International Civil Aviation Organization

Fifth Meeting of the Surveillance Implementation Coordination Group (SURICG/5)

Web-conference, 22 – 24 September 2020

Agenda Item 3: **Review of regional requirements for Surveillance in the e-ANP, Seamless ANS Plan and the reported implementation status**

c) Additional System Area Codes (SAC) for surveillance systems in APAC and update on Regional Supplement to ASTERIX Interface Control Document (ICD) for ASIA/PAC Region

ADDITIONAL SYSTEM AREA CODES (SAC) FOR SURVEILLANCE SYSTEMS IN APAC AND UPDATE ON REGIONAL SUPPLEMENT TO ASTERIX INTERFACE CONTROL DOCUMENT (ICD)

(Presented by the Secretariat)

SUMMARY

This working paper presents the Additional System Area Codes (SAC) for surveillance systems in APAC and the update on Regional Supplement to ASTERIX Interface Control Document (ICD) for ASIA/PAC Region.

1. INTRODUCTION

1.1 The Regional Supplement to ASTERIX Interface Control Document (ICD) for ASIA/PAC Region (referred as *the Supplement* in subsequent content) was in place to serve the purpose for denoting the unique identification within the Asia and Pacific regions to represent either a surveillance source or a sink, participating in the surveillance data exchange. The current 2nd edition of the document was issued back in September 2003.

1.2 With the development and expansion of surveillance facilities, there is a need to introduce additional System Area Codes (SAC) for surveillance systems in APAC. Subsequently, the Supplement will have to be updated to cater the introduction.

2. DISCUSSION

Additional SAC

2.1 Australia has requested ICAO APAC Regional Office for an additional SAC for their surveillance facilities. According to paragraph 3.1.2 in the ICD, i.e.-

Recommendation *When needed, more than one SAC could be assigned to a single country or territory, for example, to differentiate between civil and military applications.*

ICAO APAC Regional office has accepted the $A4^{hex}$ to be the additional SAC proposed by Australia.

2.2 Being the first requirement for additional SAC code in the APAC region, this issue is brought to discussion in SURICG/5. The acceptable code $A4^{hex}$ is to be reflected into the next edition the Supplement as in **Table 1 of Attachment A**.

Other Updates to the Supplement

2.3 The System Identification Code (SIC) were provided by Australia, Laos PDR and Philippines and these data are to be reflected into the next edition the Supplement as in **Attachment A**.

2.4 Further to the above, there are editorial updates on the Supplement, including the binary representation of SAC of Brunei Darussalam. Such updates are to be reflected into the next edition the Supplement as in **Table 1 of Attachment A**.

3. ACTION BY THE MEETING

3.1 The meeting is invited

a) to take note on the updates in this paper and take necessary actions.

b) to encourage States/Administrations to provide updates, including their use of SIC, to ICAO APAC Regional Office to reflect the latest data in the Supplement.

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INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE

REGIONAL SUPPLEMENT

TO

THE ASTERIX INTERFACE CONTROL DOCUMENT (ICD) FOR THE ASIA/PAC REGION

~~SECOND~~THIRD EDITION

~~September 2003~~

September 2020

Issued by the ICAO Asia/Pacific Regional Office, Bangkok

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Regional Supplement to the
All Purpose Structured Eurocontrol Surveillance
Information Exchange (ASTERIX) ICD
for the ASIA/PAC Region

System Area Code (SAC) and
System Identification Code (SIC)

ADDRESSING SCHEME OF RADAR DATA EXCHANGE

1. General

In order to avoid ambiguity, every radar system (i.e. radar sensor, radar data processing system, server) shall have a unique identification within the Asia and Pacific regions to represent either a radar source or a sink, participating in the radar data exchange.

2. Syntax

The format of System Identifier field of radar data exchange shall be composed of two subfields as illustrated below:

SAC	SIC

	Field Name	**Element Type**	**Field Size**
SAC	System Area Code	Binary	One octet
SIC	System Identification Code	Binary	One octet

2.1 System Area Code (SAC)

2.1.1 The SAC field shall consist of an eight-bit number assigned to a country or a territory.

2.1.2 The SAC field format shall be as illustrated below:

MSB

b8	b7	b6	b5	b4	b3	b2	b1

Where: b represents a binary digit and the MSB stands for Most Significant Bit

2.1.3 System Identification Code (SIC)

2.1.3.1 The SIC shall consist of an eight-bit number assigned to each radar system (radar sensor, processing system, server, etc.) located in the country or territory as defined by the SAC.

