

## ENR 2.2 OTHER REGULATED AIRSPACE

## 1 DELEGATION OF THE RESPONSIBILITY FOR PROVISION OF ATS

## 1.1 ATS IN AREAS IN AMSTERDAM FIR DELEGATED TO ADJACENT STATES

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>ABNED area</b> 515710N 0022129E - 520027N 0031019E - 512850N 0031019E - 513813N 0023000E - 512720N 0023000E - 513000N 0020000E - 515710N 0022129E.  <u>FL 245</u> FL 215  Class of airspace: <b>C</b>	London AC (Swanwick)	London Control En H24	118.480	NIL
<b>AMRIV area</b> 515710N 0022129E - 515827N 0024001E - 513555N 0024001E - 513813N 0023000E - 512720N 0023000E - 513000N 0020000E - 515710N 0022129E.  <u>FL 215</u> FL 195  Class of airspace: <b>C</b>  <u>FL 195</u> FL 055  Class of airspace: <b>A</b>	London TC (Swanwick)	London Control En H24	135.425	NIL
<b>BULAM area</b> 512402N 0020000E - 513000N 0020000E - 512720N 0023000E - 513813N 0023000E - 512537N 0032423E - 511334N 0032423E - 512402N 0020000E.  <u>FL 255</u> FL 245  Class of airspace: <b>C</b>	Brussels ACC	Brussels Control En H24	128.805	NIL

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>EBTRA North B</b> 511032N 0042037E - 512049N 0042812E - 512254N 0043326E - 512649N 0044320E - 512650N 0044925E - along the Belgian-Dutch border - 512651N 0050018E - 512651N 0050400E - 512603N 0050610E - 511857N 0052158E - 511654N 0052630E - along the Belgian-Dutch border - 510133N 0054629E - 505729N 0052350E - 505342N 0050316E - 505830N 0043650E - 511032N 0042037E.  <u>FL 660</u> FL 195 Class of airspace: <b>C</b>  <u>FL 195</u> FL 095 Class of airspace: <b>B</b>	Steenokkerzeel ATCC	Belga Radar En H24	284.850 PRI 378.425 139.975	During activation of EBTRA NB, a corridor between the northern limit of the Maastricht area and a line from 510131N 0054635E to 510654N 0060336E is delegated to Steenokkerzeel ATCC.
<b>Eijsden area</b> 504724N 0054146E - 504611N 0054446E - along the Dutch-Belgian border - 504724N 0054146E.  <u>FL 095</u> 2000 FT AMSL Class of airspace: <b>C</b>  <u>2000 FT AMSL</u> GND Class of airspace: <b>G</b>	Brussels ACC  Liège APP	Brussels Control En H24  Liège Approach En H24	129.575  119.280	BTN FL 055 and FL 095 and below 2000 FT AMSL.  BTN 2000 FT AMSL and FL 055.
<b>Emden block clearance area</b> 532750N 0065237E - 532356N 0065658E - 532011N 0065937E - 531900N 0070130E - 531835N 0070547E - 531714N 0065828E - 531743N 0065614E - 532641N 0065132E - 532750N 0065237E.  <u>2500 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b>  <u>1500 FT AMSL</u> 1000 FT AMSL Class of airspace: <b>G</b>	Bremen ACC	Bremen Radar En H24	120.225	NIL
<b>IBNOS area</b> 515702N 0022123E - 515756N 0031019E - 512850N 0031019E - 514245N 0021001E - 515702N 0022123E.  <u>FL 660</u> FL 245 Class of airspace: <b>C</b>	London AC (Swanwick)	London Control En H24	128.160 118.480	Sector 13 Sector 14

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>Kleine-Brogel CTR 2</b> Lateral limits as Kleine-Brogel CTR 2 (see ENR 2.1). <u>3000 FT AMSL</u> GND Class of airspace: <b>D</b>	Kleine-Brogel APP	Kleine-Brogel Tower En HO	134.105	Outside Kleine Brogel OPR HR, no entry without permission from Dutch MIL INFO (132.350).
<b>L179 area</b> 511521N 0053324E - 511455N 0055708E - 511100N 0055825E - 511100N 0054606E - along the Dutch-Belgian border - 511521N 0053324E. <u>FL 195</u> FL 095 Class of airspace: <b>B</b>	Brussels ACC	Brussels Control En H24	129.575	East Low sector BTN FL 095 and FL 185.
			128.450	East High sector BTN FL 185 and FL 195.
<b>Maastricht area</b> 511521N 0053324E - 511446N 0060454E - along the Dutch-German border - 504516N 0060114E - along the Dutch-Belgian border - 511521N 0053324E. <u>FL 245</u> FL 195 Class of airspace: <b>C</b>	Brussels ACC	Brussels Control En H24	128.450	East High Sector BTN FL 185 and FL 195.
	Steenokkerzeel ATCC	Belga Radar En HO	284.850 PRI 378.425 139.975	During activation of EBTRA NB, a corridor between the northern limit of the Maastricht area and a line from 510131N 0054635E to 510654N 0060336E is delegated to Steenokkerzeel ATCC.
<b>Maastricht TMA 2</b> Lateral limits as Maastricht TMA 2 (see ENR 2.1) excluding the ROMIN area, WORMS North area and WORMS South area. <u>FL 195</u> FL 095 Class of airspace: <b>B</b>	Brussel ACC	Brussels Control En H24	129.575	East Low sector BTN FL 095 and FL 185.
			128.450	East High Sector BTN FL 185 and FL 195.
<b>ROMIN area</b> 511455N 0055708E - 511446N 0060454E - along the Dutch-German border - 510515N 0060018E - 511455N 0055708E. <u>FL 195</u> FL 095 Class of airspace: <b>B</b> <u>FL 095</u> 3500 FT AMSL Class of airspace: <b>D</b>	Langen ACC	Langen Radar En H24	119.110	NIL

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>SASKI A area</b> 512719N 0023000E - along the Dutch-Belgian border - 512223N 0032147E - 511610N 0040651E - 512531N 0032419E - 512850N 0031019E - 513555N 0024001E - 513813N 0023000E - 512719N 0023000E.  <u>FL 245</u> FL 195  Class of airspace: <b>C</b>  <u>FL 195</u> FL 055  Class of airspace: <b>A</b>	Brussels ACC	Brussels Control En H24	128.805  128.805  127.230	West side of SASKI A area: North Low sector BTN FL 055 and FL 245.  East side of SASKI A area: North Low sector BTN FL 055 and FL 185.  East side of SASKI A area: West High sector BTN FL 185 and FL 245.
<b>SASKI B area</b> 514245N 0021001E - 513813N 0023000E - 512720N 0023000E - 513000N 0020000E - 514245N 0021001E.  <u>FL 660</u> FL 245  Class of airspace: <b>C</b>	London AC (Swanwick)	London Control En H24	128.160  118.480	Sector 13  Sector 14
<b>VENLO area</b> 514022N 0060212E - 512000N 0060209E - 511455N 0055708E - 511446N 0060454E - along the Dutch-German border - 514022N 0060212E.  <u>FL 195</u> FL 065  Class of airspace: <b>B</b>  <u>FL 065</u> 3000 FT AMSL  Class of airspace: <b>E</b>	Langen ACC	Langen Radar En H24	119.110	NIL
<b>WORMS North area</b> 505518N 0060331E - along the Dutch-German border - 505442N 0060504E - 505442N 0060343E - 505518N 0060331E.  <u>FL 195</u> FL 095  Class of airspace: <b>B</b>  <u>FL 095</u> 3000 FT AMSL  Class of airspace: <b>D</b>	Langen ACC	Langen Radar En H24	119.110	NIL

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>WORMS South area</b> 505442N 0060343E - 505442N 0060504E - along the Dutch-German border - 505140N 0060441E - 505442N 0060343E.  <u>FL 195</u> FL 095  Class of airspace: <b>B</b>  <u>FL 095</u> 1500 FT AMSL  Class of airspace: <b>D</b>	Langen ACC	Langen Radar En H24	119.110	NIL
<b>Zeeland area</b> 512356N 0030600E - along the Dutch-Belgian border - 512223N 0032147E - 511436N 0040157E - 512627N 0030740E - 512356N 0030600E.  <u>FL 055</u> 3500 FT AMSL  Class of airspace: <b>E</b>	Brussels ACC	Brussels Control En H24	128.805	NIL

## 1.2 ATS IN AREAS OUTSIDE AMSTERDAM FIR DELEGATED TO THE NETHERLANDS

### 1.2.1 North Sea area V

The Netherlands and the United Kingdom have arranged, through the exchange of a bi-lateral agreement, to transfer responsibility for providing FIS and ALRS in the North Sea area V<sup>1)</sup>.

