

ENR 3.2 AREA NAVIGATION ROUTES

<i>Route Designator {RNP Type}</i>		<i>[Route Usage Notes]</i>					
<i>Significant Point Name</i>		<i>Significant Point Coordinates</i>				<i>Remarks</i>	
<i>{RNP Type}</i>		<i>Track MAG</i> ↓ ↑	<i>Dist NM</i>	<i>Upper limit</i> <i>Lower limit</i>	<i>Direction of cruising levels</i> ↓ ↑		<i>Controlling unit Frequency {Airspace class} Remarks</i>
1		2	3	4	5	6	7
L517		<i>Route availability:</i> (1) H24					
▲	TERIX	041521N 1093456E					
			92.0NM	FL 460 FL 240		Even ⁽¹⁾	[Class A]
▲	GULIB (WSJC/WBFC FIR BDRY)	041714N 1110633E					⁽²⁾
<p><u>Route remarks:</u> ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover and not in the ADS-B Out exclusive airspace within the Singapore FIR. Singapore ACC FREQ P135.05MHz S134.95MHz</p> <p><u>Point/Segment Remarks:</u> (2) VMI 269° 173NM</p>							

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
L625		Route availability: (1) H24				
▲ AKMON	081254N 1101306E					
(10)	- 035°	236.1NM	FL 460 FL 135			[Class A] ⁽²⁾⁽³⁾
▲ GUTUP (WSJC/WIIF FIR BDRY)	045911N 1075603E					
(10)	- 035°	104.4NM	FL 600 FL 135			[Class A] [Class B] ⁽⁴⁾
▲ LUSMO	033341N 1065534E					
(10)	- 027°	48.2NM	FL 600 FL 135			[Class A] [Class B] ⁽⁴⁾
▲ UPLAM	025043N 1063319E					
(10)	- 027°	6.8NM	FL 600 FL 135			[Class A] [Class B] ⁽⁴⁾
▲ ISDEB	024440N 1063011E					
(10)	- 027°	12.5NM	FL 600 FL 135			[Class A] [Class B] ⁽⁴⁾
▲ VERIN	023332N 1062425E					
(10)	- 027°	43.4NM	FL 600 FL 245			[Class A] ⁽⁴⁾
▲ UXEDA (Delegated airspace BDRY)	015449N 1060423E					
(10)	- 027°	37.1NM	FL 600 FL 245			[Class A] ⁽⁵⁾
▲ TOMAN	012147N 1054717E					
<u>Route remarks:</u> Uni-directional for north-east bound flights from TOMAN to AKMON. No PDC Flight Levels FL310, FL320, FL350, FL360, FL390, FL400 applicable. Other levels available with prior approval. Flights above FL370 from TOMAN to UXEDA, see AIP Indonesia ENR2.1.						
<u>Point/Segment Remarks:</u> (2) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between GUTUP and AKMON) and not in the ADS-B Out exclusive airspace within the Singapore FIR. (3) Segment from GUTUP to 50NM before AKMON use: P135.05 MHz S134.95 MHz (4) Segment from UXEDA to GUTUP to contact Jakarta ACC. (5) Segment from TOMAN to UXEDA use: P134.2 MHz S133.35 MHz						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
L629		Route availability: (1) H24				
▲ DOLOX	044841N 1052247E					
		43.1NM	FL 460 FL 240		Odd ⁽¹⁾	[Class A]
▲ NOPAT	042313N 1044756E					
		52.2NM	FL 460 FL 240		Odd ⁽¹⁾	[Class A]
▲ VEPLI	035223N 1040542E					
		27.2NM	FL 460 FL 240		Odd ⁽¹⁾	[Class A]
▲ BUVAL (WSJC/MMFC FIR BDRY)	033622N 1034341E					
		22.6NM	FL 460 FL 240		Odd ⁽¹⁾	[Class A]
▲ PEKAN DVOR/DME (VPK)	032259N 1032524E					
<u>Route remarks:</u> Lateral Limits: 10NM either side of line joining VPK DVOR/DME to BUVAL and 25NM either side of line joining BUVAL to DOLOX. Singapore ACC FREQ: P123.7 MHz S127.3 MHz <u>Point/Segment Remarks:</u> -						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
L635		Route availability: (1) H24				
▲ MABLI	041717N 1061247E					
		59.9NM	FL 460 FL 240	Even ⁽¹⁾		[Class A]
▲ SUSAR	035848N 1051547E					
		31.6NM	FL 460 FL 240	Even ⁽¹⁾		[Class A]
▲ DUBSA	034901N 1044540E					
		39.7NM	FL 460 FL 240	Even ⁽¹⁾		[Class A]
▲ UGPEK	033647N 1040752E					
		19.4NM	FL 460 FL 240	Even ⁽¹⁾		[Class A]
▲ DOVOL (WSJC/WMFC FIR BDRY)	033047N 1034923E					
		25.2NM	FL 460 FL 240	Even ⁽¹⁾		[Class A]
▲ PEKAN DVOR/DME (VPK)	032259N 1032524E					
<p><u>Route remarks:</u> Lateral Limits: 10NM either side of line joining VPK DVOR/DME to DOVOL and 25NM either side of the line joining DOVOL to MABLI Singapore ACC FREQ: P123.7 MHz S127.3 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]					Remarks
Significant Point Name		Significant Point Coordinates		Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks	
{RNP Type}		Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓		↑
1		2	3	4	5	6	
L642		Route availability: (1) H24					
▲	ESPOB (VVHM/WSJC FIR BDRY)	070000N 1053318E					
(10)			149.2NM	FL 460 FL 135			[Class A] ⁽²⁾⁽³⁾⁽⁴⁾
▲	ENREP	045224N 1041442E					(7)
(10)			60.4NM	FL 460 FL 135	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁵⁾
▲	VEPLI	035223N 1040542E					(8)
(10)			33.0NM	FL 460 FL 135	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁵⁾
▲	EGOLO (WSJC/MMFC FIR BDRY)	031934N 1040047E					(9)
(10)			25.1NM	FL 460 FL 135	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁶⁾
▲	ROBMO	025440N 1035700E					(10)
(10)			31.6NM	FL 460 FL 135	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁶⁾
▲	MERSING DVOR/DME (VMR)	022318N 1035218E					
Route remarks:							
Lateral Limits: 10NM either side of line joining VMR DVOR/DME to EGOLO and 25NM either side of line joining EGOLO to ESPOB. Bi-directional between VMR and ENREP. Flight planning for Direct Routing Operations (DRO): Arriving aircraft to Singapore Changi Airport operating at FL290 to FL460 (inclusive) and entering Singapore FIR via ESPOB should flight plan using the direct route ESPOB DCT ELALO. All other aircraft operating at FL290 to FL460 (inclusive) and entering Singapore FIR via ESPOB should flight plan using the direct route ESPOB DCT EGOLO.							
Point/Segment Remarks:							
(2) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between ESPOB and ENREP) and not in the ADS-B Out exclusive airspace within Singapore FIR.							
(3) Uni-directional for southbound flights from ESPOB to ENREP. No PDC Flight Levels FL310, FL320, FL350, FL360, FL390, FL400 applicable. Other levels available with prior approval.							
(4) Segment from ESPOB to ENREP use: P134.9 MHz S134.35 MHz							
(5) Segment from ENREP to EGOLO use: P123.7 MHz S127.3 MHz							
(6) Segment from EGOLO to VMR use: P133.8 MHz S127.3 MHz							
(7) VMR 008° 150.0NM							
(8) VMR 008° 89.7NM							
(9) VMR 008° 56.6NM							
(10) VMR 008° 31.6NM							

