

EBBR - BRUSSELS / Brussels-National

EBBR AD 2.1 Aerodrome Location Indicator and Name

EBBR - BRUSSELS / Brussels-National

EBBR AD 2.2 Aerodrome Geographical and Administrative Data

1	ARP coordinates	505405N 0042904E
	Site of ARP at aerodrome	246° MAG / 1.8KM from TWR
2	Direction and distance from (city)	6.5NM NE of Brussels
3	Elevation / reference temperature	175FT / 25°C
4	Geoid undulation	149FT
5	Magnetic variation / annual change	1°E (2020) / INFO not AVBL
6	AD administration address	Brussels Airport Company Brussels Airport 1930 Zaventem BELGIUM
	TEL	+32 (0) 2 753 42 00 (office hours only) +32 (0) 2 753 69 00 (Airside Inspection, H24)
	FAX	+32 (0) 2 753 69 09 (Airside Inspection)
	Telex	NIL
	AFS	EBBRYDYX
	Email	reception@brusselsairport.be (office hours only) airside.inspection@brusselsairport.be (Airside Inspection) inspect@brusselsairport.be (Airside Inspection)
7	Types of traffic permitted (IFR / VFR)	IFR / VFR
8	Remarks	NIL

EBBR AD 2.3 Operational Hours

1	AD Administration	H24
2	Customs and immigration	H24
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24
6	MET Briefing Office	H24
7	ATS	H24
8	Fuelling	H24 (Between 2100 and 0500 (2000 and 0400), only with credit cards acceptable by the chosen petroleum company)
9	Handling	H24
10	Security	H24
11	De-icing	H24
12	Remarks	See also EBBR AD 2.20, § 1 and EBBR AD 2.21, § 1.

EBBR AD 2.4 Handling Services and Facilities

1	Cargo-handling facilities	Modern handling facilities Nearest railway siding: Brussels (10KM)
2	Fuel types	JET A1
	Oil types	All types
3	Fuelling facilities and capacity	Pits and trucks / No limitations
4	De-icing facilities	By arrangement with handling agent
5	Hangar space for visiting aircraft	NIL
6	Repair facilities for visiting aircraft	All repairs
7	Remarks	General aviation handling is compulsory

EBBR AD 2.5 Passenger Facilities

1	Hotels	At aerodrome and in the city
2	Restaurants	At aerodrome and in the city
3	Transportation	Taxis, buses, railway station and car hire
4	Medical facilities	Doctor, recovery rooms and ambulances Hospitals in Brussels (10KM) and in Vilvoorde (5KM)
5	Bank	At aerodrome
	Post office	At aerodrome
6	Tourist information	At aerodrome
7	Remarks	NIL

EBBR AD 2.6 Rescue and Fire Fighting Services

1	Aerodrome category for fire fighting	CAT 10
2	Rescue equipment	CAT 10 compliant
3	Capability for removal of disabled aircraft	No dedicated removal equipment on site, contact Airside Inspection (+32 2 753 69 00) or inspect@brusselsairport.be
4	Remarks	NIL

EBBR AD 2.7 Seasonal Availability - Clearing

1	Types of clearing equipment	40 vehicles composed of: <ul style="list-style-type: none"> • sweepers-blowers • tractors equipped with sweeper-blower • sprayers of de-icing liquid • snow blowers • stand-sweepers • spreaders
2	Clearance priorities	<ol style="list-style-type: none"> 1. runways, appropriate important taxiways and holding bays 2. important aprons and aircraft stands 3. remaining part movement area and all roads outside the movement area
3	Use of material for movement area surface treatment	KFOR (potassium formate fluids) and NAFO (sodium formate solids) used.
4	Specially prepared winter runways	Not applicable
5	Remarks	<p>Transmission of information by ATIS, SNOWTAM and RCR based on RCAM.</p> <p>Designated authority to co-ordinate information on the current state of progress of snow clearance operations and the condition of the movement area is the Airside Inspection:</p> <p>TEL: +32 (0) 2 753 69 00 FAX: +32 (0) 2 753 69 09 Email: airside.inspection@brusselsairport.be</p>

EBBR AD 2.8 Aprons, Taxiways and Check Locations Data

1	Apron surface	CONC
	Apron strength	Apron 1 north: PCN 72/R/A/W/T Apron 1 south, 2 north and 2 south: PCN 77/R/A/W/T Apron 3 north: PCN 68/R/C/W/T Apron 3 south: PCN 110/R/B/W/T Apron 4: PCN 63/R/D/W/T Apron 9: PCN 117/R/B/W/T Apron 10: PCN 75/R/B/W/T Apron 40: PCN 68/R/C/W/T Apron 51b: PCN 70/R/C/W/U Apron 51c: PCN 70/R/C/W/U Apron 53: PCN 76/R/C/W/T Apron 54: PCN 73/R/B/W/T (entry S and entry W: PCN 80/F/A/W/T) Apron 55: PCN 43/R/C/W/T Apron 56: PCN 76/F/A/W/T Apron 60: PCN 120/R/B/W/T
2	Taxiway width	See chart AD2 EBBR-GMC.02
	Taxiway surface	CONC / ASPH
	Taxiway strength	See chart AD2 EBBR-GMC.02
3	ACL and elevation	On satellite and parking areas (mean elevation 175FT)
4	VOR check points	NIL
	INS check points	See chart AD2 EBBR-APDC.01 and AD2 EBBR-APDC.02
5	Remarks	Slopes on aircraft stands: stand 305 1.50%, stand 306 1.60%.

EBBR AD 2.9 Surface Movement Guidance and Control System and Markings

1	Aircraft stand identification signs	AVBL
	Taxiway guide lines	AVBL
	Visual docking/parking guidance system at aircraft stands	Parking guidance lines are available at all stands. For docking guidance system, see EBBR AD 2.20, § 3.1.
2	Runway markings	Designation, threshold, touchdown zone, centre line and edge lines, aiming point
	Taxiway markings	Centre line, edge lines and holding positions (CAT I and CAT II/III operations) at the TWY/RWY intersections. Intermediate holding positions are available (not lighted).
3	Stop bars	AVBL (see chart AD2 EBBR GMC.01)
4	Remarks	<p>Line-up position signs at RWY 07R:</p> <ul style="list-style-type: none"> • sign "PSN 1" (line-up position 1) on the left beyond the PAPI at 461.4M from THR 07R • sign "PSN 2" (line-up position 2) on the left at 743.7M from THR 07R (BTN TWY C6 and C5) • sign "PSN H" (line-up position heavy) on the left at 194m from THR 07R

EBBR AD 2.10 Aerodrome Obstacles

No Area 2 or Area 3 obstacle data sets are currently provided for EBBR.

Details on EBBR aerodrome obstacles can be found on the aerodrome obstacle charts (see [EBBR AD 2.24](#)).

Note 1: Pilots shall draw attention to the presence of an obstacle of 84M AMSL (46M above THR 07L) in the axis of RWY 07L/25R and at 1610M from THR 07L. This obstacle (church with ICAO day and night marking installed) protrudes 17M above the approach surface of RWY 07L and the take-off climb surface of RWY 25R.

Note 2: Pilots shall draw attention to the presence of the control tower building (107.2M AMSL) between THR 25R and THR 25L.

EBBR AD 2.11 Meteorological Information Provided

1	Associated MET Office	EBBR MET
2	Hours of service	H24
	MET Office outside hours	NIL
3	Office responsible for TAF preparation	EBBR
	Periods of validity	30HR
	Interval of issuance	6HR
4	Trend forecast	AVBL
	Interval of issuance	30MIN
5	Briefing / consultation provided	TEL
6	Flight documentation	Charts, abbreviated plain language text
	Languages used	En
7	Charts and other information available for briefing or consultation	Surface charts, altitude charts, prognostic altitude charts, prognostic chart of significant weather, tropopause and maximum wind chart
8	Supplementary equipment available for providing information	Weather radar and satellite imagery display, self-briefing terminal, FAX, real-time weather display
9	ATS units provided with information	Brussels TWR, Brussels APP and Brussels ACC
10	Additional information	<p>International aviation:</p> <p>TEL: +32 (0) 2 206 28 50</p> <p>FAX: +32 (0) 2 206 28 29</p> <p>VFR flights, gliding, ballooning:</p> <p>TEL: 0902 / 88 173 (CONSULTEL)</p> <p><i>Note: Communications automatically recorded on tape</i></p>

EBBR AD 2.12 Runway Physical Characteristics

RWY designator	True BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR COORD	THR ELEV and highest ELEV of TDZ of precision APCH RWY
				RWY end COORD	
				THR geoid undulation	
1	2	3	4	5	6
01	014.43°	2987 x 50	120/F/A/W/T ASPH	505314.39N 0042929.68E	THR 175FT TDZ 175FT
				505446.54N 0043007.27E	
				149FT	
19	194.43°	2987 x 50	120/F/A/W/T ASPH	505439.64N 0043004.46E	THR 105FT TDZ 123FT
				505312.94N 0042929.09E	
				149FT	
07R	069.89°	3211 x 45	120/F/A/W/T ASPH	505321.89N 0042855.40E	THR 166FT TDZ 166 FT
				505356.19N 0043123.88E	
				149FT	
25L	249.89°	3211 x 45	120/F/A/W/T ASPH	505356.19N 0043123.88E	THR 150FT TDZ 157FT
				505320.54N 0042849.53E	
				149FT	
07L	65.35°	3638 x 45	120/F/A/W/T ASPH	505400.54N 0042735.80E	THR 121FT TDZ 121 FT
				505445.60N 0043011.75E	
				149FT	
25R	245.35°	3638 x 45	120/F/A/W/T ASPH	505441.57N 0042957.79E	THR 102FT TDZ 104FT
				505356.66N 0042722.38E	
				149FT	

Slope of RWY and SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	OFZ	RMK
7	8	9	10	11	12
-0.78%	NIL	NIL	3107 x 300	yes	Grooved RWY. Longitudinal slope first quarter > 0,8% and < 1,0%, (*)
+0.78%	NIL	NIL	3107 x 300	yes	Grooved RWY. Longitudinal slope last quarter > 0,8% and < 1,0%, (*)
-0.15%	NIL	NIL	3331 x 300	yes	Grooved RWY. Maximum steering angle on turn pad is 64°, (*)
+0.15%	NIL	NIL	3331 x 300	yes	Grooved RWY. Maximum steering angle on turn pad is 64°, (*)
-0.21%	NIL	NIL	3758 x 300	yes	(*)
+0.21%	NIL	NIL	3758 x 300	yes	(*)

(*) for details on obstacles present in the OFZ, please consult chart [AD 2 EBBR-ADC.01](#).

EBBR AD 2.13 Declared Distances

RWY designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	RMK
1	2	3	4	5	6
01	2987	2987	2987	2941	NIL
19	2987	2987	2987	2767	NIL
07R	2891	2891	2891	3089	No TKOF before PSN H
25L	3211	3211	3211	3211	NIL
07L	3638	3638	3638	3350	NIL
25R	3638	3638	3638	3339	NIL

In order to reduce the taxi procedure, ATC may, with a visibility of 2KM or more and subject to pilot's acceptance, authorize take-off from one of the intersections below. Pilots unable to accept should advise ATC duly in advance.

To expedite departing traffic when RWY 01 is in use, departure on RWY 07R from position "H", line-up position 1 or line-up position 2 will be assigned by ATC.

Intersection TORA are measured from the point of contact of taxiway centre line marking and runway centre line.

RWY	From	TORA (M)	RWY	From	TORA (M)	
01	E1	2075	25L	C1	2210	
	E3	2028		C2	1690	
	E4	1253		C3	1237	
19	A1	2825		C4	1237	
	E7	2675	07L	B9	2524	
	E6	2164		A6	2646	
	E5	1558		B8	2605	
	E4	1558		A5	2158	
07R	C6	2405		B7	1842	
	C4	1792		B6	1381	
	Line-up PSN 1	2624		A3	1570	
	Line-up PSN 2	2341		B5	1518	
	Line-up PSN H	2891		25R	A1	3427
	C3	1774			B1	3266
		B3	2757			
		B5	2000			
		A3	1994			
		B6	1988			
		B7	1526			
		A5	1410			

EBBR AD 2.14 Approach and Runway Lighting

RWY 01			
Approach lighting system	Type:	PALS CAT II / III	VASIS
	Length:	900M (*)	
	Intensity:	LIH	
Runway threshold lights	Colour:	green	Touchdown zone lights
	Wing bars:	NIL	
Runway end lights	Colour:	red	Stopway lights
	Wing bars:	NIL	
			MEHT: 49FT
			900M
			NIL

RWY 01			
Runway centre line lights	Length:	2987M	white: from 0 to 2087M
	Spacing:	15M	red / white: from 2087 to 2687M
	Intensity:	LIH	red: from 2687 to 2987M
Runway edge lights	Length:	2987M	red: from 0 to 45M
	Spacing:	30M	white: from 45 to 2387M
	Intensity:	LIH	amber: from 2387M to 2987M
Remarks	(*) Barrette at 570M omitted due to railway		

RWY 19				
Approach lighting system	Type:	PALS CAT I	VASIS	Type: PAPI (left / 3°)
	Length:	630M		MEHT: 56FT
	Intensity:	LIH		
Runway threshold lights	Colour:	green	Touchdown zone lights	NIL
	Wing bars:	NIL		
Runway end lights	Colour:	red	Stopway lights	NIL
	Wing bars:	NIL		
Runway centre line lights	Length:	2987M	white: from 0 to 2087M	
	Spacing:	15M	red / white: from 2087 to 2687M	
	Intensity:	LIH	red: from 2687 to 2987M	
Runway edge lights	Length:	2987M	red: from 0 to 220M	
	Spacing:	30M	white: from 220 to 2387M	
	Intensity:	LIH	amber: from 2387M to 2987M	
Remarks	NIL			

RWY 07R				
Approach lighting system	NIL		VASIS	Type: PAPI (left / 3°)
				MEHT: 66FT
Runway threshold lights	Colour:	green	Touchdown zone lights	NIL
	Wing bars:	NIL		
Runway end lights	Colour:	red	Stopway lights	NIL
	Wing bars:	NIL		
Runway centre line lights	Length:	3211M	white: from 0 to 2311M	
	Spacing:	15M	red / white: from 2311 to 2911M	
	Intensity:	LIH	red: from 2911 to 3211M	
Runway edge lights	Length:	3211M	red: from 0 to 125M	
	Spacing:	30M	white: from 125 to 2611M	
	Intensity:	LIH	amber: from 2611 to 3211M	
Remarks	NIL			

RWY 25L				
Approach lighting system	Type:	PALS CAT II / III	VASIS	Type: PAPI (left / 3°)
	Length:	900M		MEHT: 63FT
	Intensity:	LIH		
Runway threshold lights	Colour:	green	Touchdown zone lights	900M
	Wing bars:	NIL		
Runway end lights	Colour:	red	Stopway lights	NIL
	Wing bars:	NIL		

RWY 25L			
Runway centre line lights	<i>Length:</i>	3211M	<i>white:</i> from 0 to 2311M
	<i>Spacing:</i>	15M	<i>red / white:</i> from 2311 to 2911M
	<i>Intensity:</i>	LIH	<i>red:</i> from 2911 to 3211M
Runway edge lights	<i>Length:</i>	3211M	<i>white:</i> from 0 to 2611M
	<i>Spacing:</i>	30M	<i>amber:</i> from 2611 to 3211M
	<i>Intensity:</i>	LIH	
Remarks	NIL		

RWY 07L			
Approach lighting system	<i>Type:</i>	PALS CAT I	VASIS
	<i>Length:</i>	900M	
	<i>Intensity:</i>	LIH	
Runway threshold lights	<i>Colour:</i>	green	Touchdown zone lights
	<i>Wing bars:</i>	NIL	
Runway end lights	<i>Colour:</i>	red	Stopway lights
	<i>Wing bars:</i>	NIL	
Runway centre line lights	<i>Length:</i>	3638M	<i>white:</i> from 0 to 2738M
	<i>Spacing:</i>	15M	<i>red / white:</i> from 2738 to 3338M
	<i>Intensity:</i>	LIH	<i>red:</i> from 3338 to 3638M
Runway edge lights	<i>Length:</i>	3638M	<i>red:</i> from 0 to 288M
	<i>Spacing:</i>	30M	<i>white:</i> from 288 to 3038M
	<i>Intensity:</i>	LIH	<i>amber:</i> from 3038 to 3638M
Remarks	NIL		

RWY 25R			
Approach lighting system	<i>Type:</i>	PALS CAT II / III	VASIS
	<i>Length:</i>	600M	
	<i>Intensity:</i>	LIH	
Runway threshold lights	<i>Colour:</i>	green	Touchdown zone lights
	<i>Wing bars:</i>	NIL	
Runway end lights	<i>Colour:</i>	red	Stopway lights
	<i>Wing bars:</i>	NIL	
Runway centre line lights	<i>Length:</i>	3608M	<i>white:</i> from 30 to 2738M
	<i>Spacing:</i>	15M	<i>red / white:</i> from 2738 to 3338M
	<i>Intensity:</i>	LIH	<i>red:</i> from 3338 to 3638M
Runway edge lights	<i>Length:</i>	3638M	<i>red:</i> from 0 to 300M
	<i>Spacing:</i>	30M	<i>white:</i> from 300 to 3038M
	<i>Intensity:</i>	LIH	<i>amber:</i> from 3038 to 3638M
Remarks	NIL		

EBBR AD 2.15 Other Lighting, Secondary Power Supply

1	ABN / IBN location, characteristics and hours of operation	NIL
2	LDI location and lighting	NIL
	WDI location and lighting	At THR 07L (lighted) At 198M from THR 07R (lighted) At 378M from THR 25L (lighted) At 430M from THR 19 and 209M from THR 25R (lighted) At 472M from THR 01 and 940M from THR 07R (lighted)
3	Taxiway edge lighting	See chart AD2 EBBR GMC.02
	Taxiway centre line lighting	See chart AD2 EBBR GMC.02
4	Secondary power supply	AVBL
	Switch-over time	0 SEC
5	Remarks	NIL

EBBR AD 2.16 Helicopter Landing Area

1	Coordinates of TLOF and FATO THR	505348.28N 0042758.57E The FATO is located on TWY R1
2	TLOF / FATO elevation	115FT
3	TLOF dimensions	22M x 22M
	TLOF surface	ASPH
	TLOF strength	PCN 75/F/C/W/T
4	FATO true bearing	065° / 245°
5	Declared distances available	Information not available. See remarks on the restrictions of use.
6	TLOF and FATO marking	Marked with a conventional H (dimensions 6M x 3.6M). There is no aiming point provided, a WDI is located on the west side.
7	Approach and FATO lighting	Information not available. See remarks.
8	Remarks	<p>State and military flights are exempted.</p> <p>Performance class 1 operations are not allowed to/from the FATO due to the slope of obstacle limitation surfaces that comply to performance class 2 and 3 only.</p> <p>The maximum allowed D-value on the EBBR FATO is 14.6 M.</p> <p>The take-off and climb surface has been protected with a slope of 8% for the first 245 M and 16% for the next 830 M to the east and west of the FATO for performance class 3 helicopter operations. The take-off and climb surface has been protected with a slope of 12.5% for 1220 M to the east and west of the FATO for performance class 2 helicopter operations.</p> <p>Caution must be exercised when operating to and from the FATO due to possible moving aircraft and vehicles.</p> <p>The FATO shall be vacated immediately after landing according ATC instructions.</p> <p>Helicopters with skid-type landing gear proceeding to and from the FATO shall hover taxi to and from the parking area.</p> <p>Helicopters with wheel-type landing gear proceeding to and from the FATO shall ground taxi to and from the parking area.</p>
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EBBR AD 2.17 ATS Airspace

1	Designation	Brussels CTR
	Lateral limits	504434N 0043404E - an arc of circle, 10NM radius, centred on 505405N 0042904E and traced clockwise to 505203N 0044435E - 504434N 0043404E.
2	Vertical limits	1500FT AMSL
3	Airspace classification	D ⁽¹⁾
4	ATS unit call sign	Brussels Tower
	Language(s)	En
5	Transition altitude	4500FT AMSL
6	Remarks	<p>(1) Partially airspace class G during EBBB operational hours between GND and 1000FT AMSL: 510401N 0042700E - 505800N 0042800E - 505545N 0042452E - 505800N 0041428E - an arc of circle, 10NM radius, centred on 505405N 0042904E and traced clockwise to 510401N 0042700E (see chart AD2 EBBB-VAC.01 and AD 2.PVT-EBGB).</p> <p>UAS can be encountered in UAS geographical zones EBBR VLL0, VLL1 and VLL2 (for specifications, see ENR 5.1, § 4). Systematic tracking of UAS by ATC cannot be ensured.</p>

EBBR AD 2.18 ATS Communication Facilities

Service designation	Call sign	Frequency/ Channel	Hours of operation	Remarks
1	2	3	4	5
APP / TAR	Brussels Arrival	118.255	H24	For ARR TFC via S, N and W except for TFC BLW FL65 requesting to enter Brussels TMA. (See Brussels Departure.) 8.33 KHZ CH
		120.105	H24	For ARR TFC via E on ATC instruction only 8.33 KHZ CH
		369.200MHZ 362.300MHZ	H24	NIL
		121.500MHZ 243.000MHZ	H24	Emergency frequency
	Brussels Departure	126.630	H24	8.33 KHZ CH
	Brussels Final	129.730	H24	Final approach RWY 25R on ATC instruction only 8.33 KHZ CH
		127.575MHZ	H24	Final approach RWY 25L on ATC instruction only
		121.500MHZ	H24	Emergency frequency
TWR	Brussels Tower	118.605 120.780	H24	8.33 KHZ CH
		388.525MHZ 257.800MHZ	H24	NIL
		121.500MHZ	H24	Emergency frequency
		127.150MHZ	H24	Spare frequency
	Brussels Ground ⁽¹⁾	121.880 118.055	H24	8.33 KHZ CH
		121.700MHZ	H24	Spare frequency
CLR	Brussels Delivery	121.955	H24	8.33 KHZ CH
SRE	Brussels Radar	120.105	H24	SRA on ATC instruction only 8.33 KHZ CH