<sup>1)</sup> The North Sea area V is situated in the London FIR and Scottish FIR.

The United Kingdom strongly recommends flights in the North Sea area V to:

- maintain two-way radio communication with Amsterdam FIC;
- to file a flight plan.

Flights shall carry and use an operational transponder in the North Sea area V.

Procedures and communications will be as if the airspace was an integral part of the Amsterdam FIR (see paragraph 3). The North Sea area V is depicted on the chart ENR 6-3.1.

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>North Sea area V</b> 550000N 0050000E - along FIR boundary - 525552N 0030936E - 531803N 0030319E - 532809N 0030055E - 533503N 0025913E - 534003N 0025719E - 535745N 0025155E - 542245N 0024543E - 543715N 0025349E - 554552N 0032208E - 551958N 0041955E - 550000N 0050000E.  <u>FL 055</u> <sup>1)</sup> SFC  Class of airspace: <b>G</b>	Amsterdam FIC	Amsterdam Information En H24	See ENR 6-2.2	<sup>1)</sup> Upper limit below EGD323D FL 045.  For details about EGD323D see UK AIP.

**2 FREE ROUTE AIRSPACE (FRA)**

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use	Frequency purpose	Remarks
1	2	3	4	5
<b>MUAC FRA</b> Lateral limits as Amsterdam FIR (see ENR 2.1) excluding the IBNOS and SASKI B area. FL 660 FL 245 Class of airspace: C	Maastricht UAC	Maastricht Radar En H24	See ENR 6-2.4.	<b>MUAC FRA</b> extends over the state territories of Belgium, Luxemburg, the Netherlands and part of Germany.  For hours of applicability see ENR 1.3 paragraph 4.2.

**3 NORTH SEA OPERATIONS, FLIGHT INFORMATION SERVICE AND ALERTING SERVICE**

**3.1 GENERAL**

Amsterdam FIC provides FIS and ALRS in the North Sea area Amsterdam and the North Sea area V (see paragraph 2.1) to safeguard military and civil air traffic above the North Sea up to and including FL 055<sup>1)</sup>. For area boundaries see chart ENR 6-3.1.

<sup>1)</sup> Below EGD323D up to and including FL 045.

**3.1.1 North Sea area Amsterdam**

The North Sea area Amsterdam is an RTMZ (combined RMZ and TMZ). In this area all flights shall file a flight plan for the purpose of receiving flight information service and alerting service.

The North Sea area Amsterdam is depicted on ENR 6-3.1.

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>North Sea area Amsterdam</b> <sup>1)</sup> 55°00'00.00"N 005°00'00.00"E; along parallel to 55°00'00.00"N 006°30'00.00"E; 53°40'00.00"N 006°30'00.00"E; 53°30'00.00"N 005°34'00.00"E; 53°26'24.00"N 005°10'00.00"E; 53°22'29.07"N 004°52'20.47"E; along anticlockwise arc (radius 8 NM, centre 53°15'00.00"N 004°57'00.00"E) to 53°15'00.00"N 004°43'40.92"E; along parallel to 53°15'00.00"N 004°37'01.38"E; along anticlockwise arc (radius 12 NM, centre 53°15'00.00"N 004°57'00.00"E) to 53°11'06.00"N 004°38'07.51"E; 53°09'17.00"N 004°40'28.00"E; 53°06'10.00"N 004°30'56.00"E; 53°05'00.00"N 004°21'00.00"E; 52°48'19.15"N 004°21'00.00"E; 52°45'25.00"N 004°28'03.00"E; 52°43'30.00"N 004°33'40.00"E; 52°43'49.91"N 004°36'45.15"E; 52°31'28.84"N 004°33'57.79"E; 52°25'22.30"N 004°31'28.45"E; 52°16'49.35"N 004°25'35.00"E; 52°12'17.73"N 004°21'31.43"E; 52°08'56.80"N 004°17'31.07"E; 51°59'40.04"N 004°04'25.04"E; 52°00'26.39"N 004°00'34.71"E; 51°49'19.04"N 003°49'57.08"E; 51°44'23.05"N 003°40'35.57"E; 51°35'50.00"N 003°28'43.68"E; along parallel to 51°35'50.00"N 003°13'49.65"E; 51°23'55.58"N 003°06'00.49"E; 51°30'00.00"N 002°00'00.00"E; to point of origin.  <u>FL 055</u> SFC  Class of airspace: <b>G</b>	Amsterdam FIC	Amsterdam Information En H24	See ENR 6-2.2	<sup>1)</sup> Controlled airspace excluded.

### 3.1.2 Airspace structure

ATS routes (HMRs) and protected airspace (HTZs and HPZs) have been established for helicopters operating in support of the offshore oil and gas industry.

**Note:** hereunder the term 'platform' is used for fixed offshore installations equipped with a helipad; mobile installations equipped with a helipad are referred to as 'rigs'.

### 3.1.3 Operating procedures

In co-operation with all States having an interest in offshore operations over the North Sea, procedures have been established for military and civil air traffic over the whole North Sea. To meet the safety requirements of all parties concerned, operators are to ensure that pilots adhere to the procedures described in this chart.

## 3.2 AIRSPACE STRUCTURE

### 3.2.1 Helicopter main routes

**Definition:** a helicopter main route (HMR) is an ATS route, established by the appropriate ATS authority, where civil helicopters operate on a regular and frequent basis, and where alerting service, flight information service or advisory service (see notes) may be provided.

HMRs have no lateral dimensions.

**Note:** flights along helicopter routes situated within the limits of an air traffic services area, are provided with air traffic service according to the airspace classification of that area.

HMRs are indicated by the name 'KY' followed by a number and are described in ENR 3.4 and depicted on chart ENR 6-3.1.

In radio communication HMRs will be pronounced as, 'KOPTER YANKEE' followed by the appropriate number.

**3.2.2 Helicopter traffic zones (HTZ) and helicopter protection zones (HPZ)**

HTZs: an area established around a platform or rig with a helideck to safeguard helicopter approaches and departures. A HTZ extends vertically from MSL up to and including 2000 FT AMSL and is horizontally defined as a circle of 5 NM radius, unless otherwise specified.

HPZs: an area established around two or more platforms and/or rigs to safeguard helicopter approaches, departures, and extensive uncoordinated inter-platform traffic. A HPZ extends vertically from MSL up to and including 2000 FT AMSL. A HPZ is horizontally defined as the smallest area encompassing the HTZ(s) of the platforms and/or rigs, including an instrument approach area.

On the basis of assignment to concession holders, some HPZs have been divided in sectors (see chart ENR 6-3.1), through which a more effective flight information service will be possible.

**Note**

- when a part of a HPZ and/or HTZ is situated below controlled airspace with a lower limit below 2000 FT AMSL, the upper limit of that area within the HPZ or HTZ will be equal to the lower limit of the aforementioned controlled airspace.
- the lateral limits of HTZs located in a HPZ are restricted to the lateral limits of the HPZ.

**3.2.3 Platform positions****Note:**

- for positions of mobile rigs see relevant NOTAM.
- only platforms with a helideck have a location indicator.