Route Designator {RNP Type}		[Route Usage Notes]					
Significant Point Name		Significant Point Coordinates				Remarks	
{RNP Type}		Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1		2	3	4	5	6	7
L644		Route availability: (1) H24					
▲	DUDIS (WSJC/VVHM FIR BDRY)	070000N 1064836E					
(10)		<u>192°</u> -	165.8NM	FL 460 FL 240	Odd ⁽¹⁾		[Class A] ⁽²⁾⁽³⁾
▲	MABLI	041717N 1061247E					
(10)		<u>169°</u> -	33.4NM	FL 460 FL 240	Odd ⁽¹⁾		[Class A] ⁽⁴⁾
▲	LIGVU (WSJC/WIIF FIR BDRY)	034417N 1061859E					
<p><u>Route remarks:</u> Flight Planning Instructions for Direct Routing Operations (DRO): All aircraft operating at FL290 to FL460 (inclusive) and entering Singapore FIR via DUDIS should flight plan using the direct route DUDIS DCT LIGVU.</p> <p><u>Point/Segment Remarks:</u> (2) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between DUDIS and MABLI) and not in the ADS-B Out exclusive airspace within Singapore FIR. (3) Segment from DUDIS to MABLI use: P134.9 MHz S134.35 MHz (4) Segment from MABLI to LIGVU use: P134.7 MHz S134.15 MHz</p>							

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
L649		Route availability: (1) H24				
▲ LAXOR (WSJC/RPHI FIR BDRY)	094937N 1144829E					
(10)		98.0NM	FL 460 FL 240		Even ⁽¹⁾	[Class A]
▲ URKET (WSJC/WBFC FIR BDRY)	081130N 1145000E					
(10)		62.0NM	FL 460 FL 240		Even ⁽¹⁾	[Class A]
▲ DAKIX (WBFC/WSJC FIR BDRY)	070854N 1145054E					⁽²⁾
<p><u>Route remarks:</u> Available only for flights departing from Brunei (WBSB), Labuan (WBKL) and Miri (WBGR) to Hong Kong (VHHH) only. No-PDC Flight Levels FL300 and FL380 applicable. ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover and not in the ADS-B Out exclusive airspace within the Singapore FIR. Singapore ACC FREQ: P135.05 MHz S134.95 MHz</p> <p><u>Point/Segment Remarks:</u> (2) BRU 359° 136NM</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
L762		Route availability: (1) H24				
▲ ASUNA	005948N 1030954E					
(10)	291° 111°	66.2NM	FL 600 9500 FT ALT	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A - ABV FL150] [Class B - BLW FL150]
▲ MIBEL	012351N 1020816E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P133.25MHz S135.8MHz Flight Planning Instructions: Westbound - Aircraft originating only from airports within Singapore, Batam, Tanjungpinang and Johor to Medan and destinations beyond Jakarta FIR. Eastbound - Aircraft to destinations within Singapore, Batam, Tanjungpinang and Johor only. Flights above FL370 between ASUNA and MIBEL, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M522		Route availability: (1) H24				
▲ VINIK (WSJC/RPHI FIR BDRY)	083830N 1161348E					
		27.5NM	FL 460 FL 135	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A - ABV FL150 Class B - BLW FL150]
▲ NODIN (WSJC/WBFC FIR BDRY)	081100N 1161142E					
<u>Route remarks:</u> Portion of M522 within the Singapore FIR has been delegated to Kota Kinabalu ACC for provision of ATS Kinabalu ACC FREQ: 126.1 MHz <u>Point/Segment Remarks:</u> -						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M630		Route availability: (1) H24				
▲ SUKRI (WMFC/WIF FIR BDRY) (Delegated airspace BDRY)	012306N 1025904E					
(5)	<u>123°</u> -	37.1NM	<u>FL 600</u> 5500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ BOBAG	010230N 1032954E					
(5)	<u>098°</u> -	24.7NM	<u>FL 600</u> 5500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ EMSIB	005911N 1035419E					
(5)	<u>098°</u> -	2.9NM	<u>FL 600</u> 5500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ OMDUD	005847N 1035714E					
(5)	<u>098°</u> -	4.3NM	<u>FL 600</u> 5500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ IRPUG	005813N 1040127E					
(5)	<u>098°</u> -	13.9NM	<u>FL 600</u> 5500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ AKVOM	005620N 1041514E					
(5)	<u>097°</u> -	15.8NM	<u>FL 600</u> 5500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ JUNHA	005413N 1043052E					
<p><u>Route remarks:</u> Flight departing from aerodromes in Peninsular Malaysia with planned cruising level of FL270 or above are required to cross SUKRI at FL270 or above. Singapore ACC FREQ: P133.25 MHz S135.8 MHz Flights above FL370 from SUKRI to JUNHA, see AIP Indonesia ENR2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]					Remarks
Significant Point Name		Significant Point Coordinates		Upper limit Lower limit	Direction of cruising levels		
{RNP Type}		Track MAG ↓ ↑	Dist NM		Controlling unit Frequency {Airspace class} Remarks	↓	↑
1	2	3	4	5		6	7
M635		Route availability: (1) H24					
▲	TEKONG DVOR/DME (VTK)	012455N 1040120E					
(10)		$\frac{136^\circ}{316^\circ}$	12.4NM	FL 460 5500 FT ALT	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] [Class B] ⁽²⁾
▲	UNSID (WSJC/WIIF FIR BDRY) (Delegated airspace BDRY)	011600N 1040955E					
(10)		$\frac{136^\circ}{316^\circ}$	30.2NM	FL 600 5500 FT ALT	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] [Class B]
▲	JUNHA	005413N 1043052E					
(10)		$\frac{120^\circ}{300^\circ}$	51.8NM	FL 600 5500 FT ALT	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] [Class B]
▲	INVUB (Delegated airspace BDRY)	002749N 1051530E					
(10)		$\frac{120^\circ}{300^\circ}$	6.7NM	FL 600 5500 FT ALT	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] [Class B]
▲	ATPOM	002425N 1052114E					
(10)		$\frac{131^\circ}{311^\circ}$	93.0NM	FL 600 5500 FT ALT	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] [Class B]
▲	SURGA	003657S 1063119E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.4 MHz S128.1 MHz Flight Planning Instructions: Flights overflying Singapore to destinations north of Kuala Lumpur and Subang are to flight plan via M635 JUNHA IRTAD A464 SJ G579 VJB Y342 AROSO Y513. Flights overflying Singapore to land at Kuala Lumpur and Subang are to flight plan via M635 JUNHA IRTAD A464 SJ G579 VJB A457. All departures from Singapore aerodromes joining ATS route M635 to flight plan via JUNHA T24. Flights above FL370 between UNSID and SURGA, see AIP Indonesia ENR2.1.</p> <p><u>Point/Segment Remarks:</u> (2) Kuala Lumpur / Singapore FIR boundary approximately 1.2NM north of VTK.</p>							