Service designation	Call sign	Frequency/ Channel	Hours of operation	Remarks
1	2	3	4	5
ATIS (2)(3)	Brussels Arrival	132.480	H24	8.33 KHZ CH
		110.600MHZ	H24	BUN frequency
		112.050MHZ	H24	FLO frequency
		114.600MHZ	H24	BUB frequency
		117.550MHZ	H24	HUL frequency
		Brussels Departure	121.755	H24
VDF	Brussels Homer	120.105 118.255 118.605	H24	8.33 KHZ CH
		121.500MHZ	H24	Emergency frequency
SAR	Brussels Rescue	282.800MHZ 123.100MHZ	HO	OPR: Belgian Air Component Combined Scene of SAR (monitored only when SAR operation in progress).
(1) Ground movement control (2) see EBBR AD 2.23 (3) D-ATIS AVBL (see GEN 3.4. § 3.4.2)				

EBBR AD 2.19 Radio Navigation and Landing Aids

Type of aid (MAG VAR)	ID	Frequency	Hours of operation	Position of transmitting antenna	DME antenna elevation	Remarks
1	2	3	4	5	6	7
DVOR/DME (1°/2020)	BUB	114.600MHZ CH 93X	H24	505408.4N 0043217.1E	200FT	070° GEO / 0.60NM from THR 25L Coverage: 100NM (FL500)
L	OB	293KHZ	H24	505513.0N 0043658.2E		070° GEO / 3.76NM from THR 25L Coverage: 25NM Collocated with OM ILS 25L
L	OP	402KHZ	H24	505619.4N 0043533.6E		065° GEO / 3.91NM from THR 25R Coverage: 25NM Collocated with OM ILS 25R
L	OZ	314KHZ	H24	504936.2N 0042801.3E		194° GEO / 3.77NM from THR 01 Coverage: 20NM Collocated with OM ILS 01
ILS 01 (CAT I)						
	LOC	IBX	109.900MHZ	H24	505455.9N 0043011.1E	014° GEO / 1.76NM from THR 01 No back beam AVBL LOC only reliable within 35° either side of course line
	GP		333.800MHZ	H24	505323.9N 0042940.2E	Slope 3° RDH 52FT
	DME	IBX	CH 36X	H24	505324.0N 0042939.9E	186FT Collocated with GP 0 at 340M from THR 01
	OM	dash / dash	75MHZ	H24	504936.7N 0042801.2E	3.75NM from THR 01 or use IBX DME fix
	MM	dot / dash	75MHZ	H24	505239.9N 0042915.4E	0.59NM from THR 01 or use IBX DME fix

Type of aid (MAG VAR)	ID	Frequency	Hours of operation	Position of transmitting antenna	DME antenna elevation	Remarks
1	2	3	4	5	6	7
ILS 19 (CAT I)						
LOC	IBM	111.150MHZ	H24	505306.1N 0042926.3E		194° GEO / 1.62NM from THR 19 No back beam AVBL LOC only reliable within 35° either side of course line
GP		331.550MHZ	H24	505429.8N 0043006.8E		Slope 3° RDH 54FT Coverage restricted to 6° at left-hand site antenna
DME	IBM	CH 48Y	H24	505429.8N 0043006.8E	126FT	Collocated with GP 0 at 315M from THR 19
ILS 25L (CAT III)						
LOC	IBL	110.350MHZ	H24	505318.7N 0042841.5E		250° GEO / 1.83NM from THR 25L No back beam AVBL LOC only reliable within 35° either side of course line
GP		334.850MHZ	H24	505349.0N 0043110.7E		Slope 3° RDH 59FT
DME	IBL	CH 40Y	H24	505349.2N 0043110.7E	156FT	Collocated with GP 0 at 316M from THR 25L
OM	dash / dash	75MHZ	H24	505512.9N 0043659.1E		3.75NM from THR 25L or use IBL DME fix
MM	dot / dash	75MHZ	H24	505409.1N 0043219.7E		0.60NM from THR 25L or use IBL DME fix
ILS 25R (CAT III)						
LOC	IBR	108.900MHZ	H24	505348.9N 0042655.5E		245° GEO / 2.12NM from THR 25R No back beam AVBL LOC only reliable within 35° either side of course line
GP		329.300MHZ	H24	505441.1N 0042940.9E		Slope 3° RDH 54FT
DME	IBR	CH 26X	H24	505441.0N 0042941.0E	119FT	Collocated with GP 0 at 307M from THR 25R
OM	dash / dash	75MHZ	H24	505619.3N 0043532.9E		3.89NM from THR 25R or use IBR DME fix
MM	dot / dash	75MHZ	H24	505456.1N 0043052.6E		0.63NM from THR 25R or use IBR DME fix

EBBR AD 2.20 Local Aerodrome Regulations

1 GENERAL

1.1 Airport Coordination

EBBR is a coordinated airport. Unless exempted, and irrespective of noise abatement procedures (EBBR AD 2.21, § 1), ATFM slot, or traffic rights, take-off or landing of an IFR flight without an appropriate allocated slot is prohibited and punishable. No airport slots will be allocated for take-off during following periods:

- SAT, 0000 (FRI, 2300) to SAT, 0500 (0400);
- SAT, 2300 (2200) to SUN, 0500 (0400);
- SUN, 2300 (2200) to MON, 0500 (0400).

1.1.1 Coordination Procedure

1.1.1.1 General

For every take-off and landing of an IFR flight, a slot shall be requested and obtained from the coordinator before the filing of the flight plan.

Applications should be made as early as possible. In case of short-term applications or alterations to flights, lower priority handling must be expected as against flights with earlier allocated slots for the same time of arrival or departure.

For fully coordinated airports, the arrival and departure times may only be published by the air carrier and/or operator after allocation of the slots by the airport coordinator. The arrival and departure times at coordinated airports included in the announcements and/or applications must conform to the airport slot as allocated by the airport slot coordinator.

Permission for entry and exit granted by the Belgian CAA does not replace the obligation to report or submit an application to the airport coordinator. The same applies to flight schedules for scheduled air services approved by the Belgian CAA.

Any unused slot shall be returned to the airport coordinator in due time.

1.1.1.2 **Procedures for airlines**

Slot applications shall be submitted via email to BRUACXH@brucoord.org, whereby the procedures and formats of the *IATA Standard Schedule Information Manual* (SSIM, chapter 6), must be used.

1.1.1.3 **Procedures for General Business Aviation (GA/BA)**

Unless otherwise agreed with Belgium Slot Coordination (BSC), airport slots and airport slot authorization number must be requested only via a handling agent for General and Business Aviation. Slot requests sent directly to the coordinator will not be accepted.

GA/BA flights outbound from or inbound for EBBR falling under this regulation shall fill item 18 of the flight plan form.

The filing format is as follows: RMK/ASL<authorization number>. The authorization number is that given by the coordinator when allocating the airport time slot. It is composed of 14 alphanumeric characters, the first 4 of which are the ICAO code of the airport for which the airport time slot has been delivered (example: "RMK/ASLEBBR1234567890").

If the flight is between two coordinated airports applying a similar regulation (ex. France or Germany), the authorization numbers delivered by the coordinator for each airport shall be filled in, in item 18 as per the format below:

RMK/ASLLFMNSEA3456789

RMK/ASLEBBR1234567890

The general or business flight plans falling under this regulation and filed without authorization number or without a corresponding airport slot time, will not be taken in consideration for the departure sequence. For that purpose, a message will be sent by email by Brussels Airport Company on account of Belgium Slot Coordination to the flight plan originator or his dedicated representative.

1.1.2 **Exemptions**

Following flights are exempted from coordination, but should be reported to the airport coordinator as far in advance as possible:

- flights carrying members of the Belgian Royal Family, the Belgian governments or foreign royal families, foreign heads of state or leaders of governments, the President or commissioners of the European Commission when they are on official mission;
- military missions.

Following flights are exempted from coordination, but should be reported to the airport coordinator as soon as possible after the operation:

- ILS calibration flights when urgently needed for operational reasons;
- missions in case of disaster or medical urgency;
- police emergency flights;
- SAR flights;
- landing (and subsequent departure within 2 hours) in case of operational diversion.

1.1.3 **Additional Information**

Post: Belgium Slot Coordination VZW
Mr Didier Hocq
General Manager
Brussels Airport PB27
1930 Zaventem 4
BELGIUM

TEL: +32 (0) 2 753 57 91 to 94

Email: BRUACXH@brucoord.org (for slot requests; traffic on this email address is monitored and slot requests are replied H24)

Email: didier.hocq@brucoord.org (for any other question; office hours only)

URL: www.brucoord.org

Operational hours: MON to FRI (HOL excl), 0700-1600 (0600-1500)

1.2 **Use of VHF Radio by Vehicles**

Vehicles on the manoeuvring area use VHF radio for communication with Brussels TWR. Vehicles are thus on the same frequency as aircraft on the active runway, enhancing pilot and driver awareness (see also chart [AD 2.EBBR-GMC.03](#)).

1.3 Ground Surveillance - Use of Mode S Transponders

EBBR is equipped with an advanced ground surveillance system using Mode S. Operators intending to use the airport should ensure that Mode S transponders are able to operate when their aircraft are on the ground.

Pilots shall select XPDR or the equivalent according to specific installation, AUTO if available, not OFF or STBY, and the assigned Mode A code:

- from the request for push back or taxi, whichever is earlier;
- after landing, continuously until the aircraft is fully parked on stand. When parked, Mode A code 2000 shall be set before selecting OFF or STBY.

Whenever possible, the aircraft identification (i.e. call sign used in flight) shall be entered as from the request for push back or taxi, whichever is earlier (through the FMS or the transponder control panel). Pilots shall use the ICAO format for aircraft identification, as entered in item 7 of the flight plan form (e.g. "DAT123").

To ensure that the performance of systems based on SSR frequencies (incl airborne ACAS units and SSR radars) is not compromised, ACAS shall not be selected before receiving clearance to line up. It should be deselected after vacating the runway.

Aircraft taxiing without flight plan, shall select Mode A code 2000.

1.4 Wildlife Strikes

Pilots are requested to report wildlife strikes immediately to ATC and submit the wildlife strike report to:

Safety Management

Email: safetymanagement@brusselsairport.be

Belgian CAA

Email: bcaa-occurrences@mobiliteit.fgov.be

2 TAXI REGULATIONS

2.1 General

Pilots are advised to consult chart [AD 2.EBBR-GMC.05](#), depicting the hot spots on the manoeuvring area.

Between 2200 and 0459 (2100 and 0359), taxi restrictions apply (see EBBR AD 2.21, §1).

2.2 Use of Stopbars

Stopbars at entry points of active RWY are operated permanently. Due to operational requirements and practices, the stopbar at RWY entry point TWY Z will remain off when configuration RWY 01/07R is used.

Aircraft and vehicles shall never cross a lit stopbar.

When a lit stopbar cannot be cycled, the RWY entry point will be taken out of service and aircraft and vehicles will be rerouted. If rerouting is not possible, ATC will clear the aircraft or vehicle to cross a lit stopbar, stating the reason why the stopbar remains lit in each individual clearance.

When stopbars for all RWY entry points of one or more RWY cannot be lit, this shall be announced via RTF and ATIS, as well as via NOTAM if the outage is estimated to occur for a period of at least two hours.

Pilots are reminded that when stopbars are not lit, this does not constitute an authorisation of any kind to enter a RWY, irrespective if this RWY is active or not. An explicit clearance or instruction to enter or cross any RWY is required.

2.3 Standard Taxi Routes

2.3.1 General

Aircraft requiring full length for departure shall advise GND at the latest when requesting taxi clearance.

Arriving aircraft shall remain on TWR frequency until instructed to contact GND.

Ground operations are controlled by two sectors: GND North and GND South (see chart [AD 2.EBBR-GMC.03](#)). Transfer of control and communication point between GND N and GND S is TWY INN 8 or OUT 8.

Aircraft will be transferred to the appropriate TWR frequency to enter or cross an active runway. An explicit clearance to cross or enter **any** runway shall be issued by ATC. If no such clearance is received, pilots shall obtain it from ATC before crossing the relevant holding position marking.

2.3.2 Runway Configuration 25L (Arrivals) / 25R (Departures)

Departures originating from sector GND N will expect to depart from B1. Departures originating from sector GND S will expect to depart from W41 or W42.

Clearance to cross RWY 01/19 at E4-F4, E5-F4 or E6-F5 may be given by GND. Aircraft arriving on RWY 25L and proceeding via E1 or E3 will receive clearance to cross RWY 01/19 from TWR.

2.3.3 Runway Configuration 25L and 25R (Arrivals) / 19 and 25R (Departures)

All departures for RWY 25R will expect to depart from B1.

All departures for RWY 19 will expect to depart from E7.

Aircraft requiring full length for departure (RWY 19 and RWY 25R) will receive clearance to cross RWY 01/19 from TWR.

2.3.4 Runway Configuration 07L (Arrivals) / 07R (Departures)

Departing traffic RWY 07R will receive take-off clearance on TWR FREQ 118.605 (8.33 KHZ CH).

2.3.5 Runway Configuration 01 (Arrivals) / 07R (Departures)

Traffic departing from RWY 07R, lining up via P9 and departing from position H or position 1, will receive line-up clearance on GND S FREQ 121.880 (8.33 KHZ CH).

Departing traffic will receive take-off clearance on TWR FREQ 120.780 (8.33 KHZ CH).

2.3.6 LVP

See EBBR AD 2.22, § 4.1.2.

2.4 Taxiway Restrictions

When an A380 is present on TWY OUT, traffic on parallel TWY INN must be limited to Code D aircraft.

Pilots must not enter TWY W41 or W42 when A380 is present on TWY W41 or W42.

Pilots of A380 must not enter TWY W41 or W42 when another aircraft is present on TWY W41 or W42.

For A380 taxiway restrictions see chart [AD 2.EBBR-GMC.06a](#).

TWY A1 and TWY N6 may only be used by aircraft to and from EBMB.

All aircraft with wingspan > 45 M taxiing to/from EBMB only via TWY A3.

3 APRON REGULATIONS**3.1 Docking Guidance**

When arriving at parking positions on remote stands or on stands where no guidance system is installed, pilots shall **not enter the stand unless a marshaller is present for guidance. In case no marshaller is present, contact GND, request marshaller guidance and await the marshaller on the taxiway centre line.**

Parking stand 140 to 174, 201 to 240, 680 to 699, 957 and 959 to 966 are equipped with a docking guidance system. Guidance to these stands by marshalls may still be requested from GND.

When the pilot receives from the guidance system a wrong type of aircraft, a wrong flight number, an ERR-message, an ESTOP emergency stop message or if the display becomes unreadable, **the aircraft must be stopped immediately**, contact GND and ask for a marshaller **and hold position**.

System messages on parking stand 140, 142, 144, 146, 162, 164, 147, 149L, 149R, 151, 153L, 153R, 155, 157L, 157R, 159, 161, 163, 171, 680 to 694 and 696 to 699	
<i>"Flight number" / "Aircraft type" flashing</i>	Gate is ready for docking. Aircraft is not yet detected.
<i>"Aircraft type" steadily</i>	Aircraft has been detected. Aircraft symbol appears and system guides the pilot.
<i>"Distance"</i>	Distance to stop position in metres. Approach slowly.
<i>Arrow <</i>	Correction to the left required.
<i>Arrow ></i>	Correction to the right required.
<i>"STOP"</i>	Stop now, the docking position has been reached.
<i>"OK"</i>	Docking successful.
<i>"STOP TOO FAR"</i>	Aircraft has gone past the stop position.
<i>"ESTOP"</i>	Emergency stop. Stop aircraft immediately and await marshaller instructions.
<i>"BRIN" / "STOP"</i>	Bridge is not in good position. Stop aircraft and contact ATC (not applicable at stands 680 to 699).

System messages on parking stand 143, 145L, 145R, 148, 150, 152, 154, 156, 158, 160, 165L, 165R, 166, 168, 169L, 169R, 170, 172, 174, 957 and 959 to 966	
WAIT (in red)	Self test after starting of the system or when losing track of aircraft 15 M before stop-position.
"Aircraft type" + "Flight number" + "rolling arrows"	DGS ready for docking. Aircraft not yet detected. Warning: pilot must not proceed beyond the bridge, unless the arrows have been superseded by the yellow centre line.
"Aircraft type" + "yellow centre line"	Aircraft detected and tracked. The yellow centreline shrinks as the aircraft nears its configured stop-position.
"Aircraft type" + "distance"	Distance from stop position in meters (from +/- 30 M).
Arrow >	Correction to the right required. A flashing red and/or yellow arrow indicates the direction to turn for the azimuth guidance. The yellow arrow indicates the aircraft position in relation to the centerline.
Arrow <	Correction to the left required. A flashing red and/or yellow arrow indicates the direction to turn for the azimuth guidance. The yellow arrow indicates the aircraft position in relation to the centerline.
STOP (in red)	Stop now, docking position has been reached or emergency stop.
OK	Docking successful.
STOP + TOO FAR	Aircraft has gone past the stop position.
"Aircraft type" + SLOW	Approach on too high speed, reduce approach speed.
WAIT + GATE BLOCK	Object is detected. Docking procedure stopped. The docking procedure will resume as soon as the blocking object has been removed.
WAIT + VIEW BLOCK	Message coming when the closest view is hindered. (Laser problem, dust on the glass,...). Closing rate display comes again when the problem is resolved.
STOP + SBU	Internal error (safety backup). Stop aircraft and contact ATC.
STOP + ERROR	Configuration error. Stop aircraft and contact ATC.
WAIT + BR IN	Bridge is not in good position. The docking procedure will resume as soon as the bridge is in the good position.
STOP (in red) + ID FAIL	Bad type of aircraft detected. Stop aircraft and contact ATC.
IN-BLOCK "XX:XX" LT	Actual in-block time in local time.
OFF-BLOCK "xx:xx" LT	Actual off-block time in local time.
TOBT : "xx:xx" z TSAT : "xx:xx" z -XX min	TOBT (Target off-block time) in Zulu time. TSAT (Target start-up approval time) in Zulu time. Countdown to TOBT in minutes.

System messages on parking stand 201 to 240	
WAIT (in red)	Self test after starting of the system or when losing track of aircraft 15 M before stop-position.
"Aircraft type" + "rolling arrows"	DGS ready for docking. Aircraft not yet detected. Warning: pilot must not proceed beyond the bridge, unless the arrows have been superseded by the yellow centre line.
"Aircraft type" + "yellow centre line"	Aircraft detected and tracked. The yellow centreline shrinks as the aircraft nears its configured stop-position.
"Aircraft type" + "distance"	Distance from stop position in meters (from +/- 30 M).
Arrow >	Correction to the right required. A flashing red and/or yellow arrow indicates the direction to turn for the azimuth guidance. The yellow arrow indicates the aircraft position in relation to the centerline.
Arrow <	Correction to the left required. A flashing red and/or yellow arrow indicates the direction to turn for the azimuth guidance. The yellow arrow indicates the aircraft position in relation to the centerline.
STOP (in red)	Stop now, docking position has been reached or emergency stop.
OK	Docking successful.
STOP + TOO FAR	Aircraft has gone past the stop position.
"Aircraft Type" + SLOW	Approach on too high speed, reduce approach speed.

System messages on parking stand 201 to 240	
WAIT + GATE BLOCK	Object is detected. Docking procedure stopped. The docking procedure will resume as soon as the blocking object has been removed.
WAIT + VIEW BLOCK	Message coming when the closest view is hindered. (Laser problem, dust on the glass,...). Closing rate display comes again when the problem is resolved.
STOP + SBU	Internal error (Safety Backup). Stop aircraft and contact ATC.
STOP + ERROR	Configuration error. Stop aircraft and contact ATC.
WAIT + BR IN	Bridge is not in good position. The docking procedure will resume as soon as the bridge is in the good position.
STOP (in red) + ID FAIL	Bad type of aircraft detected. Stop aircraft and contact ATC.
BTIME "XX:XX:XX"	Actual in-block or off-block time in local time.
TOBT : "xx:xx" TSAT : "xx:xx"	TOBT (Target off-block time) in Zulu time. TSAT (Target start-up approval time) in Zulu time.

Note: Two simultaneous messages are always shown in an alternate way.

3.2 Push-back

Unless prior permission has been obtained from the Airside Inspection, push-back is compulsory at nose-in stands. Push-back shall be executed immediately after approval has been received from GND, taking into account the traffic information and/or restrictions contained in the approval message.

ATC can give push-back instructions that overrule the standard procedures. The captain shall notify the headset operator who shall notify the pushback driver.

The pilot shall always relay push-back instructions received from ATC to the headset operator (see below, § 3.2.1). If - for unforeseen reasons - the push back operator is unable to perform the push-back following the standard procedures or the special ATC instructions, he shall immediately inform the captain who shall inform ATC. Simultaneous push-back of aircraft on adjacent stands is not allowed below 400 M RVR. Power out on reverse thrust is not allowed. Power out on nose-in stand is not allowed, except when authorized by Airside Inspection.

3.2.1 Standard Phraseology

- For push-back according to the standard procedure, the phraseology, will be:
"Push-back approved [facing E (W, N, S)]".
- For push-back according to special instructions from ATC, the phraseology will state **the special instructions**:
"Push-back approved. **Push on T (R, S, U, Inner, Outer), [facing E (W, N, S)]**".

