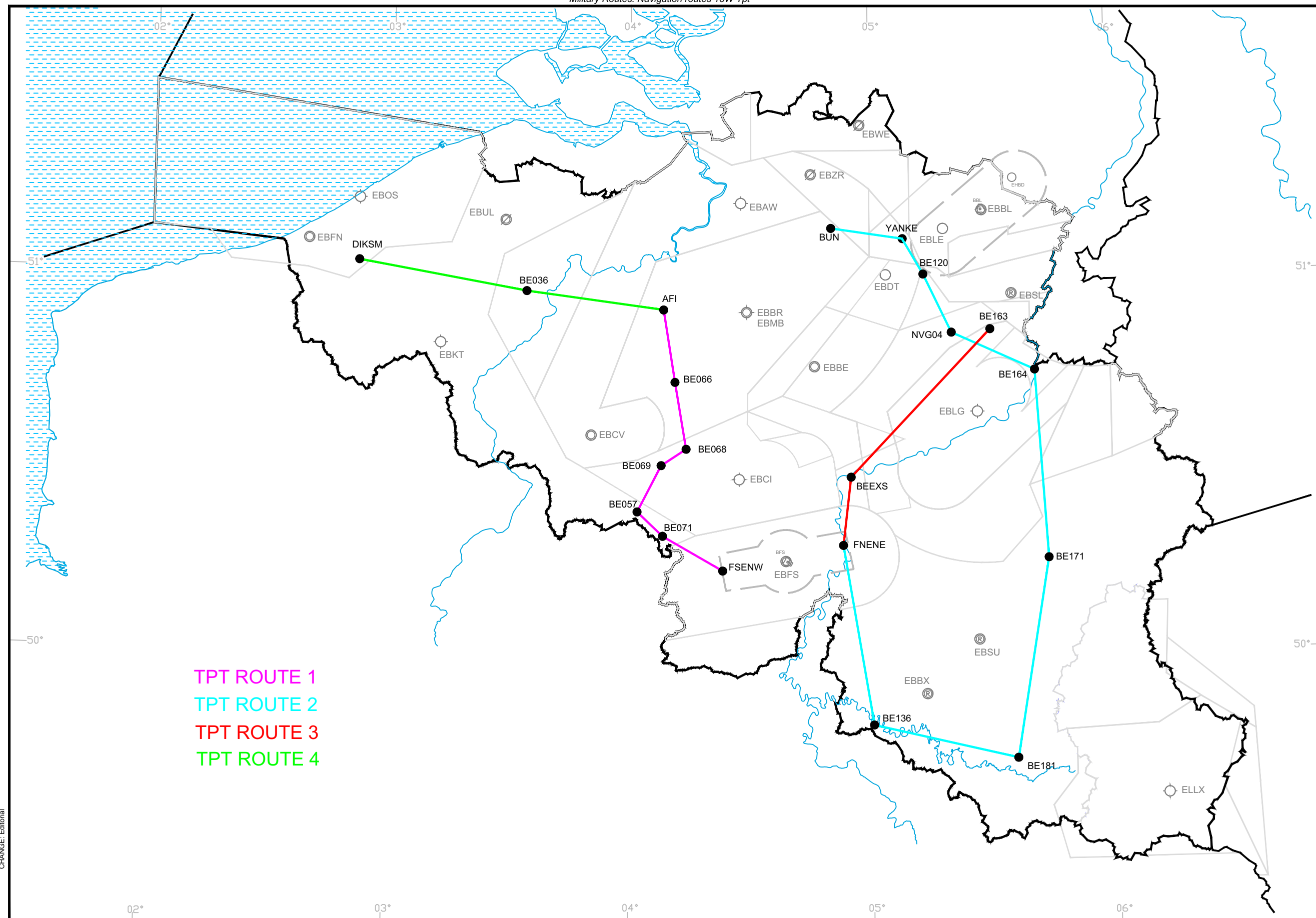
THIS PAGE INTENTIONALLY LEFT BLANK





THIS PAGE INTENTIONALLY LEFT BLANK

**En-route Chart**  
Military Routes: Navigation routes 15W Tpt



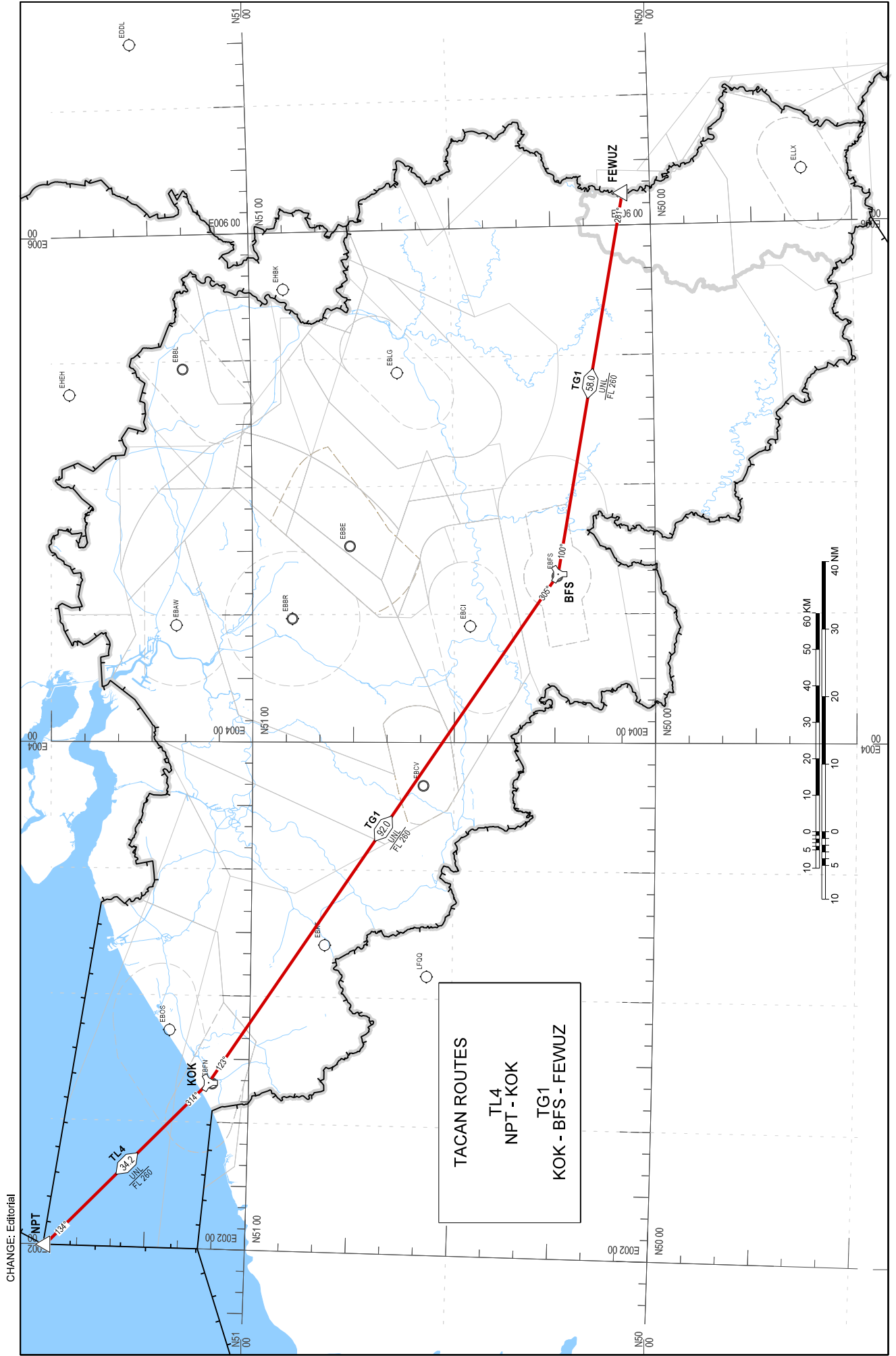
TPT ROUTE 1  
TPT ROUTE 2  
TPT ROUTE 3  
TPT ROUTE 4

CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK

### En-Route Chart

Military Routes: TACAN Routes

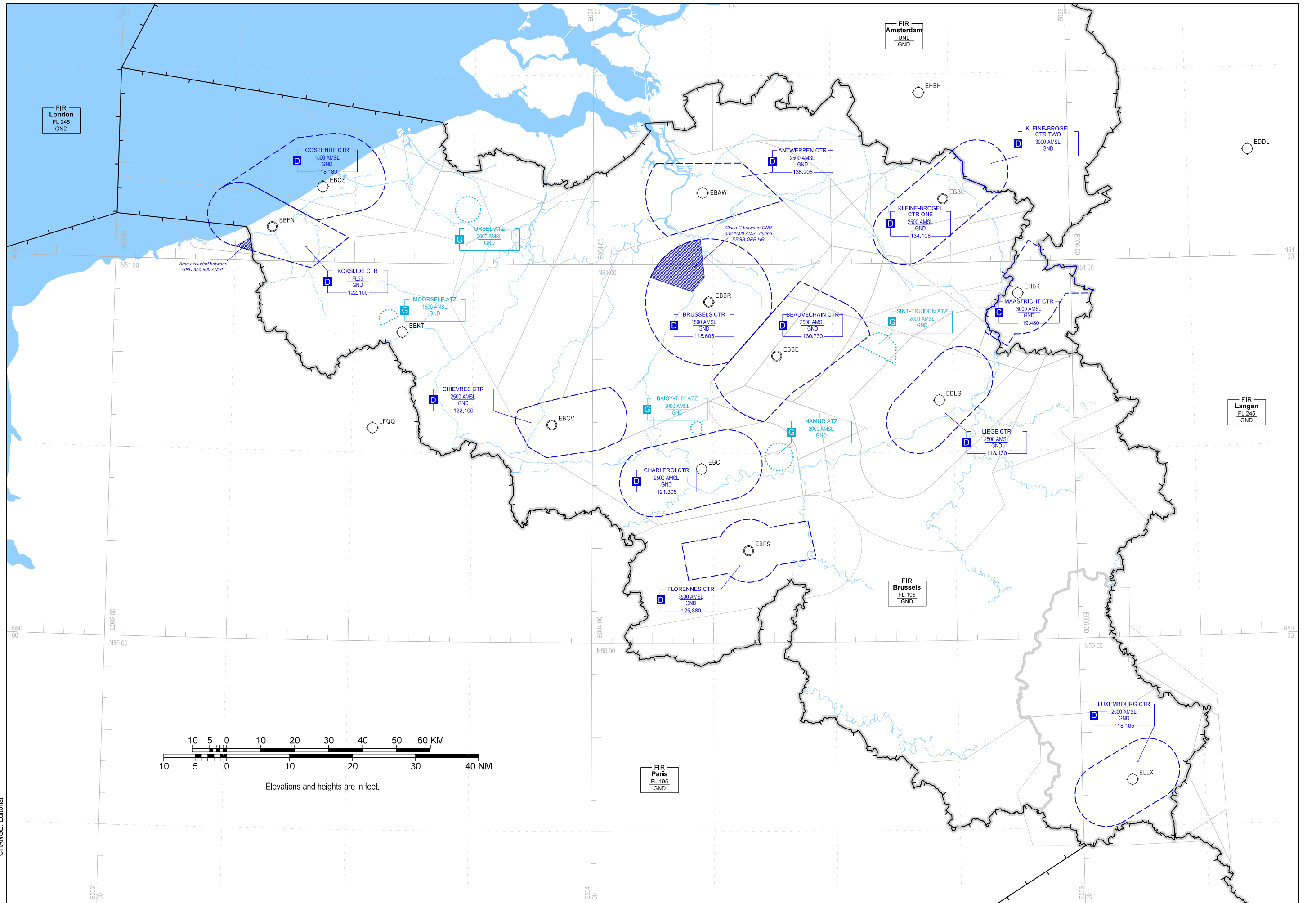


CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK

### Index Chart

ATS Airspace: Control Zones and Aerodrome Traffic Zones

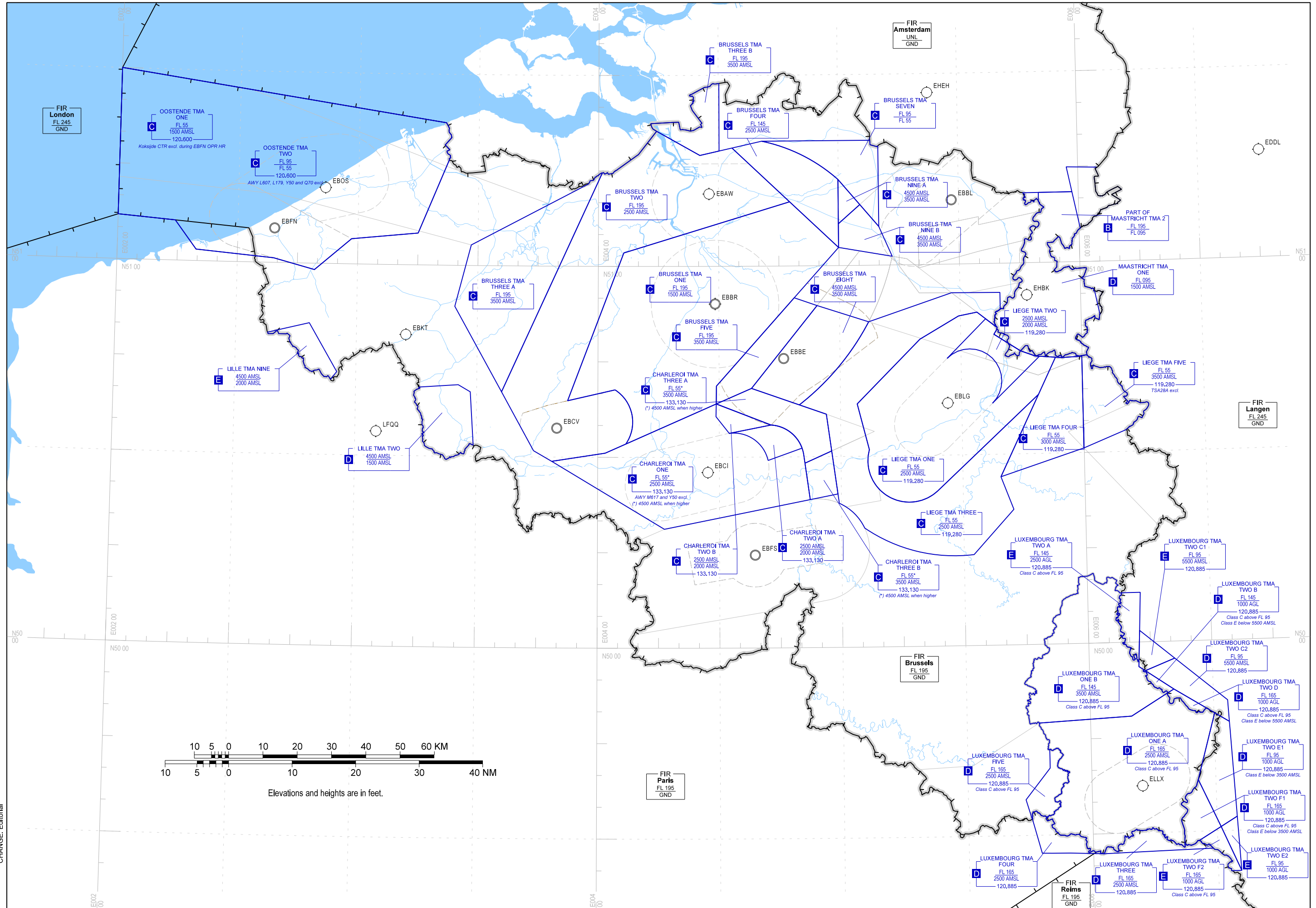


CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK



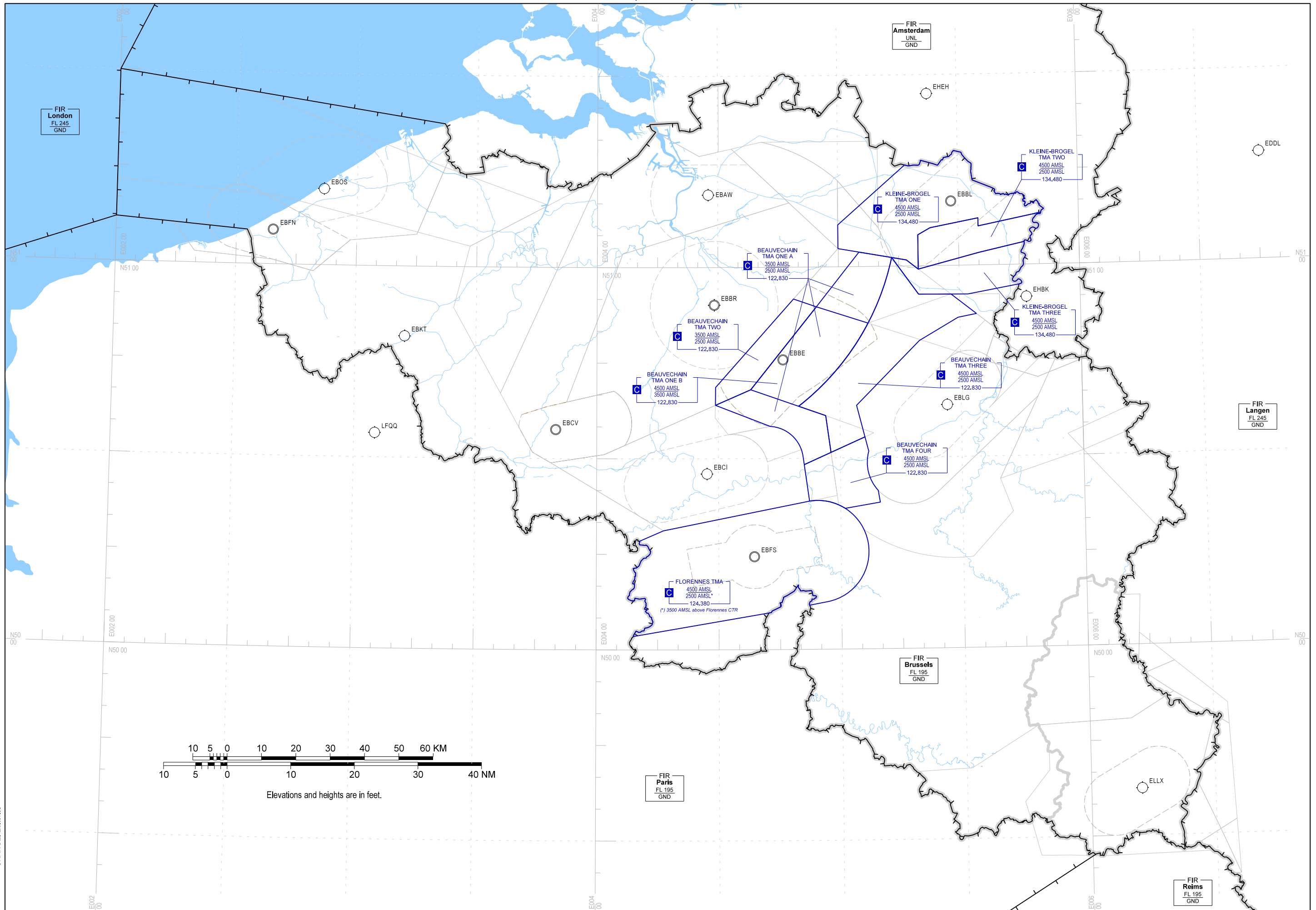
Index Chart  
ATS Airspace: Civil TMA



CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK

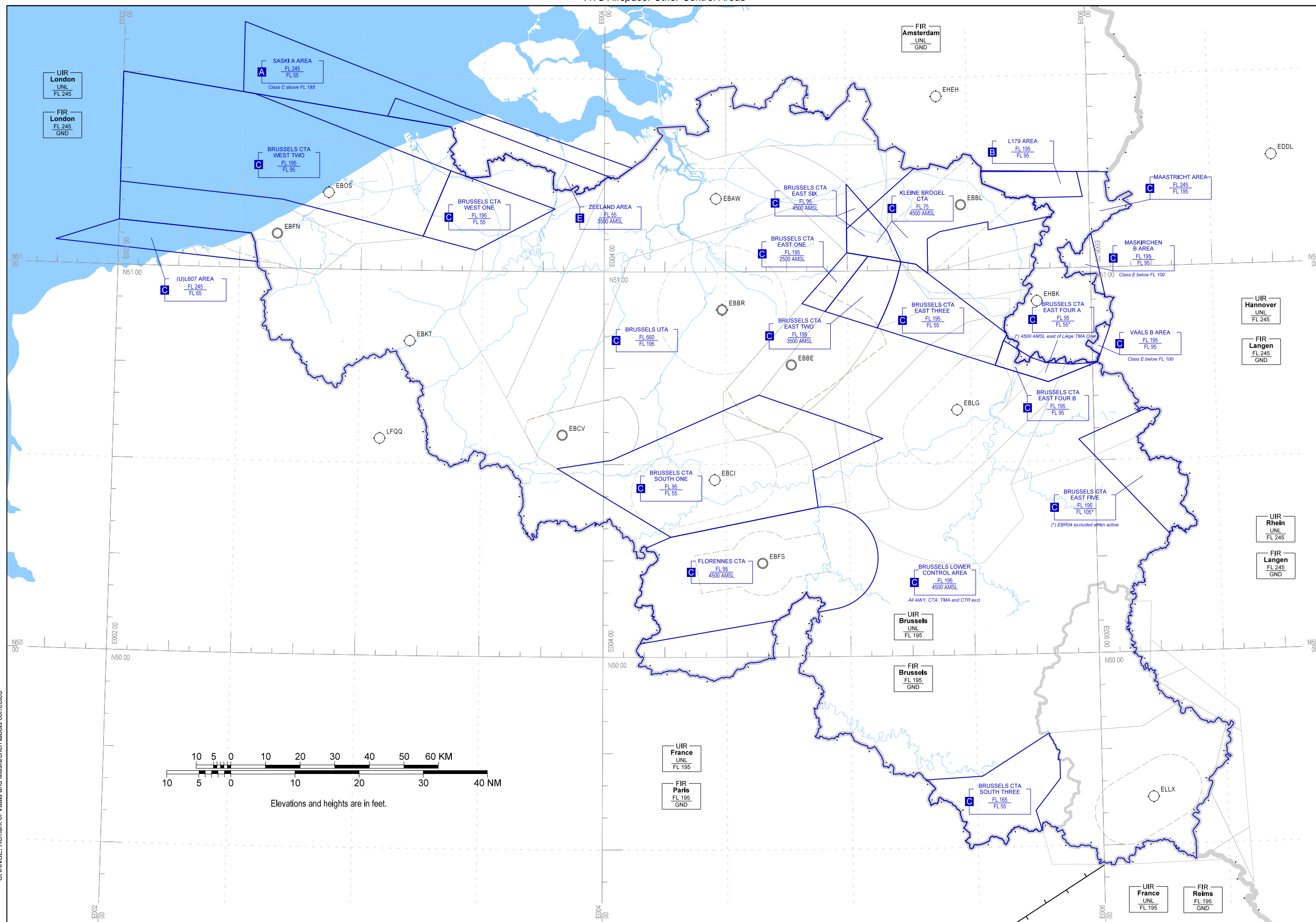
### Index Chart ATS Airspace: Military TMA



CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK

### Index Chart ATS Airspace: Other Control Areas

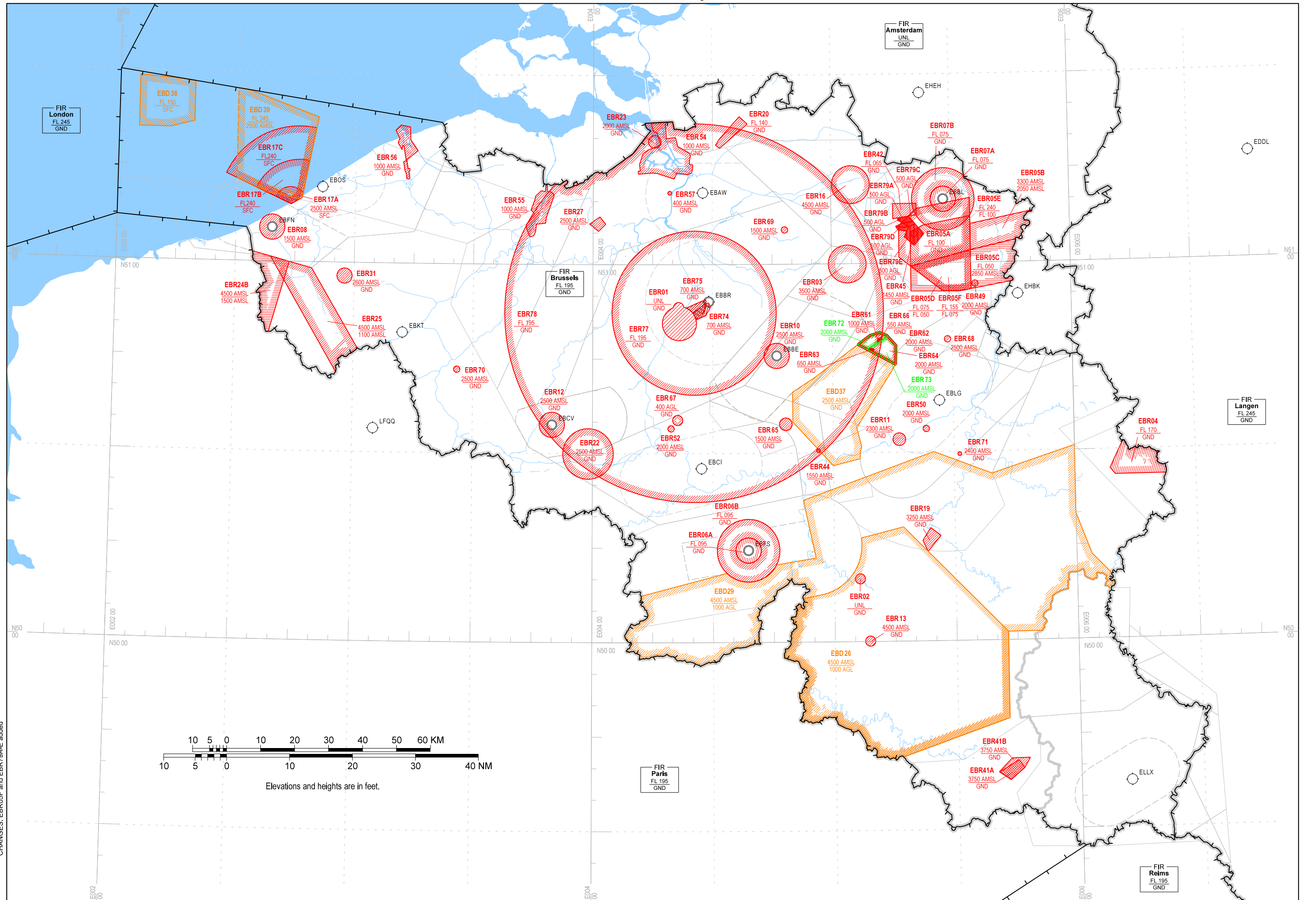


CHANGE: Remark of Vaals and Maskirchen labels corrected

THIS PAGE INTENTIONALLY LEFT BLANK



### Index Chart Prohibited, Restricted and Danger Areas

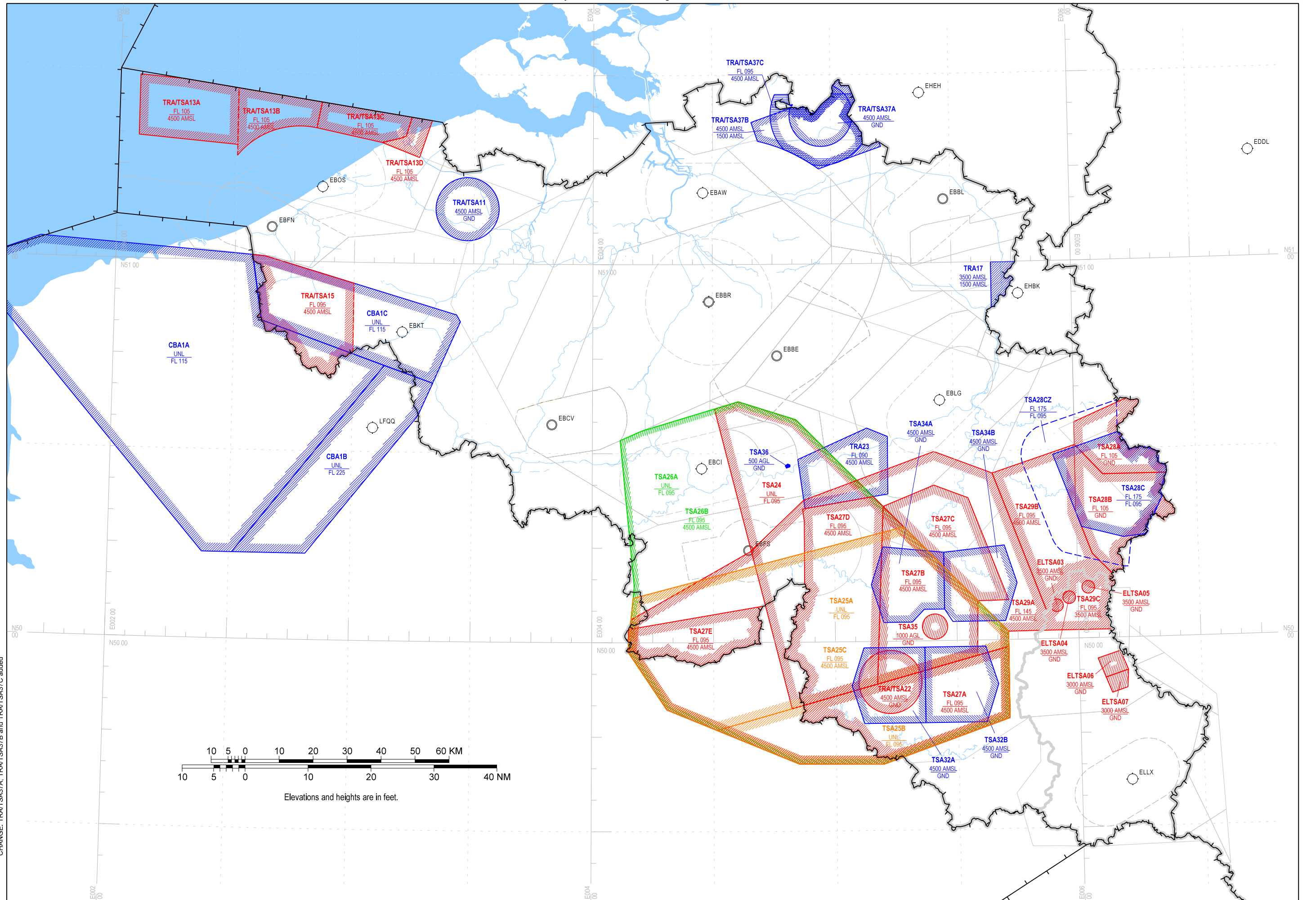


CHANGES: EBR05F and EBR79A-E added

THIS PAGE INTENTIONALLY LEFT BLANK



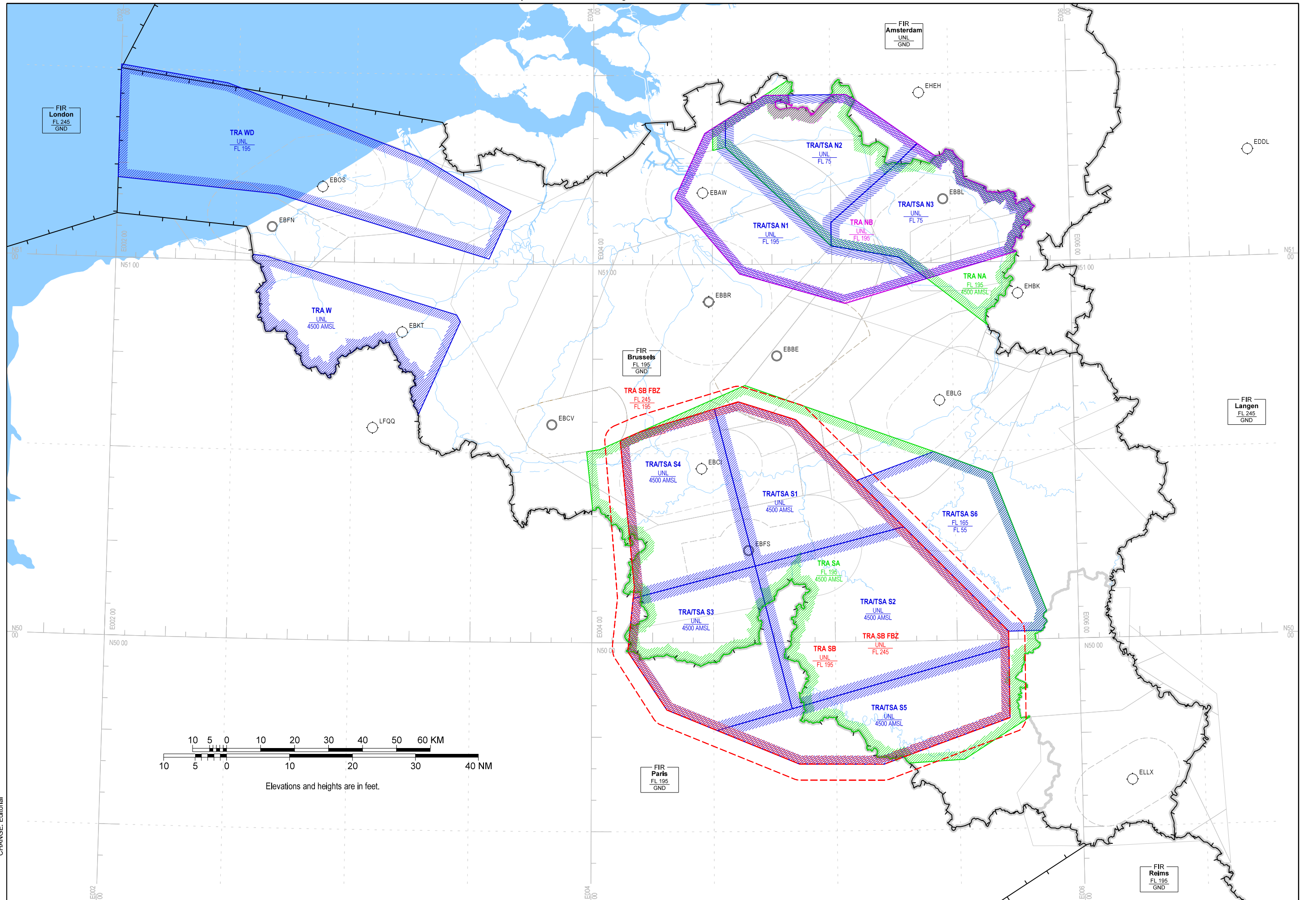
**Index Chart**  
Military Exercise and Training Areas: TRA and TSA