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M646		Route availability: (1) H24				
▲ VENUN (Delegated airspace BDRY)	013206N 1061351E					
(10)	$\frac{249^\circ}{069^\circ}$	28.5NM	$\frac{FL\ 600}{FL\ 245}$	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A]
▲ TOMAN	012147N 1054717E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.2 MHz S133.35 MHz Flights above FL370 between VENUN and TOMAN, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M753		Route availability: (1) H24				
▲ IPRIX (VVHM/WSJC FIR BDRY)	070000N 1040754E					
		127.2NM	FL 460 FL 155	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A]
▲ ENREP	045224N 1041442E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.9 MHz S134.35 MHz ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover and not in the ADS-B Out exclusive airspace within the Singapore FIR. Flight planning for Direct Routing Operations (DRO): Departing aircraft from Singapore operating at FL290 to FL460 (inclusive) and exiting Singapore FIR via IPRIX should flight plan using the direct route EGOLO DCT IPRIX. All other aircraft operating at FL290 to FL460 (inclusive) and entering or exiting Singapore FIR via L642 ENREP M753 IPRIX should flight plan using the direct route EGOLO DCT IPRIX or its reciprocal track. Lateral Limits: 25NM either side of line joining ENREP to IPRIX.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M754		Route availability: (1) H24				
▲ VINIK (WSJC/RPHI FIR BDRY)	083830N 1161348E					
		37.9NM	FL 460 FL 135	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A-ABV FL150 Class B-BLW FL150] ⁽²⁾
▲ SUMLA (WSJC/WMFC FIR BDRY)	080242N 1160054E					
<p><u>Route remarks:</u> Lateral Limits: 10NM either side of line joining SUMLA to VINIK. Portion of M754 within the Singapore FIR has been delegated to Kinabalu ACC for provision of ATS. Kinabalu ACC FREQ: 126.1 MHz</p> <p><u>Point/Segment Remarks:</u> (2) BRU 019° 238.9NM</p>						

Route Designator {RNP Type}		[Route Usage Notes]					
Significant Point Name		Significant Point Coordinates				Remarks	
{RNP Type}		Track MAG	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
		↓ ↑			↓	↑	
1		2	3	4	5	6	7
M758		Route availability: (1) H24					
▲	PEKAN DVOR/DME (VPK)	032259N 1032524E					
		087° 267°	30.4NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽²⁾
▲	IDSEL (WMFC/WSJC FIR BDRY)	032432N 1035544E					
		087° 267°	11.1NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	URIGO	032505N 1040647E					
		087° 267°	24.8NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	VISAT	032620N 1043134E					
		087° 267°	41.1NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	MABAL	032826N 1051236E					
		087° 267°	35.7NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	ELGOR	033014N 1054818E					
		087° 267°	2.6NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
△	UPVUN (WSJC/WIIF FIR BDRY)	033022N 1055053E					
		087° 267°	30.5NM	FL 600 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾⁽⁴⁾
▲	OPULA	033155N 1062118E					
		087° 267°	34.3NM	FL 600 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁴⁾
▲	LUSMO	033341N 1065534E					
		075° 255°	110.7NM	FL 600 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁴⁾
▲	GULGU (WSJC/WIIF FIR BDRY)	040141N 1084242E					
		075° 255°	53.9NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁵⁾⁽⁶⁾
▲	TERIX	041521N 1093456E					
		075° 255°	140.5NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽⁵⁾⁽⁶⁾
▲	OLKIT (WSJC/WBFC FIR BDRY)	045010N 1115118E					

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
<u>Route remarks:</u> -						
<u>Point/Segment Remarks:</u> (2) Segment from VPK to IDSEL use: P123.7 MHz S127.3 MHz (3) Segment from IDSEL to UPVUN use: P134.7 MHz S134.15 MHz (4) Segment from UPVUN to GULGU to contact Jakarta ACC. (5) Segment from GULGU to OLKIT use: P135.05 MHz S 134.95 MHz (6) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between GULGU and OLKIT) and not in the ADS-B Out exclusive airspace within the Singapore FIR.						

Route Designator {RNP Type}		[Route Usage Notes]					Remarks
Significant Point Name		Significant Point Coordinates		Upper limit Lower limit	Direction of cruising levels		
{RNP Type}		Track MAG ↓ ↑	Dist NM		FL 460 FL 240	↓	↑
1	2	3	4	5		6	7
M761		Route availability: (1) H24					
▲	PEKAN DVOR/DME (VPK)	032259N 1032524E					
		$\frac{105^\circ}{285^\circ}$	46.0NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽²⁾
▲	KETOD (WMFC/WSJC FIR BDRY)	031042N 1040942E					
		$\frac{105^\circ}{285^\circ}$	10.8NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	OTLON	030752N 1042006E					
		$\frac{105^\circ}{285^\circ}$	21.0NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	KILOT	030217N 1044023E					
		$\frac{105^\circ}{285^\circ}$	32.3NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	LIPRO	025342N 1051128E					
		$\frac{105^\circ}{285^\circ}$	2.4NM	FL 460 FL 240	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	BOPVA (WSJC/WIIF FIR BDRY) (Delegated airspace BDRY)	025303N 1051349E					
		$\frac{105^\circ}{285^\circ}$	30.9NM	FL 600 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾⁽⁴⁾
▲	OSERU (Delegated airspace BDRY)	024450N 1054334E					
<u>Route remarks:</u> -							
<u>Point/Segment Remarks:</u> (2) Segment from VPK to KETOD use: P123.7 MHz S127.3 MHz (3) Segment from KETOD to OSERU use: P134.7 MHz S134.15 MHz (4) Flights above FL370 between BOPVA and OSERU, see AIP Indonesia ENR2.1							