3.2.2 Apron 1 North

Stand 144 till 158: all aircraft shall be pushed on the push line (white dotted line) or INN-4, ATC will specify nose facing East or West and specify use of INN-4 or push line (white dotted line) for push and pull. When pushing on push line (white dotted line), nose facing East, all pull forward no further than abeam stand 158.

Remarks:

- It is not allowed to surpass the white dotted push line with the nose wheels of the aircraft
- It is not allowed to position the aircraft after pushback in such a way that the inner wing swings over the service drive situated behind the aircraft stands
- It is recommended that, in the beginning of the push back, a maximum swing is made with the aircraft and that afterwards the aircraft is pulled forward parallel to the A-pier

3.2.3 Apron 1 South

Stand 143 and 145 L/R: all aircraft shall be pushed no further than nose wheel limit line on TWY R4 (white perpendicular mark on TWY).

3.2.4 Apron 2 North

Stand 204: all aircraft shall be pushed on the push line no further than nose wheel limit line (white perpendicular mark on the push line) and pulled forward abeam stand 210 or further on ATC discretion.

No simultaneous push back from stands 204 and 145L allowed.

3.2.5 Apron 2 South

Stand 205 L: all aircraft shall be pushed backward with a slight turn to the right-hand side onto the push line. Nose gear no further than nose wheel limit line (white perpendicular mark on the push line). When pushed on TWY T, aircraft will be pulled forward abeam stand 207 or further when instructed by ATC. Full engine start only abeam stand 207 (TWY T).

Stand 205 R: when pushed on TWY T, all aircraft shall be pushed no further than nose wheel limit line (white perpendicular mark on the TWY).

Stand 207: All aircraft shall be pushed on TWY, when pushed on TWY T pull forward abeam stand 207 or further when instructed by ATC. Full engine start only abeam stand 207 (TWY T).

3.2.6 Apron 3 North

- ICAO aircraft code F shall be pushed onto TWY T.
- ICAO aircraft code C, D, E: all aircraft shall be pushed on TWY, when pushed on TWY T full engine start only abeam stand 207.
- Stand 312: all aircraft shall be pushed on TWY, nose facing West only.

3.2.7 Apron 3 South

Stand 313, 317 and 321: all aircraft (fleetmix) push back via STRIP 0 on TWY INN 9 or INN 10 on ATC discretion.

Stand 315 and 319: all aircraft (fleetmix) push back on STRIP 0, nose facing East, nose gear no further than nose wheel limit line (white perpendicular mark on TWY).

Stand 323: all aircraft (fleetmix) push back on TWY INN 9 or INN 10 on ATC discretion.

3.2.8 Satellite (apron 3)

Stand 305: when pushing on TWY Z, nose facing West, all aircraft shall be pushed via lead out line, no further than nose wheel limit line (white perpendicular mark on the TWY).

Stand 306: all aircraft shall be pushed on TWY Z via strip 1, ATC will specify nose facing East or West.

3.2.9 Apron 9 West

Stand 950: When push back nose facing East, all aircraft shall be pushed on push line, no further than nose wheel limit line (white perpendicular mark on push line) and pull forward on TWY N1, clear of TWY A7.

Stand 951: All aircraft shall be pushed on TWY N2 clear of TWY A7, nose facing West only (in case of A380 push back only allowed under supervision of Airside Inspection).

Stand 952 and 954: When push back nose facing East, all aircraft shall be pushed on TWY N1, no further than nose wheel limit line (white perpendicular mark on TWY N1).

Stand 950-955: When push back nose facing West, all aircraft shall be pushed back on TWY N2 clear of TWY A7.

Position 957: Push back nose facing East or West at ATC discretion, push on TWY N1/N2 clear of TWY A7.

Position 959: Push back nose facing East or West at ATC discretion, when push back nose facing East, all aircraft shall be pushed on TWY N2 and pulled forward abeam stand 961 clear of TWY A7 or all aircraft shall be pushed on TWY N1 clear of TWY A7.

3.2.10 Apron 9 East

Position 969 and 970: When push back nose facing West, all aircraft shall be pushed on push line via lead-in line stand 971, nose gear no further than nose wheel limit line (white perpendicular mark on push line) and pulled forward abeam stand 969. Full engine start only abeam 969.

Position 971: When push back nose facing West, all aircraft shall be pushed on lead-in line stand 971, nose gear no further than nose wheel limit line (white perpendicular mark on push line) and pulled forward abeam stand 969. Full engine start only abeam 969.

4 RUNWAY REGULATIONS

4.1 Selection of Runway-in-use

The direction in which aircraft take off and land is determined by the speed and direction of the surface wind or by the preferential runway system.

The term "runway-in-use" is used to indicate the runway that - at a particular time - is considered by ATC to be the most suitable for use by the types of aircraft expected to land or take off according to the preferential runway system.

Normally, an aircraft will take off and land into the wind, unless safety, runway configuration or traffic conditions determine that a different direction is preferable. However, in selecting the runway-in-use, ATC shall also take into consideration other relevant factors such as the aerodrome traffic circuits, the length of the runway, the approach and landing aids available, meteorological conditions, aircraft performance, the existence of a preferential runway system and noise abatement.

Accepting a runway is a pilot's decision. If the pilot-in-command considers the runway-in-use not usable for reasons of safety or performance, he shall request permission to use another runway. ATC will accept such request, provided that traffic and air safety conditions permit.

4.2 Preferential Runway System

4.2.1 Runway Configuration Scheme

		0500 to 1459 (0400 to 1359)	1500 to 2159 (1400 to 2059)	2200 to 0459 (2100 to 0359)
MON 0500 (0400) till TUE 0459 (0359)	TKOF	25R		25R / 19 ⁽¹⁾
	LDG	25L / 25R		25R / 25L ⁽²⁾
TUE 0500 (0400) till WED 0459 (0359)	TKOF	25R		25R / 19 ⁽¹⁾
	LDG	25L / 25R		25R / 25L ⁽²⁾
WED 0500 (0400) till THU 0459 (0359)	TKOF	25R		25R / 19 ⁽¹⁾
	LDG	25L / 25R		25R / 25L ⁽²⁾
THU 0500 (0400) till FRI 0459 (0359)	TKOF	25R		25R / 19 ⁽¹⁾
	LDG	25L / 25R		25R / 25L ⁽²⁾
FRI 0500 (0400) till SAT 0459 (0359)	TKOF	25R		25R ⁽³⁾
	LDG	25L / 25R		25R
SAT 0500 (0400) till SUN 0459 (0359)	TKOF	25R	25R / 19 ⁽¹⁾	25L ⁽⁴⁾
	LDG	25L / 25R	25R / 25L ⁽²⁾	25L
SUN 0500 (0400) till MON 0459 (0359)	TKOF	25R / 19 ⁽¹⁾	25R	19 ⁽⁴⁾
	LDG	25R / 25L ⁽²⁾	25L / 25R	19

(1) RWY 25R only for traffic via ELSIK, NIK, HELEN, DENUT, KOK and CIV / RWY 19 only for traffic via LNO, SPI, SOPOK, PITES and ROUSY; aircraft with MTOW between 80 and 200T can use RWY 25R or 19 (at pilot discretion); aircraft with MTOW > 200T shall use RWY 25R regardless the destination.
(2) Arrival on RWY 25L at ATC discretion only.
(3) No airport slot will be allocated for take-off between 0000 (2300) and 0500 (0400) (EBBR AD 2.20, § 1).
(4) No airport slot will be allocated for take-off between 2300 (2200) and 0500 (0400) (EBBR AD 2.20, § 1).

Times of runway changeover are subject to flexibility in order to ensure transition in safe conditions. ATC will operate the changeover as close as possible from the indicated time, taking into account the traffic conditions.

4.2.2 Wind Criteria

In selecting the runway combination to be used, the following wind components shall be applied:

Runway-in-use: wind components are exceeded at:

	RWY 25L/R	RWY 19 (TKOF only)
Tailwind MAX	7KT	7KT
Crosswind MAX	20KT	20KT

	RWY 01	RWY 07L/R	RWY 19 (TKOF and ARR)
Tailwind MAX	0KT - 3KT (incl)	0KT - 3KT (incl)	0KT - 3KT (incl)
Crosswind MAX	20KT	20KT	20KT

Note: (incl) means that the wind component threshold is exceeded when the component exceeds 3KT.

4.2.3 Exceptions

The preferential runway system is not the determining factor in runway selection under the following circumstances:

- when the crosswind component exceeds 20KT or more (gusts included);
- when the tailwind component exceeds 7KT or more (gusts included);
- when the runways are contaminated or when estimated surface friction is less than good;
- when alternative runways are successively requested by pilots for safety reasons;
- when pilots report excessive wind at higher altitudes resulting in go-arounds;
- when wind shear has been reported or forecast, or when thunderstorms are expected to affect arriving or departing traffic;
- when works are in progress on one of the runways included in the preferential runway system;
- for landing, when the ceiling is lower than 500FT or the visibility is less than 1900M;
- for departure, when the visibility is less than 1900M.

Gust components are derived from the maximum 3 second average wind speed which occurred during the last 10 minutes (or a shorter period in case of a marked discontinuity).

4.2.4 Definitions

Following definitions (based upon JAR-OPS terminology) apply:

- A runway is considered **contaminated** when more than 25% of the runway surface area (whether in isolated areas or not) within the required length and width being used is covered by:
 - surface water more than 3MM deep, or by slush or loose snow, equivalent to more than 3MM of water;
 - snow that has been compressed into a solid mass that resists further compression and will hold together or break into lumps if picked up (also referred to as “compacted snow”) or;
 - ice, including wet ice.
- **Estimated surface friction “good”** is a comparative value meaning that aircraft should not experience directional control or braking difficulties and that stopping is available within the scheduled distance, but that conditions are not as good as when landing on a clear, dry runway.

4.3 Runway Occupation

In order to avoid go-arounds, aircraft should vacate the runway quickly, without prejudice to safety. Pilots should take into consideration that it might be more efficient to use an exit situated farther away, than to try to vacate too quickly, miss the exit and then having to taxi slowly to the next. The aim should be to achieve a normal touchdown with progressive smooth deceleration to vacate, at a safe speed, at the nominated exit point.

The table below indicates the distances to exit. The exits are grouped in left or right turns and by increasing distance.

RWY	exit	distance to exit (M)
25L	C1	860
	C2	1232
	C3/C4	1791
	C5	2148
	C6	2405
25R	A3	1269
	A5	1857
	A6	2345
	B6	1085
	B5	1217
	B7	1542
	B9	2227
B8	2301	
07R	C3/C4	1116
	C2	1574
	C1	2087

RWY	exit	distance to exit (M)
07L	A5	1120
	A3	1702
	B5	1711
	B3	2472
	B1	2977
01	E3	847
	E4/E5	1511
	E6	2116
	E7	2632
19	E4	1034
	E3	1808
	E1	1858
	C5	2105

5 SPECIFIC TRAFFIC REGULATIONS

5.1 Aircraft Without Radio

Aircraft without radio are prohibited.

5.2 Glider Flights

Glider flights are prohibited.

5.3 ULM Flights

ULM flights are prohibited.

5.4 Balloon Flights

Balloon flights are prohibited.

5.5 Parachuting

Parachuting is prohibited.

5.6 Acrobatic Flights

Acrobatic flights are prohibited.

5.7 Training and Test Flights

Provided traffic conditions permit, training and test flights may be performed using RWY 25L/R, outside following periods:

- 2200-0459 (2100-0359);
- MON to FRI: 0600-1000 (0500-0900) and 1600-1900 (1500-1800);
- SAT: 0700-1000 (0600-0900);
- SUN: 1600-2000 (1500-1900).

Local VFR is not allowed during HN.

6 OPERATIONS OF LARGE AIRCRAFT

6.1 Aircraft Code F

Aircraft code F are subject to a special permission. However, A380 and B747-8/-8F are authorised to operate at EBBR.

For A380 taxiway restrictions see chart [AD 2.EBBR-GMC.06a](#).

For B747-8/-8F taxiway restrictions see chart [AD 2.EBBR-GMC.06b](#).

6.2 A380 Operations

6.2.1 General

Operators of A380 aircraft may designate Brussels Airport as a nominated diversionary aerodrome subject to prior agreement by Airside Inspection +32 2 753 69 00 and assessment of the handling facilities by the airline.

6.2.2 Aprons and Aircraft Stands

Designated aircraft stand 233L, equipped with triple apron boarding bridge and four power units.

Additionally, remote stands 322 and 328 are available for A380 parking.

Aircraft stands 951 and 954 suitable for remote handling. Push back from stand 951 only allowed under supervision of Airside Inspection.

7 DE-ICING OPERATIONS

7.1 On stand de-icing

On stand de-icing is performed for:

- aircraft that are not allocated to be de-iced on a remote de-icing platform.

Aircraft handled on apron 9:

- de-icing on stands 950, 951, 952, 953, 954, 955 may not be allowed on apron 9, only de-icing allowed on remote de-icing platform
- for departures from RWY 01 or RWY 07R de-icing platform South, M and stand 304 (see [AD 2.EBBR-GMC.07](#)) are available for de-icing. For stand 304 engines shut down is required. In case of de-icing on stand 304, pilot requests taxi to stand 304 and no start-up clearance (movement to stand 304). Once de-icing is complete, pilot requests actual start-up (activation of flight plan) and push-back

7.2 Remote de-icing

Remote de-icing can be performed on one of the following locations see [AD 2.EBBR-GMC.07](#):

- De-icing platform W:
 - VHF frequency for de-icing platform coordinator, contact 129.805 (8.33 KHZ CH)
 - offers two de-icing stands for aircraft:
 - W22 up to ICAO code C
 - W21 up to ICAO code E
 - pilot shall confirm ICAO aircraft code to the de-icing coordinator
 - in case TWY W21 is used by aircraft greater than ICAO code C, TWY W22 becomes unavailable until aircraft on TWY W21 has vacated TWY W21
 - simultaneous de-icing on TWY W21 and TWY W22 is possible for aircraft up to ICAO code C only

- note that the two de-icing stands are not on the same level, pilots shall thus line up with the de-icing stop of their assigned de-icing pad and not line up with the aircraft on the adjacent pad
- de-icing platform W cannot be used when RWY 01 or RWY 19 is in use
- when de-icing platform W is active, TWY F4 is restricted to ICAO code C aircraft
- De-icing platform M, on TWY M:
 - VHF frequency for de-icing platform coordinator, contact 121.730 (8.33 KHZ CH)
 - offers one de-icing stand for aircraft up to ICAO code E
 - de-icing platform M is not available during arrival peaks
 - when instructed by ATC to proceed to de-icing hold position pilot shall make sure to position aircraft correctly on de-icing hold position
 - after de-icing pilots shall await further instructions from ATC before taxiing from the de-icing stop position
- De-icing platform South:
 - VHF frequency for de-icing platform coordinator, contact 129.805 (8.33 KHZ CH)
 - offers three de-icing stands for aircraft:
 - stand 326 and 330 up to ICAO code C
 - stand 328 only ICAO code D and E
 - pilot shall confirm ICAO aircraft code to the de-icing coordinator
 - after de-icing, stands to be vacated via lead out lights in front of aircraft after contact with ATC
 - in case stand 328 is used, no aircraft allowed on stand 326 and 330
 - simultaneous de-icing on stand 326 and 330 is possible for aircraft up to ICAO code C only

ATC will provide taxi clearance up until the holding point to the remote de-icing platform. After which pilots will be requested to contact the platform coordinator on VHF FREQ indicated above according de-icing platform assigned or await instructions by manual hand signals from the de-icing platform coordinator.

Upon completion of de-icing, pilots will only contact the GND FREQ after having received the confirmation of the platform coordinator that the platform is clear.

EBBR AD 2.21 Noise Abatement Procedures

1 GENERAL

1.1 Noise Restrictions

Movements of jet aircraft with MTOW \geq 34T or with a capacity of more than 19 seats (crew-only seats excl) are restricted:

- take-off or landing with QC > 8.0 is forbidden between 2200 and 0459 (2100 and 0359);
- take-off or landing with QC > 12.0 is forbidden between 0500 and 0559 (0400 and 0459);
- take-off with QC > 48.0 is forbidden between 0600 and 1959 (0500 and 1859);
- landing with QC > 24.0 is forbidden between 0600 and 1959 (0500 and 1859);
- take-off with QC > 24.0 is forbidden between 2000 and 2159 (1900 and 2059);
- landing with QC > 12.0 is forbidden between 2000 and 2159 (1900 and 2059).

Exemptions may be granted for:

- take-off between 2000 and 2159 (1900 and 2059) with QC \leq 26.0 (with a maximum of 3% of the number of take-offs per year for this time period);
- take-off between 2200 and 0459 (2100 and 0359) with QC \leq 12.0 (with a maximum of 200 take-offs per year only for aircraft that operated at EBBR between 25 OCT 2008 and 24 OCT 2009);
- landing between 2200 and 0459 (2100 and 0359) with QC \leq 12.0 (with a maximum of 300 exemptions per year).

Exemptions shall be requested from the CAA in advance via FAX (+32 (0) 2 277 42 54) or via email (BCAA.inspect.env@mobilif.fgov.be).

The QC is calculated using the formula $QC = 10^{[(G-85)/10]}$, whereby "G" equals:

- for take-off: half the sum of the certified fly-over and sideline noise levels in EPNdB of the aircraft at its MTOW;
- for landing: the certified approach noise level in EPNdB of the aircraft at its maximum landing weight, minus 9 EPNdB.

Take-off or landing of marginally compliant aircraft is forbidden between 2200 and 0459 (2100 and 0359).

Following flights are exempted from the noise quota system:

- flights carrying members of the Belgian Royal Family, the federal government, regional or community governments or foreign royal families, foreign heads of state or government leaders, the President or members of the European Commission on official mission;
- missions in case of disaster or medical urgency;
- military missions;

- take-off or landing performed in exceptional conditions (flights on which an immediate threat exists to the health of people or animals, diverted flights, etc.).

In case of circumstances beyond the operator's control, a non-compliant flight may be exceptionally allowed, provided that proper justification is sent to the Director-General of the CAA within two working days after the flight.

For marginally compliant aircraft, an authorization of temporary use may be delivered by the Minister of Transport or his representative, if the aircraft is operated exceptionally or in non-commercial flights for modifications, repairs or maintenance.

1.2 Reverse Thrust

Except for safety reasons, reverse thrust shall not be used at other than idle power. On the aprons, it is prohibited at any time.

1.3 Reduced Engine Taxi

Whenever operationally and safely feasible, all arriving aircraft are requested to shut down as many engines as possible while taxiing from the landing runway to their parking position.

2 GROUND PROCEDURES

2.1 Taxi Restrictions between 2200 and 0459 (2100 and 0359)

Maximum four aircraft are authorized to taxi simultaneously to the holding position(s) of the runway(s)-in-use. Additionally, only three aircraft are allowed to await take-off clearance at the holding position at the same time.

Engine run-up is not allowed at the holding position, except for run-up tests performed immediately before take-off as part of the take-off procedure.

2.2 Engine Test Runs and Idle Checks

Engine test runs and idle checks in the open air and without silencers must be restricted to the very minimum and require prior permission from the Airport Authority.

Engine test runs are only allowed between 0600 and 2100 (0500 and 2000). They can only take place on the crossing of TWY F3, Y, W1 and W21. If this crossing is not available due to infrastructural reasons, TWY D2 may be used instead.

Engine test runs shall be requested via Airside Inspection (TEL +32 (0) 2 753 69 00). ATC to be contacted for start-up and taxi instructions to the engine test location.

Idle checks on the aircraft stand shall be requested via Airside Inspection (TEL +32 (0) 2 753 69 00). ATC must not be contacted to obtain start-up permission to execute the idle run.

2.3 Power Supply

The aircraft parking stand 140 to 174, 201 to 240, 680 to 699, 957, 959 to 971 are equipped with 400HZ and aircraft parking stand 140 to 174, 201 to 240 and 680 to 699 are equipped with pre-conditioned air (PCA). As soon as possible after arrival at one of these stands (5MIN after docking MAX), 400HZ shall be connected and the APU switched off. Upon departure (15MIN before ETD), the APU may be started and 400HZ shall be disconnected. When 400HZ or PCA is not available, GPU shall be used.

When no PCA is available and an authorization from the Airside Inspection has been obtained, the use of the APU is allowed during periods of extreme high or low temperatures for aircraft docked for more than 1 HR at the aircraft parking stand.

3 ARRIVAL PROCEDURES

3.1 ILS Approach

Aircraft performing an ILS approach shall not intercept the GP below:

- 2000FT QNH for RWY 25L/R (3000FT and 2000FT respectively in case of simultaneous approach);
- 2000FT QNH for RWY 01;
- 3000FT QNH for RWY 19.

After interception, the aircraft shall not descend below the GP.

3.2 Surveillance Radar Approach

Aircraft performing an SRA without ILS assistance, shall not descend below 2000FT QNH before 6NM from touchdown, nor fly thereafter below a descent path of 3°.

3.3 Visual Approach

Aircraft performing a visual approach without ILS or radar assistance, shall not descend below 1800FT QNH before intercepting the PAPI approach slope, nor fly below it thereafter.

3.4 Vectored Continuous Descent Operations (CDO)

When the traffic situation permits, ATC will facilitate vectored continuous descent for all RWY.

Facilitation of CDO will be provided at ATC discretion only.

When vectoring for continuous descent, ATC will, as soon as practicable after first call on the APP frequency, provide distance from touchdown and an approval to descend at pilot's discretion. The phraseology "when ready, descend" shall be used.