THIS PAGE INTENTIONALLY LEFT BLANK

### Index Chart

Military Exercise and Training Areas: TRA/TSA North, South and West



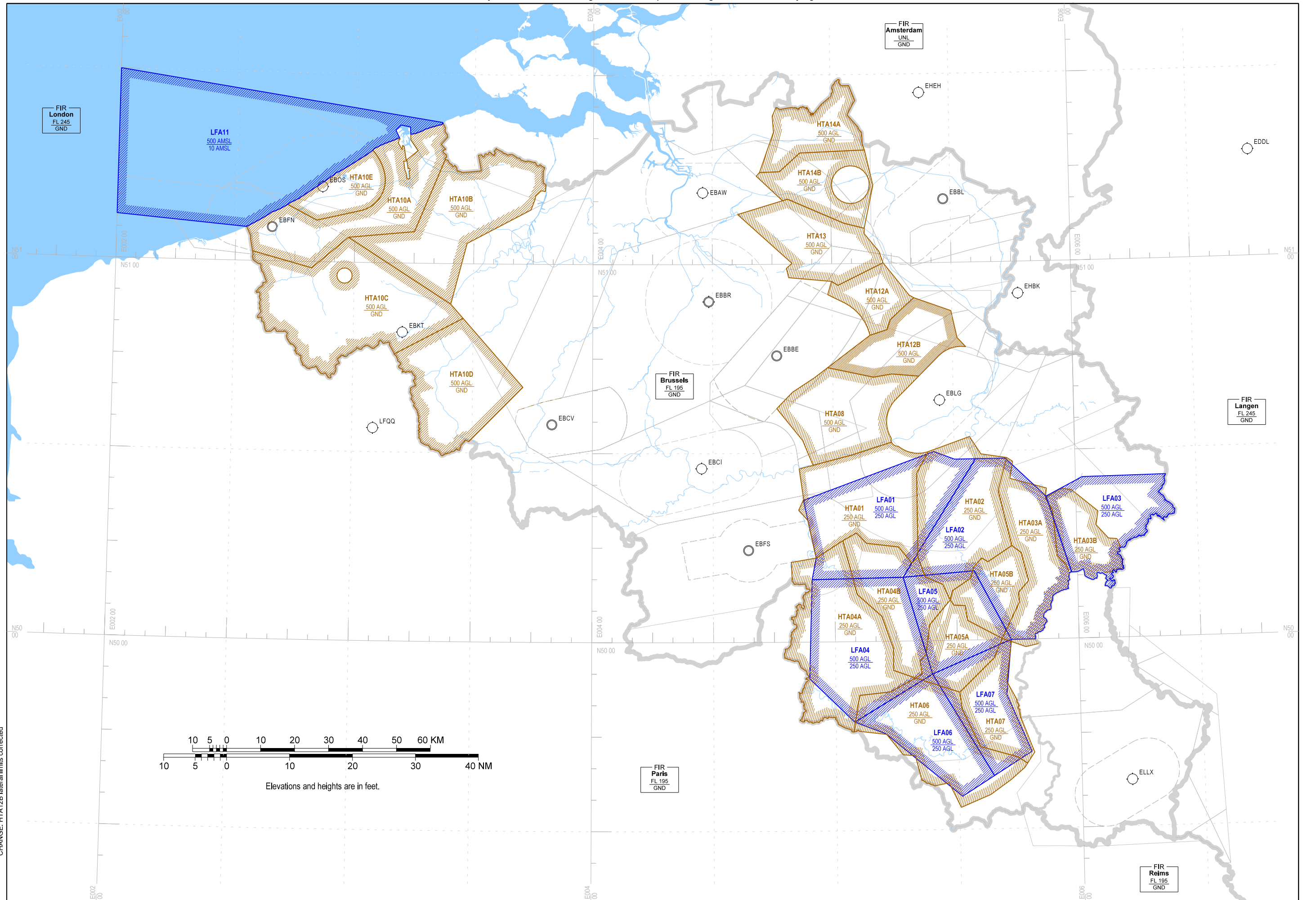
CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK



### Index Chart

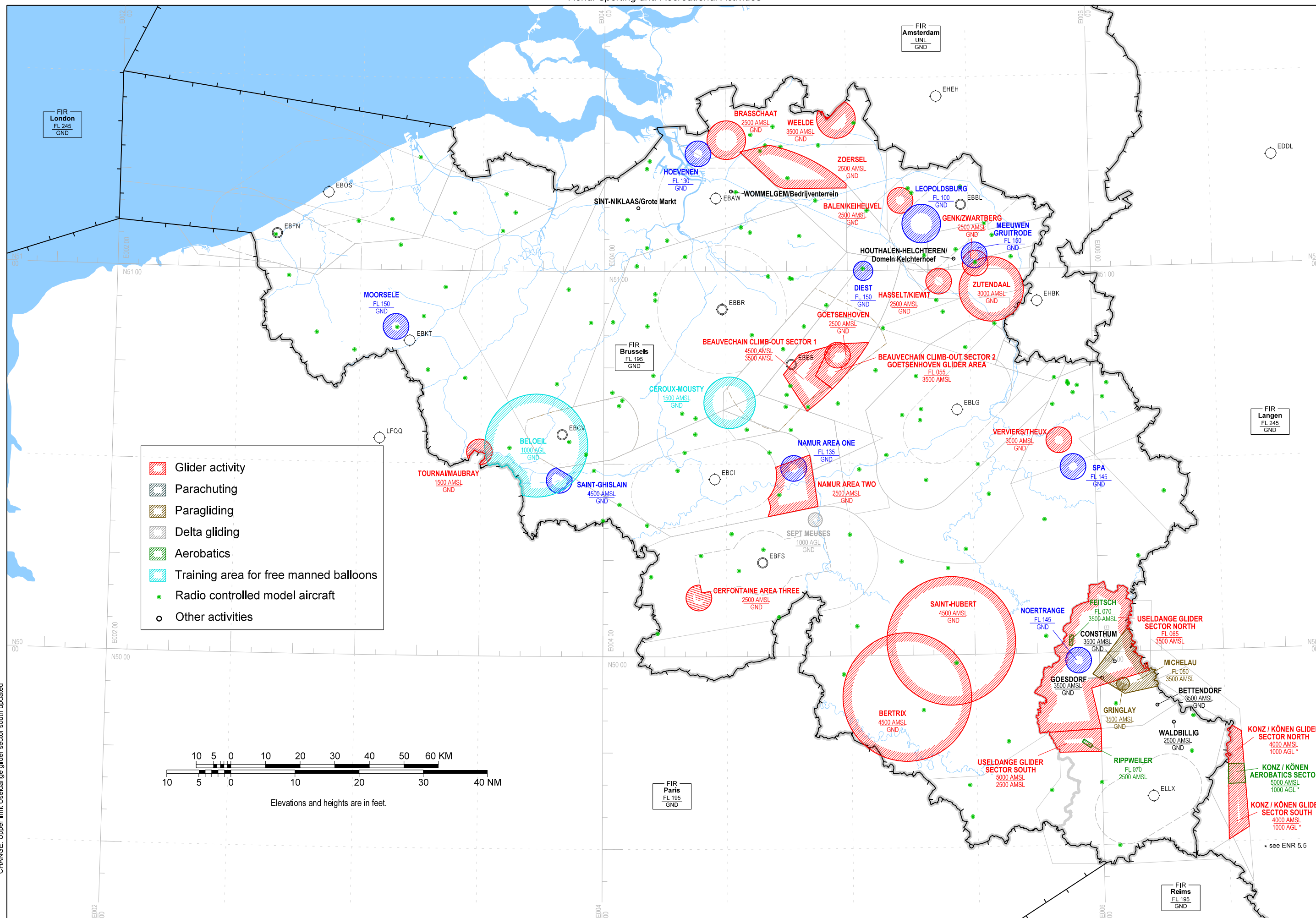
Military Exercise and Training Areas: Helicopter Training Areas and Low Flying Areas