Platform	Location indicator	Co-ordinates	Within HPZ
A12-CPP	EHAK	55°23'57"N 003°48'37"E*	-
A18-A	EHAX	55°06'18"N 003°49'54"E	-
AWG-1	EHMA	53°29'31"N 005°56'25"E*	-
B13-A	EHBL	55°17'05"N 004°05'48"E	-
BARD 1	EHHL	542106N 0060036E	-
BKR02-Z02 <sup>5)</sup>	EHHZ	535725N 0062827E	-
Borssele Alpha (BSA)	EHSG	514200N 0030324E	-
Borssele Beta (BSB)	EHSF	514336N 0025758E	-
BORWIN BETA	EHHK	542119N 0060129E	-
BORWIN GAMMA <sup>6)</sup>	EHHM	542316N 0062251E	-
Buitengaats / BG-OHVS2	EHHW	54°02'12"N 006°02'32"E	-
BW0 <sup>7)</sup>	EHHX	540247N 0062801E	-
D12-A <sup>1)</sup>	NIL	542032N 0025152E*	Dermar
D12-B	EHDS	542421N 0024900E	Dermar
D15-FA-1	EHDV	54°19'29"N 002°56'03"E*	Dermar
D18-A <sup>1)</sup>	NIL	540857N 0024919E	-
Deutsche Bucht (DBU OSS)	EHGM	541810N 0054712E	-
DOLWIN A <sup>8)</sup>	EHHY	535949N 0062516E	-
E17a-A	EHER	54°05'53"N 003°21'37"E*	-
EUROPLATFORM	EHSA	51°59'51"N 003°16'27"E*	-
F2-A	EHFB	54°56'40"N 004°34'21"E*	Hanze B
F3-FB-1	EHFD	54°51'11"N 004°41'41"E*	Hanze A
F3-OLT	EHFC	54°51'11"N 004°43'34"E*	Hanze A
F15-A	EHFO	54°12'57"N 004°49'38"E*	-
G14-A	EHGN	54°13'26"N 005°29'55"E*	Goromand
G14-B	EHGO	54°10'10"N 005°26'05"E*	Goromand
G16A-A	EHGP	54°07'31"N 005°12'08"E*	Goromand
G16a-B	EHGS	54°07'09"N 005°15'47"E	Goromand
G17D-A	EHGQ	54°02'57"N 005°25'55"E*	Goromand
G17D-AP <sup>1)</sup>	NIL	54°02'58"N 005°26'16"E*	Goromand
Global Tech I <sup>2)</sup>	EHHI	54°30'49"N 006°22'07"E	-
GOEREE	EHSC	51°55'30"N 003°40'06"E*	-
HELDER-A <sup>1)</sup>	NIL	52°55'13"N 004°05'53"E*	Unicorn B
HELM-A <sup>1)</sup>	NIL	52°52'16"N 004°08'30"E*	Unicorn B
Hohe See	EHHH	542640N 0061940E	-
Hollandse Kust Noord (HKN)	EHQN	523914N 0041543E	Unicorn A
Hollandse Kust West Alpha (HKWA)	EHQW	524047N 0034817E	Mebot
Hollandse Kust Zuid Alpha (HKZA) <sup>9)</sup>	EHQS	521910N 0040235E	-
J6-A	EHJA	53°49'24"N 002°56'38"E*	Markham B
K1-A	EHJB	53°50'35"N 003°04'41"E*	Markham B
K2B-A	EHJC	53°56'55"N 003°39'44"E*	-
K4-A	EHJE	53°45'01"N 003°18'34"E*	Markham B



Platform	Location indicator	Co-ordinates	Within HPZ
K4-BE	EHJD	53°45'54"N 003°11'43"E*	Markham B
K5-ACP	EHJF	53°41'44"N 003°20'20"E*	Markham B
K5-B	EHJG	53°42'50"N 003°25'38"E*	Markham B
K5-CU	EHJJ	53°48'54"N 003°26'58"E	Markham B
K5-D	EHJI	53°41'27"N 003°29'14"E*	Markham B
K5-EN/C	EHJH	53°42'38"N 003°30'40"E*	Markham B
K6-D	EHKG	53°40'30"N 003°49'42"E*	Pentacon F
K6-DN	EHKC	53°43'32"N 003°48'16"E*	Pentacon F
K6-GT	EHKB	53°45'09"N 003°54'53"E*	Pentacon F
K6-PC	EHKE	53°41'54"N 003°52'08"E*	Pentacon F
K6-PN <sup>1)</sup>	NIL	53°41'55"N 003°44'52"E*	Pentacon F
K7-FB-1 <sup>1)</sup>	NIL	53°37'45"N 003°04'03"E	Markham A
K8-FA-1	EHJM	53°29'58"N 003°22'08"E*	Markham A
K8-FA-2	EHJO	53°30'52"N 003°25'03"E*	Markham A
K8-FA-3	EHJN	53°32'29"N 003°25'20"E*	Markham A
K9-AB-A <sup>1)</sup>	NIL	533112N 0035933E*	Pentacon C
K9-AB-B	EHKK	53°33'03"N 003°46'46"E*	Pentacon C
K9C-A <sup>1)</sup>	NIL	533909N 0035222E*	Pentacon C
K12-B	EHKP	53°20'27"N 003°53'37"E*	Pentacon C
K12-C	NIL	53°27'30"N 003°54'16"E*	Pentacon C
K12-D	EHKO	53°25'18"N 003°53'06"E*	Pentacon C
K12-G	EHKQ	53°21'19"N 003°58'56"E*	Pentacon C
K12-K	EHKX	53°25'22"N 003°57'37"E	Pentacon C
K13-A	EHJR	53°13'02"N 003°13'08"E*	-
K14-FA-1A	EHKW	53°16'07"N 003°37'35"E*	Pentacon A
K14-FA-1C	EHKV	53°16'07"N 003°37'35"E*	Pentacon A
K15-FA-1	EHKT	53°14'50"N 003°59'10"E*	Pentacon A
K15-FB-1	EHKS	53°16'32"N 003°52'18"E*	Pentacon A
K17-FA-1 <sup>1)</sup>	NIL	53°03'46"N 003°32'15"E*	-
L2-FA-1	EHFQ	53°57'38"N 004°29'46"E*	Pentacon L
L4-A	EHKJ	53°43'28"N 004°05'51"E*	Pentacon F
L4-PN	EHKA	53°49'24"N 004°02'59"E*	Pentacon F
L5-B <sup>1)</sup>	NIL	53°42'15"N 004°36'08"E*	Pentacon G
L5-C	EHMF	53°41'45"N 004°38'43"E*	Pentacon G
L5-D	EHFT	53°49'05"N 004°30'46"E	Pentacon L
L5-FA-1	EHFR	53°48'39"N 004°21'04"E*	Pentacon L
L8-G <sup>1)</sup>	NIL	53°34'52"N 004°36'10"E*	Pentacon G
L8-P <sup>1)</sup>	NIL	53°38'24"N 004°33'45"E*	Pentacon G
L8-P4	EHLT	53°39'38"N 004°32'22"E*	Pentacon G
L9-FA-1 <sup>1)</sup>	NIL	53°33'00"N 004°43'46"E	-
L9-FB-1 <sup>1)</sup>	NIL	53°33'59"N 004°52'13"E	-
L9-FF-1	EHMG	53°36'52"N 004°57'37"E*	-
L10-A	EHLL	532412N 0041202E*	Pentacon C
L10-B	EHLH	53°27'24"N 004°13'54"E*	Pentacon C
L10-E	EHLI	53°25'54"N 004°14'08"E*	Pentacon C
L10-F	EHLO	53°23'11"N 004°15'34"E*	Pentacon C
L10-L	EHLJ	53°25'06"N 004°11'01"E*	Pentacon C
L10-M	EHLM	53°24'19"N 004°01'21"E*	Pentacon C
L11-B	EHLX	53°28'20"N 004°29'22"E*	Pentacon D
L13-FC-1	EHLQ	53°17'00"N 004°12'30"E*	Pentacon A
L13-FE-1	EHLP	53°18'47"N 004°14'48"E*	Pentacon A
L15-FA-1	EHMR	53°19'46"N 004°49'51"E*	-
OSY-OS1ST	EHRS	51°34'57"N 002°52'07"E	-
P6-A <sup>1)</sup>	NIL	52°45'18"N 003°45'22"E*	Mebot
P9-A (HORIZON) <sup>1)</sup>	NIL	52°33'09"N 003°44'27"E*	-
P11-B (DE RUYTER)	EHPG	52°21'36"N 003°20'31"E	-
P15-ACD (RIJN-C)	EHPK	52°17'25"N 003°48'58"E*	Rynveld
P15-F	EHPJ	52°18'21"N 003°41'06"E*	Rynveld