CDO will not be facilitated in adverse weather conditions that may affect the approach (wind shear, thunderstorms, etc).

Subject to ATC instructions, inbound aircraft shall adopt a continuous descent profile - to the greatest possible extent compatible with safe operation of the aircraft - by employing minimum engine thrust, ideally in a low drag configuration, prior to the FAF/FAP.

Note: All noise abatement procedures for arrivals as well as the speed limitations in EBBR AD 2.22, § 2.1.3 remain applicable when performing CDO.

3.5 Speed Limitation

Aircraft being radar vectored shall reduce speed to 250KIAS when entering the radar vectoring area or when below FL 100. 250KIAS MAX shall be respected by all pilots as soon as they cross one of the speed limiting points (SLP) as shown on chart [AD 2.EBBR-STAR.01](#).

3.6 Special Procedures for Arrivals between 2200 and 0459 (2100 and 0359)

Traffic leaving IAF KERKY for approach to RWY 25L/R will not be cleared to descend below FL 70 until crossing R-360 BUB unless for vectored continuous descent operations (see [§ 3.4](#) above).

4 DEPARTURE PROCEDURES

4.1 General

The SID (see EBBR AD 2.22, [§ 3.2.1](#)) constitute noise abatement procedures. It is therefore emphasized that pilots shall adhere to these routes as closely as performance permits. If unable to comply with these procedures, they shall advise ATC immediately.

4.2 Climb Gradient

In order to minimize noise nuisance, to clear obstacles in the departure area and for compliance with ATS airspace limits, aircraft shall maintain a net climb gradient of 7% MNM until passing 3200FT QNH. If unable to comply, pilots shall advise ATS accordingly when requesting start-up clearance.

4.3 Noise Abatement Take-off and Climb Procedures

The following operational noise abatement take-off procedures must be applied for outbound flights:

For turbo-jet aircraft:

- from take-off to 1700FT QNH:
 - take-off power;
 - take-off flaps;
 - climb to V2 + 10 to 20KT or as limited by body angle;
- at 1700FT QNH:
 - reduce thrust to not less than climb thrust;
- from 1700FT QNH to 3200FT QNH:
 - climb at V2 + 10 to 20KT;
- at 3200FT QNH:
 - accelerate smoothly to en-route climb speed with flaps retraction.

For propeller aircraft:

- from take-off to 1700FT QNH:
 - take-off power;
 - climb at maximum gradient compatible with safety;
 - speed not less than single engine climb speed, nor higher than best rate of climb speed;
- at 1700FT QNH:

- reduce power to the maximum normal operating power (if this power has been used for showing compliance with the noise certification requirements) or to the maximum climb power;
- from 1700FT QNH to 3200FT QNH:
 - climb at the maximum gradients with reduced power, maintaining constant speed;
- at 3200FT QNH:
 - accelerate smoothly to en-route climb speed.

4.4 Speed Restrictions

Unless otherwise instructed by ATC for safety reasons, maximum speed below FL 100 is 250KIAS or clean speed (V_{ZF}), whichever is higher.

4.5 Special Procedures for Aircraft with MTOW > 200T

When preferential runway system configuration RWY 25R/19 is in use for departures, the following aircraft shall use RWY 25R for departure, regardless of their destination.

ICAO aircraft type (see ICAO Doc 8643)						
A124	A332	A333	A342	A343	A345	A346
A351	A359	A388	AN22	B741	B742	B743
B744	B748	B74R	B74S	B764	B772	B773
B77L	B77W	B781	B788	B789	C5	C17
DC10	IL96	L101	MD11			

The table mentioned above is not limitative, the MTOW of the aircraft prevails.

4.6 Special Procedures for Departures between 2200 and 0459 (2100 and 0359)

All departures from RWY 25R shall start their take-off at the beginning of the runway and preferably an uninterrupted take-off from W41/W42 will be made.

EBBR AD 2.22 Flight Procedures

1 GENERAL

1.1 Aerodrome Minima

For specific landing minima, see charts:

- [AD 2.EBBR-IAC.01](#)
- [AD 2.EBBR-IAC.02](#)
- [AD 2.EBBR-IAC.08](#)
- [AD 2.EBBR-IAC.09](#)
- [AD 2.EBBR-IAC.10](#)

2 IFR FLIGHTS (INBOUND)

2.1 General

2.1.1 Aircraft Equipment

DME is compulsory for all inbound IFR traffic.

2.1.2 Radar Vectoring

Radar vectoring may be expected when crossing 30 DME BUB.

In case of radar vectoring, the intermediate approach procedure may be partially or completely omitted. The clearance limit assigned by Brussels ACC will then be replaced by a clearance to a final approach aid or radar vectors will be given to direct the aircraft to a position from where final approach can be started or a visual approach made.

2.1.3 Speed Limitations

In case of ILS approach following speed limits apply, unless otherwise instructed by ATC:

- 250KIAS below FL 100;
- 220KIAS or more from IAF until LOC interception;
- 180KIAS or more at a distance of approximately 12NM from touchdown until 6NM from touchdown;
- 160KIAS until OM (or 4NM from THR RWY 19)¹.

Aircraft unable to maintain these speeds shall advise Brussels Arrival/Final on initial contact.

The speed limitations do not relieve pilots of their responsibility to observe any applicable noise abatement procedures (see [EBBR AD 2.21](#)).

- (1) Aircraft unable to maintain 160KIAS until OM (or 4NM from THR RWY 19) will not be accepted during periods 0700-0900 (0600-0800) and 1700-1930 (1600-1830) ATA.

2.2 Holding Patterns

The holding patterns shall be entered at 170KIAS MAX (aircraft CAT A/B) or 230KIAS MAX (aircraft CAT C/D).

ANTWERPEN

Fix	ANT DVOR/DME
Turn / inbound track (MAG)	Left / 117°
Levels (MAX / MNM)	FL 140 / FL 80
Remarks	NIL

BRUNO

Fix	BUN DVOR/DME
Turn / inbound track (MAG)	Right / 115°
Levels (MAX / MNM)	FL 140 / 3000FT QNH
Remarks	At ATC discretion only

FLORA

Fix	FLO DVOR/DME
Turn / inbound track (MAG)	Right / 308°
Levels (MAX / MNM)	FL 140 / FL 90 (FL 60 when RWY 25R/L is used for landings)
Remarks	NIL

GOSLY

Fix	GSY DVOR/DME
Turn / inbound track (MAG)	Left / 358°
Levels (MAX / MNM)	FL 230 / FL 100
Remarks	At ATC discretion only

KERKY

Fix	KERKY (R-281 AFI/5.7NM and R-206 NIK/16.0NM)
Turn / inbound track (MAG)	Right / 100°
Levels (MAX / MNM)	FL 90 / 4000FT QNH
Remarks	NIL

NIVOR

Fix	NIVOR (R-155 AFI/14.0NM and R-255 HUL/13.7NM)
Turn / inbound track (MAG)	Left / 075°
Levels (MAX / MNM)	FL 90 / 3000FT QNH
Remarks	At ATC discretion only

2.3 Approach Procedures

2.3.1 RNP RWY 01

2.3.1.1 Waypoints

	ID	LATITUDE	LONGITUDE
	RUDEL	504101.4N	0041336.6E
IF	BURUS	504251.5N	0042514.8E
FAF	BR01F	504743.1N	0042713.9E
MAPt	RW01	505314.32N	0042929.65E

2.3.1.2 Path Terminators

Note: These database entries are suggestions only and should be checked by a professional database coder before entry into an active database.

Via ANT

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
1	ANT	IF	N							RNP APCH	IAF
2	AFI	TF	N	216.8	L		21.2			RNP APCH	
3	RUDEL	TF	N	166.0	L	+2200	13.9	-220		RNP APCH	
4	NIVOR	TF	N	076.0	L		2.5			RNP APCH	
5	BURUS	TF	N	076.0	L	+2000	5.1			RNP APCH	IF
6	BR01F	TF	N	014.5		@2000	5.0			RNP APCH	FAF
7	RW01	TF	Y	014.5			5.7		-3.00/52	RNP APCH	MAPt
		CA		014.0		+1500				Revert to Conventional	

Via KERKY

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
1	KERKY	IF	N							RNP APCH	IAF
2	AFI	TF	N	101.7	R		5.7			RNP APCH	
3	RUDEL	TF	N	166.0	L	+2200	13.9	-220		RNP APCH	
4	NIVOR	TF	N	076.0	L		2.5			RNP APCH	
5	BURUS	TF	N	076.0	L	+2000	5.1			RNP APCH	IF
6	BR01F	TF	N	014.5		@2000	5.0			RNP APCH	FAF
7	RW01	TF	Y	014.5			5.7		-3.00/52	RNP APCH	MAPt
		CA		014.0		+1500				Revert to Conventional	

Via FLO

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
1	FLO	IF	N							RNP APCH	IAF
2	BUB	TF	N	274.1	L		22.7			RNP APCH	
3	AFI	TF	N	271.2	L		15.2			RNP APCH	
4	RUDEL	TF	N	166.0	L	+2200	13.9	-220		RNP APCH	
5	NIVOR	TF	N	076.0	L		2.5			RNP APCH	
6	BURUS	TF	N	076.0	L	+2000	5.1			RNP APCH	IF
7	BR01F	TF	N	014.5		@2000	5.0			RNP APCH	FAF
8	RW01	TF	Y	014.5			5.7		-3.00/52	RNP APCH	MAPt
		CA		014.0		+1500				Revert to Conventional	

2.3.2 RNP RWY 19

2.3.2.1 Waypoints

	ID	LATITUDE	LONGITUDE
	LEBVU	505419.2N	0041934.0E
	UMPES	510355.6N	0044548.3E
	INRAB	510613.7N	0044114.6E
IF	VAMVO	510712.8N	0043513.4E
FAF	BR19F	510316.6N	0043336.2E
MAPt	RW19	505439.62N	0043004.44E

2.3.2.2 Path Terminators

Note: These database entries are suggestions only and should be checked by a professional database coder before entry into an active database.

Via ANT

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
1	ANT	IF	N			+FL80				RNAV1	
2	LEBVU	TF	N	198.0			18.0			RNAV1	
3	BUB	TF	N	091.2	L		8.1			RNAV1	
4	UMPES	TF	N	041.0			13.0			RNAV1	
5	INRAB	TF	N	308.7			3.7			RNAV1	
6	VAMVO	TF	N	284.6		+3000	3.9	-220		RNAV1	IF
7	BR19F	TF	N	194.5		@3000	4.1			RNP APCH	FAF
8	RW19	TF	Y	194.5			8.9		-3.00/54	RNP APCH	MAPt
		CA		194.5		+1100				Revert to Conventional	
		VM		046.0		@3000				Conventional	

Via FLO

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
1	FLO	IF	N			+FL90				RNAV1	
2	UMPES	TF	N	309.0			18.1			RNAV1	
3	INRAB	TF	N	308.7			3.7			RNAV1	
4	VAMVO	TF	N	284.6		+3000	3.9	-220		RNAV1	IF
5	BR19F	TF	N	194.5		@3000	4.1			RNP APCH	FAF
6	RW19	TF	Y	194.5			8.9		-3.00/54	RNP APCH	MAPt
		CA		194.5		+1100				Revert to Conventional	
		VM		046.0		@3000				Conventional	

Via KERKY

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
1	KERKY	IF	N			+4000				RNAV1	
2	AFI	TF	N	101.7			5.7			RNAV1	
3	LEBVU	TF	N	091.1			7.1			RNAV1	
4	BUB	TF	N	091.2			8.1			RNAV1	
5	UMPES	TF	N	041.0			13.0			RNAV1	
6	INRAB	TF	N	308.7			3.7			RNAV1	

Via KERKY

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
7	VAMVO	TF	N	284.6		+3000	3.9	-220		RNAV1	IF
8	BR19F	TF	N	194.5		@3000	4.1			RNP APCH	FAF
9	RW19	TF	Y	194.5			8.9		-3.00/54	RNP APCH	MAPt
		CA		194.5		+1100				<i>Revert to Conventional</i>	
		VM		046.0		@3000				<i>Conventional</i>	

Via BUN

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (ft)	DIST (NM)	Speed limit (kts)	VPA (°)/TCH (ft)	NAV Spec	Remarks
1	BUN	IF	N			+3000				RNAV1	
2	VAMVO	TF	N	270.7		+3000	9.6	-220		RNAV1	IF
3	BR19F	TF	N	194.5		@3000	4.1			RNP APCH	FAF
4	RW19	TF	Y	194.5			8.9		-3.00/54	RNP APCH	MAPt
		CA		194.5		+1100				<i>Revert to Conventional</i>	
		VM		046.0		@3000				<i>Conventional</i>	

2.3.3 RNP RWY 25L

2.3.3.1 Waypoints

	ID	LATITUDE	LONGITUDE
	OKLUP	510525.3N	0044252.5E
	NAXOD	510101.4N	0045154.3E
	DIKBO	505849.2N	0045234.1E
IF	GIKNU	505737.7N	0044724.2E
FAF	B25LF	505555.0N	0043958.6E
MAPt	RW25L	505356.19N	0043123.88E

2.3.3.2 Path Terminators

Note: These database entries are suggestions only and should be checked by a professional database coder before entry into an active database.

Via ANT

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KTS)	VPA(°)/TCH(ft)	Remarks
1	ANT	IF	N			+F80				IAF
2	BUN	TF	N	107.0			14.6			
3	NAXOD	TF	N	171.8			6.2			
4	GIKNU	TF	N	220.0		+2000	4.4			IF
5	B25LF	TF	N	250.0		@2000	5.0			FAF
6	RW25L	TF	Y	250.0			5.8		-3/59	MAPt
		CA		250.0		+700				<i>Revert to conventional</i>
		VM		106.0	L	@4000		-185		<i>Conventional</i>

Via KERKY

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KTS)	VPA(°)/TCH(ft)	Remarks
1	KERKY	IF	N			+4000				IAF
2	OKLUP	TF	N	070.0			29.1			
3	BUN	TF	N	070.6			5.1			
4	NAXOD	TF	N	171.8	R		6.2			
5	GIKNU	TF	N	220.0		+2000	4.4			IF
6	B25LF	TF	N	250.0		@2000	5.0			FAF
7	RW25L	TF	Y	250.0			5.8		-3/59	MAPt
		CA		250.0		+700				Revert to conventional
		VM		106.0	L	@4000		-185		Conventional

Via FLO

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KTS)	VPA(°)/TCH(ft)	Remarks
1	FLO	IF	N			+F60				IAF
2	DIKBO	TF	N	302.5		+3000	11.6			
3	GIKNU	TF	N	250.0		+2000	3.5			IF
4	B25LF	TF	N	250.0		@2000	5.0			FAF
5	RW25L	TF	Y	250.0			5.8		-3/59	MAPt
		CA		250.0		+700				Revert to conventional
		VM		106.0	L	@4000		-185		Conventional

2.3.4 RNP RWY 25R

2.3.4.1 Waypoints

	ID	LATITUDE	LONGITUDE
	OKLUP	510525.3N	0044252.5E
	NAXOD	510101.4N	0045154.3E
	DIKBO	505849.2N	0045234.1E
IF	UVETI	505914.0N	0044541.9E
FAF	B25RF	505709.5N	0043830.2E
MAPt	RW25R	505441.57N	0042957.79E

2.3.4.2 Path Terminators

Note: These database entries are suggestions only and should be checked by a professional database coder before entry into an active database.

Via ANT

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KTS)	VPA(°)/TCH(ft)	Remarks
1	ANT	IF	N			+F80				IAF
2	BUN	TF	N	107.0			14.6			
3	NAXOD	TF	N	171.8			6.2			
4	UVETI	TF	N	245.5		+2000	4.3			IF
5	B25RF	TF	N	245.5		@2000	5.0			FAF
6	RW25R	TF	Y	245.5			5.9		-3/54	MAPt
		CA		245.5		+700				Revert to conventional
		VM		016.0	R	@3000				Conventional

Via KERKY

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KTS)	VPA(°)/TCH(ft)	Remarks
1	KERKY	IF	N			+4000				IAF
2	OKLUP	TF	N	070.0			29.1			
3	BUN	TF	N	070.6			5.1			
4	NAXOD	TF	N	171.8	R		6.2			
5	UVETI	TF	N	245.5		+2000	4.3			IF
6	B25RF	TF	N	245.5		@2000	5.0			FAF
7	RW25R	TF	Y	245.5			5.9		-3/54	MAPt
		CA		245.5		+700				<i>Revert to conventional</i>
		VM		016.0	R	@3000				<i>Conventional</i>

Via FLO

#	ID	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KTS)	VPA(°)/TCH(ft)	Remarks
1	FLO	IF	N			+F60				IAF
2	DIKBO	TF	N	302.5		+3000	11.6			
3	UVETI	TF	N	275.5		+2000	4.4			IF
4	B25RF	TF	N	245.5		@2000	5.0			FAF
5	RW25R	TF	Y	245.5			5.9		-3/54	MAPt
		CA		245.5		+700				<i>Revert to conventional</i>
		VM		016.0	R	@3000				<i>Conventional</i>

2.3.5 Standard Instrument Arrivals

STAR have been established as shown on the STAR charts (see [EBBR AD 2.24](#)) and as listed below. ATC may deviate from these routes and pilots may expect radar vectors for separation reasons or in order to expedite traffic flow.

Depending on traffic conditions (LVP in progress, etc.), ATC may clear traffic to hold at GSY DVOR/DME. At EAT, such traffic will be re-cleared for a standard approach or will be radar vectored for sequencing.

2.3.5.1 Route Description

Designator	Route	Track (MAG)	Distance (NM)	MNM IFR level	Remarks
BATTY 5A	BATTY				When RWY 25R/L is in use for landing, TFC shall endeavour to cross IAF FLO at FL80 MAX.
		296°	30.5	FL70	
	FLO DVOR				
	RNAV1: BATTY-BR205[K250-]-FLO[F070+]				
LNO 4A	LNO DVOR				When RWY 25R/L is in use for landing, TFC shall endeavour to cross IAF FLO at FL80 MAX.
		308°	28.0	FL70	
	FLO DVOR				
	RNAV1: LNO-BR204[K250-]-FLO[F070+]				
ARVOL 7A	ARVOL				(*) Turning point to intercept and follow R-250 BUN.
		034°	14.8	FL70	
	AKOVI				
		034°	9.5	FL70	
	RODRI (*)				
		-	-	FL70	
	KERKY				
RNAV1: ARVOL[K250-]-AKOVI-RODRI-BR209[R]-KERKY[F070+]					
ARVOL 7B	ARVOL				To be used on ATC discretion.
		081°	13.0	FL70	
	CIV DVOR				
		070°	32.6	FL70	
	HUL DVOR				
		067°	20.3	FL70	
RNAV1: ARVOL[K250-]-CIV-HUL-FLO[F070+]					
TULNI 7A	TULNI				To be used only when MIL activities permit. (*) Turning point to intercept and follow R-250 BUN.
		055°	20.2	FL90	
	AKOVI				
		034°	9.5	FL70	
	RODRI (*)				
		-	-	FL70	
RNAV1: TULNI[K250-]-AKOVI[F090+;L]-RODRI-BR209[R]-KERKY[F070+]					
TULNI 7B	TULNI				To be used on ATC discretion.
		086°	21.1	FL90	
	CIV DVOR				
		070°	32.6	FL70	
	HUL DVOR				
		067°	20.3	FL70	
RNAV1: TULNI[K250-]-CIV[F090+;L]-HUL-FLO[F070+]					
KOK 7A	KOK VORTAC				NIL
		100°	51.8	FL70	
	KERKY				
RNAV1: KOK-BR201[K250-]-KERKY[F070+]					

Designator	Route	Track (MAG)	Distance (NM)	MNM IFR level	Remarks
WOODY 7A	WOODY				NIL
		205°	7.6	FL 70	
	8.4 DME NIK				
		117°	-	FL 70	
	ANT DVOR				
RNAV1: WOODY[K250-]-BR202[L]-ANT[F070+]					
WOODY 3B	WOODY				To be used on ATC discretion.
		205°	16.0	FL 80	
	NIK				
		206°	16.0	FL 80	
	KERKY				
RNAV1: WOODY[K250-]-NIK-KERKY[F080+]					
BEKEM 7A	BEKEM				NIL
		222°	13.2	FL 70	
	8.7 DME NIK				
		117°	-	FL 70	
	ANT DVOR				
RNAV1: BEKEM[K250-]-BR203[L]-ANT[F070+]					
BEKEM 3B	BEKEM				To be used on ATC discretion.
		222°	21.9	FL 80	
	NIK				
		206°	16.0	FL 80	
	KERKY				
RNAV1: BEKEM[K250-]-NIK[L]-KERKY[F080+]					

2.3.5.2 *Waypoint Information*

ID	Latitude	Longitude	Fly-over
BR201	505928.7N	0032936.7E	N
BR202	511544.3N	0041526.8E	N
BR203	511448.1N	0041815.6E	N
BR204	504240.1N	0052749.8E	N
BR205	504527.6N	0053038.7E	N
BR209	505435.4N	0035506.2E	N
ANT	511125.7N	0042821.3E	N
AKOVI	504450.0N	0034307.0E	N
ARVOL	503245.0N	0032949.0E	N
BATTY	503857.0N	0055055.6E	N
BEKEM	512556.0N	0043448.7E	N
CIV	503426.3N	0034958.4E	N
FLO	505236.0N	0050804.3E	N
HUL	504458.1N	0043829.9E	N
KERKY	505537.0N	0035933.4E	N
KOK	510540.9N	0023905.9E	N
LNO	503509.3N	0054237.0E	N
NIK	510954.3N	0041102.2E	N
RODRI	505236.0N	0035146.4E	N
TULNI	503327.0N	0031656.0E	N
WOODY	512420.4N	0042159.3E	N