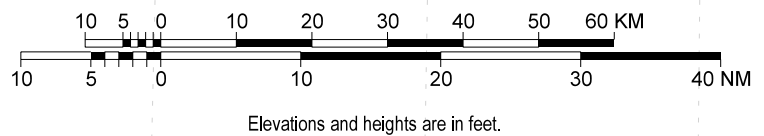
CHANGE: HTA 12B lateral limits corrected

THIS PAGE INTENTIONALLY LEFT BLANK

### Index Chart Aerial Sporting and Recreational Activities



- Glider activity
- Parachuting
- Paragliding
- Delta gliding
- Aerobatics
- Training area for free manned balloons
- Radio controlled model aircraft
- Other activities



CHANGE: Upper limit Useldange glider sector south updated

\* see ENR 5.5

THIS PAGE INTENTIONALLY LEFT BLANK





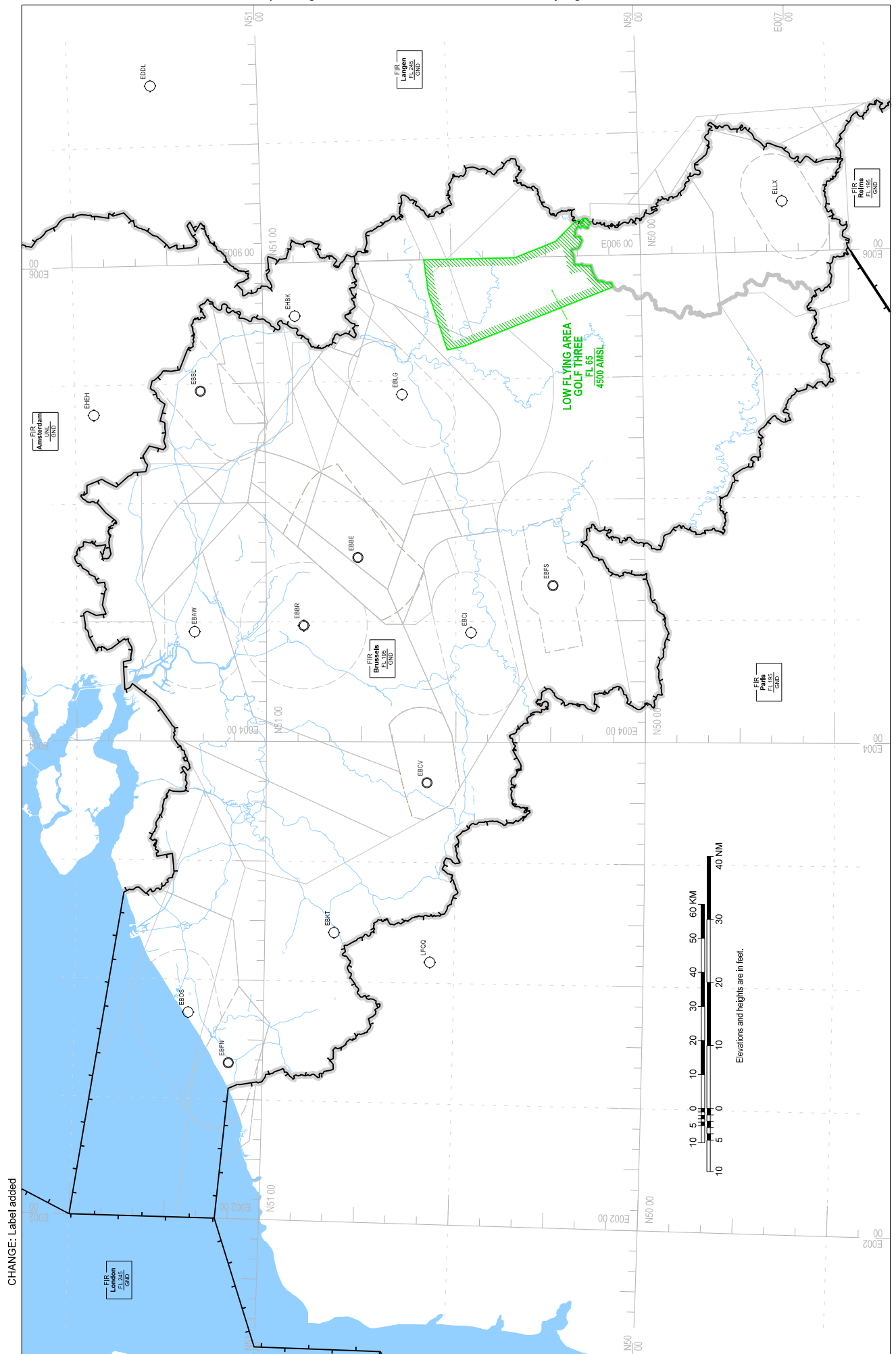
THIS PAGE INTENTIONALLY LEFT BLANK



THIS PAGE INTENTIONALLY LEFT BLANK