2.1.3.2 The SIC field format shall be as illustrated below:

MSB

b8	b7	b6	b5	b4	b3	b2	b1

Where: b represents a binary digit and MSB stands for the Most Significant Bit

2.1.4 The individual SICs are assigned by the National Administration concerned within the area identified by the SAC and are published in the this Document.

2.1.5 Within a country or territory identified by a SAC up to 256 individual codes (SICs) can be assigned.

2.1.6 The SICs shall be indicated by decimal and presented by binary in their relevant tables.

2.1.7 **Recommendation** *The assignment of SICs could be divided into groups by different functions and facilities categories.*

3. Assignment of the Systems Identifiers

3.1 System Area Codes

3.1.1 One SAC is assigned to each country or territory.

3.1.2 **Recommendation** *When needed, more than one SAC could be assigned to a single country or territory, for example, to differentiate between civil and military applications.*

3.1.3 The SACs allotment is provided in the Table 1 - System Area Codes (SAC)

3.1.4 Amendments to the System Area Codes (SAC) shall be coordinated by ICAO ASIA/PAC Regional office.

System Area Code (SAC) Allotment Scheme
(by country alphabet order and even hexadecimal numbers)

Table 1 - System Area Codes

SAC (Hexad)	Country/ Geographical Area	Binary Representation	SAC (Hexad)	Country/ Geographical Area	Binary Representation
02	American Samoa	0000 0010	50	Mongolia	0101 0000
04	Australia	0000 0100	52	Myanmar	0101 0010
A4	Australia	1010 0100	54	Nauru	0101 0100
06	Bangladesh	0000 0110	56	Nepal	0101 0110
08	Bhutan	0000 1000	58	New Caledonia	0101 1000
10	Brunei Darussalam	~~0000 1010~~ 0001 0000	60	New Zealand	0110 0000
12	Cambodia	0001 0010	62	Niue Island	0110 0010
16	China	0001 0110	64	Pakistan	0110 0100
18	Hong Kong, China	0001 1000	66	Palau	0110 0110
20	Taibei, China	0010 0000	68	Papua New Guinea	0110 1000
22	Cook Islands	0010 0010	72	Philippines	0111 0010
24	DPR. of Korea	0010 0100	74	Republic of Korea	0111 0100
26	Fiji	0010 0110	76	Samoa	0111 0110
28	French Polynesia	0010 1000	78	Singapore	0111 1000
30	India	0011 0000	80	Solomon Islands	1000 0000
32	Indonesia	0011 0010	82	Sri Lanka	1000 0010
34	Japan	0011 0100	84	Thailand	1000 0100
36	Kiribati	0011 0110	86	Tonga	1000 0110
38	Lao PDR.	0011 1000	88	Tuvalu	1000 1000
40	Macao, China	0100 0000	90	United States	1001 0000
42	Malaysia	0100 0010	92	Vanuatu	1001 0010
44	Maldives	0100 0100	94	Vietnam	1001 0100
46	Marshall Islands	0100 0110	96	Wallis Islands	1001 0110
48	Micronesia	0100 1000			

* 14, 70 is intentionally left blank

System Identification Codes (SIC) Assignment
by country alphabet order

(Sample Format)

SIC (Decimal)	Radar Data System	Radar Type	Code (Binary)
Radars in Terminal Areas			
001	Location A	PSR/SSR	0000 0001
002	B	PSR/MSSR	0000 0010
003	C	PSR/MSSR	0000 0011
065	D	PSR/MSSR	0100 0001
066	E	PSR/MSSR	0100 0010
Radars in En-Route Airspace			
132	Location F	MSSR	1000 0100
133	G	SSR	1000 0101
134	X	MSSR	1000 0110
135	Y	MSSR	1000 0111
195	Z	SSR	1100 0011
196		SSR	1100 0100
Processing Systems			
228	ATCC - RDPA		1110 0100
229	ATCC – RDPB		1110 0101

AUSTRALIA

1. System Identification Code (SIC)

Table 1: Proposed SIC assignment for Australia – grouped into functions and facilities categories.