Platform	Location indicator	Co-ordinates	Within HPZ
P18-A	EHPN	52°07'37"N 003°56'16"E*	Rynveld
Q1-D	EHQM	52°52'20"N 004°10'17"E	Unicorn B
Q4-C	EHQH	52°49'32"N 004°17'00"E*	Unicorn A
Q10-A <sup>1)</sup>	NIL	522947N 0041257E	-
Q13-A <sup>3)</sup>	EHQT	52°11'28"N 004°08'11"E	-
Riffgat <sup>4)</sup>	EHNR	53°41'27"N 006°29'01"E	-
Veja Mate	EHGL	54°19'19"N 005°52'55"E	-
ZUIDWAL <sup>1)</sup>	NIL	53°11'09"N 005°09'55"E*	-

- <sup>1)</sup> No helideck available.
- <sup>2)</sup> Lateral limits HTZ Global Tech I:  
54°32'46.34"N 006°30'00.00"E;  
54°28'51.34"N 006°30'00.00"E;  
along clockwise arc (radius 5 NM, centre 54°30'48.60"N 006°22'06.60"E) to  
to point of origin.
- <sup>3)</sup> Lateral limits HTZ Q13-A:  
52°13'49.99"N 004°01'01.92"E;  
along clockwise arc (radius 5 NM, centre 52°11'27.53"N 004°08'10.92"E) to  
52°07'03.79"N 004°04'19.91"E;  
along anticlockwise arc (radius 5 NM, centre 52°07'37.14"N 003°56'16.23"E) to  
52°09'26.42"N 004°03'49.62"E;  
to point of origin.
- <sup>4)</sup> Lateral limits HTZ Riffgat:  
53°46'24.34"N 006°30'00.00"E;  
53°40'00.00"N 006°30'00.00"E;  
along Dutch-German border to  
53°37'02.74"N 006°32'58.49"E;  
along clockwise arc (radius 5 NM, centre 53°41'26.90"N 006°29'00.90"E) to  
to point of origin.
- <sup>5)</sup> Lateral limits HTZ BKR02-Z02:  
540220N 0063000E;  
535231N 0063000E;  
along clockwise arc (radius 5 NM, centre 535725N 0062827E) to  
540220N 0063000E.
- <sup>6)</sup> Lateral limits HTZ BORWIN GAMMA:  
542601N 0063000E;  
542032N 0063000E;  
along clockwise arc (radius 5 NM, centre 542316N 0062251E) to  
542601N 0063000E.
- <sup>7)</sup> Lateral limits HTZ BW0:  
540739N 0063000E;  
535756N 0063000E;  
along clockwise arc (radius 5 NM, centre 540247N 0062801E) to  
540739N 0063000E.
- <sup>8)</sup> Lateral limits HTZ DOLWIN A:  
540358N 0063000E;  
535541N 0063000E;  
along clockwise arc (radius 5 NM, centre 535949N 0062516E) to  
540358N 0063000E.
- <sup>9)</sup> Lateral limits HTZ Hollandse Kust Zuid Alpha (HKZA):  
522158N 0035550E -  
along clockwise arc (radius 5 NM, centre 521910N 0040235E) -  
521419N 0040044E -  
522158N 0035550E.

### 3.2.4 Helicopter protection zones (HPZ)

Identification name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction)
<b>DERMAR</b> 542431N 0024641E - along clockwise arc (radius 5 NM, centre 542032N 0025152E) - 542508N 0025514E - 542404N 0025926E - along clockwise arc (radius 5 NM, centre 541929N 0025603E) - 541454N 0025241E - 541615N 0024721E - 542245N 0024543E - 542431N 0024641E.	2000 ft AMSL MSL	H24

Identification name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction)
<b>GOROMAND</b> 54°11'51.54"N 005°07'55.20"E; 54°17'47.18"N 005°25'43.48"E; along clockwise arc (radius 5 NM, centre 54°13'26.44"N 005°29'55.13"E) to 54°12'25.95"N 005°38'15.60"E; 54°01'58.18"N 005°34'34.61"E; along clockwise arc (radius 5 NM, centre 54°02'58.42"N 005°26'16.15"E) to 53°58'35.89"N 005°22'11.40"E; 54°03'08.41"N 005°08'04.41"E; along clockwise arc (radius 5 NM, centre 54°07'31.41"N 005°12'08.12"E) to point of origin.	<u>2000 ft AMSL</u> MSL	H24
<b>HANZE A</b> 54°50'52.74"N 004°31'10.57"E; 54°57'15.91"N 004°45'25.56"E; 54°51'34.56"N 004°54'56.39"E; 54°48'09.81"N 004°50'26.34"E; along clockwise arc (radius 5 NM, centre 54°51'11.48"N 004°43'33.99"E) to 54°46'12.02"N 004°43'33.87"E; 54°46'12.07"N 004°41'50.14"E; along clockwise arc (radius 5 NM, centre 54°51'11.48"N 004°41'40.98"E) to 54°48'08.68"N 004°34'50.13"E; to point of origin.	<u>2000 ft AMSL</u> MSL	H24
<b>HANZE B</b> 54°53'37.27"N 004°27'29.74"E; along clockwise arc (radius 5 NM, centre 54°56'40.48"N 004°34'20.96"E) to 55°01'33.11"N 004°32'30.44"E; 55°02'08.35"N 004°37'13.36"E; 54°57'15.91"N 004°45'25.56"E; 54°50'52.74"N 004°31'10.57"E; to point of origin.	<u>2000 ft AMSL</u> MSL	H24
<b>HANZE C</b> 55°02'08.35"N 004°37'13.36"E; 55°03'58.30"N 004°52'06.68"E; 55°00'00.00"N 005°00'00.00"E; along parallel to 55°00'00.00"N 005°02'32.30"E; along clockwise arc (radius 5 NM, centre 54°59'06.00"N 004°54'00.00"E) to 54°56'04.33"N 005°00'53.69"E; 54°51'34.56"N 004°54'56.39"E; to point of origin.	<u>2000 ft AMSL</u> MSL	H24
<b>MARKHAM A</b> 53°43'00.00"N 002°56'25.38"E; along parallel to 53°43'00.00"N 003°00'00.00"E; 53°35'17.67"N 003°35'52.74"E; 53°29'30.40"N 003°33'06.30"E; along clockwise arc (radius 5 NM, centre 53°30'52.27"N 003°25'03.03"E) to 53°26'26.16"N 003°28'53.48"E; 53°25'32.25"N 003°25'58.70"E; along clockwise arc (radius 5 NM, centre 53°29'58.27"N 003°22'08.03"E) to 53°26'40.75"N 003°15'50.63"E; 53°33'30.52"N 002°59'38.19"E; to point of origin.	<u>2000 ft AMSL</u> MSL	H24
<b>MARKHAM B</b> 53°55'08.88"N 002°52'42.95"E; 53°55'34.24"N 003°04'10.04"E; along clockwise arc (radius 5 NM, centre 53°50'35.29"N 003°04'40.97"E) to 53°55'32.38"N 003°05'45.31"E; 53°53'53.09"N 003°28'06.30"E; along clockwise arc (radius 5 NM, centre 53°48'56.00"N 003°27'02.00"E) to 53°50'32.54"N 003°35'01.26"E; 53°44'14.84"N 003°38'38.09"E; along clockwise arc (radius 5 NM, centre 53°42'38.30"N 003°30'40.02"E) to 53°41'16.06"N 003°38'45.35"E; 53°35'17.67"N 003°35'52.74"E; 53°43'00.00"N 003°00'00.00"E; along parallel to 53°43'00.00"N 002°56'25.38"E; to point of origin.	<u>2000 ft AMSL</u> MSL	H24