### Index Chart

#### Aerial Sporting and Recreational Activities: Low Flying Area Golf Three

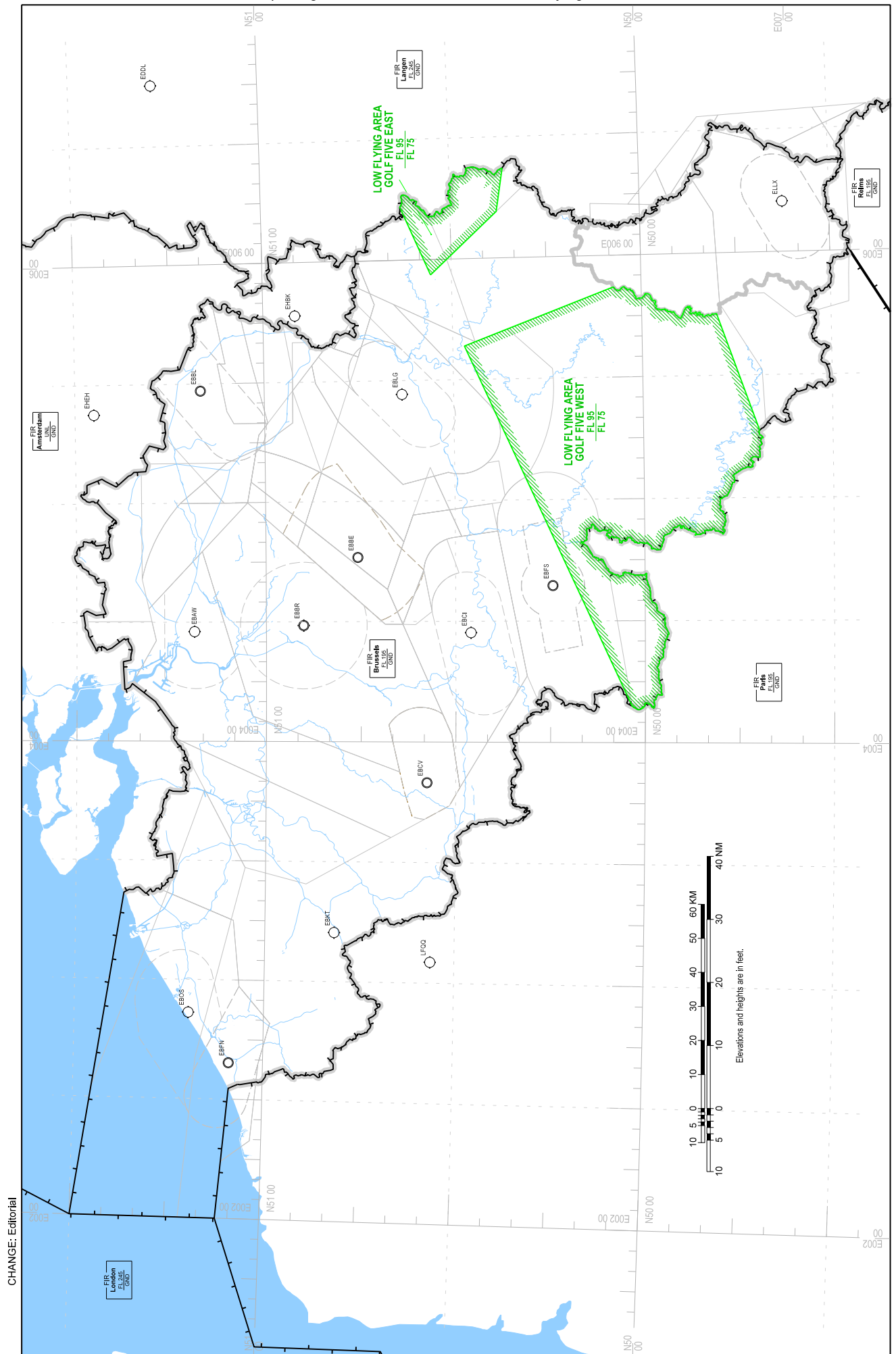


CHANGE: Label added

THIS PAGE INTENTIONALLY LEFT BLANK

### Index Chart

#### Aerial Sporting and Recreational Activities: Low Flying Areas Golf Five



CHANGE: Editorial

THIS PAGE INTENTIONALLY LEFT BLANK



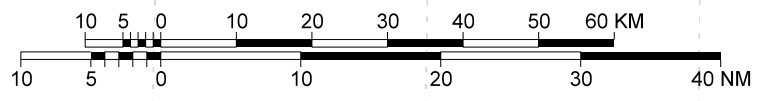
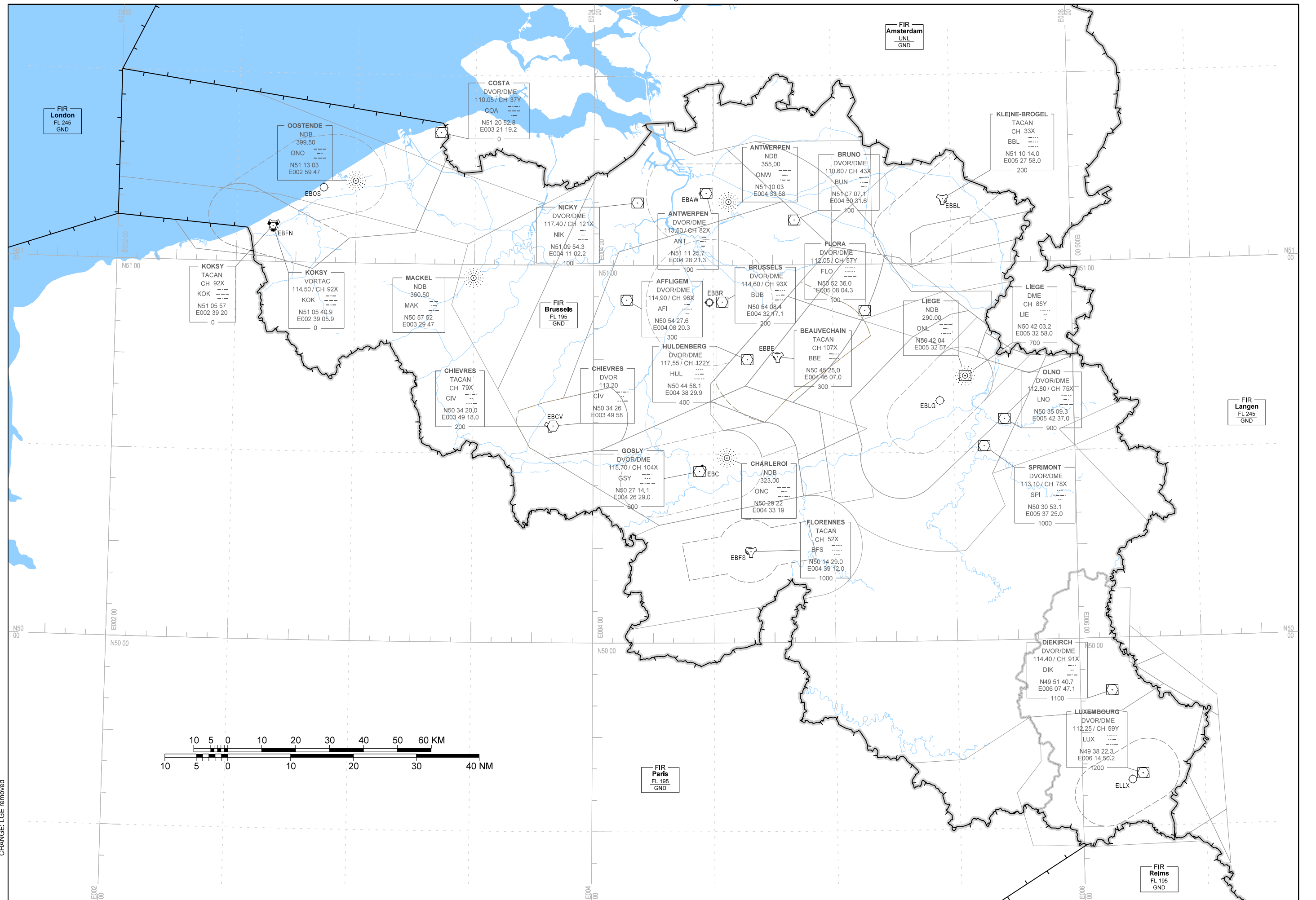


THIS PAGE INTENTIONALLY LEFT BLANK



THIS PAGE INTENTIONALLY LEFT BLANK

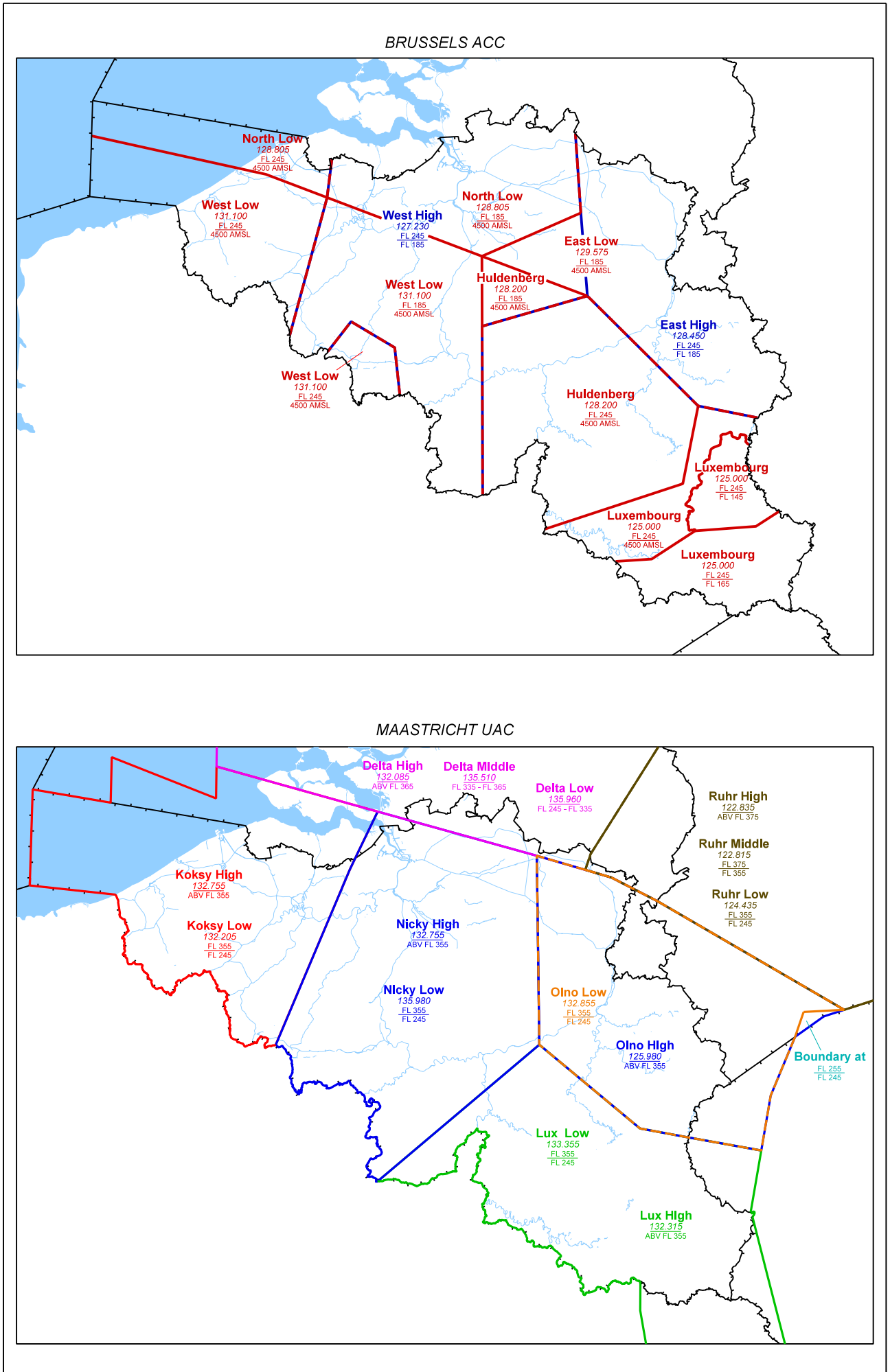
### Index Chart En-route Radio Navigation Aids