SIC Range (Decimal)	Type
0001 – 0010	ATC Centres
0011 – 0040	Terminal Area Radar Stations
0041 – 0080	Enroute Radar Stations
0081 – 0200	ADS-B Ground Stations
0200 – 0255	Reserved for Military

Table 2: Detailed SIC assignment for Australia

SIC (Decimal)	System	Type	Code (Binary)
0001	Reserved	Undefined	0000 0001
0002	Brisbane TAAATS Centre	ATC Centre	0000 0010
0003	Melbourne TAAATS Centre	ATC Centre	0000 0011
0004	Reserved	Undefined	0000 0100
0005	Reserved	Undefined	0000 0101
0006	Reserved	Undefined	0000 0110
0007	Reserved	Undefined	0000 0111
0008	Reserved	Undefined	0000 1000
0009	Reserved	Undefined	0000 1001
0010	Reserved	Undefined	0000 1010
0011	Redden Creek	PSR/MSSR	0000 1011
0012	Brisbane	PSR/MSSR	0000 1100
0013	Mt Sommerville	PSR/MSSR	0000 1101
0014	Sydney	PSR/MSSR	0000 1110
0015	Mt Majura	PSR/MSSR	0000 1111
0016	Gellibrand Hill	PSR/MSSR	0001 0000
0017	Adelaide	PSR/MSSR	0001 0001
0018	Perth	PSR/MSSR	0001 0010
0019	Transportable	PSR/MSSR	0001 0011
0020	Reserved	Undefined	0001 0100
0021	Reserved	Undefined	0001 0101
0022	Reserved	Undefined	0001 0110
0023	Reserved	Undefined	0001 0111
0024	Reserved	Undefined	0001 1000
0025	Reserved	Undefined	0001 1001
0026	Reserved	Undefined	0001 1010
0027	Reserved	Undefined	0001 1011
0028	Reserved	Undefined	0001 1100
0029	Reserved	Undefined	0001 1101

AUSTRALIA (CONT'D)

SIC (Decimal)	System	Type	Code (Binary)
0030	Reserved	Undefined	0001 1110
0031	Reserved	Undefined	0001 1111
0032	Reserved	Undefined	0010 0000
0033	Reserved	Undefined	0010 0001
0034	Reserved	Undefined	0010 0010
0035	Reserved	Undefined	0010 0011
0036	Reserved	Undefined	0010 0100
0037	Reserved	Undefined	0010 0101
0038	Reserved	Undefined	0010 0110
0039	Reserved	Undefined	0010 0111
0040	Reserved	Undefined	0010 1000
0041	Hans Tableland	MSSR	0010 1001
0042	Mt Alma	MSSR	0010 1010
0043	Swampy Ridge	MSSR	0010 1011
0044	Tabletop	MSSR	0010 1100
0045	Mt Hardgrave	MSSR	0010 1101
0046	The Round Mountain	MSSR	0010 1110
0047	Mt Boyce	MSSR	0010 1111
0048	Mt Bobbora	MSSR	0011 0000
0049	Mt Macedon	MSSR	0011 0001
0050	Summertown	MSSR	0011 0010
0051	Kalamunda	MSSR	0011 0011
0052	Reserved	Undefined	0011 0100
0053	Reserved	Undefined	0011 0101
0054	Reserved	Undefined	0011 0110
0055	Reserved	Undefined	0011 0111
0056	Reserved	Undefined	0011 1000
0057	Reserved	Undefined	0011 1001
0058	Reserved	Undefined	0011 1010
0059	Reserved	Undefined	0011 1011
0060	Reserved	Undefined	0011 1100
0061	Reserved	Undefined	0011 1101
0062	Reserved	Undefined	0011 1110
0063	Reserved	Undefined	0011 1111
0064	Reserved	Undefined	0100 0000
0065	Reserved	Undefined	0100 0001
0066	Reserved	Undefined	0100 0010
0067	Reserved	Undefined	0100 0011
0068	Reserved	Undefined	0100 0100
0069	Reserved	Undefined	0100 0101
0070	Reserved	Undefined	0100 0110
0071	Reserved	Undefined	0100 0111
0072	Reserved	Undefined	0100 1000
0073	Reserved	Undefined	0100 1001
0074	Reserved	Undefined	0100 1010
0075	Reserved	Undefined	0100 1011