Identification name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction)
<p><b>MEBOT</b> 52°46'54.17"N 003°37'34.29"E; along clockwise arc (radius 5 NM, centre 52°45'18.20"N 003°45'22.15"E) to 52°49'33.15"N 003°49'41.61"E; 52°48'29.04"N 003°52'32.79"E; along clockwise arc (radius 5 NM, centre 52°44'14.20"N 003°48'13.16"E) to 52°43'05.74"N 003°56'13.54"E; 52°39'37.82"N 003°54'52.94"E; along clockwise arc (radius 5 NM, centre 52°40'46.19"N 003°46'53.16"E) to 52°36'30.89"N 003°42'35.50"E; 52°37'45.77"N 003°39'14.69"E; along clockwise arc (radius 5 NM, centre 52°42'01.19"N 003°43'32.15"E) to 52°43'37.04"N 003°35'44.81"E; to point of origin.</p>	<p><u>2000 ft AMSL</u> MSL</p>	<p>H24</p>
<p><b>PENTACON A</b> 53°17'50.88"N 003°29'46.13"E; along clockwise arc (radius 5 NM, centre 53°16'07.25"N 003°37'35.08"E) to 53°19'57.35"N 003°42'55.21"E; 53°19'57.28"N 004°23'55.14"E; along parallel to 53°19'57.28"N 004°25'07.42"E; 53°14'27.45"N 004°19'39.78"E; along clockwise arc (radius 5 NM, centre 53°17'00.28"N 004°12'30.13"E) to 53°12'14.60"N 004°10'00.00"E; 53°09'23.45"N 004°01'26.02"E; along anticlockwise arc (radius 5 NM, centre 53°04'53.24"N 003°57'51.13"E) to 53°08'23.82"N 003°51'57.09"E; 53°06'32.48"N 003°36'19.57"E; along clockwise arc (radius 5 NM, centre 53°11'26.24"N 003°34'42.09"E) to 53°13'09.68"N 003°26'53.88"E; to point of origin.</p>	<p><u>2000 ft AMSL</u> MSL</p>	<p>H24</p>
<p><b>PENTACON C</b> 53°39'57.12"N 003°39'36.40"E; 53°39'57.30"N 003°59'55.09"E; 53°29'57.29"N 004°04'00.00"E; along parallel to 53°29'57.29"N 004°23'55.14"E; 53°19'57.28"N 004°23'55.14"E; 53°19'57.35"N 003°42'55.21"E; along anticlockwise arc (radius 5 NM, centre 53°16'07.25"N 003°37'35.08"E) to 53°21'05.44"N 003°38'22.47"E; to point of origin.</p>	<p><u>2000 ft AMSL</u> MSL</p>	<p>H24</p>
<p><b>PENTACON D</b> 53°29'57.29"N 004°23'55.14"E; along parallel to 53°29'57.29"N 004°35'07.72"E; 53°19'57.28"N 004°25'07.42"E; along parallel to 53°19'57.28"N 004°23'55.14"E; to point of origin.</p>	<p><u>2000 ft AMSL</u> MSL</p>	<p>H24</p>
<p><b>PENTACON F</b> 53°47'40.41"N 003°43'32.87"E; 53°53'33.00"N 003°58'16.67"E; along clockwise arc (radius 5 NM, centre 53°49'24.33"N 004°02'59.05"E) to 53°54'22.79"N 004°02'16.63"E; 53°54'53.19"N 004°12'38.01"E; 53°48'39.34"N 004°12'38.01"E; along anticlockwise arc (radius 5 NM, centre 53°48'39.34"N 004°21'04.08"E) to 53°46'53.64"N 004°13'10.74"E; 53°41'24.42"N 004°16'40.49"E; 53°29'57.29"N 004°23'55.14"E; along parallel to 53°29'57.29"N 004°04'00.00"E; 53°39'57.30"N 003°59'55.09"E; 53°39'57.12"N 003°39'36.40"E; 53°43'44.32"N 003°39'51.38"E; along clockwise arc (radius 5 NM, centre 53°43'32.31"N 003°48'16.04"E) to point of origin.</p>	<p><u>2000 ft AMSL</u> MSL</p>	<p>H24</p>

Identification name and lateral limits	Upper limit Lower limit	Remarks (time of activity, type of restriction)
<b>PENTACON G</b> 53°41'24.42"N 004°16'40.49"E; 53°49'51.61"N 004°41'41.00"E; 53°43'26.07"N 004°44'18.73"E; along clockwise arc (radius 5 NM, centre 53°42'15.34"N 004°36'08.11"E) to 53°42'15.86"N 004°44'32.90"E; 53°35'00.29"N 004°44'33.44"E; 53°35'00.00"N 004°40'00.00"E; 53°29'57.29"N 004°35'07.72"E; along parallel to 53°29'57.29"N 004°23'55.14"E; to point of origin.	2000 ft AMSL MSL	H24
<b>PENTACON L</b> 53°54'53.19"N 004°12'38.01"E; 54°01'15.23"N 004°23'55.53"E; along clockwise arc (radius 5 NM, centre 53°57'38.37"N 004°29'46.07"E) to 53°58'49.53"N 004°37'59.52"E; 53°49'51.61"N 004°41'41.00"E; 53°41'24.42"N 004°16'40.49"E; 53°46'53.64"N 004°13'10.74"E; along clockwise arc (radius 5 NM, centre 53°48'39.34"N 004°21'04.08"E) to 53°48'39.34"N 004°12'38.01"E; to point of origin.	2000 ft AMSL MSL	H24
<b>RYNVELD</b> 52°26'11.12"N 003°53'07.00"E; 52°09'26.42"N 004°03'49.62"E; along clockwise arc (radius 5 NM, centre 52°07'37.14"N 003°56'16.23"E) to 52°03'41.47"N 003°51'15.90"E; 52°09'24.97"N 003°39'22.29"E; along clockwise arc (radius 5 NM, centre 52°13'21.14"N 003°44'22.21"E) to 52°11'29.52"N 003°36'49.67"E; 52°16'29.33"N 003°33'32.94"E; along clockwise arc (radius 5 NM, centre 52°18'21.15"N 003°41'06.19"E) to 52°20'23.88"N 003°33'40.18"E; 52°26'24.16"N 003°38'04.37"E; along clockwise arc (radius 5 NM, centre 52°24'21.16"N 003°45'31.19"E) to point of origin.	2000 ft AMSL <sup>1)</sup> MSL	H24 <sup>1)</sup> 1500 ft AMSL below Rotterdam TMA 1.
<b>UNICORN A</b> 52°47'38.69"N 004°03'32.63"E; 52°51'42.78"N 004°13'29.22"E; along parallel to 52°51'42.78"N 004°21'00.00"E; 52°49'00.00"N 004°21'00.00"E; 52°46'30.00"N 004°26'00.00"E; 52°46'20.60"N 004°26'37.68"E; 52°42'37.98"N 004°26'11.23"E; along clockwise arc (radius 5 NM, centre 52°42'59.22"N 004°17'59.20"E) to 52°40'21.58"N 004°10'59.93"E; to point of origin.	2000 ft AMSL <sup>1)</sup> MSL	H24 <sup>1)</sup> 1500 ft AMSL below Schiphol TMA 1.
<b>UNICORN B</b> 53°02'36.68"N 003°50'28.55"E; along clockwise arc (radius 5 NM, centre 53°04'53.24"N 003°57'51.13"E) to 53°09'23.45"N 004°01'26.02"E; 53°05'00.00"N 004°10'00.00"E; 53°05'00.11"N 004°17'34.85"E; along clockwise arc (radius 5 NM, centre 53°00'51.25"N 004°12'58.16"E) to 53°02'04.24"N 004°21'00.00"E; 52°51'42.78"N 004°21'00.00"E; along parallel to 52°51'42.78"N 004°13'29.22"E; 52°47'38.69"N 004°03'32.63"E; 52°49'38.03"N 004°01'29.99"E; along clockwise arc (radius 5 NM, centre 52°52'16.23"N 004°08'30.17"E) to 52°50'00.33"N 004°01'09.18"E; to point of origin.	2000 ft AMSL MSL	H24

### 3.3 OPERATING PROCEDURES

#### 3.3.1 Introduction

The procedures hereunder are developed with the aim to segregate civil helicopters engaged in offshore operations and military and other civil air traffic.