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M763		Route availability: (1) H24				
▲ ENREP	045224N 1041442E					
		70.3NM	FL 460 FL 240	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A]
▲ TAXUL (WMFC/WSJC FIR BDRY)	035035N 1034037E					
<u>Route remarks:</u> Lateral Limits: 25NM either side of line joining TAXUL to ENREP. Singapore ACC FREQ: P123.7 MHz S127.3 MHz <u>Point/Segment Remarks:</u> -						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M765		<i>Route availability:</i> (1) H24				
▲ IGARI	065612N 1033506E					
		53.3NM	FL 460 FL 135	Even ⁽¹⁾	Odd ⁽¹⁾	[Class B] ⁽²⁾
▲ VENLI (WMFC/WSJC FIR BDRY)	062848N 1024900E					
<p><u>Route remarks:</u> Lateral Limits: 10NM either side of line joining VKB DVOR/DME to IGARI. Portion of M765 within the Singapore FIR has been delegated to Lumpur ACC for provision of ATS. Lumpur ACC FREQ: 132.6MHz</p> <p><u>Point/Segment Remarks:</u> (2) VKB 058° 88.8NM</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name		Significant Point Coordinates		Direction of cruising levels		Remarks
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M767		Route availability: (1) H24				
▲ TEGID (RPHI/WSJC FIR BDRY)	085656N 1155143E					
(10)	$\frac{233^\circ}{-}$	242.5NM	$\frac{FL\ 460}{FL\ 205}$			[Class A] ⁽²⁾⁽³⁾
▲ TODAM	063138N 1123536E					
(10)	$\frac{233^\circ}{-}$	225.5NM	$\frac{FL\ 460}{FL\ 205}$			[Class A] ⁽²⁾⁽³⁾
▲ TERIX	041521N 1093456E					
(10)	$\frac{233^\circ}{-}$	54.0NM	$\frac{FL\ 460}{FL\ 205}$			[Class A] ⁽²⁾⁽³⁾
▲ UKLIS (WSJC/WIIF FIR BDRY)	034234N 1085149E					
(10)	$\frac{233^\circ}{-}$	132.8NM	$\frac{FL\ 600}{FL\ 205}$	Even ⁽¹⁾		[Class A] [Class B] ⁽⁴⁾
▲ BOBOB	022206N 1070558E					
(10)	$\frac{233^\circ}{-}$	69.6NM	$\frac{FL\ 600}{FL\ 205}$	Even ⁽¹⁾		[Class A] [Class B] ⁽⁴⁾
▲ NIXEB (Delegated airspace BDRY)	013943N 1061040E					
(10)	$\frac{232^\circ}{-}$	29.4NM	$\frac{FL\ 600}{FL\ 205}$			[Class A - ABV FL150] ⁽⁵⁾
▲ TOMAN	012147N 1054717E					
<p><u>Route remarks:</u> Uni-directional for south-west bound flights from TEGID to TOMAN. No PDC Flight Levels FL310, FL320, FL350, FL360, FL390, FL400 applicable. Other levels available with prior approval. Flights above FL370 from NIXEB to TOMAN, see AIP Indonesia ENR2.1.</p> <p><u>Point/Segment Remarks:</u> (2) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between TEGID and UKLIS) and not in the ADS-B Out exclusive airspace within the Singapore FIR. (3) Segment from TEGID to UKLIS use: P135.05 MHz S134.95 MHz (4) Segment from UKLIS to NIXEB to contact Jakarta ACC. (5) Segment from NIXEB to TOMAN use: P134.2 MHz S133.35 MHz</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M768		Route availability: (1) H24				
▲ AKMON	081254N 1101306E					
(10)		96.9NM	FL 460 FL 135	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A]
▲ LAGOT	071632N 1113243E					
(10)		76.9NM	FL 460 FL 135	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A]
▲ TODAM	063138N 1123536E					
(10)		55.4NM	FL 460 FL 135	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A]
▲ ASISU (WSJC/WBFC FIR BDRY)	055906N 1132046E					⁽²⁾
<p><u>Route remarks:</u> ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover and not in the ADS-B Out exclusive airspace within the Singapore FIR.</p> <p><u>Point/Segment Remarks:</u> (2) BRU 305° 113.3NM</p>						

Route Designator {RNP Type}		[Route Usage Notes]					Remarks
Significant Point Name		Significant Point Coordinates		Upper limit Lower limit	Direction of cruising levels		
{RNP Type}	Track MAG ↓ ↑	Dist NM			↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7	
M771		Route availability: (1) H24					
▲	DUDIS (WSJC/VVHM FIR BDRY)	070000N 1064836E					
(10)		156.2NM	FL 460 FL 135			[Class A] ⁽²⁾⁽³⁾	
▲	DOLOX	044841N 1052247E				(7)	
(10)		42.5NM	FL 460 FL 135			[Class A] ⁽⁴⁾	
▲	DAMOG	041225N 1050014E				(8)	
(10)		27.5NM	FL 460 FL 135			[Class A] ⁽⁴⁾	
▲	DUBSA	034901N 1044540E				(9)	
(10)		26.6NM	FL 460 FL 135			[Class A] ⁽⁵⁾	
▲	VISAT	032620N 1043134E				(10)	
(10)		21.7NM	FL 460 FL 135			[Class A] ⁽⁵⁾	
▲	OTLON	030752N 1042006E				(11)	
(10)		5.4NM	FL 460 FL 135			[Class A] ⁽⁵⁾	
▲	RAXIM (WMFC/WSJC FIR BDRY)	030318N 1041713E				(12)	
(10)		47.0NM	FL 460 FL 135			[Class A] ⁽⁶⁾	
▲	MERSING DVOR/DME (VMR)	022318N 1035218E					