AUSTRALIA (CONT'D)

SIC (Decimal)	System	Type	Code (Binary)
0076	Reserved	Undefined	0100 1100
0077	Reserved	Undefined	0100 1101
0078	Reserved	Undefined	0100 1110
0079	Reserved	Undefined	0100 1111
0080	Reserved for ADS-B		0101 0000
0081	Reserved for ADS-B		0101 0001
0082	Reserved for ADS-B		0101 0010
0083	Reserved for ADS-B		0101 0011
0084	Reserved for ADS-B		0101 0100
0085	Reserved for ADS-B		0101 0101
0086	Reserved for ADS-B		0101 0110
0087	Reserved for ADS-B		0101 0111
0088	Reserved for ADS-B		0101 1000
0089	Reserved for ADS-B		0101 1001
0090	Reserved for ADS-B		0101 1010
0091	Reserved for ADS-B		0101 1011
0092	Reserved for ADS-B		0101 1100
0093	Reserved for ADS-B		0101 1101
0094	Reserved for ADS-B		0101 1110
0095	Reserved for ADS-B		0101 1111
0096	Reserved for ADS-B		0110 0000
0097	Reserved for ADS-B		0110 0001
0098	Reserved for ADS-B		0110 0010
0099	Reserved for ADS-B		0110 0011
0100	Reserved for ADS-B		0110 0100
0101	ADS-B Test bed	ADS-B Ground Station	0110 0101
0102	Reserved for ADS-B		0110 0110
0103	Reserved for ADS-B		0110 0111
0104	Reserved for ADS-B		0110 1000
0105	Reserved for ADS-B		0110 1001
0106	Reserved for ADS-B		0110 1010
0107	Reserved for ADS-B		0110 1011
0108	Reserved for ADS-B		0110 1100
0109	Reserved for ADS-B		0110 1101
0110	Bundaberg (DSGK) GS#01	ADS-B Ground Station	0110 1110
0111	Bundaberg (DSGK) GS#02	ADS-B Ground Station	0110 1111
0112	Caiguna (CAG) GS#01	ADS-B Ground Station	0111 0000
0113	Caiguna (CAG) GS#02	ADS-B Ground Station	0111 0001
0114	Esperance (ESP) GS#01	ADS-B Ground Station	0111 0010
0115	Esperance (ESP) GS#02	ADS-B Ground Station	0111 0011
0116	Ayres Rock (AYE) GS#01	ADS-B Ground Station	0111 0100

AUSTRALIA (CONT'D)

SIC (Decimal)	System	Type	Code (Binary)
0117	Ayres Rock (AYE) GS#02	ADS-B Ground Station	0111 0101
0118	Warburton (WBR) GS#01	ADS-B Ground Station	0111 0110
0119	Warburton (WBR) GS#02	ADS-B Ground Station	0111 0111
0120	Broken Hill (BHI) GS#01	ADS-B Ground Station	0111 1000
0121	Broken Hill (BHI) GS#02	ADS-B Ground Station	0111 1001
0122	Jackson (JAK) GS#01	ADS-B Ground Station	0111 1010
0123	Jackson (JAK) GS#02	ADS-B Ground Station	0111 1011
0124	Birdsville (BDV) GS#01	ADS-B Ground Station	0111 1100
0125	Birdsville (BDV) GS#02	ADS-B Ground Station	0111 1101
0126	Billabong (BLB) GS#01	ADS-B Ground Station	0111 1110
0127	Billabong (BLB) GS#02	ADS-B Ground Station	0111 1111
0128	Thursday Is (TUD) GS#01	ADS-B Ground Station	1000 0000
0129	Thursday Is (TUD) GS#02	ADS-B Ground Station	1000 0001
0130	Meekathara (MEK) GS#01	ADS-B Ground Station	1000 0010
0131	Meekathara (MEK) GS#02	ADS-B Ground Station	1000 0011
0132	Oodnadatta (OOD) GS#01	ADS-B Ground Station	1000 0100
0133	Oodnadatta (OOD) GS#02	ADS-B Ground Station	1000 0101
0134	Karratha (KA) GS#01	ADS-B Ground Station	1000 0110
0135	Karratha (KA) GS#02	ADS-B Ground Station	1000 0111
0136	Longreach (LRE) GS#01	ADS-B Ground Station	1000 1000
0137	Longreach (LRE) GS#02	ADS-B Ground Station	1000 1001
0138	Doongan (DGN) GS#01	ADS-B Ground Station	1000 1010
0139	Doongan (DGN) GS#02	ADS-B Ground Station	1000 1011
0140	Woomeras (WRA) GS#01	ADS-B Ground Station	1000 1100
0141	Woomeras (WRA) GS#02	ADS-B Ground Station	1000 1101