2.3.5.3 *Suggested Database Coding*

BATTY 5A

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	BATTY	503857.0N	0055055.6E	IF	N					
2	BR205	504527.6N	0053038.7E	TF	N	296.9			14.5	250-
3	FLO	505236.0N	0050804.3E	TF	N	296.7		FL070+	16.0	

LNO 4A

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	LNO	503509.3N	0054237.0E	IF	N					
2	BR204	504240.1N	0052749.8E	TF	N	308.7			12.1	250-
3	FLO	505236.0N	0050804.3E	TF	N	308.5		FL070+	16.0	

ARVOL 7A

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	ARVOL	503245.0N	0032949.0E	IF	N					250-
2	AKOVI	504450.0N	0034307.0E	TF	N	034.9			14.8	
3	RODRI	505236.0N	0035146.4E	TF	N	035.2			9.5	
4	BR209	505435.4N	0035506.2E	TF	N	046.6	R		2.9	
5	KERKY	505537.0N	0035933.4E	TF	N	069.9		FL070+	3.0	

ARVOL 7B

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	ARVOL	503245.0N	0032949.0E	IF	N					250-
2	CIV	503426.3N	0034958.4E	TF	N	082.4			13.0	
3	HUL	504458.1N	0043829.9E	TF	N	070.8			32.6	
4	FLO	505236.0N	0050804.3E	TF	N	067.7		FL070+	20.3	

TULNI 7A

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	TULNI	503327.0N	0031656.0E	IF	N					250-
2	AKOVI	504450.0N	0034307.0E	TF	N	055.5	L	FL090+	20.2	
3	RODRI	505236.0N	0035146.4E	TF	N	035.2			9.5	
4	BR209	505435.4N	0035506.2E	TF	N	046.6	R		2.9	
5	KERKY	505537.0N	0035933.4E	TF	N	069.9		FL070+	3.0	

TULNI 7B

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	TULNI	503327.0N	0031656.0E	IF	N					250-
2	CIV	503426.3N	0034958.4E	TF	N	087.3	L	FL090+	21.1	
3	HUL	504458.1N	0043829.9E	TF	N	070.8			32.6	
4	FLO	505236.0N	0050804.3E	TF	N	067.7		FL070+	20.3	

KOK 7A

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	KOK	510540.9N	0023905.9E	IF	N					
2	BR201	505928.7N	0032936.7E	TF	N	100.7			32.5	250-
3	KERKY	505537.0N	0035933.4E	TF	N	101.4		FL070+	19.3	

WOODY 7A

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	WOODY	512420.4N	0042159.3E	IF	N					250-
2	BR202	511544.3N	0041526.8E	TF	N	205.5	L		9.5	
3	ANT	511125.7N	0042821.3E	TF	N	117.9		FL070+	9.2	

WOODY 3B

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	WOODY	512420.4N	0042159.3E	IF	N					250-
2	NIK	510954.3N	0041102.2E	TF	N	205.5			16.0	
3	KERKY	505537.0N	0035933.4E	TF	N	206.9		FL080+	16.0	

BEKEM 7A

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	BEKEM	512556.0N	0043448.7E	IF	N					250-
2	BR203	511448.1N	0041815.6E	TF	N	223.1	L		15.2	
3	ANT	511125.7N	0042821.3E	TF	N	118.0		FL070+	7.2	

BEKEM 3B

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	BEKEM	512556.0N	0043448.7E	IF	N					250-
2	NIK	510954.3N	0041102.2E	TF	N	223.1	L		21.9	
3	KERKY	505537.0N	0035933.4E	TF	N	206.9		FL080+	16.0	

2.3.6 Surveillance Radar Approach

SRA is available on all runways and will be terminated either:

- at a distance of 2NM (RWY 01, 19, 25L/R) or 3NM (RWY 07L/R) from threshold;
- before the aircraft enters an area of continuous radar clutters;
- when the aircraft reports that a visual approach can be made.

The aircraft will be informed at regular intervals of its position relative to the extended RCL and heading corrections will be given as necessary. The distance from THR will be passed on at each NM.

The levels through which the aircraft should be passing to maintain the glide path (3° or 5.2% on all runways) will also be passed on at each NM:

DIST to THR (NM)	Altitude (FT)					
	RWY 01	RWY 07L	RWY 07R	RWY 19	RWY 25L	RWY 25R
6	2000	2000	2000	2000	2000	2000
5	1800	1800	1800	1800	1800	1800
4	1500	1500	1500	1400	1500	1400
3	1200	1100	1200	1100	1200	1100
2	900	NIL	NIL	800	800	800

RWY	THR ELEV (FT)	INBD track (MAG)	DIST from FAF to THR (NM)	DIST from MAPT to THR (NM)	OCA (OCH) (FT)
01	175	013°	6	2	880 (700)
07L	121	064°	6	3	1030 (900)
07R	166	069°	6	3	1030 (860)
19	105	193°	6	2	800 (690)
25L	150	249°	6	2	800 (640)
25R	102	244°	6	2	800 (690)

2.3.7 Circling Approach

Circling approaches are prohibited.

2.3.8 Simultaneous Dependent Instrument Approaches on RWY 25L and 25R (SIMDEP)

Simultaneous dependent instrument approaches may be performed on RWY 25L and 25R in all meteorological conditions, provided that radio, radar and ILS equipment (both airborne and on the ground) are fully serviceable.

ATC will provide following separations:

- a minimum 1000FT vertical separation between aircraft during turn-on to the LOC course until interception;
- a minimum staggered radar separation of 2NM between aircraft established on the adjacent LOC. Minimum ICAO standard separations will continue to be applied between aircraft on the same LOC course.

The ATIS broadcast will include the following message: "Vectoring for simultaneous dependent ILS approach." When receiving this information, pilots shall advise ATC of the unavailability of any equipment needed to perform the approach.

Each pilot will be informed by Brussels APP of the assigned runway and shall acknowledge receipt of the message. The assigned runway will be repeated by ATC with the instruction for ILS interception.

Depending on traffic conditions, aircraft may be vectored to one of both LOC courses for a straight-in approach. If, for any reason, a vectored aircraft does not receive LOC interception instructions, the pilot will perform interception of the LOC serving the assigned runway by himself. In any case, pilots shall execute a precise interception, without overshooting the LOC axis. If overshoot occurs, ATC will instruct to return to the LOC course immediately.

Any undue track variation in relation to the LOC axis or any equipment malfunctioning shall be reported to ATC immediately, together with any decision to perform a missed approach. ATC will radar monitor the missed approach and transmit instructions to start a new approach.

2.3.9 Simultaneous Independent Instrument Approaches on RWY 25L and 25R (SIMINDEP)

Simultaneous independent instrument approaches without radar separation between aircraft on the adjacent runway centre lines may be performed on RWY 25L and 25R in all meteorological conditions, provided that following conditions are met:

- no adverse weather, such as wind shear, severe turbulence, thunderstorms,... is reported which might increase ILS LOC course deviations;
- radio, radar and ILS equipment (LOC, GP, DME and markers) are fully serviceable, both airborne and on ground.

ATC will provide following separations:

- a radar separation of at least 3NM and/or 1000FT vertical separation during turn-on to the LOC course until both aircraft are stabilized on the LOC course;
- 1000FT minimum vertical separation between aircraft established on adjacent LOC until **14NM** from touchdown;
- minimum ICAO standard separations will continue to be applied between aircraft on the same LOC course.

Note 1: No Transgression Zone (NTZ): A corridor of airspace of defined dimensions located centrally between the two extended runway centre lines where a penetration by an aircraft requires a controller intervention to manoeuvre any threatened aircraft on the adjacent approach.

Note 2: An aircraft established on ILS LOC course is separated from another aircraft established on an adjacent parallel ILS LOC course, provided neither aircraft penetrates the NTZ as depicted on the radar display.

Following procedures apply:

- the ATIS broadcast will include the following message: "Vectoring for simultaneous independent ILS approach in progress - ILS 25R 108.9; ILS 25L 110.35." When informed by ATIS that SIMINDEP are in progress, pilots will advise ATC of any unavailability of required equipment;
- each pilot will be informed by Brussels APP of the assigned runway for landing and shall acknowledge receipt of the message. The assigned runway (25L or 25R) will be repeated by the controller with the instruction for ILS interception;
- pilots experiencing radio-communication failure before runway assignment shall execute an ILS approach on RWY 25L;
- if - for any reason - an aircraft being radar vectored does not receive LOC interception instructions, the pilot shall intercept the ILS/LOC course serving the **assigned** runway by himself;
- pilots shall execute precise LOC interception (not overshooting the LOC axis);
- if an aircraft is observed to overshoot the assigned LOC course during its turn to final on the assigned runway, the pilot will be instructed to return to the LOC course immediately;
- when an aircraft is observed penetrating the NTZ, the aircraft on the adjacent LOC course will be immediately cleared by the appropriate controller to climb and turn away (45° MAX) from penetrating aircraft;
- any undue track variation in relation to the LOC axis or any equipment malfunction shall be reported immediately to ATC, together with any decision to perform a missed approach. ATC will exercise radar monitoring of the missed approach and will transmit instructions to start a new approach.

2.4 Missed Approach

Unless instructed otherwise by Brussels TWR or Brussels APP, the missed approach procedures as published on the instrument approach charts (see [EBBR AD 2.24](#)) shall be followed.

3 IFR FLIGHTS (OUTBOUND)

3.1 Starting Procedures

3.1.1 Airport Collaborative Decision Making (A-CDM)

CDM is part of the European programme "Single European Sky" to optimize airspace and airport operations. Major European airports started implementing local CDM-programmes (A-CDM) which will become a harmonized procedure in Europe.

A-CDM is about partnership at airports between Airport Operations, Air Traffic Control, Aircraft Operators, Slot Coordinator and Ground Handlers. Emphasis is put on:

- linking the inbound, turn-round and outbound processes;
- the sharing of the right information at the right time to the right people best placed to act upon it; and
- the improved flight operational data exchange between airports and the ATFM-Network.

3.1.1.1 CDM-Procedures

3.1.1.1.1 Flight Plan Check

The ATC FPL-originator needs to check if the flight has a valid airport slot and that the scheduled departure time of the related ATC flight plan is in line with the Airport Slot. If they do not correspond, the contact address will be informed together with the request to coordinate the times. The CDM-process may be blocked if the flight is not coordinated according the rules and the flight plan may be rejected (no TSAT) if the air carrier intends to take off without having an airport slot allocated

by the Brussels Slot Coordinator (*EC-Regulation N°793/2004 amending Council Regulation 95/93 on common rules for the allocation of slots at Community Airports, §14.1*).

Filing and updating a flight plan is and remains the responsibility of the Aircraft Operator. He may delegate these tasks to his accredited Handling Agent.

3.1.1.1.2 TOBT-TSAT Procedure

INFO from airline / handler	TOBT	Target off block time: confirmation of estimated ready time
INFO from ATC	TSAT	Target start-up approval time, based on TOBT or EOBT (if TOBT not AVBL): sequenced off block time

TOBT represents the time that an Aircraft Operator or Handling Agent estimates that an aircraft will be ready, all doors closed, boarding bridge removed, push back vehicle available, ready to start-up immediately and push back within 5MIN after reception of start-up clearance from Tower.

TSAT is issued by ATC and represents the time at which an aircraft can expect start-up taking into account the ATFM restrictions and local constraints. ATC sequences the departures based on TOBT.

TSAT will be calculated from TOBT-25MIN onwards. Changes to the TOBT do not affect the TSAT in general, as long as the newly calculated TOBT is not later than TSAT. However it is of the utmost importance that a TOBT reflects the potential readiness of the aircraft since it is the basis for the determination of TSAT.

3.1.1.1.3 Actions by Cockpit Crew

Pilots at a stand with a Docking Guidance System display (e.g. Pier A&B, P60): TOBT is displayed from EOBT-20MIN onwards and TSAT appears at TOBT-5MIN.

Pilots at a stand with no Docking Guidance System display (e.g. on remote stands): TOBT can be obtained from the Redcap/Loadmaster and the TSAT becomes available at Brussels Delivery on *FREQ 121.955 (8.33 KHZ CH)* from approximately TOBT-10MIN onwards.

Start-up shall be requested from Brussels Delivery on *FREQ 121.955 (8.33 KHZ CH)* or via Digital Data Link (see below, § 3.1.2) in accordance with the related *TSAT±5MIN* (TSAT takes the ATFM-slot into consideration, if any). Early requests without flight plan update are only allowed as of EOBT minus 15MIN. The start-up request shall only be made when the aircraft is "ready" (see TOBT-definition) and when push back (if required) becomes available. Pilots must check the pushback availability before requesting start-up.

If the flight is not ready at TSAT+5MIN, ATS will issue a new TSAT only after receipt of an updated EOBT. The IATA-delay code becomes "code 61".

Aircraft requiring full runway length shall include this in their start-up request. Pilots are reminded that noise abatement procedures affecting some runway distances remain to be adhered to (see EBBR AD 2.21, § 4.5).

The request for push back and/or taxi shall be done on the GND frequency within 5MIN after reception of start-up clearance. TWR shall be advised if the latter is not possible and delay is expected. Otherwise, the TOBT will be deleted and must be entered again. If pilot does not call at TSAT+5MIN, ATC will issue a new TSAT only after receipt of an updated EOBT.

The pushback sequence of the handling agent is based on TSAT, not on TOBT. The pushback vehicle will become available at TSAT-5MIN.

3.1.1.1.4 Actions by Airline Representative or Handling Agent

The first TOBT is triggered automatically at EOBT-2H and copies the value of EOBT.

Until the Target Start-Up Approval Time (TSAT) has been issued, the TOBT can be corrected as often as desired.

If the TOBT cannot be adhered to, it must be corrected by the TOBT responsible person.

As the TOBT is triggering additional processes at the airport, TOBT adaptations shall be done as soon as possible. If a flight is to be withdrawn from the TOBT and/or TSAT calculation, the TOBT shall be cancelled. To set this process in motion again, the TOBT shall be filed anew. It is still mandatory to send a delay message to the IFPS if the EOBT deviates by 15MIN or more.

Note: Restricted flights should not update their EOBT/TOBT in function of the related CTOT.

Aircraft Operators shall communicate known or expected delays to their Handling Agent and the Airport Partners well in advance.

In case of changing the aircraft and filing a change message (CHG-type / registration), the original TOBT will be retained.

3.1.1.1.5 Actions by ATC

The TOBT received by Brussels Delivery is processed and results in a TSAT, which can never be earlier than TOBT. Start-up approval will only be granted from TSAT-5MIN till TSAT+5MIN.

3.1.1.2 CDM alerts

An alert mechanism monitors expected upcoming events to trigger data updates and consistency. These alert messages will be sent via the A-CDM Information Sharing Platform and are classified into 3 classes, sorted in decreasing priority:

- Primary Alert;
- Secondary Alert; and
- Advisory Alert

React onto the alerts as required.

3.1.1.3 **Coordination with Eurocontrol NM**

A permanent and fully automatic data exchange with the Eurocontrol NM (Network Management) is established. This data transfer enables highly accurate early predictions of landing and departure times. Furthermore, this allows for more accurate and efficient calculation of the CTOT due to the use of local target take-off times.

The following system-to-system messages are used:

- Flight Update Message (FUM);
- Early Departure Planning Information Message (E-DPI);
- Target Departure Planning Information Message (T-DPI);
 - T-DPI-t is based on the TOBT and related updates;
 - T-DPI-s is based on TSAT and related updates;
- ATC Departure Planning Information Message (A-DPI);
- Cancel DPI (C-DPI).

The first DPI (E-DPI) is based on the Estimated Off-Block Time (=STD) and confirms the validity of the Airport Slot against a flight plan. The target DPIs are triggered by TOBT/TSAT and provide Target Take-Off Times, used to re-assess the impact on the Network. The final DPI is sent at Actual Off-Block Time and freezes the ATFM-slot.

The basic Eurocontrol NM procedures continue to apply. The Eurocontrol NM will generally take these local target take-off times into consideration and will try to adjust the CTOT accordingly, if possible.

3.1.1.4 **De-icing and A-CDM**

EBBR has implemented the de-icing milestones in its A-CDM program, indicating start/end times and duration of de-icing. This means that for both on-stand and remote de-icing the de-icing operations are always excluded out of TOBT.

On-stand de-icing

Whenever a flight has been flagged for on-stand de-icing, the TSAT will be based on the Estimated End of De-icing Time (EEZT) instead of the TOBT.

The EEZT is a calculated element, derived from the ground handler's estimation of the start of de-icing (ECZT) + the expected duration of the de-icing job (EDIT). An update of the EEZT is provided when the de-icing job actually starts (ACZT).

Remote de-icing

Whenever a flight has been flagged for remote de-icing, the TSAT will be based on the ground handler's estimation of the start of the de-icing (ECZT) at the platform, taking into account the taxi time to the platform + a standard queuing time.

Pre de-icing

Flights that are flagged for pre de-icing are exempted from having to share the de-icing milestones.

Cancellation of de-icing

De-icing can be cancelled at any time after having been flagged for either on-stand or remote de-icing. When de-icing is requested again after cancellation, the process as described above has to be initiated again.

3.1.2 **Data Link Clearance Delivery Service (DCL)**

3.1.2.1 **General**

A DCL through Digital Data Link is implemented at Brussels TWR. The system, implemented through ACARS, uses the SITA network, which complies with the requirements and recommendations of *EUROCAE Document ED-85*.

To use DCL via Data Link, the user should have certified on-board equipment according to the recommendations of *Document ED-85* and comply with the entire operational procedure that overcomes the risk identified by *Document ED-85*.

In order to be authorized to use Brussels DCL, operators shall apply to the national authority responsible for their own operational oversight (or to the state of registry when appropriate) to obtain technical and operational approval to receive departure clearance over ACARS. When obtained, copy of such authorization shall be sent to skeyes:

Post: skeyes
DGS&O
Tervuursesteenweg 303
1820 Steenokkerzeel
BELGIUM

The document shall indicate the type and registration of each authorized aircraft, as well as the ICAO and IATA aircraft operating agency designator of the operator.

3.1.2.2 **Operational Use**

DCL via Data Link can only be used by aircraft using SID whose specifications include level requirements.

The service does not provide clearance revision. Any clearance modification will be made via the Brussels Delivery voice frequency.

After reception of the departure clearance, the pilot shall send to the ground system an acknowledge message including the entire content of the clearance before contacting GND. In case a departure clearance is not received, the pilot shall contact Brussels Delivery by voice.

TSAT will be communicated from TOBT-10MIN onwards. Syntax: "Standby till TSAT hh:mm".

Note: TSAT on DGS has precedence over TSAT via Data Link (TSAT can only be sent once via DCL thus late TSAT-changes should be monitored via DGS).

The aircrew, before taking off, shall check the consistency of the SID delivered in the DCL message with the departure runway and the flight plan information. Voice procedures shall be used in case of inconsistency.

Departure clearance delivered by voice shall always supersede any DCL clearance. **Pilots are reminded to keep a continuous listening watch on 121.955 (8.33 KHZ CH).**

3.2 **Departure Procedures**

3.2.1 **Standard Instrument Departures**

SID have been established as shown on the EBBR SID charts (see [EBBR AD 2.24](#)) and as listed below. Pilots unable to comply shall inform ATC when requesting start-up clearance.

After take-off, aircraft shall remain on TWR frequency.

Note: ATC may deviate from these routes.

3.2.1.1 Route Description

RWY 01

Designator	Route		Remarks
	Lateral	Vertical	
LNO7F	At 700FT QNH TR 028. At 1700 FT QNH RT to intercept R-354 HUL INBD. At 6.0 DME HUL LT to intercept R-286 LNO INBD to LNO.	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	For TFC requesting a cruising or initial FL below FL195.
SPI7F	At 700FT QNH TR 028. At 1700FT QNH RT to intercept R-354 HUL INBD. At 6.0 DME HUL LT to intercept R-286 LNO INBD, RT to intercept R-294 SPI INBD to SPI.	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	NIL
SOPOK7F	At 700FT QNH TR 028. At 1700FT QNH RT to intercept R-354 HUL INBD. LT to intercept R-286 SPI INBD. When passing BULUX or climbing through FL170, whichever is later, RT direct to SOPOK.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	ATC climb requirements: see § 3.2.2 below.
PITES7F	At 700FT QNH TR 028. At 1700FT QNH RT to intercept R-354 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, DIK, PITES next.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK7F-SOPOK - RITAX - DIK - PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK7F - SOPOK - ETENO).
ROUSY7F	At 700FT QNH TR 028. At 1700FT QNH RT to intercept R-354 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, ROUSY next.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK7F - SOPOK - RITAX - ROUSY).
CIV1F	At 700FT QNH TR 028. At 1700FT QNH RT to intercept R-354 HUL INBD. At 3 DME HUL RT to intercept R-071 CIV INBD to CIV.		AVBL when RWY 01 in single RWY operations. ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL170. Y50 southbound, MAX FL190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flight planned above FL195.
KOK 2F	Climb straight ahead. At 1700FT QNH LT direct to KOK.		L607 westbound.
DENUT 8F	At 700FT QNH TR 008. At 1800FT QNH DCT to DENUT.		RNAV5 above MSA.
HELEN 8F	At 700FT QNH TR 008. At 1800FT QNH DCT to HELEN.		RNAV5 above MSA.
NIK 5F	At 700FT QNH TR 008. At 1700FT QNH LT direct to NIK.		M624 northbound. Not to be used by TFC DEST EHAM.
ELSIK 2F	At 700FT QNH RT direct to BUN, ELSIK next.		L179 eastbound. To be used when adequate MIL airspaces are AVBL for GAT.