### 3.3.2 Operating procedures for helicopters engaged in offshore operations

#### 3.3.2.1 Pilot heliports

The following heliports are available only for North Sea pilotage (see also ENR 5.3):

- EHTP (Pistoolhaven);
- EHYP (YPAD).

Heliports are not connected to the AFTN network.

#### 3.3.2.2 North Sea pilotage areas

Shore-to-ship traffic of helicopters operating for the North Sea pilotage service serve the following pilotage areas off the North Sea coast.

North Sea pilotage area	Co-ordinates <sup>1)</sup>
Maas Center Buoy area (MCB)	520103N 0035331E*
Rotterdam rendez-vous (RRV)	520000N 0030000E*
IJmuiden rendez-vous (YRV)	522957N 0034955E*
IJmuiden Uiterton (YUIT)	522757N 0042455E*
<sup>1)</sup> The North Sea pilotage areas have no defined boundaries.	

#### 3.3.2.3 Routes and altitudes

Civil helicopters shall, whenever possible, operate along published HMRs and within HTZs and HPZs. Along HMRs helicopters shall normally transit westbound at 2000 FT AMSL or FL 040 and eastbound at 3000 FT AMSL or FL 050. Helicopter routes may deviate to facilitate for example DEP EHKD at 2000 FT AMSL and DEST EHKD at 3000 FT AMSL. For a detailed description of the HMRs see ENR 3.4.

Flights along HMRs shall not deviate more than 2 NM from the published track.

When leaving the HMR helicopters should proceed to the platform/rig of destination along the shortest possible distance between HMR and HTZ/HPZ. Pilots should maintain a minimum altitude of 1500 FT AMSL as long as possible.

#### 3.3.2.4 Approaches to offshore locations

The visual approach to a platform/rig as well as the descent during an instrument approach (i.e. the most critical part of the procedure) shall be carried out within the limits of the HTZ/HPZ concerned.

**Note:** an instrument approach procedure to a platform/rig may start outside the HTZ/HPZ at 1500 FT AMSL.

#### 3.3.2.5 Icing

##### 3.3.2.5.1 Altitude and reports to ATS

Should helicopter icing conditions or other flight safety considerations dictate it, helicopters may have to operate below 1500 FT AMSL. In these circumstances pilots shall make every attempt to follow the HMR and to inform Amsterdam Information c.q. Schiphol Approach or Rotterdam Approach/Tower of the new altitude, stating the reason for operation below 1500 FT AMSL.

##### 3.3.2.5.2 Conditions

Helicopter icing conditions can exist when a temperature of 0°C and visible moisture are forecasted below 2000 FT AMSL.

#### 3.3.2.6 SSR transponder code

Civil helicopters operating over the North Sea:

- to and from De Kooy receive an SSR code from De Kooy Tower. This code is valid for the outward flight and the flight back.
- from Rotterdam Airport receive an SSR code from Rotterdam Tower. This code is valid up to the first destination.
- to Rotterdam Airport receive an SSR code from ATS.

### 3.3.3 Operating procedures for military and other civil air traffic

#### 3.3.3.1 Crossing or overflying of HTZs/HPZs

A pilot operating over the North Sea, shall make sure that crossing or overflying at his level is safe, especially in IMC.

Information on possible flight operations within HTZs/HPZs will be provided by the Amsterdam flight information centre.

#### 3.3.3.2 Crossing of and operations in the vicinity of HMRs

The information required for the crossing of HMRs, or operating in the vicinity of HMRs, will be provided by the Amsterdam flight information centre.

**Note:** although HMRs are not defined in lateral limits, civil helicopters will navigate within 2 NM of the published track (see paragraph 3.3.2.3 Routes and altitudes).

All traffic operating in the vicinity of HMRs and HTZs/HPZs shall maintain a sharp look-out.

#### 3.3.3.3 Avoidance measures and distance

Pilots of military and civil aircraft shall avoid helicopters over the North Sea by:

- taking avoiding action as early as possible, giving as much separation (see note) as possible.
- attempting to pass above, below or behind the helicopter when practicable.
- using, whenever possible, airborne radar to detect the helicopter traffic.

**Note:** helicopter pilots prefer a minimum lateral separation of 2 NM.

### 3.4 AIR TRAFFIC SERVICES

Amsterdam FIC provides FIS and ALRS in the North Sea area Amsterdam and the North Sea area V (see paragraph 2.1), in accordance with GEN 3.3, to safeguard military and civil air traffic above the North Sea up to and including FL 055<sup>1)</sup>. For area boundaries see chart ENR 6-3.1.

<sup>1)</sup> Below EGD323D up to and including FL 045.

#### 3.4.1 Service limitations

In principle flight information service and alerting service will be provided within the limits of VHF coverage. When radio communication is not possible, the helicopter pilot reports his information to Amsterdam FIC or the radio operator by telephone or relay.

**Note:** within (a sector of) an HPZ helicopter traffic will also be in radio contact with the radio operator of a designated platform/rig. Such a radio operator will constantly monitor the route of flight, the number of persons on board and the ETA of the destination platform/rig (flight watch) in order to initiate alerting action in due time.

#### 3.4.2 ATS procedures for civil helicopter traffic

##### 3.4.2.1 Flight plans

Flight plans shall be submitted for all VFR and IFR flights to be executed outside the Netherlands territorial waters. Flight plans to and from platforms/rigs shall contain the HMR designator, the out- or inbound radial to be flown (item 15) and the name, location indicator, and position of the platform/rig, including the grid-NR (item 18). Before departure from a platform/rig, (supplementary) flight plan information shall be given by radio or telephone.

##### 3.4.2.2 Position reports

**Note:** flight information and alerting service are a responsibility of Amsterdam Flight Information Center (Amsterdam FIC). However, an overdue notification may be issued by a radio operator, if available.

**Note:** helicopter pilots shall remain on the frequency of Amsterdam FIC during all stages of flight.

##### 3.4.2.2.1 En route

Helicopter pilots shall make 'operational reports' every 20 minutes. When practicable, such reports shall be given relative to the HMR route points or distance to HDR DME or SPY DME.

##### 3.4.2.2.2 Landing on a platform/rig

1. Before descending into an HPZ, the helicopter pilot shall report to Amsterdam FIC the ETA, or when a radio operator is available, the helicopter pilot shall:
  - establish two-way radio communication with the appropriate radio operator;
  - report the ETA, POB and endurance to the radio operator; and
  - inform Amsterdam FIC that two-way radio communication with the radio operator has been established.
2. Not later than ETA + 10 MIN, the helicopter pilot shall contact Amsterdam FIC or the radio operator (either by radio or telephone) to report the ATA.

##### 3.4.2.2.3 Flying between platforms/rigs (shuttling)

For short shuttle flights (< 10 MIN) between platforms/rigs, the following applies:

1. Before take-off, the helicopter pilot shall contact Amsterdam FIC or the radio operator (if available) and shall report call sign, DEP (ETD), DEST (ETA), POB and endurance.
2. Not later than ETA + 10 MIN the helicopter pilot shall contact Amsterdam FIC or the radio operator (either by radio or telephone) to report the ATA.
3. The helicopter pilot shall report to Amsterdam FIC when shuttling has ended.

##### 3.4.2.2.4 Taking off from a platform/rig and leaving the HPZ

For flights leaving HPZs, the following applies:

1. Before take-off, the helicopter pilot shall contact Amsterdam FIC (either by radio or telephone) and report at least the following: call sign, DEP (ETD), DEST (ETA), requested FL, route, POB and endurance.
2. Amsterdam FIC passes flight information (traffic, weather, etc.) at first contact.
3. Within ETD + 10 MIN, the helicopter pilot shall make a position report to Amsterdam FIC.

##### 3.4.2.2.5 Departing to De Kooy (or other onshore destinations)

For flights approaching the final platform/rig before returning to De Kooy (or another onshore destination), the following applies:

1. Immediately after landing on the final platform/rig, the helicopter pilot shall contact Amsterdam FIC (either by radio or telephone) to report the ATA and state the intention to proceed to De Kooy (or another onshore destination) after a short stop.
2. Before take-off, the helicopter pilot shall contact Amsterdam FIC to report at least the following: call sign, DEP (ETD), DEST (ETA), RFL, route, POB and endurance.
3. Within ETD + 10 MIN, the helicopter pilot shall make a position report to Amsterdam FIC.