CHANGE: LGE removed

THIS PAGE INTENTIONALLY LEFT BLANK

Index Chart  
Sectorisation



CHANGE: Maastricht UAC Ruhr sectors updated

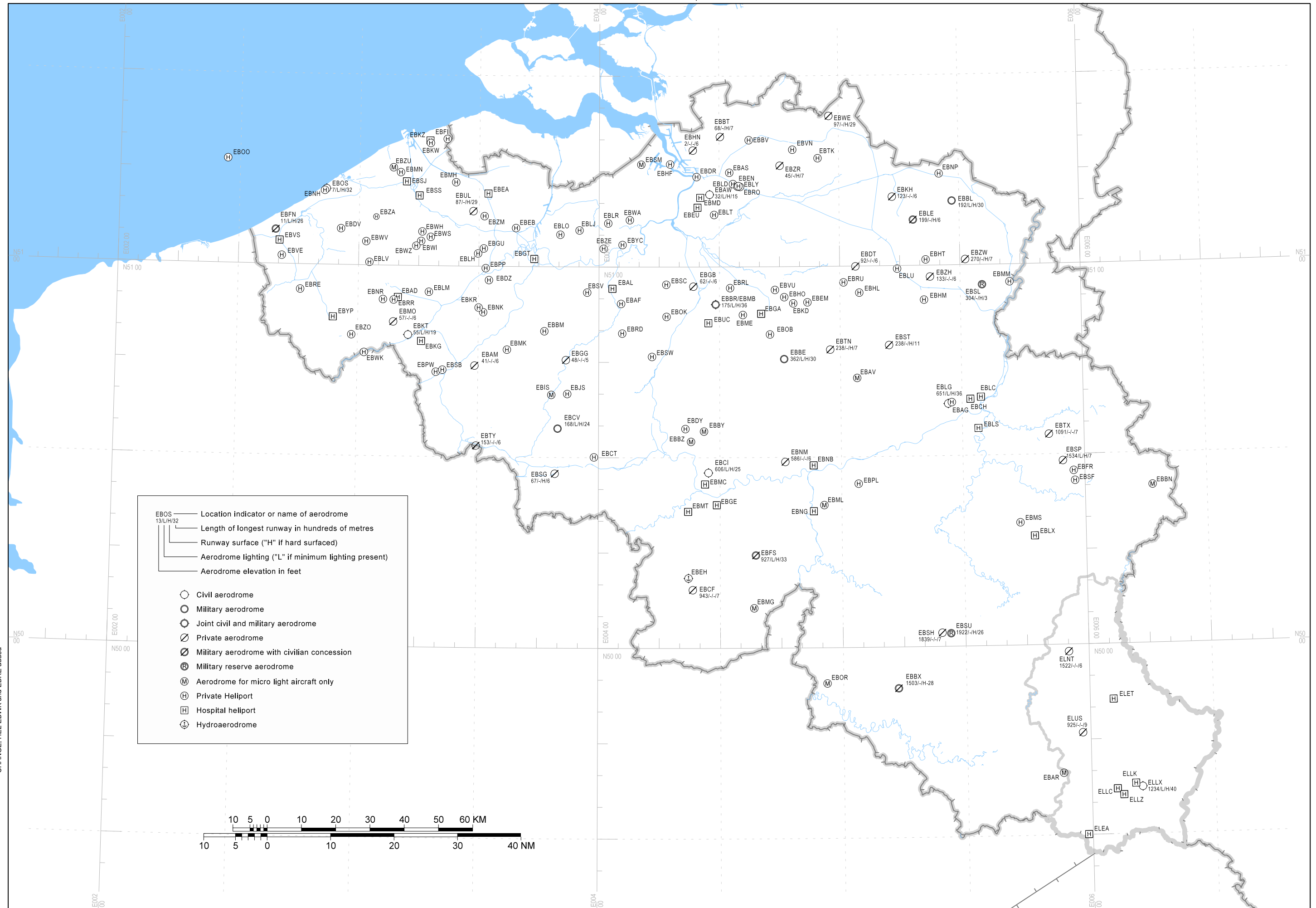
THIS PAGE INTENTIONALLY LEFT BLANK





THIS PAGE INTENTIONALLY LEFT BLANK

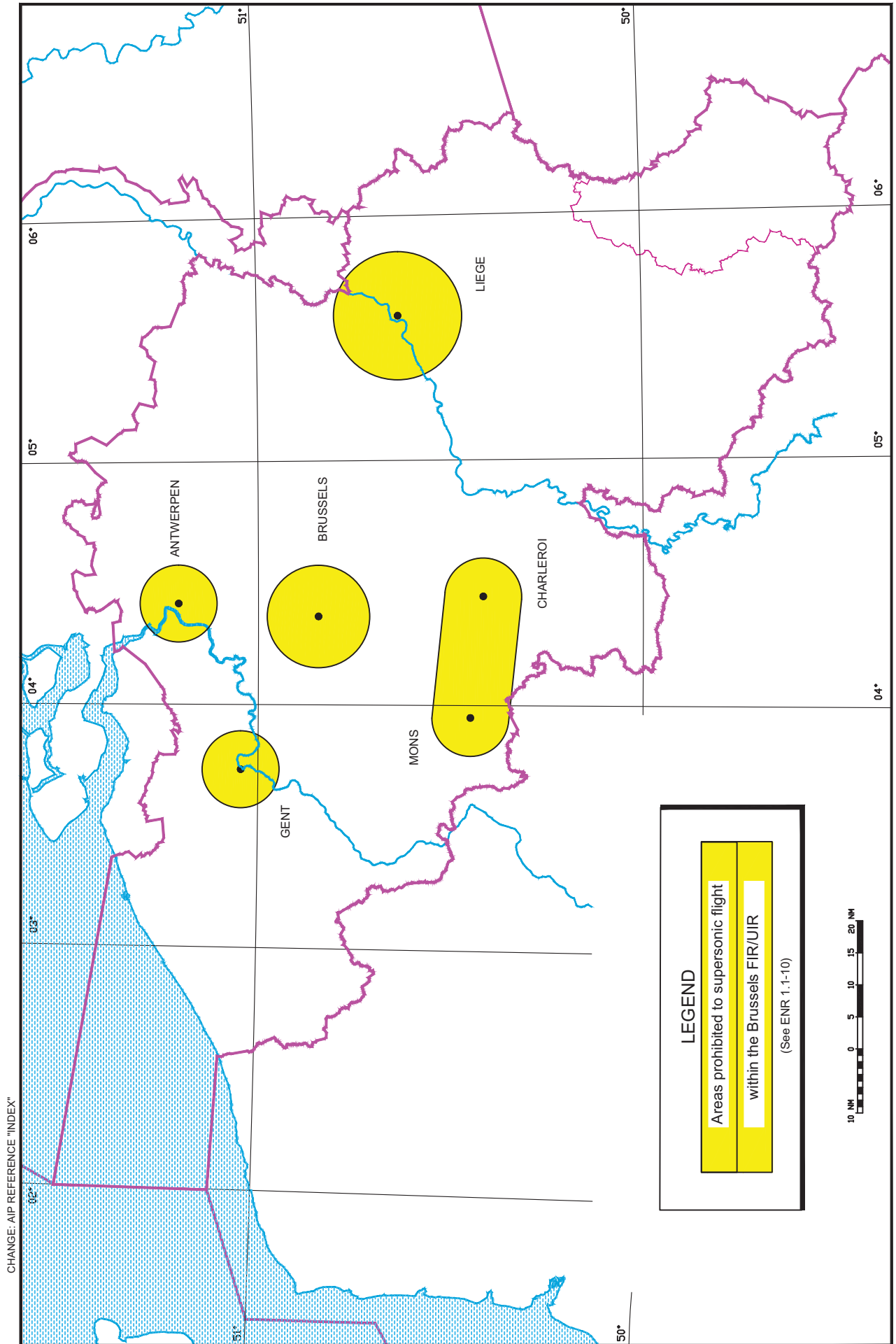
### Index Chart Aerodromes and Heliports



CHANGE: HEL EBWK and EBRE added

THIS PAGE INTENTIONALLY LEFT BLANK

**Index Chart**  
Areas Prohibited to Supersonic Flight



CHANGE: AIP REFERENCE "INDEX"

THIS PAGE INTENTIONALLY LEFT BLANK