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
	↓ ↑			↓	↑	
1	2	3	4	5	6	7
<p><u>Route remarks:</u> Lateral Limits: 10NM either side of line joining VMR DVOR/DME to RAXIM and 25NM either side of line joining RAXIM to DUDIS. Uni-directional for north-east bound flights from VMR to DUDIS. No PDC Flight Levels FL310, FL320, FL350, FL360, FL390, FL400 applicable. Other levels available with prior approval.</p> <p><u>Point/Segment Remarks:</u> (2) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between DOLOX and DUDIS) and not in ADS-B Out exclusive airspace within the Singapore FIR. (3) Segment from DUDIS to DOLOX use: P134.9 MHz S134.35 MHz (4) Segment from DOLOX to DUBSA use: P123.7 MHz S127.3 MHz (5) Segment from DUBSA to RAXIM use: P134.7 MHz S134.15 MHz (6) Segment from RAXIM to VMR use: P133.8 MHz S127.3 MHz (7) VMR 031° 170.6NM (8) VMR 031° 128.1NM (9) VMR 032° 100.6NM (10) VMR 032° 74.0NM (11) VMR 032° 52.4NM (12) VMR 032° 47.0NM</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M772		Route availability: (1) H24				
▲ LAXOR (WSJC/RPHI FIR BDRY)	094937N 1144829E					
(10)	020° -	147.5NM	FL 460 FL 240		Even ⁽¹⁾	[Class A]
▲ BIDAG	073101N 1135544E					
(10)	020° -	97.9NM	FL 460 FL 240		Even ⁽¹⁾	[Class A] ⁽²⁾
▲ ASISU (WBFC/WSJC FIR BDRY)	055906N 1132046E					
<p><u>Route remarks:</u> Available only for flights departing from: - WIII and WIHH to VHHH and airports in People's Republic of China. - WBGB, WBSB, WBG, WBKL, WBGR and WBGS to VHHH only. ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover and not in ADS-B Out exclusive airspace within the Singapore FIR.</p> <p><u>Point/Segment Remarks:</u> (2) BRU 305° 113.3NM</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
M774		Route availability: (1) H24				
▲ JUNHA	005413N 1043052E					
(10)	101° 281°	61.3NM	FL 600 5500 FT ALT	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A - ABV FL150] [Class B - BLW FL150]
▲ OTLAL (Delegated airspace BDRY)	004209N 1053052E					
(10)	101° 281°	86.8NM	FL 600 5500 FT ALT	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] [Class B]
▲ OBDOS	002503N 1065551E					
<p><u>Route Remarks:</u> Singapore ACC FREQ: P134.4 MHz S128.1 MHz Flight Planning: Flights overflying Singapore to destinations north of Kuala Lumpur and Subang to flight plan via M774 JUNHA IRTAD A464 SJ G579 VJB Y342 AROSO Y513. Flights overflying Singapore to land at Kuala Lumpur and Subang to flight plan via M774 JUNHA IRTAD A464 SJ G579 VJB A457. All departures from Singapore aerodromes joining ATS route M774 to flight plan via HOSBA G580 DODSO T21. Flights above FL370 between JUNHA and OBDOS, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]					
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks		
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks	
1	2	3	4	5	6	7	
M904		Route availability: (1) H24					
▲ TIDAR (WSJC/VTBB FIR BDRY)	065230N 1025000E						
(10)	$\frac{144^\circ}{324^\circ}$	19.8NM	$\frac{FL\ 460}{6500\ FT\ ALT}$	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A (FL290 and ABV)]	
▲ ODOÑO	063614N 1030129E						
(10)	$\frac{144^\circ}{324^\circ}$	33.1NM	$\frac{FL\ 460}{FL\ 145}$	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A (FL290 and ABV)]	
▲ UPRON	060903N 1032040E						
(10)	$\frac{144^\circ}{324^\circ}$	93.4NM	$\frac{FL\ 460}{FL\ 245}$	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A (FL290 and ABV)]	
▲ ENREP	045224N 1041442E						
<u>Route remarks:</u> Singapore ACC FREQ: P134.9 MHz S134.35 MHz ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover and not in the ADS-B Out exclusive airspace within the Singapore FIR.							
<u>Point/Segment Remarks:</u> -							

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
	↓ ↑			↓	↑	
1	2	3	4	5	6	7
N502		Route availability: (1) H24				
▲ BOBAG	010230N 1032954E					
(5)	336° -	105.3NM	FL 600 FL 275		Even ⁽¹⁾	[Class A]
▲ PARDI	003400S 1041300E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.4 MHz S128.1 MHz Flights above FL370 from PARDI to BOBAG, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels			Remarks
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
N875		Route availability: (1) H24				
▲ ENREP	045224N 1041442E					
	131° 311°	44.1NM	FL 460 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽²⁾
▲ NOPAT	042313N 1044756E					
	131° 311°	16.3NM	FL 460 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽²⁾
▲ DAMOG	041225N 1050014E					
	131° 311°	20.6NM	FL 460 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽²⁾
▲ SUSAR	035848N 1051547E					
	131° 311°	21.8NM	FL 460 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲ MUMSO	034420N 1053213E					
	131° 311°	21.3NM	FL 460 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲ ELGOR	033014N 1054818E					
	131° 311°	1.3NM	FL 460 FL 245	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
△ AKDAT (WSJC/WIIF FIR BDRY)	032923N 1054917E					
<u>Route remarks:</u> -						
<u>Point/Segment Remarks:</u> (2) Segment from ENREP to SUSAR use: P123.7 MHz S127.3 MHz (3) Segment from SUSAR to AKDAT use: P134.7 MHz S134.15 MHz						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name		Significant Point Coordinates		Direction of cruising levels		Remarks
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
N884		Route availability: (1) H24				
▲	LAXOR (WSJC/RPHI FIR BDRY)	094937N 1144829E				
(10)	<u>051°</u> -	246.6NM	<u>FL 460</u> 6500 FT ALT			[Class A] ⁽²⁾⁽³⁾
▲	LAGOT	071632N 1113243E				
(10)	<u>051°</u> -	242.9NM	<u>FL 460</u> 6500 FT ALT			[Class A] ⁽²⁾⁽³⁾
▲	RILRI (WSJC/WIIF FIR BDRY)	044343N 1082239E				
(10)	<u>051°</u> -	111.5NM	<u>FL 600</u> 6500 FT ALT		Odd ⁽¹⁾	[Class A] [Class B] [Class C] ⁽⁴⁾
▲	LUSMO	033341N 1065534E				
(10)	<u>069°</u> -	53.0NM	<u>FL 600</u> 6500 FT ALT		Odd ⁽¹⁾	[Class A] [Class B] ⁽⁴⁾
▲	LEBIN	031438N 1060604E				
(10)	<u>069°</u> -	32.2NM	<u>FL 600</u> 6500 FT ALT		Odd ⁽¹⁾	[Class A] [Class B] ⁽⁴⁾
▲	OLMUT (Delegated airspace BDRY)	030306N 1053558E				
(10)	<u>069°</u> -	22.5NM	<u>FL 600</u> 6500 FT ALT			[Class A - ABV FL150] [Class B - BLW FL150] ⁽⁵⁾
▲	VEGLO (WSJC/WIIF FIR BDRY)	025502N 1051457E				
(10)	<u>069°</u> -	3.7NM	<u>FL 460</u> 6500 FT ALT			[Class A] ⁽⁵⁾
▲	LIPRO	025342N 1051128E				
(10)	<u>069°</u> -	34.2NM	<u>FL 460</u> 6500 FT ALT			[Class A] ⁽⁵⁾
▲	LENDA (WSJC/MMFC FIR BDRY)	024124N 1043932E				
(10)	<u>069°</u> -	50.6NM	<u>FL 460</u> 6500 FT ALT			[Class A] ⁽⁶⁾
▲	MERSING DVOR/DME (VMR)	022318N 1035218E				