RWY 07L ONLY

Designator	Route		Remarks
	Lateral	Vertical	
LNO6H	Climb straight ahead. At 17.7 DME AFI, RT to intercept R-082 AFI. At 22.7 DME AFI, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. LT to intercept R-277 LNO INBD to LNO.		For TFC requesting a cruising or initial FL below FL 195.
LNO 2T	RNAV1: BR751 - BR752 - BR705 - REMBA - LNO		RNAV1 Overlay of LNO6H For TFC requesting a cruising or initial FL below FL 195.
LNO2W	Climb straight ahead. At 1 700FT QNH RT to intercept R-354 HUL INBD. At 6.0 DME HUL LT to intercept R-286 LNO INBD to LNO.	Cross R-044 HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	For TFC requesting a cruising or initial FL below FL 195.
SPI7H	Climb straight ahead. At 17.7 DME AFI, RT to intercept R-082 AFI. At 22.7 DME AFI, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. LT to intercept R-286 SPI INBD to SPI.		NIL
SPI 2T	RNAV1: BR751 - BR752 - BR705 - REMBA - SPI		RNAV1 Overlay of SPI7H
SPI2W	Climb straight ahead. At 1 700FT QNH RT to intercept R-354 HUL INBD. At 6.0 DME HUL LT to intercept R-286 LNO INBD. RT to intercept R-294 SPI INBD to SPI.	Cross R-044 HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	NIL
SOPOK6H	Climb straight ahead. At 17.7 DME AFI, RT to intercept R-082 AFI. At 22.7 DME AFI, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. LT to intercept R-286 SPI to BULUX, SOPOK next.		ATC climb requirements: see § 3.2.2 below. BULUX-SOPOK is a RNAV5 segment.
SOPOK 2T	RNAV1: BR751 - BR752 - BR705 - REMBA - BULUX - SOPOK		RNAV1 Overlay of SOPOK6H ATC climb requirements: see § 3.2.2 below.
SOPOK2W	Climb straight ahead. At 1 700FT QNH RT to intercept R-354 HUL INBD. LT to intercept R-286 SPI INBD. When passing BULUX or climbing through FL 170, whichever is later, RT direct to SOPOK.	Cross HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	ATC climb requirements: see § 3.2.2 below. BULUX-SOPOK is a RNAV5 segment.
PITES8H	Climb straight ahead. At 17.7 DME AFI, RT to intercept R-082 AFI. At 22.7 DME AFI, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. Intercept R-314 DIK INBD via RITAX to DIK, PITES next.		ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK6H-SOPOK-RITAX-DIK-PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK6H- SOPOK-ETENO).
PITES2W	Climb straight ahead. At 1 700FT QNH RT to intercept R-354 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, DIK, PITES next.	Cross HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	ATC climb requirements: see § 3.2.2 below. CDR 1 - H24 TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK2W-SOPOK-RITAX-DIK-PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK2W-SOPOK-ETENO).
ROUSY8H	Climb straight ahead. At 17.7 DME AFI, RT to intercept R-082 AFI. At 22.7 DME AFI, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. Intercept R-314 DIK INBD via RITAX, ROUSY next.		ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK6H-SOPOK - RITAX - ROUSY).

RWY 07L ONLY

Designator	Route		Remarks
	Lateral	Vertical	
ROUSY2W	Climb straight ahead. At 1 700FT QNH RT to intercept R-354 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, ROUSY next.	Cross HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	ATC climb requirements: see § 3.2.2 below. CDR 1 - H24 TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK2W-SOPOK-RITAX-ROUSY). RITAX-ROUSY is a RNAV5 segment.
CIV8H	Climb straight ahead. At 17.7 DME AFI, RT to intercept R-082 AFI. At 22.7 DME AFI, RT to TR 157 to intercept R-064 CIV INBD to CIV.		ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL 170. Y50 southbound, MAX FL 190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flight planned above FL 195.
CIV 2P	Climb straight ahead. At 1700FT QNH LT to TR 275 to intercept R-042 CIV INBD to CIV.		At ATC discretion only.
CIV 1W	Climb straight ahead. At 1 700FT QNH LT HDG 275 to intercept R-042 CIV INBD to CIV.		ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL 170. Y50 southbound, MAX FL 190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flightplanned above FL 195.
KOK 1H	Climb straight ahead. At 1700FT QNH LT direct to KOK.		L607 westbound.
DENUT 4H	Climb straight ahead. At 1800FT QNH DCT to DENUT.		RNAV5 above MSA.
HELEN 4H	Climb straight ahead. At 1800FT QNH DCT to HELEN.		RNAV5 above MSA.
NIK 1H	Climb straight ahead. At 1700FT QNH LT direct to NIK.		M624 northbound. Not to be used by TFC DEST EHAM.
ELSIK 1H	At 700FT QNH LT direct to BUN, ELSIK next.		L179 eastbound. To be used when adequate MIL airspaces are AVBL for GAT.

RWY 07R ONLY

Designator	Route		Remarks
	Lateral	Vertical	
LNO6J	At 700FT QNH TR 062. At 4.4 DME BUB, intercept R-067 BUB. At 8.0 DME BUB, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. LT to intercept R-277 LNO INBD to LNO.		For TFC requesting a cruising or initial FL below FL 195.
LNO 2V	RNAV1: [A700+] -> BR701 - BR704 - BR705 - REMBA - LNO		RNAV1 Overlay of LNO6J For TFC requesting a cruising or initial FL below FL 195.
LNO2Y	At 700FT QNH TR 062. At 2.2 DME BUB, RT to HUL. At 6.0 DME HUL LT to intercept R-286 LNO INBD to LNO.	Cross R-044 HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	For TFC requesting a cruising or initial FL below FL 195.
SPI6J	At 700FT QNH TR 062. At 4.4 DME BUB, intercept R-067 BUB. At 8.0 DME BUB, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. LT to intercept R-286 SPI INBD to SPI.		NIL
SPI 2V	RNAV1: [A700+] -> BR701 - BR704 - BR705 - REMBA - SPI		RNAV1 Overlay of SPI6J

RWY 07R ONLY

Designator	Route		Remarks
	Lateral	Vertical	
SPI2Y	At 700FT QNH TR 062. At 2.2 DME BUB, RT to HUL. At 6.0 DME HUL LT to intercept R-286 LNO INBD to LNO. RT to intercept R-294 SPI INBD to SPI.	Cross R-044 HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	NIL
SOPOK6J	At 700FT QNH TR 062. At 4.4 DME BUB, intercept R-067 BUB. At 8.0 DME BUB, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. LT to intercept R-286 SPI to BULUX, SOPOK next.		ATC climb requirements: see § 3.2.2 below. BULUX-SOPOK is a RNAV5 segment.
SOPOK 2V	RNAV1: [A700+] -> BR701 - BR704 - BR705 - REMBA - BULUX - SOPOK		RNAV1 Overlay of SOPOK6J ATC climb requirements: see § 3.2.2 below.
SOPOK2Y	At 700FT QNH TR 062. At 1 700FT QNH or 1.1 DME BUB, whichever is later, RT to intercept R-349 HUL INBD. LT to intercept R-286 SPI INBD. When passing BULUX or climbing through FL 170, whichever is later, RT direct to SOPOK.	Cross HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	BULUX-SOPOK is a RNAV5 segment.
PITES8J	At 700FT QNH TR 062. At 4.4 DME BUB, intercept R-067 BUB. At 8.0 DME BUB, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. Intercept R-314 DIK INBD via RITAX to DIK, PITES next.		ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK6J - SOPOK - RITAX - DIK - PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK6J - SOPOK - ETENO).
PITES2Y	At 700FT QNH TR 062. At 1 700FT QNH or 1.1 DME BUB, whichever is later, RT to intercept R-349 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, DIK, PITES next.	Cross HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	ATC climb requirements: see § 3.2.2 below. CDR 1 - H24 TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK2Y-SOPOK-RITAX-DIK-PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK2Y-SOPOK-ETENO).
ROUSY8J	At 700FT QNH TR 062. At 4.4 DME BUB, intercept R-067 BUB. At 8.0 DME BUB, RT to intercept R-139 ANT. RT to intercept R-173 BUN to REMBA. Intercept R-314 DIK INBD to RITAX, ROUSY next.		ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK6J - SOPOK - RITAX - ROUSY).
ROUSY2Y	At 700FT QNH TR 062. At 1 700FT QNH or 1.1 DME BUB, whichever is later, RT to intercept R-349 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, ROUSY next.	Cross HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	ATC climb requirements: see § 3.2.2 below. CDR 1 - H24 TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK2Y-SOPOK-RITAX-ROUSY). RITAX-ROUSY is a RNAV5 segment.
CIV8J	At 700FT QNH TR 062. At 4.4 DME BUB, intercept R-067 BUB. At 8.0 DME BUB, RT to intercept TR 157 to intercept R-064 CIV INBD to CIV.		ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL 170. Y50 southbound, MAX FL 190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flight planned above FL 195.
CIV 2U	At 700FT QNH TR 062. At 1700FT QNH LT to TR 275 to intercept R-042 CIV INBD to CIV.		At ATC discretion only.

RWY 07R ONLY

Designator	Route		Remarks
	Lateral	Vertical	
CIV2Y	At 700FT QNH TR 062. At 1 700FT QNH or 1.1 DME BUB, whichever is later, RT to intercept R-349 HUL INBD. At 3.0 DME HUL RT to intercept R-071 CIV INBD to CIV.	Cross R-269 HUL at FL 60 (FL 70 when QNH is below 977 HPA) or above if instructed by ATC.	ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL 170. Y50 southbound, MAX FL 190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flightplanned above FL 195.
KOK 2J	At 700FT QNH TR 062. At 1700FT QNH LT DCT to KOK.		L607 westbound.
DENUT 2J	At 700FT QNH TR 062. At 1800FT QNH DCT to DENUT.		RNAV5 above MSA.
HELEN 2J	At 700FT QNH TR 062. At 1800FT QNH DCT to HELEN.		RNAV5 above MSA.
NIK 2J	At 700 FT QNH TR 062. At 1700FT QNH direct to NIK.		M624 northbound. Not to be used by TFC DEST EHAM.
ELSIK 2J	At 700FT QNH TR 062. At 4.4 DME BUB, DCT direct to BUN, ELSIK next.		L179 eastbound. To be used when adequate MIL airspaces are AVBL for GAT.

RWY 19

Designator	Route		Remarks
	Lateral	Vertical	
LNO7L	At 700FT QNH LT to intercept R-286 LNO INBD to LNO. RNAV1: [A700+]-BR010-BR011[6000+]-LNO	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	For TFC requesting a cruising or initial FL below FL 195.
SPI6L	At 700FT QNH LT to intercept R-286 LNO INBD, RT to intercept R-294 SPI INBD to SPI. RNAV1: [A700+]-BR010-BR011[6000+]-SPI	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	NIL
SOPOK7L	At 700FT QNH LT to intercept R-318 HUL INBD. LT to intercept R-286 SPI INBD. When passing BULUX RT direct to SOPOK. RNAV1: [A700+]-BR012[5000+]-BR013-REMBA-BULUX-SOPOK	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	ATC climb requirements: see § 3.2.2 below.
PITES8L	At 700FT QNH LT to intercept R-318 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, DIK, PITES next. RNAV1: [A700+]-BR012[5000+]-BR013-REMBA-RITAX-DIK-PITES	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	ATC climb requirements: see § 3.2.2 below. CDR - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK7L - SOPOK - RITAX - DIK - PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK7L - SOPOK - ETENO).
ROUSY8L	At 700FT QNH LT to intercept R-318 HUL INBD. LT to intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, ROUSY next. RNAV1: [A700+]-BR012[5000+]-BR013-REMBA-RITAX-ROUSY	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	ATC climb requirements: see § 3.2.2 below. CDR - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK7L - SOPOK - RITAX - ROUSY).
CIV 2L	At 700FT QNH LT on TR 130 to intercept R-066 CIV INBD to CIV. RNAV1: [A700+]-BR012-BR014-CIV		ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL 170. Y50 southbound, MAX FL 190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flight planned ABV FL 195.

RWY 19

Designator	Route		Remarks
	Lateral	Vertical	
KOK8L	At 700FT QNH RT HDG 333 to intercept R-279 BUB to KOK. RNAV1: [A700+]-BR015[2900+]-KOK	Cross 7.0 DME BUB at or above 1700FT QNH.	L607 westbound. Not AVBL when <u>TSA Summit 1</u> or <u>TSA Summit 2</u> is active.
DENUT8L	Climb straight ahead. At 1700FT QNH RT to intercept R-314 HUL. LT to intercept R-300 BUB to DENUT. RNAV1: [A1700+]-BR016-BR017-DENUT		AVBL from 0500 to 2159 (0400 to 2059). L610 westbound. For TFC overflying London TMA with requested flight level above FL245. For TFC destination EGKK, EGHH and EGHI.
DENUT7N	At 700FT QNH RT to intercept R-314 HUL. LT to intercept R-300 BUB to DENUT. RNAV1: [A700+]-BR016[3700+]-BR017-DENUT	Cross R-279 BUB at or above 1700FT QNH.	AVBL from 2200 to 0459 (2100 to 0359) or when RWY 25R is not AVBL for LDG. L610 westbound. For TFC overflying London TMA with requested flight level above FL245. For TFC DEST EGKK, EGHH and EGHI.
HELEN6L	Climb straight ahead. At 1700FT QNH RT to intercept R-314 HUL to HELEN. RNAV1: [A1700+]-BR016-BR017-HELEN		AVBL from 0500 to 2159 (0400 to 2059). For TFC INBD London TMA except DEST EGKK, EGHH and EGHI: route connection HELEN - COA. For TFC overflying London TMA with requested flight level below FL245: route connection HELEN - COA. For TFC DEST EHAM: route connection HELEN - HSD.
HELEN6N	At 700FT QNH RT to intercept R-314 HUL to HELEN. RNAV1: [A700+]-BR016[3700+]-BR017-HELEN	Cross R-279 BUB at or above 1700FT QNH.	AVBL from 2200 to 0459 (2100 to 0359) or when RWY 25R is not AVBL for LDG. For TFC INBD London TMA except DEST EGKK, EGHH and EGHI: route connection HELEN - COA. For TFC overflying London TMA with requested flight level below FL245: route connection HELEN - COA. For TFC DEST EHAM: route connection HELEN - HSD.
NIK 3L	Climb straight ahead. At 1700FT QNH RT direct to NIK. RNAV1: [A1700+]-BR018-NIK		AVBL from 0500 to 2159 (0400 to 2059). M624 northbound. Not to be used by TFC DEST EHAM.
NIK5N	At 700FT QNH RT direct to NIK. RNAV1: [A700+]-BR018[4200+]-NIK	Cross R-279 BUB at or above 1700 FT QNH.	AVBL from 2200 to 0459 (2100 to 0359) or when RWY 25R is not AVBL for LDG. M624 northbound. Not to be used by TFC DEST EHAM.
ELSIK 2L	At 700FT QNH LT direct to BUN, ELSIK next. RNAV1: [A700+]-BUN-ELSIK		L179 eastbound. To be used when adequate MIL airspaces are AVBL for GAT.

RWY 25L / R

Designator	Route		Remarks
	Lateral	Vertical	
LNO4D	Climb straight ahead. At 4000FT QNH or when crossing 8.0 DME BUB, whichever is later, LT to HUL. At HUL intercept R-282 LNO INBD to LNO.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. For TFC requesting a cruising or initial FL below FL195. To be used by four-engine aircraft.
LNO 2K	RNAV1: [A700+] - BR301[T245] - [T245; A4000+; L]- HUL[T103; A6000+] - LNO	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of LNO4D Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. For TFC requesting a cruising or initial FL below FL195. To be used by four-engine aircraft.
SPI4D	Climb straight ahead. At 4000FT QNH or when crossing 8.0 DME BUB, whichever is later, LT to intercept R-286 SPI INBD to SPI.	Cross R-224 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft.
SPI 2K	RNAV1: [A700+] - BR301[T245] - [T245; A4000+; L]- BR302[T107; A6000+] - SPI	Cross BR302 at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of SPI4D Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft.
SOPOK5D	Climb straight ahead. At 4000FT QNH or when crossing 8.0 DME BUB whichever is later, LT to intercept R-286 SPI. When passing BULUX or climbing through FL170, whichever is later, RT direct to SOPOK.	Cross R-224 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft. ATC climb requirements: see § 3.2.2 below.
SOPOK 2K	RNAV1: [A700+] - BR301[T245] - [T245; A4000+; L]- BR302[T107; A6000+] - BULUX - [F170+; R]-> SOPOK	Cross BR302 at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of SOPOK5D Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft. ATC climb requirements: see § 3.2.2 below.
PITES5D	Climb straight ahead. At 4000FT QNH or when crossing 8.0 DME BUB, whichever is later, LT to intercept R-286 SPI. When passing REMBA, RT direct to RITAX, DIK, PITES next.	Cross R-224 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft. ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK5D - SOPOK - RITAX - DIK - PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK5D - SOPOK - ETENO).
PITES 2K	RNAV1: [A700+] - BR301[T245] - [T245; A4000+; L]- BR302[T107; A6000+] - REMBA - RITAX - DIK - PITES	Cross BR302 at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of PITES5D Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft. ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK 2K - SOPOK - RITAX - DIK - PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK 2K - SOPOK - ETENO).

RWY 25L / R

Designator	Route		Remarks
	Lateral	Vertical	
ROUSY5D	Climb straight ahead. At 4000FT QNH or when crossing 8.0 DME BUB, whichever is later, LT to intercept R-286 SPI. When passing REMBA, RT direct to RITAX, ROUSY next.	Cross R-224 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft. ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK5D - SOPOK - RITAX - ROUSY).
ROUSY 2K	RNAV1: [A700+] - BR301[T245] - [T245; A4000+; L] - BR302[T107; A6000+] - REMBA - RITAX - ROUSY	Cross BR302 at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of ROUSY5D Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L. To be used by four-engine aircraft. ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK 2K - SOPOK - RITAX - ROUSY).
CIV5C	At 700FT QNH RT on track 292° to intercept R-272 BUB. At 6.7 DME BUB, LT to intercept R-041 CIV INBD to CIV.		Not AVBL during weekends from 0500 to 2159 (0400 to 2059). ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL170. Y50 southbound, MAX FL190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flight planned ABV FL195.
KOK5C	At 700FT QNH RT HDG 290 to intercept R-279 BUB to KOK.	Cross 7.0 DME BUB at or above 1700FT QNH.	L607 westbound.
DENUT7C	At 700FT QNH RT on track 297° to intercept R-277 BUB. RT to intercept R-307 HUL to DENUT.	Cross R-280 BUB at or above 1700FT QNH.	L610 westbound. For TFC overflying London TMA with requested flight level above FL245. For TFC DEST EGKK, EGGH and EGGI.
HELEN7C	At 700FT QNH RT on track 305° to intercept R-314 HUL to HELEN.	Cross R-279 BUB at or above 1700FT QNH.	For TFC INBD London TMA except DEST EGKK, EGGH and EGGI: route connection HELEN - COA. For TFC overflying London TMA with requested flight level below FL245: route connection HELEN - COA. For TFC DEST EHAM: route connection HELEN - HSD.
NIK4C	At 700FT QNH RT direct to NIK.	Cross R-279 BUB at or above 1700FT QNH.	M624 northbound. Not to be used by TFC DEST EHAM.
ELSIK4C	At 700FT QNH RT direct to BUN, ELSIK next.	Cross R-279 BUB at or above 1700FT QNH.	L179 eastbound. To be used when adequate MIL airspaces are AVBL for GAT. To be used by all TFC at ATC discretion. Pilots unable to comply with the procedure shall advise ATC and expect ELSIK4D.
ELSIK4D	At 700FT QNH RT direct to NIK, ELSIK next.	Cross R-279 BUB at or above 1700FT QNH.	L179 eastbound. To be used when adequate MIL airspaces are AVBL for GAT. To be used at ATC discretion.