### 3.4.3 ATS procedures for other civil air traffic

#### 3.4.3.1 Flight plans

Flight plans shall be submitted for other civil air traffic intending to operate IFR or VFR over the North Sea, outside the Netherlands territorial waters at or below FL 055. These flight plans shall contain, where applicable, the out- or inbound radial, the track including waypoints and, if applicable, the name and position of the destination, including the grid-NR (naming the kind of the grid).

#### 3.4.3.2 Position reports

Other civil air traffic shall report position when entering or leaving the North Sea Area Amsterdam. They shall remain on the COM channel of Amsterdam FIC while remaining in the RMZ.

#### 3.4.3.3 Operations normal

Other civil air traffic shall make 'operations normal' reports every 20 to 40 minutes. When practicable, such reports shall be given relative to the HMR route points or and distance to HDR DME or SPY DME.

### 3.4.4 Flight plans of military air traffic

Military air traffic shall submit flight plans in accordance with MIL AIP Netherlands.

## 3.5 ROYAL NAVY EXERCISES WITH SHIPS AND HELICOPTERS OVER THE NORTH SEA

Required data such as position, times, radius and height of the exercises, in which both Royal Navy ships and helicopters participate, can be obtained from the naval air base 'De Kooy' or from Amsterdam FIC.

Normally the radius will be APRX 5 or 10 NM, the vertical limits: MSL - 500 ft AMSL.

When actual information is required or necessary, radio contact can be made with the exercise ship of the Royal Navy on VHF channel 16.

**Caution:** unknown helicopter movements from, to or in the vicinity of foreign navy ships may take place within the North Sea area.

## 4 RADIO MANDATORY ZONES

RMZs are areas wherein the carriage and operation of radio equipment is mandatory. Before entering a RMZ an initial call shall be made by pilots on the appropriate COM channel.

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>RMZ Budel</b> As ATZ Budel and AFIZ Budel (see ENR 5.1 and EHBD AD 2.17). <ul style="list-style-type: none"> <li>• Part A  <u>1200 FT AMSL</u>                              GND                              Class of airspace: <b>G</b></li> <li>• Part B  <u>600 FT AMSL</u>                              GND                              Class of airspace: <b>G</b></li> </ul>	See EHBD AD 2.18.	See EHBD AD 2.18. OPR HR EHBD and outside UDP.	See EHBD AD 2.18.	NIL
<b>RMZ Deelen</b> As CTR Deelen (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	<sup>1)</sup> RMZ active outside OPR HR CTR.
<b>RMZ De Kooy</b> As CTR De Kooy (see EHKD AD 2.17) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See EHKD AD 2.18.	See EHKD AD 2.18 <sup>1)</sup> .	See EHKD AD 2.18.	<sup>1)</sup> RMZ active outside OPR HR CTR.



Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>RMZ De Peel</b> As CTR De Peel (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>C/E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	1) RMZ active outside OPR HR CTR.
<b>RMZ Eelde</b> As CTR Eelde (see EHGG AD 2.17) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See EHGG AD 2.18.	See EHGG AD 2.18 <sup>1)</sup> .	See EHGG AD 2.18.	1) RMZ active outside OPR HR CTR.
<b>RMZ Eindhoven</b> As CTR Eindhoven (see EHEH AD 2.17) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>C</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See EHEH AD 2.18.	See EHEH AD 2.18 <sup>1)</sup> .	See EHEH AD 2.18 <sup>1)</sup> .	1) RMZ active outside OPR HR CTR.
<b>RMZ Gilze-Rijen</b> As CTR Gilze-Rijen (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	1) RMZ active outside OPR HR CTR.
<b>RMZ Kleine-Brogel</b> As CTR Kleine-Brogel (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	1) RMZ active outside OPR HR CTR.
<b>RMZ Leeuwarden</b> As CTR Leeuwarden (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	1) RMZ active outside OPR HR CTR.
<b>RMZ Lelystad</b> As Lelystad CTR 1 and 2 (see EHLE AD 2.17). <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	MilATCC Schiphol	Dutch MIL Info <sup>1)</sup> En	See ENR 6-2.2.	1) RMZ active outside OPR HR CTR.

Name Lateral limits Vertical limits Class of airspace	Unit providing service	Call sign Languages Area and conditions of use Hours of service	Frequency/ purpose	Remarks
1	2	3	4	5
<b>RMZ Maastricht</b> As CTR Maastricht within Amsterdam FIR (see EHBK AD 2.17) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>D</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See EHBK AD 2.18.	See EHBK AD 2.18 <sup>1)</sup> .	See EHBK AD 2.18.	<sup>1)</sup> RMZ active outside OPR HR CTR.
<b>RMZ Niederrhein</b> As CTR Niederrhein (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	<sup>1)</sup> RMZ active outside OPR HR CTR.
<b>RTMZ North Sea area Amsterdam</b> As North Sea area Amsterdam (see paragraph 3 and chart ENR 6-3.1). <u>FL 055</u> SFC Class of airspace: <b>G</b>	See paragraph 3.	H24	See paragraph 3.	NIL
<b>RMZ Teuge</b> As ATZ Teuge (see ENR 5.1). <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See EHTE AD 2.17).	See EHTE AD 2.18). Outside UDP.	See EHTE AD 2.18).	NIL
<b>RMZ Twente</b> As ATZ Twente (see ENR 5.1). <u>2200 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See EHTW AD 2.17).	See EHTW AD 2.18).	See EHTW AD 2.18).	NIL
<b>RMZ Volkel</b> As CTR Volkel (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>C/E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	<sup>1)</sup> RMZ active outside OPR HR CTR.
<b>RMZ Woensdrecht</b> As CTR Woensdrecht (see ENR 2.1) <u>3000 FT AMSL</u> 1500 FT AMSL Class of airspace: <b>E</b> <u>1500 FT AMSL</u> GND Class of airspace: <b>G</b>	See ENR 2.1.	See ENR 2.1 <sup>1)</sup> .	See ENR 2.1.	<sup>1)</sup> RMZ active outside OPR HR CTR.

**5 TRANSPONDER MANDATORY ZONES**

TMZs are areas wherein an operational mode S SSR transponder is mandatory for all aircraft.

The TMZs are active H24, unless otherwise indicated.

CTRs (up to 3000 FT AMSL) are excluded from the TMZs.

<b>TRANSPONDER MANDATORY ZONES</b>		
<b>Area</b>	<b>Lateral Limits</b>	<b>Upper limit Lower limit</b>
TMZ A	As Nieuw Milligen TMA A (see ENR 2.1).	FL 195 FL 055 <sup>1)</sup> FL 045 <sup>2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ B1	<b>Lateral limits description:</b> TMZ B1 is the northern part of Nieuw Milligen TMA B.  <b>Lateral limits in co-ordinates:</b> 524803N 0051711E; 531224N 0060933E; 530000N 0061105E; 525300N 0061400E; 525457N 0062952E; 524550N 0062000E; 523241N 0062000E; 524906N 0055822E; 524527N 0054824E; 524029N 0053500E; 523305N 0053409E; 524820N 0052000E; 524803N 0051711E.	FL 065 FL 055 <sup>1)</sup> FL 045 <sup>2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ B2	<b>Lateral limits description:</b> TMZ B2 is the southern part of Nieuw Milligen TMA B.  <b>Lateral limits in co-ordinates:</b> 522700N 0060000E; 522534N 0062000E; 520004N 0053116E; 515855N 0051742E; 515311N 0050547E; 515311N 0044941E; 521145N 0050424E; 521811N 0053634E; 521913N 0053925E; 522300N 0055000E; 522700N 0060000E.	FL 065 FL 055 <sup>1)</sup> FL 045 <sup>2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ C1	As Nieuw Milligen TMA C1 (see ENR 2.1).	FL 195 FL 065 <sup>1)</sup> FL 045 <sup>2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ C2	As Nieuw Milligen TMA C2 (see ENR 2.1).	FL 195 FL 055 <sup>1)</sup> FL 045 <sup>2)</sup> 1200 FT AMSL <sup>3)</sup>
<sup>1)</sup> MON-FRI before 0800 (0700) and after 1600 (1500), SAT, SUN, and HOL. <sup>2)</sup> MON-FRI 0800-1600 (0700-1500), EXC HOL: lower limit for non-motorised hanggliders and paragliders. <sup>3)</sup> MON-FRI 0800-1600 (0700-1500), EXC HOL: lower limit 1200 FT AMSL. <sup>4)</sup> Only active MON-FRI 0800-1600 (0700-1500), EXC HOL.		