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
<p><u>Route remarks:</u> Uni-directional for east bound flights from VMR to LAXOR. No PDC Flight Levels FL310, FL320, FL350, FL360, FL390, FL400 applicable. Other levels available with prior approval. Flight planning: Not available for flight planning between VMR and OLMUT. Flight Plan via TOMAN L625. Flights above FL370 from VEGLO to OLMUT, see AIP Indonesia ENR2.1.</p> <p><u>Point/Segment Remarks:</u> (2) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between RILRI and LAXOR) and not in the ADS-B Out exclusive airspace within the Singapore FIR. (3) Segment from RILRI to LAXOR use: P135.05 MHz S134.95 MHz (4) Segment from OLMUT to RILRI to contact Jakarta ACC. (5) Segment from OLMUT to LENDA use: P134.7 MHz S134.15 MHz (6) Segment from LENDA to VMR use: P133.8 MHz S127.3 MHz</p>						

Route Designator {RNP Type}		[Route Usage Notes]					
Significant Point Name		Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}		Track MAG	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
		↓ ↑			↓	↑	
1		2	3	4	5	6	7
N891		Route availability: (1) H24					
▲	IGARI (WSJC/VVHM FIR BDRY)	065612N 1033506E					
(10)		$\frac{162^\circ}{342^\circ}$	65.4NM	$\frac{FL\ 460}{FL\ 155}$	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽²⁾
▲	IKUMI	055338N 1035509E					
(10)		$\frac{162^\circ}{342^\circ}$	64.0NM	$\frac{FL\ 460}{FL\ 155}$	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽²⁾
▲	ENREP	045224N 1041442E					
(10)		$\frac{185^\circ}{005^\circ}$	75.5NM	$\frac{FL\ 460}{FL\ 155}$	Odd ⁽¹⁾	Even ⁽¹⁾	[Class A] ⁽³⁾
▲	UGPEK	033647N 1040752E					
(10)		$\frac{185^\circ}{005^\circ}$	11.7NM	$\frac{FL\ 460}{FL\ 155}$	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A] ⁽³⁾
▲	URIGO	032505N 1040647E					
(10)		$\frac{184^\circ}{004^\circ}$	10.6NM	$\frac{FL\ 460}{FL\ 155}$	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A] ⁽³⁾
▲	MANIM (WMFC/WSJC FIR BDRY)	031430N 1040554E					
(10)		$\frac{185^\circ}{005^\circ}$	2.6NM	$\frac{FL\ 460}{FL\ 155}$	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A] ⁽⁴⁾
▲	OBDAB	031153N 1040538E					
(10)		$\frac{185^\circ}{005^\circ}$	106.4NM	$\frac{FL\ 460}{FL\ 155}$	Even ⁽¹⁾	Odd ⁽¹⁾	[Class A] ⁽⁴⁾
▲	PAPA UNIFORM DVOR/DME (PU)	012524N 1035600E					⁽⁵⁾
Route remarks: ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover and not in the ADS-B Out exclusive airspace within the Singapore FIR.							
Point/Segment Remarks: (2) Segment from IGARI to ENREP use: P134.9 MHz S134.35 MHz (3) Segment from ENREP to MANIM use: P123.7 MHz S127.3 MHz (4) Segment from MANIM to PU use: P133.8 MHz S127.3 MHz (5) WSJC/WMFC FIR boundary approximately 0.4NM North of PU.							

Route Designator {RNP Type}		[Route Usage Notes]					Remarks
Significant Point Name		Significant Point Coordinates		Upper limit Lower limit	Direction of cruising levels		
{RNP Type}	Track MAG	Dist NM			↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7	
N892		Route availability: (1) H24					
▲	MELAS (VVHM/WSJC FIR BDRY)	070518N 1080912E					
(10)		203.6NM	FL 460 FL 135			[Class A] ⁽²⁾⁽³⁾	
▲	MABLI	041717N 1061247E				(6)	
(10)		52.1NM	FL 460 FL 135			[Class A] ⁽⁴⁾	
▲	MUMSO	034420N 1053213E				(7)	
(10)		25.2NM	FL 460 FL 135			[Class A] ⁽⁴⁾	
▲	MABAL	032826N 1051236E				(8)	
(10)		41.4NM	FL 460 FL 135			[Class A] ⁽⁴⁾	
▲	KILOT	030217N 1044023E				(9)	
(10)		15.7NM	FL 460 FL 135			[Class A] ⁽⁴⁾	
▲	KIBOL (WSJC/WMFC FIR BDRY)	025224N 1042818E				(10)	
(10)		28.1NM	FL 460 FL 135			[Class A] ⁽⁵⁾	
▲	PEKLA	023437N 1040618E				(11)	
(10)		18.0NM	FL 460 FL 135			[Class A] ⁽⁵⁾	
▲	MERSING DVOR/DME (VMR)	022318N 1035218E					

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
<p><u>Route remarks:</u> Lateral Limits: 10NM either side of line joining VMR DVOR/DME to KIBOL and 25NM either side of line joining KIBOL to MELAS. Uni-directional for south-west bound flights from MELAS to VMR. No PDC Flight Levels FL310, FL320, FL350, FL360, FL390, FL400 applicable. Other levels available with prior approval. Flight planning for Direct Routing Operations (DRO): Arriving aircraft into Singapore Changi Airport operating at FL290 to FL460 (inclusive) and entering Singapore FIR via MELAS should flight plan using the direct route MELAS DCT MABAL. All other aircraft operating at FL290 to FL460 (inclusive) and entering Singapore FIR via MELAS should flight plan using the direct route MELAS DCT MABAL.</p> <p><u>Point/Segment Remarks:</u> (2) ADS-C and CPDLC services are available to suitably equipped aircraft operating outside radar cover (between MELAS and MABLI) and not in the ADS-B Out exclusive airspace within the Singapore FIR. (3) Segment from MELAS to MABLI use: P134.9 MHz S134.35 MHz (4) Segment from MABLI to KIBOL use: P134.7 MHz S134.15 MHz (5) Segment from KIBOL to VMR use: P133.8 MHz S127.3 MHz (6) VMR 051° 180.6NM (7) VMR 051° 128.4NM (8) VMR 051° 103.2NM (9) VMR 051° 61.8NM (10) VMR 050° 46.1NM (11) VMR 051° 18.0NM</p>						