RWY 25L / R

Designator	Route		Remarks
	Lateral	Vertical	
SOPOK9C	Climb straight ahead. At 1700FT QNH LT to HUL. After HUL intercept R-286 SPI INBD. When passing BULUX or climbing through FL170 whichever is later, RT direct to SOPOK.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L.</p> <p>ATC climb requirements: see § 3.2.2 below.</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p> <p>BULUX - SOPOK is a RNAV5 segment.</p>
SOPOK 2G	<p>RNAV1: [A1700+; L] -> HUL [A6000+] - BR102 - BULUX - [F170+] - SOPOK</p>	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>RNAV1 Overlay of SOPOK9C</p> <p>Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L.</p> <p>ATC climb requirements: see § 3.2.2 below.</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p>
PITES8C	Climb straight ahead. At 1700FT QNH LT to HUL. After HUL intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, DIK, PITES next.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L.</p> <p>ATC climb requirements: see § 3.2.2 below.</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR Part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p> <p>CDR 1 - H24</p> <p>TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK9C - SOPOK - RITAX - DIK - PITES).</p> <p>Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK9C - SOPOK - ETENO).</p>
PITES 2G	<p>RNAV1: [A1700+; L] -> HUL [A6000+] - BR102 - REMBA - RITAX - DIK - PITES</p>	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>RNAV1 Overlay of PITES8C</p> <p>Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L.</p> <p>ATC climb requirements: see § 3.2.2 below.</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR Part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p> <p>CDR 1 - H24</p> <p>TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK 2G - SOPOK - RITAX - DIK - PITES).</p> <p>Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK 2G - SOPOK - ETENO).</p>

RWY 25L / R

Designator	Route		Remarks
	Lateral	Vertical	
ROUSY8C	Climb straight ahead. At 1700FT QNH LT to HUL. After HUL intercept R-286 SPI INBD. When passing REMBA, RT direct to RITAX, ROUSY next.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L.</p> <p>ATC climb requirements: see § 3.2.2 below.</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p> <p>CDR 1 - H24</p> <p>TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK9C - SOPOK - RITAX - ROUSY).</p> <p>RITAX - ROUSY is a RNAV5 segment.</p>
ROUSY 2G	<p>RNAV1: [A1700+; L] -> BR101 - HUL [A6000+] - BR102 - REMBA - RITAX - ROUSY</p>	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>RNAV1 Overlay of ROUSY8C</p> <p>Only AVBL from 0500 to 2159 (0400 to 2059) for DEP RWY 25R and H24 for DEP RWY 25L.</p> <p>ATC climb requirements: see § 3.2.2 below.</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p> <p>CDR 1 - H24</p> <p>TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK 2G - SOPOK - RITAX - ROUSY).</p>

RWY 25R ONLY

Designator	Route		Remarks
	Lateral	Vertical	
LNO6C	Climb straight ahead. At 1700FT QNH LT to intercept R-286 LNO INBD to LNO.	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	AVBL from 0500 to 2159 (0400 to 2059). AVBL for TFC requesting a cruising or initial flight level below FL195. To be used by single, two- and three-engine aircraft. May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.
LNO 2G	RNAV1: [A1700+; L] -> BR101 - BR103[A6000+] - LNO	Cross BR103 at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of LNO6C AVBL from 0500 to 2159 (0400 to 2059). AVBL for TFC requesting a cruising or initial flight level below FL195. To be used by single, two- and three-engine aircraft. May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.
LNO6Z	At 700FT QNH RT HDG 290 to intercept R-043 CIV. Do not cross R-276 BUB. At 22.0 DME CIV LT to intercept R-155 AFI. At 9.0 DME AFI LT to intercept R-268 HUL INBD. At HUL intercept R-282 LNO INBD to LNO.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below. For TFC requesting a cruising or initial FL below FL195.
LNO 2M	RNAV1: [A700+; R] - BR421[T291] - BR422 - BR413 - HUL[A6000+] - LNO	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of LNO6Z AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below. For TFC requesting a cruising or initial FL below FL195.
SPI6C	Climb straight ahead. At 1700FT QNH LT to intercept R-286 LNO INBD, intercept R-294 SPI INBD to SPI.	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	AVBL from 0500 to 2159 (0400 to 2059). To be used by single, two- and three-engine aircraft. May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.
SPI 2G	RNAV1: [A1700+; L] - BR103[T107; A6000+] - BR105 - SPI	Cross BR103 at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of SPI6C AVBL from 0500 to 2159 (0400 to 2059). To be used by single, two- and three-engine aircraft. May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.
SPI7Z	At 700FT QNH RT HDG 290 to intercept R-043 CIV. Do not cross R-276 BUB. At 22.0 DME CIV LT to intercept R-155 AFI. At 9.0 DME AFI LT to intercept R-268 HUL INBD. At HUL R-289 SPI INBD to SPI.	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below.
SPI 2M	RNAV1: [A700+; R] - BR421[T291] - BR422 - BR413 - HUL[A6000+] - SPI	Cross HUL at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of SPI7Z AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below.
SOPOK7Z	At 700FT QNH RT HDG 290 to intercept R-043 CIV. Do not cross R-276 BUB. At 22.0 DME CIV LT to intercept R-155 AFI. At 9.0 DME AFI LT to intercept R-268 HUL INBD to intercept R-286 SPI INBD to BULUX, SOPOK next.	Cross R-224 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below.

RWY 25R ONLY

Designator	Route		Remarks
	Lateral	Vertical	
SOPOK 2M	RNAV1: [A700+; R] - BR421[T291] - BR422 - BR413 - BR414 - BR415[A6000+] - BULUX - SOPOK	Cross BR415 at FL60 (FL70 when QNH is below 977HPA) or above.	RNAV1 Overlay of SOPOK7Z AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below.
PITES7Z	At 700FT QNH RT HDG 290 to intercept R-043 CIV. Do not cross R-276 BUB. At 22.0 DME CIV LT to intercept R-155 AFI. At 9.0 DME AFI LT to intercept R-268 HUL INBD to intercept R-309 DIK INBD to DIK, PITES next.	Cross R-224 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK7Z - SOPOK - RITAX - DIK - PITES). Only when M150 between DIK and PITES is AVBL (alternative route: SOPOK7Z - SOPOK - ETENO).
ROUSY6Z	At 700FT QNH RT HDG 290 to intercept R-043 CIV. Do not cross R-276 BUB. At 22.0 DME CIV LT to intercept R-155 AFI. At 9.0 DME AFI LT to intercept R-268 HUL INBD. RT to intercept R-137 AFI to ROUSY.	Cross R-224 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	AVBL from 2200 to 0459 (2100 to 0359). ATC climb requirements: see § 3.2.2 below. CDR 1 - H24. TEMPO CLSD on ATC instructions due to MIL requirements (alternative route: SOPOK7Z - SOPOK - RITAX - ROUSY).
CIV 2D	At 700FT QNH track 251. At 6.0 DME BUB LT to track 206 to intercept R-053 CIV INBD to CIV. RNAV1: [A700]-BR045-BR009-CIV		AVBL from 2200 to 0459 (2100 to 0359). H24 on SAT and SUN. ATC climb requirements: see § 3.2.2 below. M617 southbound, MAX FL170. Y50 southbound, MAX FL190, compulsory for TFC DEST Paris TMA. N872 southbound, only for TFC flight planned ABV FL195. Between 2200 and 0459, only to be used by aircraft with QC ≤ 4.

RWY 25L ONLY

Designator	Route		Remarks
	Lateral	Vertical	
LNO6Q	At 700FT QNH LT to intercept R-286 LNO INBD to LNO.	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p> <p>For TFC requesting a cruising or initial FL below FL195.</p>
LNO 2E	RNAV1: [A700+; L] -> BR101 - BR103 [A6000+]- LNO	Cross BR103 at FL60 (FL70 when QNH is below 977HPA) or above.	<p>RNAV1 Overlay of LNO6Q</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR Part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p> <p>For TFC requesting a cruising or initial FL below FL195.</p>
SPI6Q	At 700FT QNH LT to intercept R-286 LNO INBD, intercept R-294 SPI INBD to SPI.	Cross R-044 HUL at FL60 (FL70 when QNH is below 977HPA) or above.	<p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR Part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p>
SPI 2E	RNAV1: [A700+; L] - BR103 [T107; A6000+] - BR105 - SPI	Cross BR103 at FL60 (FL70 when QNH is below 977HPA) or above.	<p>RNAV1 Overlay of SPI6Q</p> <p>To be used by single, two- and three-engine aircraft.</p> <p>May be used by four-engine aircraft noise certificated according to <i>ICAO Annex 16, Chapter 3/FAR Part 36 Stage 3</i> and whose performances permit to adhere to the SID.</p>
CIV 2Q	Climb straight ahead. At 7.0 DME BUB LT to TR 206° to intercept R-053 CIV INBD to CIV.		<p>AVBL from 2200 to 0459 (2100 to 0359). H24 on SAT and SUN.</p> <p>ATC climb requirements: see § 3.2.2 below.</p> <p>M617 southbound, MAX FL170.</p> <p>Y50 southbound, MAX FL190, compulsory for TFC DEST Paris TMA.</p> <p>N872 southbound, only for TFC flight planned ABV FL195.</p> <p>Between 2200 and 0459, only to be used by aircraft with QC ≤ 4.</p>

3.2.1.2 Waypoint Information

ID	Latitude	Longitude
BR009	504645.6N	0041652.9E
BR010	504759.7N	0043857.8E
BR011	504634.6N	0044604.2E
BR012	504642.1N	0043607.3E
BR013	504200.3N	0044228.9E
BR014	504315.6N	0042300.9E
BR015	505527.1N	0042026.7E
BR016	505707.5N	0041921.6E
BR017	510208.8N	0041122.9E
BR018	505823.7N	0041943.8E
BR045	505247.9N	0042143.7E
RWR25	505441.5N	0042957.7E
BR101	504944.6N	0042952.6E
BR102	504135.6N	0044433.9E
BR103	504719.8N	0044213.5E
BR105	504634.7N	0044604.0E
BR301	505151.5N	0042010.8E
BR302	504318.4N	0043552.9E
BR421	505514.2N	0042039.9E
BR422	504914.7N	0041200.2E
BR413	504440.3N	0041511.1E
BR414	504450.7N	0042801.8E
BR415	504318.4N	0043552.9E
BR701	505611.8N	0043825.7E
BR704	505745.1N	0044629.8E
BR705	505258.9N	0045246.0E
BR751	505635.5N	0043633.5E
BR752	505720.8N	0044701.8E

3.2.1.3 Path Terminators

Note: The following database entries are suggestions only and should be checked by a professional database coder before entry into an active database.

3.2.1.3.1 RWY 19

LNO7L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR010	504759.7N	0043857.8E	DF	N					
3	BR011	504634.6N	0044604.2E	TF	N	107.5		6000+	4.7	
4	LNO	503509.3N	0054237.0E	TF	N	107.3			37.7	

SPI6L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR010	504759.7N	0043857.8E	DF	N					
3	BR011	504634.6N	0044604.2E	TF	N	107.5		6000+	4.7	
4	SPI	503053.1N	0053725.0E	TF	N	115.3			36.3	

SOPOK7L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR012	504642.1N	0043607.3E	DF	N			5000+		
3	BR013	504200.3N	0044228.9E	TF	N	139.3			6.2	
4	REMBA	503944.0N	0045450.5E	TF	N	106.1			8.2	
5	BULUX	503534.0N	0051504.6E	TF	N	107.8			13.5	
6	SOPOK	501510.0N	0054626.0E	TF	N	135.3			28.6	

ROUSY8L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR012	504642.1N	0043607.3E	DF	N			5000+		
3	BR013	504200.3N	0044228.9E	TF	N	139.3			6.2	
4	REMBA	503944.0N	0045450.5E	TF	N	106.1			8.2	
5	RITAX	500440.0N	0054825.0E	TF	N	135.3			49.1	
6	ROUSY	492835.0N	0060654.0E	TF	N	161.5			38.1	

PITES8L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR012	504642.1N	0043607.3E	DF	N			5000+		
3	BR013	504200.3N	0044228.9E	TF	N	139.3			6.2	
4	REMBA	503944.0N	0045450.5E	TF	N	106.1			8.2	
5	RITAX	500440.0N	0054825.0E	TF	N	135.3			49.1	
6	DIK	495140.7N	0060747.1E	TF	N	136.0			18.0	
7	PITES	494342.9N	0063109.7E	TF	N	117.6			17.1	

CIV 2L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR012	504642.1N	0043607.3E	DF	N					
3	BR014	504315.6N	0042300.9E	TF	N	247.6			9.0	
4	CIV	503426.3N	0034958.4E	TF	N	247.4			22.8	

KOK8L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR015	505527.1N	0042026.7E	DF	N			2900+		
3	KOK	510540.9N	0023905.9E	TF	N	279.8			64.8	

DENUT8L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		1700+		
2	BR016	505707.5N	0041921.6E	DF	N					
3	BR017	510208.8N	0041122.9E	TF	N	315.0			7.1	
4	DENUT	511410.0N	0033927.4E	TF	N	301.1			23.4	

DENUT7N

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR016	505707.5N	0041921.6E	DF	N			3700+		
3	BR017	510208.8N	0041122.9E	TF	N	315.0			7.1	
4	DENUT	511410.0N	0033927.4E	TF	N	301.1			23.4	

HELEN6L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		1700+		
2	BR016	505707.5N	0041921.6E	DF	N					
3	BR017	510208.8N	0041122.9E	TF	N	315.0			7.1	
4	HELEN	511407.1N	0035211.0E	TF	N	314.9			17.0	

HELEN6N

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR016	505707.5N	0041921.6E	DF	N			3700+		
3	BR017	510208.8N	0041122.9E	TF	N	315.0			7.1	
4	HELEN	511407.1N	0035211.0E	TF	N	314.9			17.0	

NIK 3L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		1700+		
2	BR018	505823.7N	0041943.8E	DF	N					
3	NIK	510954.3N	0041102.2E	TF	N	334.6			12.8	

NIK5N

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BR018	505823.7N	0041943.8E	DF	N			4200+		
3	NIK	510954.3N	0041102.2E	TF	N	334.6			12.8	

ELSIK 2L

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		194.4		700+		
2	BUN	510707.1N	0045031.6E	DF	N					
3	ELSIK	511142.1N	0045955.0E	TF	N	52.1			7.5	

3.2.1.3.2 RWY 07L ONLY

LNO 2T

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	BR751	505635.5N	0043633.5E	CF	N	065.5				
2	BR752	505720.8N	0044701.8E	TF	N	083.4			6.7	
3	BR705	505258.9N	0045246.0E	TF	N	140.3			5.7	
4	REMBA	503944.0N	0045450.5E	TF	N	174.3			13.3	
5	LNO	503509.3N	0054237.0E	TF	N	098.3			30.8	

SPI 2T

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	BR751	505635.5N	0043633.5E	CF	N	065.5				
2	BR752	505720.8N	0044701.8E	TF	N	083.4			6.7	
3	BR705	505258.9N	0045246.0E	TF	N	140.3			5.7	
4	REMBA	503944.0N	0045450.5E	TF	N	174.3			13.3	
5	SPI	503053.1N	0053725.0E	TF	N	107.8			28.5	

SOPOK 2T

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	BR751	505635.5N	0043633.5E	CF	N	065.5				
2	BR752	505720.8N	0044701.8E	TF	N	083.4			6.7	
3	BR705	505258.9N	0045246.0E	TF	N	140.3			5.7	
4	REMBA	503944.0N	0045450.5E	TF	N	174.3			13.3	
5	BULUX	503534.0N	0051504.6E	TF	N	107.8			13.5	
6	SOPOK	501510.0N	0054626.0E	TF	N	135.3			28.6	

3.2.1.3.3 RWY 07R ONLY

LNO 2V

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		069.9		700+		
2	BR701	505611.8N	0043825.7E	DF	N					
3	BR704	505745.1N	0044629.8E	TF	N	073.0			5.3	
4	BR705	505258.9N	0045246.0E	TF	N	140.2			6.2	
5	REMBA	503944.0N	0045450.5E	TF	N	174.3			13.3	
6	LNO	503509.3N	0054237.0E	TF	N	098.3			30.8	

SPI 2V

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		069.9		700+		
2	BR701	505611.8N	0043825.7E	DF	N					
3	BR704	505745.1N	0044629.8E	TF	N	073.0			5.3	
4	BR705	505258.9N	0045246.0E	TF	N	140.2			6.2	
5	REMBA	503944.0N	0045450.5E	TF	N	174.3			13.3	
6	SPI	503053.1N	0053725.0E	TF	N	107.8			28.5	

SOPOK 2V

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA		069.9		700+		
2	BR701	505611.8N	0043825.7E	DF	N					
3	BR704	505745.1N	0044629.8E	TF	N	073.0			5.3	
4	BR705	505258.9N	0045246.0E	TF	N	140.2			6.2	
5	REMBA	503944.0N	0045450.5E	TF	N	174.3			13.3	
6	BULUX	503534.0N	0051504.6E	TF	N	107.8			13.5	
7	SOPOK	501510.0N	0054626.0E	TF	N	135.3			28.6	

3.2.1.3.4 RWY 25L / R

SOPOK 2G

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				1700+		
2	HUL	504458.1N	0043829.9E	DF	N			6000+		
3	BR102	504135.6N	0044433.9E	TF	N	131.2			5.1	
4	BULUX	503534.0N	0051504.6E	TF	N	107.1		FL170+	20.3	
5	SOPOK	501510.0N	0054626.0E	TF	N	135.3			28.6	

PITES 2G

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				1700+		
2	HUL	504458.1N	0043829.9E	DF	N			6000+		
3	BR102	504135.6N	0044433.9E	TF	N	131.2			5.1	
4	REMBA	503944.0N	0045450.5E	TF	N	105.8			6.8	
5	RITAX	500440.0N	0054825.0E	TF	N	135.3			49.1	
6	DIK	495140.7N	0060747.1E	TF	N	136.0			18.0	
7	PITES	494342.9N	0063109.7E	TF		117.6			17.1	

ROUSY 2G

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				1700+		
2	BR101	504944.6N	0042952.6E	DF	N					
3	HUL	504458.1N	0043829.9E	TF	N	131.1		6000+	7.3	
4	BR102	504135.6N	0044433.9E	TF	N	131.2			5.1	
5	REMBA	503944.0N	0045450.5E	TF	N	105.8			6.8	
6	RITAX	500440.0N	0054825.0E	TF	N	135.3			49.1	
7	ROUSY	492835.0N	0060654.0E	TF	N	161.5			38.1	

LNO 2K

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR301	505151.5N	0042010.8E	CF	Y	245.5				
3				CA		245.5		4000+		
4	HUL	504458.1N	0043829.9E	CF	N	103.1		6000+		
5	LNO	503509.3N	0054237.0E	TF	N	103.1			42.0	

SPI 2K

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR301	505151.5N	0042010.8E	CF	Y	245.5				
3				CA		245.5		4000+		
4	BR302	504318.4N	0043552.9E	CF	N	107.0		6000+		
5	SPI	503053.1N	0053725.0E	TF	N	107.2			41.1	

SOPOK 2K

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR301	505151.5N	0042010.8E	CF	Y	245.5				
3				CA		245.5		4000+		
4	BR302	504318.4N	0043552.9E	CF	N	107.0		6000+		
5	BULUX	503534.0N	0051504.6E	TF	N	107.0			26.1	
6				CA		107.0		FL170+		
7	SOPOK	501510.0N	0054626.0E	DF	N					

PITES 2K

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR301	505151.5N	0042010.8E	CF	Y	245.5				
3				CA		245.5		4000+		
4	BR302	504318.4N	0043552.9E	CF	N	107.0		6000+		
5	REMBA	503944.0N	0045450.5E	TF	N	106.4			12.6	
6	RITAX	500440.0N	0054825.0E	TF	N	135.3			49.1	
7	DIK	495140.7N	0060747.1E	TF	N	136.0			18.0	
8	PITES	494342.9N	0063109.7E	TF	N	117.6			17.1	

ROUSY 2K

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR301	505151.5N	0042010.8E	CF	Y	245.5				
3				CA		245.5		4000+		
4	BR302	504318.4N	0043552.9E	CF	N	106.4		6000+		
5	REMBA	503944.0N	0045450.5E	TF	N	106.4			12.6	
6	RITAX	500440.0N	0054825.0E	TF	N	135.3			49.1	
7	ROUSY	492835.0N	0060654.0E	TF	N	161.5			38.1	

3.2.1.3.5 RWY 25R ONLY

CIV 2D

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1	RWR25			CA		245.4		700		
2	BR045	505247.9N	0042143.7E	CF	N	252.0	L			
3	BR009	504645.6N	0041652.9E	TF	N	207.0	R		6.8	
4	CIV	503426.3N	0034958.4E	TF	N	234.4			21.1	

LNO 2G

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				1700+		
2	BR101	504944.6N	0042952.6E	DF	N					
3	BR103	504719.8N	0044213.5E	TF	N	107.1		6000+	8.2	
4	LNO	503509.3N	0054237.0E	TF	N	107.2			40.3	

SPI 2G

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				1700+		
2	BR103	504719.8N	0044213.5E	CF	N	107.1		6000+		
3	BR105	504634.7N	0044604.0E	TF	N	107.1			2.6	
4	SPI	503053.1N	0053725.0E	TF	N	115.3			36.3	

LNO 2M

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR421	505514.2N	0042039.9E	CF	N	291.0				
3	BR422	504914.7N	0041200.2E	TF	N	222.5			8.1	
4	BR413	504440.3N	0041511.1E	TF	N	156.2			5.0	
5	HUL	504458.1N	0043829.9E	TF	N	088.7		6000+	14.8	
6	LNO	503509.3N	0054237.0E	TF	N	103.1			42.0	

SPI 2M

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR421	505514.2N	0042039.9E	CF	N	291.0				
3	BR422	504914.7N	0041200.2E	TF	N	222.5			8.1	
4	BR413	504440.3N	0041511.1E	TF	N	156.2			5.0	
5	HUL	504458.1N	0043829.9E	TF	N	088.7		6000+	14.8	
6	SPI	503053.1N	0053725.0E	TF	N	110.2			40.1	

SOPOK 2M

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR421	505514.2N	0042039.9E	CF	N	291.0				
3	BR422	504914.7N	0041200.2E	TF	N	222.5			8.1	
4	BR413	504440.3N	0041511.1E	TF	N	156.2			5.0	
5	BR414	504450.7N	0042801.8E	TF	N	088.7			8.2	
6	BR415	504318.4N	0043552.9E	TF	N	107.1		6000+	5.2	
7	BULUX	503534.0N	0051504.6E	TF	N	107.0			26.1	
8	SOPOK	501510.0N	0054626.0E	TF	N	135.3			28.6	

3.2.1.3.6 RWY 25L ONLY

LNO 2E

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR101	504944.6N	0042952.6E	DF	N					
3	BR103	504719.8N	0044213.5E	TF	N	107.1		6000+	8.2	
4	LNO	503509.3N	0054237.0E	TF	N	107.2			40.3	

SPI 2E

#	ID	Latitude	Longitude	P/T	F/O	Course (°T)	Turn Dir.	ALT (FT)	DIST (NM)	Speed limit (KIAS)
1				CA				700+		
2	BR103	504719.8N	0044213.5E	CF	N	107.1		6000+		
3	BR105	504634.7N	0044604.0E	TF	N	107.1			2.6	
4	SPI	503053.1N	0053725.0E	TF	N	115.3			36.3	

3.2.2 Climb Requirements

All traffic shall initially climb to FL60, unless instructed otherwise by ATC. Brussels APP or Brussels ACC will allocate a higher level as soon as possible.