<b>TRANSPONDER MANDATORY ZONES</b>		
<b>Area</b>	<b>Lateral Limits</b>	<b>Upper limit Lower limit</b>
TMZ D	<p><b>Lateral limits description:</b> TMZ D is composed of Nieuw Milligen TMA D, excluding Schiphol TMA 3, 4 and 5.</p> <p><b>Lateral limits in co-ordinates:</b></p> <ul style="list-style-type: none"> <li>• <b>Part 1:</b> 51°53'11.00"N 004°49'40.72"E; along parallel to 51°53'11.00"N 005°05'47.00"E; 51°58'55.00"N 005°17'42.00"E; 52°00'04.00"N 005°31'16.00"E; 51°56'22.00"N 005°47'00.00"E; 51°50'02.07"N 005°57'31.88"E; along Dutch-German border to 51°14'45.88"N 006°04'54.01"E; 51°14'55.32"N 005°57'08.32"E; 51°11'00.26"N 005°58'25.18"E; 51°11'00.01"N 005°46'04.08"E; along Dutch-Belgian border to 51°28'47.06"N 004°30'40.45"E; to point of origin.</li> <li>• <b>Part 2:</b> 51°11'00.01"N 005°46'04.08"E; 51°11'00.23"N 005°50'00.21"E; 51°09'40.57"N 005°50'00.20"E; along Dutch-Belgian border; to point of origin.</li> </ul>	<p style="text-align: center;"><u>FL 195</u> 2500 FT AMSL <sup>1) 2)</sup> 1200 FT AMSL <sup>3)</sup></p> <p style="text-align: center;"><u>FL 095</u> 2500 FT AMSL <sup>1) 2)</sup> 1200 FT AMSL <sup>3)</sup></p>
	<p><b>Malden area</b> (located within part 1): During weekends from FRI 1600 (1500) until MON 0800 (0700) and HOL, an area around Malden is exempted from the TMZ D to facilitate non-motorised aircraft without a mode S transponder.</p> <p><b>Lateral limits description:</b></p> <ul style="list-style-type: none"> <li>• from the crossing of highway A50 with TMZ D boundary east along this boundary (north of Nijmegen) to the Amsterdam FIR boundary (51°50'02"N 005°57'32"E);</li> <li>• south along the Amsterdam FIR boundary to 51°44'35"N (marked as the centre of the forest east of the border);</li> <li>• along bearing 270° to the Volkel CTR;</li> <li>• along north side of Volkel CTR to highway A50;</li> <li>• following highway A50 north up to the point of origin.</li> </ul> <p><b>Lateral limits in co-ordinates:</b> 51°56'36.48"N 005°45'58.78"E; 51°56'22.00"N 005°47'00.00"E; 51°50'02.07"N 005°57'31.88"E; along Dutch-German border to 51°44'34.87"N 005°57'08.69"E; along parallel to 51°44'34.87"N 005°52'18.12"E; along anti-clockwise arc (radius 8 NM, centre 51°39'25.95"N 005°42'28.17"E) to 51°47'05.95"N 005°38'50.88"E; APRX along highway A50: 51°47'31.01"N 005°39'39.13"E; 51°48'23.69"N 005°40'37.27"E; 51°50'01.53"N 005°41'08.12"E; 51°51'29.91"N 005°42'39.48"E; 51°52'34.37"N 005°44'00.95"E; 51°53'34.82"N 005°44'28.64"E; 51°54'30.90"N 005°46'06.72"E; 51°55'03.31"N 005°46'20.57"E; to point of origin.</p>	<p style="text-align: center;"><u>FL 045</u> 2500 FT AMSL</p>
	<p>As Nieuw Milligen TMA E (see ENR 2.1).</p>	<p style="text-align: center;"><u>FL 095</u> FL 055 <sup>1)</sup> FL 045 <sup>2)</sup> 1200 FT AMSL <sup>3)</sup></p>
<p><sup>1)</sup> MON-FRI before 0800 (0700) and after 1600 (1500), SAT, SUN, and HOL.  <sup>2)</sup> MON-FRI 0800-1600 (0700-1500), EXC HOL: lower limit for non-motorised hanggliders and paragliders.  <sup>3)</sup> MON-FRI 0800-1600 (0700-1500), EXC HOL: lower limit 1200 FT AMSL.  <sup>4)</sup> Only active MON-FRI 0800-1600 (0700-1500), EXC HOL.</p>		

TRANSPONDER MANDATORY ZONES		
Area	Lateral Limits	Upper limit Lower limit
TMZ Eelde	As Eelde TMA (see ENR 2.1). <b>Note:</b> the user conditions for ATZ Veendam are subject to a local agreement between NNZC Veendam and Eelde ATC.	FL 065 1500 FT AMSL <sup>1)2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ G1 <sup>4)</sup>	As Nieuw Milligen TMA G1 (see ENR 2.1).	FL 055 FL 045 <sup>2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ LE2	As Lelystad TMA 2 (see ENR 2.1).	3500 FT AMSL 1200 FT AMSL
TMZ LE3	As Lelystad TMA 3 (see ENR 2.1).	FL 065 1500 FT AMSL <sup>1)2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ LE4	As Lelystad TMA 4 (see ENR 2.1).	FL 065 2500 FT AMSL <sup>1)2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ LE5	As Lelystad TMA 5 (see ENR 2.1).	FL 065 FL 045 <sup>1)2)</sup> 1200 FT AMSL <sup>3)</sup>
TMZ Maastricht	As Maastricht TMA 1 (excluding Brussels FIR) and Maastricht TMA 2 (see ENR 2.1). <b>Note:</b> the user conditions for ATZ Schinveld are subject to a local agreement between Stichting ZAS and Beek ATC.	FL 195 1500 FT AMSL <sup>1)2)</sup> 1200 FT AMSL <sup>3)</sup>
RTMZ North Sea area Amsterdam	As North Sea area Amsterdam (see paragraph 3 and chart ENR 6-3.1).	FL 055 SFC
TMZ Rotterdam	<b>Lateral limits description:</b> <ul style="list-style-type: none"> <li>• North, east and west limits: as Rotterdam TMA 1, 2 and 3.</li> <li>• South limit: APRX along Hollandsch Diep and Grevelingen.</li> </ul> <b>Lateral limits in co-ordinates:</b> 52°17'29.93"N 003°41'47.07"E; 52°17'06.01"N 003°59'10.51"E; 51°59'20.00"N 004°06'40.00"E; 51°56'10.00"N 004°21'15.00"E; 51°53'11.00"N 004°49'40.72"E; 51°43'10.64"N 004°41'50.32"E; 51°38'38.15"N 004°23'46.17"E; 51°38'41.61"N 004°19'23.96"E; 51°42'54.54"N 004°01'04.75"E; 51°45'27.68"N 003°59'10.36"E; along parallel to 51°45'27.68"N 003°37'37.19"E; 51°35'50.00"N 003°31'10.14"E; along parallel to 51°35'50.00"N 003°13'49.65"E; to point of origin.	FL 055 2500 FT AMSL <sup>1)2)</sup> 1200 FT AMSL <sup>3)</sup>
<sup>1)</sup> MON-FRI before 0800 (0700) and after 1600 (1500), SAT, SUN, and HOL. <sup>2)</sup> MON-FRI 0800-1600 (0700-1500), EXC HOL: lower limit for non-motorised hanggliders and paragliders. <sup>3)</sup> MON-FRI 0800-1600 (0700-1500), EXC HOL: lower limit 1200 FT AMSL. <sup>4)</sup> Only active MON-FRI 0800-1600 (0700-1500), EXC HOL.		