Route Designator {RNP Type}		[Route Usage Notes]					
Significant Point Name		Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks	
1	2	3	4	5	6	7	
P501		Route availability: (1) H24					
▲	ARAMA (Delegated airspace BDRY)	013654N 1030712E					
(10)	<u>146°</u> -	25.0NM	<u>FL 460</u> 9500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150] ⁽²⁾	
▲	ANBUS (WMFC/WIIF FIR BDRY) (Delegated airspace BDRY)	011554N 1032100E					
(10)	<u>146°</u> -	16.0NM	<u>FL 600</u> 9500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150] ⁽²⁾	
▲	BOBAG	010230N 1032954E					
(10)	<u>134°</u> -	41.2NM	<u>FL 600</u> <u>FL 275</u>	Odd ⁽¹⁾		[Class A] ⁽³⁾	
▲	UXATI	003348N 1035933E					
(10)	<u>134°</u> -	19.2NM	<u>FL 600</u> <u>FL 275</u>	Odd ⁽¹⁾		[Class A] ⁽³⁾	
▲	POSOG	002024N 1041323E					
(10)	<u>134°</u> -	53.7NM	<u>FL 600</u> <u>FL 275</u>	Odd ⁽¹⁾		[Class A] ⁽³⁾	
▲	ANITO	001700S 1045200E					
<p><u>Route remarks:</u> Flights above FL370 from ANBUS to ANITO, see AIP Indonesia ENR2.1.</p> <p><u>Point/Segment Remarks:</u> (2) Segment from ARAMA to BOBAG use: P133.25 MHz S135.8 MHz (3) Segment from BOBAG to ANITO use: P134.4 MHz S128.1 MHz</p>							

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
Q801		Route availability: (1) H24				
▲ ESPOB (VVHM/WSJC FIR BDRY)	070000N 1053318E					
		143.0NM	FL 460 FL 200			[Class A]
▲ ESBUM	045210N 1042830E					
<p><u>Route remarks:</u> Lateral Limits: 15NM either side of line joining ESPOB TO ESBUM. Flight planning for Direct Routing Operations (DRO): Arriving aircraft into Singapore Changi Airport operating at FL290 to FL460 (inclusive) and entering Singapore FIR via ESPOB should flight plan using the direct route ESPOB DCT ELALO. Uni-directional for southbound flights from ESPOB to ESBUM. No PDC Flight Levels FL310, F320, F350, FL360, FL390, FL400 applicable. Other levels available with prior approval. Singapore ACC FREQ: P134.9 MHz S134.35 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
Q802		Route availability: (1) H24				
▲ IPRIX (VVHM/WSJC FIR BDRY)	070000N 1040754E					
		130.0NM	FL 460 FL 200	Odd ⁽¹⁾		[Class A]
▲ ESBUM	045210N 1042830E					
		39.0NM	FL 460 FL 200	Odd ⁽¹⁾		[Class A]
▲ ELALO	041240N 1043329E					
<p><u>Route remarks:</u> Lateral Limits: 15NM either side of line joining IPRIX to ELALO Singapore ACC FREQ: P134.9 MHz S134.35 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name		Significant Point Coordinates				Remarks
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
				↓	↑	
1	2	3	4	5	6	7
Q803		<i>Route availability:</i> (1) H24				
▲ UPRON	060903N 1032040E					
		87.0NM	FL 460 FL 240	Odd ⁽¹⁾		[Class A]
▲ IPDOL	045111N 1035920E					
		15.0NM	FL 460 FL 200	Odd ⁽¹⁾		[Class A]
▲ KEXOL	043930N 1040942E					
		36.0NM	FL 460 FL 200	Odd ⁽¹⁾		[Class A]
▲ ELALO	041240N 1043329E					
<p><u>Route remarks:</u> Lateral Limits: 15NM either side of line joining UPRON to ELALO Singapore ACC FREQ: P134.9 MHz S134.35 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
T21		Route availability: (1) H24				
▲ JUNHA	005413N 1043052E					
(2)	041° -	34.6NM	FL 600 3000 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ VEBMA	012030N 1045332E					
(2)	088° -	53.8NM	FL 600 3000 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ TOMAN	012147N 1054717E					
(2)	088° -	26.8NM	FL 600 5500 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ DODSO (Delegated airspace BDRY)	012225N 1061402E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.2 MHz S133.35 MHz Flight Planning Instructions: All departures from Singapore aerodromes, Batam and Tanjungpinang joining ATS route L504 or M774 to flight plan via DODSO T21. Flights above FL370 from JUNHA to DODSO, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
T22		Route availability: (1) H24				
▲	OBDOS	002503N 1065551E				
(2)	<u>278°</u> -	92.4NM	FL 600 3000 FT ALT	Even ⁽¹⁾		[Class A] [Class B]
▲	UGEBO	003813N 1052432E				
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.2 MHz S133.35 MHz Flight Planning Instructions: Arrivals into Changi, Batam and Tanjungpinang on L504 or M774 to flight plan via OBDOS – UGEB0. After UGEB0, to join the UGEB0 STAR. Arrivals into WSSL and WSAP on L504 or M774 to flight plan via OBDOS – T22 – UGEB0 – T23 – JUNHA. After JUNHA to route either to OMKOM or SJ. Flights above FL370 from OBDOS to UGEB0, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
T23		Route availability: (1) H24				
▲ SURGA	003657S 1063119E					
(2)	318° -	100.4NM	FL 600 3000 FT ALT	Even ⁽¹⁾		[Class A] [Class B]
▲ UGEB0	003813N 1052432E					
(2)	286° -	56.1NM	FL 600 5500 FT ALT	Even ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ JUNHA	005413N 1043052E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.2 MHz S133.35 MHz Flight Planning Instructions: Arrivals into Changi, Batam and Tanjungpinang on M635 to flight plan via SURGA – UGEB0. After UGEB0, to join the UGEB0 STAR. Arrivals into WSSL and WSAP on M635 to flight plan via SURGA – T23 – JUNHA. After JUNHA to route either to OMKOM or SJ. Flights above FL370 from SURGA to JUNHA, see AIP Indonesia ENR 2.1</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates				Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	Direction of cruising levels ↓ ↑		Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
T24		Route availability: (1) H24				
▲ JUNHA	005413N 1043052E					
(2)	<u>163°</u> -	27.0NM	FL 600 3000 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ GURES	002814N 1043835E					
(2)	<u>120°</u> -	26.7NM	FL 600 3000 FT ALT	Odd ⁽¹⁾		[Class A - ABV FL150] [Class B - BLW FL150]
▲ IDBUD (Delegated airspace BDRY)	001454N 1050139E					
(2)	<u>120°</u> -	103.6NM	FL 600 5500 FT ALT	Odd ⁽¹⁾		[Class A] [Class B]
▲ SURGA	003657S 1063119E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P134.4 MHz S128.1 MHz Flight Planning Instructions: All departures from Singapore aerodromes, Batam and Tanjungpinang joining ATS route M635 to flight plan via IDBUD T24. Flights above FL370 from JUNHA to SURGA, see AIP Indonesia ENR 2.1.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
T25		Route availability: (1) H24				
▲ AVLUB	003112S 1042501E					
(2)	341° -	18.6NM	FL 600 FL 290	Even ⁽¹⁾		[Class A] [Class B] [Class C]
▲ IGUTU	001331S 1041857E					
<u>Route remarks:</u> See Indonesia AIP ENR 2.1. Flight planning unidirectional for northbound flights from DOLTA-IGUTU to Batam and Tanjungpinang. All departures from WIPP to WIDD and WIDN to flight plan via T25 IGUTU. All departures from WIKK to WIDD and WIDN to flight plan via DCT NIPES T25 IGUTU. All departures from WIJJ to WIDD and WIDN to flight plan via IGUTU.						
<u>Point/Segment Remarks:</u> -						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
T611		Route availability: (1) H24				
▲ IPRIX (VVHM/WSJC FIR BDRY)	070000N 1040754E					
		128.0NM	FL 460 FL 200		Even ⁽¹⁾	[Class A]
▲ IPDOL	045111N 1035920E					
		86.0NM	FL 460 FL 200		Even ⁽¹⁾	[Class A]
▲ IDSEL (WMFC/WSJC FIR BDRY)	032432N 1035544E					
<p><u>Route remarks:</u> Lateral Limits: 15NM either side of line joining IDSEL to IPRIX. Singapore ACC FREQ: P123.7 MHz S127.3 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
T612		Route availability: (1) H24				
▲ DOLOX	044841N 1052247E					
		121.0NM	FL 460 FL 200			[Class A]
▲ IDSEL (WMFC/WSJC FIR BDRY)	032432N 1035544E					
<p><u>Route remarks:</u> Lateral Limits: 15NM either side of line joining IDSEL to DOLOX. Uni-directional for north-east bound flights from IDSEL to DOLOX. No PDC Flight Levels FL310, FL320, FL350, FL360, FL390, FL400 applicable. Other levels available with prior approval. Singapore ACC FREQ: P123.7 MHz S127.30 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name		Significant Point Coordinates				Remarks
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
	↓ ↑			↓	↑	
1	2	3	4	5	6	7
Y334		Route availability: (1) H24				
▲ DOVOL (WSJC/MMFC FIR BDRY)	033047N 1034923E					
	<u>219°</u> -	27.8NM	<u>FL 460</u> <u>FL 245</u>	Even ⁽¹⁾		
▲ PADLI	030918N 1033133E					
<p><u>Route remarks:</u> Lateral Limits: 10NM either side of line joining DOVOL to PADLI. Singapore ACC FREQ: P123.7 MHz S127.3 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
Y335		Route availability: (1) H24				
▲ IDSEL (WMFC/WSJC FIR BDRY)	032432N 1035544E					
(2)	$\frac{057^\circ}{237^\circ}$	28.5NM	$\frac{FL\ 460}{FL\ 245}$	Even ⁽¹⁾	Odd ⁽¹⁾	
▲ PADLI	030918N 1033133E					
<u>Route remarks:</u> Lateral Limits: 10NM on either side of line joining IDSEL to PADLI. Singapore ACC FREQ: P123.7 MHz S127.3 MHz <u>Point/Segment Remarks:</u> -						