Following additional requirements apply:

- Traffic proceeding via SOPOK - ETENO - LIRSU and planned above FL245 shall cross BULUX at FL 170 MNM and ETENO at FL250 MNM;
- Traffic proceeding via REMBA - RITAX shall cross REMBA at FL 100 MNM;
- Traffic proceeding via RITAX - ROUSY or RITAX - PITES and planned above FL245 shall cross RITAX or abeam at FL250 MNM;
- Traffic proceeding via CIV - MEDIL and planned above FL265 shall cross MEDIL at FL210 MNM.

Aircraft unable to meet these requirements shall advise ATC when requesting start-up clearance, allowing for appropriate coordination to be made with adjacent ATS units in due time.

4 LOW VISIBILITY PROCEDURES

4.1 Facilities and Equipment Available

4.1.1 Runways

RWY 25L and 25R are equipped with ILS and are approved for CAT III operations with a minimum RVR of 50 M.

The runway exits are equipped with alternating green and yellow centre line lights within the ILS sensitive areas. Landing aircraft should leave this area as soon as possible.

In order to provide adequate protection of the ILS system, no vehicle or aircraft shall infringe the ILS sensitive areas when an arriving aircraft is within 2 NM from touchdown and has not completed its landing run.

Departing aircraft are required to use the following CAT II/III holding points at RWY 25R: B1 (backtrack not allowed), W41/ W42 or A1. Intersection take-offs are not allowed except when entering RWY 25R via B1 or A1.

Guided take-off is not available.

4.1.2 Taxiways

Taxi is restricted to the taxiways equipped with centre line lights. Standard routes are established for departing and arriving aircraft (see chart [AD 2.EBBR-GMC.04](#)). After receiving taxi clearance, aircraft shall proceed only when a green centre line path is illuminated, except on TWY N6-A1.

When RVR at TDZ falls below 400M, a follow-me car is available on stand-by to assist pilots during taxi upon request.

ATC may use ground surveillance information to assist in monitoring aircraft and vehicles on the manoeuvring area. Any ground surveillance derived information is however to be considered as advice only.

4.1.3 Communications

Pilots will be informed by ATIS or ATC when LVP are in progress. The ATIS message will contain the phrase "LOW VISIBILITY PROCEDURES IN PROGRESS" and will also provide details of any unavailability of equipment relevant to LVP.

Pilots will be informed by ATC when LVP are terminated.

4.2 Criteria for Initiation and Termination of LVP

The preparation phase will start when visibility falls below 1500M and/or ceiling is at or below 300FT, and CAT II/III operations are expected. The operations phase will start when RVR falls below 800M or the ceiling is below 200FT.

LVP will be terminated when RVR is greater than 800M and ceiling is higher than 200FT, and a continuing improvement in these conditions is expected.

4.3 Other Information

When LVP are in operation, arriving aircraft will be vectored to intercept the ILS at least 10NM from touchdown. ATC will provide suitable spacing between arrivals to achieve sufficient protection of the ILS sensitive area (see § 4.1.1 above). This spacing will be in the order of 8NM in case of CAT II operations and 10NM during CAT III operations.

The traffic manager will determine the applicable traffic acceptance rate according to the circumstances.

CAT II and CAT III approach practice during normal operations is allowed, but pilots should be aware that due to high traffic intensity, protection of the ILS sensitive area cannot be guaranteed and fluctuations in the ILS signal may occur.

5 VFR FLIGHTS

5.1 General

Pilots flying to/from EBBR or crossing Brussels CTR or TMA shall adhere strictly to all published procedures and ATC instructions. Non-adherence can cause unacceptable supplementary workload for ATC and may result in delays for the flights concerned. In any case, IFR traffic will have priority over VFR traffic.

VFR traffic (state aircraft and helicopter flights excluded) shall not enter Brussels CTR or TMA during following periods:

- from MON to FRI: 0700-0900 (0600-0800), 1200-1300 (1100-1200) and 1600-1900 (1500-1800);
- on SAT: 0700-0800 (0600-0700);
- on SUN: 1600-1900 (1500-1800).

Local VFR flights at night within the aerodrome traffic circuit are prohibited.

The published routes are compulsory. All routes are allocated at ATC discretion according to the traffic situation. Pilots unable to comply shall contact ATC immediately to request an alternative route.

To enhance the see-and-avoid concept, VFR flights operating in Brussels CTR or TMA are advised to switch on their navigation, landing and anti-collision lights, and they shall keep a sharp look-out for other aircraft.

In order to improve radar detection, pilots flying transponder equipped aircraft shall set code 7000 in mode A/C. Unless another code has been previously allocated, Brussels TWR will allocate a code from series 6301-6313.

5.2 Visual Reporting Points

VFR traffic shall only use following reporting points:

Abbreviation	Name	Associated landmark	Position
AM	Abeam Mechelen	east of Mechelen, lake Nekker	510117N 0043023E
AT	Atomium	monument	505342N 0042029E
BE	Bertem	radar station	505226N 0043659E
CA	Brucargo	cargo terminal	505420N 0042726E
GB	Groot-Bijgaarden	motorway intersection R0-E40	505231N 0041626E
HO	Haasrode	intersection motorway E40 and road N25	505041N 0044302E
KH	Kampenhout-Sas	intersection canal Leuven-Dijle and road N21	505720N 0043537E
LO	Waterloo	monument	504042N 0042417E
ME	Mechelen	water tower	510039N 0042749E
NO	Nossegem	intersection motorway E40 and road N227	505210N 0043038E
PU	Peutie	pylon military domain	505555N 0042757E
SH	South Herent	KBC building at intersection of motorway E314 and road N2	505310N 0044039E
TE	Ternat	castle	505216N 0041014E
WA	Wavre	radio and television mast	504426N 0043512E
ZB	Forêt de Soignes/Zoniënbos	motorway intersection R0-E411	504803N 0042754E

5.3 Inbound Traffic

5.3.1 Communications

Pilots intending to enter Brussels CTR shall contact Brussels TWR on FREQ 120.780 (8.33 KHZ CH) (entry via AT, GB or ME) or 118.605 (8.33 KHZ CH) (entry via HO, LO or WA).

Pilots entering Brussels TMA shall contact Brussels Departure (entry between 2000FT AMSL and FL60) or Brussels ACC (entry above FL60).

All VFR flights with destination EBBR shall report their position and obtain an ATC clearance before entering the Brussels CTA, TMA or CTR. When practicable, the request shall be made at least 5MIN prior to entry.

5.3.2 Routes

RWY 25L/R OR RWY 07L/R IN USE

Arrivals from the North	Join Brussels CTR via ME and proceed to PU. Traffic shall remain RIGHT of motorway E19 and enter the aerodrome traffic circuit according to ATC instructions.
Arrivals from the South	Join Brussels CTR via WA or LO and proceed to ZB, NO next. Traffic shall remain RIGHT of motorways E411/R0, and enter the aerodrome traffic circuit according to ATC instructions.

RWY 01 (ARR) AND 07L/R (DEP) OR RWY 01/19 IN USE

Arrivals from the West	Join Brussels CTR via TE and proceed to GB, AT and CA next. Traffic shall remain RIGHT of motorway E40 and enter the aerodrome traffic circuit according to ATC instructions.
Arrivals from the East	Join Brussels CTR via HO and proceed to BE, NO next. Traffic shall remain RIGHT of motorway E40, and enter the aerodrome traffic circuit according to ATC instructions.

Crossing traffic shall follow the routes indicated above and proceed in accordance with ATC instructions.

Crossing traffic with destination EBGB will not be allowed to route directly to EBGB, but will be instructed to vacate Brussels CTR via the relevant outbound routes indicated below.

Aircraft crossing Brussels CTR east of EBBR may be instructed by ATC to hold over reporting point SH (northbound traffic) or KH (southbound traffic), awaiting clearance to cross the final approach path of RWY 25L/R.

5.4 Outbound Traffic

5.4.1 Communications

Pilots departing from EBBR shall request start-up clearance from Brussels Delivery. The clearance will be issued depending on traffic density.

Together with start-up clearance, pilots will receive instructions regarding the transponder setting, the outbound routes to be expected and the ATS unit(s) to be contacted with the associated frequency.

Departing traffic with destination EBGB will not be allowed to route directly to EBGB, but will be instructed to vacate Brussels CTR via the relevant outbound routes indicated below.

5.4.2 Routes**RWY 19 AND 25L/R IN USE**

Departures to the North	After take-off, right turn to PU and proceed via AM. Traffic shall remain RIGHT of motorway E19 and leave Brussels CTR according to ATC instructions.
Departures to the South	After take-off, left turn to NO and proceed via ZB to LO or WA. Traffic shall remain RIGHT of motorways R0/E411 and leave Brussels CTR according to ATC instructions.

RWY 01 AND 07L/R IN USE

Departures to the West	After take-off, left turn to CA and proceed via AT, GB and TE. Traffic shall remain RIGHT of motorway E40 and leave Brussels CTR according to ATC instructions.
Departures to the East	After take-off, right turn to NO or abeam and proceed via BE and HO. Traffic shall remain RIGHT of motorway E40 and leave Brussels CTR according to ATC instructions.

6 HELICOPTER FLIGHTS

All helicopters to and from EBBR are subject to PPR. Prior permission must be obtained before the departure of the helicopter. In flight requests are not allowed. PPR requests shall be addressed to Brussels Airport Company Airside Inspection:

TEL: + 32 (0) 2 753 69 00

FAX: + 32 (0) 2 753 69 09

Email: inspect@brusselsairport.be

Upon requesting permission to land at or take off from EBBR, notwithstanding any other required information, the pilot will clearly indicate:

- the flight rules under which the flight will be performed: IFR or VFR;
- the MOPSC;
- the time of the day on which the flight will be performed (day or night flight);
- the performance class under which the helicopter will be operated.

Restrictions of use applying to the FATO:

- The FATO is limited to:
 - helicopters able to climb according their associated performance class and obstacle surface clearance;
 - VFR traffic only;
 - day operations only (HJ);
 - performance class 2 (slope category "C") and performance class 3 (slope category "B") operations only;
 - helicopters that have an MOPSC ≤ 19;
- All helicopters shall take off or land on the designated runway in use in the following conditions:
 - night operations (HN);
 - operating under IFR;
 - operating under performance class 1 (slope category "A");
 - if the MOPSC > 19.

7 RADIO COMMUNICATION FAILURE

If an aircraft does not succeed in landing within the 30MIN normally allowed for approach and landing, it shall leave Brussels CTR and TMA on R-289 BUB at 2200FT QNH or below, and land at the first suitable aerodrome where the weather conditions allow a visual approach and landing.

See also [ENR 1.1, § 1.10.5](#).

EBBR AD 2.23 Additional Information**1 ATIS**

ATIS messages serving inbound and outbound traffic are broadcast H24 (see [EBBR AD 2.18](#)).

The messages contain following elements in the order as listed:

Item	ATIS	Start of expression
Aerodrome name	EBBR NAT	Brussels National...
Alphabetical designator	ARR or DEP (A till Z)	Arrival or Departure... (alfa - zulu)
Time of observation	HHMM
Type of approach to be expected (ARR only)	TYPE APCH	Expecting vectoring...
Runway in use for ARR (resp DEP)	ARR RWY(s)	Runway (RWY) for arrivals
RSCD time		Runway surface condition at...
RSCD for complete RWY or per third part of RWY including depth	TDZ...UP TO...mm MID...UP TO...mm END...UP...mm	touchdown zone...up to...mm middle...up to...mm end...up to...mm
RWYCC	RWYCC	Runway condition code...
Runway in use for DEP (resp ARR)	DEP RWY(s)	Runway (RWY) for departures
Transition level	TRL	Transition level...
Operational status	OPS STS	...
Surface wind, direction and speed (including significant variations)	WIND	Wind...
Visibility	VIS	CAVOK or visibility...
RVR	RVR (RWY) TDZ / M, MID / M, END / M	RVR runway... ..metres, ...metres, ...metres
Present weather	WX	weather...
Cloud base or vertical visibility	CLD VV / FT	Cloud...or vertical visibility...
Air temperature	T	Temperature...
Dewpoint temperature	DP	Dewpoint...
Altimeter settings	QNH	QNH...
Recent weather	REWX	Recent...
Supplementary meteorological phenomena	SIGWX	Wind shear..., cumulonimbus in climb out, severe icing,...
Landing forecast TREND	TREND	NOSIG, trend BCMG...or trend TEMPO...
CONFIRM ATIS ARR (resp DEP)	CFM...(A till Z)	Confirm ARR (DEP)...(alfa - zulu) on first contact

When rapidly changing weather conditions make it inadvisable to include a weather report in the ATIS broadcast, the weather data are omitted and replaced by the phrase "MET REPORT OMITTED DUE TO RAPID CHANGES". The omitted data can be requested from ATC.

Pilots are requested to listen to the ATIS broadcast prior to the first contact with ATS. When establishing communication with the relevant ATS unit, the pilot shall acknowledge receipt of ATIS message with the phrase "INFORMATION ... [alphabetical designator] RECEIVED". ATS will confirm the validity of the received alphabetical designator. If the designator has changed meanwhile, only the actually valid designator will be given.

2 LIGHTNING PROCEDURE

Lightning procedure in progress will be announced by ATIS.

When lightning procedure is activated, some handling activities may be temporarily suspended.

EBBR AD 2.24 Charts Related to EBBR

AD 2.EBBR-ADC.01	Aerodrome Chart - ICAO
AD 2.EBBR-ADC.02	Aerodrome Chart - ICAO. Appendix 1: Runway Marking Aids
AD 2.EBBR-ADC.03	Aerodrome Chart - ICAO. Appendix 2: Runway Lighting Aids
AD 2.EBBR-GMC.01	Aerodrome Ground Movement Chart - ICAO
AD 2.EBBR-GMC.02a	Aerodrome Ground Movement Chart - ICAO. Appendix 1: Taxiways, Aircraft Stand Taxi Lanes and Holding Platforms (a)

AD 2.EBBR-GMC.02b	Aerodrome Ground Movement Chart - ICAO. Appendix 1: Taxiways, Aircraft Stand Taxi Lanes and Holding Platforms (b)
AD 2.EBBR-GMC.02c	Aerodrome Ground Movement Chart - ICAO. Appendix 1: Taxiways, Aircraft Stand Taxi Lanes and Holding Platforms (c)
AD 2.EBBR-GMC.02d	Aerodrome Ground Movement Chart - ICAO. Appendix 1: Taxiways, Aircraft Stand Taxi Lanes and Holding Platforms (d)
AD 2.EBBR-GMC.03	Aerodrome Ground Movement Chart - ICAO. Appendix 2: Ground Movement Responsibilities
AD 2.EBBR-GMC.04	Aerodrome Ground Movement Chart - ICAO. Appendix 3: Low Visibility Procedures
AD 2.EBBR-GMC.05	Aerodrome Ground Movement Chart - ICAO. Appendix 4: Hot Spots
AD 2.EBBR-GMC.06a	Aerodrome Ground Movement Chart - ICAO. Appendix 5: A380 Ground Movements
AD 2.EBBR-GMC.06b	Aerodrome Ground Movement Chart - ICAO. Appendix 6: B747-8/-8F Ground Movements
AD 2.EBBR-GMC.07	Aerodrome Ground Movement Chart - ICAO. Appendix 7: De-icing
AD 2.EBBR-APDC.01	Aircraft Parking Docking Chart - ICAO
AD 2.EBBR-APDC.02	Aircraft Parking Docking Chart - ICAO: Apron 9
AD 2.EBBR-APDC.03	Aircraft Parking Docking Chart - ICAO: General Aviation
AD 2.EBBR-APDC.04	Aircraft Parking Docking Chart - ICAO: Mil Apron
AD 2.EBBR-AOC.01	Aerodrome Obstacle Chart. Type A (Operating Limitations): RWY 01/19
AD 2.EBBR-AOC.02	Aerodrome Obstacle Chart. Type A (Operating Limitations): RWY 07L/25R
AD 2.EBBR-AOC.03	Aerodrome Obstacle Chart. Type A (Operating Limitations): RWY 07R/25L
AD 2.EBBR-AOC.04	Aerodrome Obstacle Chart. Type B
AD 2.EBBR-PATC.01	Precision Approach Terrain Chart - ICAO: RWY 25L
AD 2.EBBR-PATC.02	Precision Approach Terrain Chart - ICAO: RWY 25R
AD 2.EBBR-ATCSMAC.01	ATC Surveillance Minimum Altitude Chart - ICAO
AD 2.EBBR-STAR.01	Standard Arrival Chart - Instrument - ICAO
AD 2.EBBR-STAR.02	Standard Arrival Chart - Instrument - ICAO (RNAV1 Overlay)
AD 2.EBBR-SID.01	Standard Departure Chart - Instrument - ICAO: RWY 01
AD 2.EBBR-SID.02	Standard Departure Chart - Instrument - ICAO: RWY 07L
AD 2.EBBR-SID.02a	Standard Departure Chart - Instrument - ICAO: RWY 07L
AD 2.EBBR-SID.02b	Standard Departure Chart - Instrument - ICAO: RWY 07L (RNAV1 Overlay)
AD 2.EBBR-SID.03	Standard Departure Chart - Instrument - ICAO: RWY 07R
AD 2.EBBR-SID.03a	Standard Departure Chart - Instrument - ICAO: RWY 07R
AD 2.EBBR-SID.03b	Standard Departure Chart - Instrument - ICAO: RWY 07R (RNAV1 Overlay)
AD 2.EBBR-SID.04a	Standard Departure Chart - Instrument - ICAO: RWY 19
AD 2.EBBR-SID.04b	Standard Departure Chart - Instrument - ICAO: RWY 19 (RNAV1 Overlay)
AD 2.EBBR-SID.05a	Standard Departure Chart - Instrument - ICAO: RWY 25L (C Departures)
AD 2.EBBR-SID.05b	Standard Departure Chart - Instrument - ICAO: RWY 25L (D - Q Departures)
AD 2.EBBR-SID.05c	Standard Departure Chart - Instrument - ICAO: RWY 25L (E - G Departures; RNAV1 Overlay)
AD 2.EBBR-SID.05d	Standard Departure Chart - Instrument - ICAO: RWY 25L (K Departures; RNAV1 Overlay)
AD 2.EBBR-SID.06a	Standard Departure Chart - Instrument - ICAO: RWY 25R (C Departures)
AD 2.EBBR-SID.06b	Standard Departure Chart - Instrument - ICAO: RWY 25R (D - Z Departures)
AD 2.EBBR-SID.06c	Standard Departure Chart - Instrument - ICAO: RWY 25R (G Departures; RNAV1 Overlay)
AD 2.EBBR-SID.06d	Standard Departure Chart - Instrument - ICAO: RWY 25R (D - K Departures; RNAV1 Overlay)
AD 2.EBBR-SID.06e	Standard Departure Chart - Instrument - ICAO: RWY 25R (M Departures; RNAV1 Overlay)
AD 2.EBBR-IAC.01	Instrument Approach Chart - ICAO: ILS or LOC a RWY 25R (IAF ANT/KERKY)
AD 2.EBBR-IAC.02	Instrument Approach Chart - ICAO: ILS or LOC b RWY 25R (IAF FLO)
AD 2.EBBR-IAC.03	Instrument Approach Chart - ICAO: ILS or LOC a RWY 25L (IAF ANT/KERKY)
AD 2.EBBR-IAC.04	Instrument Approach Chart - ICAO: ILS or LOC b RWY 25L (IAF FLO)
AD 2.EBBR-IAC.05	Instrument Approach Chart - ICAO: VOR z RWY 25L (IAF ANT/KERKY)
AD 2.EBBR-IAC.06	Instrument Approach Chart - ICAO: VOR y RWY 25L (IAF FLO)
AD 2.EBBR-IAC.07a	Instrument Approach Chart - ICAO: ILS or LOC RWY 01
AD 2.EBBR-IAC.07b	Instrument Approach Chart - ICAO: ILS or LOC RWY 01. Appendix: Alternate Routes RWY 01 - On ATC discretion only
AD 2.EBBR-IAC.08	Instrument Approach Chart - ICAO: VOR RWY 07R
AD 2.EBBR-IAC.09	Instrument Approach Chart - ICAO: ILS or LOC RWY 19
AD 2.EBBR-IAC.10	Instrument Approach Chart - ICAO: VOR RWY 07L

AD 2.EBBR-IAC.11	Instrument Approach Chart - ICAO: RNP RWY 01
AD 2.EBBR-IAC.11a	Instrument Approach Chart - ICAO: RNP RWY 01. Appendix: FAS Datablock
AD 2.EBBR-IAC.12	Instrument Approach Chart - ICAO: RNP RWY 25L
AD 2.EBBR-IAC.12a	Instrument Approach Chart - ICAO: RNP RWY 25L. Appendix: FAS Datablock
AD 2.EBBR-IAC.13	Instrument Approach Chart - ICAO: RNP RWY 25R
AD 2.EBBR-IAC.13a	Instrument Approach Chart - ICAO: RNP RWY 25R. Appendix: FAS Datablock
AD 2.EBBR-IAC.14	Instrument Approach Chart - ICAO: RNP RWY 19
AD 2.EBBR-IAC.14a	Instrument Approach Chart - ICAO: RNP RWY 19. Appendix: FAS Datablock
AD 2.EBBR-VAC.01	Visual Approach Chart - ICAO

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