Route Designator {RNP Type}		[Route Usage Notes]					
Significant Point Name		Significant Point Coordinates				Remarks	
{RNP Type}		Track MAG	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
		↓ ↑			↓	↑	
1	2	3	4	5	6	7	
Y336		Route availability: (1) H24					
▲	KETOD (WMFC/WSJC FIR BDRY)	031042N 1040942E					
(2)		087° 267°	38.2NM	FL 460 FL 245	Even ⁽¹⁾	Odd ⁽¹⁾	
▲	PADLI	030918N 1033133E					
<p><u>Route remarks:</u> Lateral Limits: 10NM on either side of line joining KETOD to PADLI. Singapore ACC FREQ: P123.7 MHz S127.3 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>							

Route Designator {RNP Type}		[Route Usage Notes]					
Significant Point Name		Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}		Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1		2	3	4	5	6	7
Y339		Route availability: (1) H24					
△	AKOMA (20 DME PU)	014522N 1035443E					
(2)			38.3NM	FL 460 5500 FT ALT	Even ⁽¹⁾		[Class A-ABV FL150 Class B-BLW FL150]
△	AROSO	020846N 1032421E					
<p><u>Route remarks:</u> Lateral Limits: 11.5NM either side of line joining AKOMA to AROSO. Flight Planning Flights departing from or overflying Singapore FIR to destinations north of WMKK and WMSA are to flight plan via Y339. Flights landing at WMKK and WMSA, or flights operating at FL220 and below, refer to A457. Singapore ACC FREQ: P133.25 MHz S135.8 MHz</p> <p><u>Point/Segment Remarks:</u> -</p>							

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name		Significant Point Coordinates				Remarks
{RNP Type}	Track MAG	Dist NM	Upper limit Lower limit	Direction of cruising levels		Controlling unit Frequency {Airspace class} Remarks
	↓ ↑			↓	↑	
1	2	3	4	5	6	7
Y342		Route availability: (1) H24				
▲	JOHOR BAHRU DVOR/DME (VJB)	013950N 1033939E				
		32.6NM	FL 460 4500 FT ALT	Even ⁽¹⁾		[Class A-ABV FL150 Class B-BLW FL150]
△	AROSO	020846N 1032421E				
<p><u>Route remarks:</u> Lateral Limits: 10NM either side of line joining VJB to AROSO. Flight Planning Flights overflying Singapore FIR to destinations north of WMKK and WMSA are to flight plan via Y342. Flights landing at WMKK and WMSA, refer to A457.</p> <p><u>Point/Segment Remarks:</u> -</p>						

Route Designator {RNP Type}		[Route Usage Notes]				
Significant Point Name	Significant Point Coordinates		Direction of cruising levels		Remarks	
{RNP Type}	Track MAG ↓ ↑	Dist NM	Upper limit Lower limit	↓	↑	Controlling unit Frequency {Airspace class} Remarks
1	2	3	4	5	6	7
Y514		Route availability: (1) H24				
△ VIRID	031728N 1031318E					
(2)		34.6NM	FL 460 11000 FT ALT	Odd ⁽¹⁾		[Class A]
▲ NUFFA	025341N 1033830E					
<p><u>Route remarks:</u> Singapore ACC FREQ: P123.7MHz S127.3MHz Flight Planning Arrivals into Changi to flight plan via Y514 - NUFFA - PIBAP - PASPU. After PASPU, expect radar vectors. All other flights to flight plan via Y514 - NUFFA - BIKTA -B469</p> <p><u>Point/Segment Remarks:</u> -</p>						