AUSTRALIA (CONT'D)

SIC (Decimal)	System	Type	Code (Binary)
0142	Newman (NWN) GS#01	ADS-B Ground Station	1000 1110
0143	Newman (NWN) GS#02	ADS-B Ground Station	1000 1111
0144	Leonora (LEO) GS#01	ADS-B Ground Station	1001 0000
0145	Leonora (LEO) GS#02	ADS-B Ground Station	1001 0001
0146	Balgo Hills (BGO) GS#01	ADS-B Ground Station	1001 0010
0147	Balgo Hills (BGO) GS#02	ADS-B Ground Station	1001 0011
0148	Mt Isa (MA) GS#01	ADS-B Ground Station	1001 0100
0149	Mt Isa (MA) GS#02	ADS-B Ground Station	1001 0101
0150	Tennant Creek (TNK) GS#01	ADS-B Ground Station	1001 0110
0151	Tennant Creek (TNK) GS#02	ADS-B Ground Station	1001 0111
0152	Nullabor (NUB) GS#01	ADS-B Ground Station	1001 1000
0153	Nullabor (NUB) GS#02	ADS-B Ground Station	1001 1001
0154	Broome (BRM) GS#01	ADS-B Ground Station	1001 1010
0155	Broome (BRM) GS#02	ADS-B Ground Station	1001 1011
0156	Mornington Is. (MTI) GS#01	ADS-B Ground Station	1001 1100
0157	Mornington Is. (MTI) GS#02	ADS-B Ground Station	1001 1101
0158	Mt Oxley (MXL) GS#01	ADS-B Ground Station	1001 1110
0159	Mt Oxley (MXL) GS#02	ADS-B Ground Station	1001 1111
0160	Alice Springs (AS) GS#01	ADS-B Ground Station	1010 0000
0161	Alice Springs (AS) GS#02	ADS-B Ground Station	1010 0001
0162	Mt Barrow (BOW) GS#01	ADS-B Ground Station	1010 0010
0163	Mt Barrow (BOW) GS#02	ADS-B Ground Station	1010 0011
0164	Telfer (TEF) GS#01	ADS-B Ground Station	1010 0100
0165	Telfer (TEF) GS#02	ADS-B Ground Station	1010 0101
0166	Reserved for ADS-B		1010 0110
0167	Reserved for ADS-B		1010 0111
0168	Reserved for ADS-B		1010 1000
0169	Reserved for ADS-B		1010 1001
0170	Reserved for ADS-B		1010 1010
0171	Reserved for ADS-B		1010 1011

AUSTRALIA (CONT'D)

SIC (Decimal)	System	Type	Code (Binary)
0172	Reserved for ADS-B		1010 1100
0173	Reserved for ADS-B		1010 1101
0174	Reserved for ADS-B		1010 1110
0175	Reserved for ADS-B		1010 1111
0176	Reserved for ADS-B		1011 0000
0177	Reserved for ADS-B		1011 0001
0178	Reserved for ADS-B		1011 0010
0179	Reserved for ADS-B		1011 0011
0180	Unused		1011 0100
0181	Unused		1011 0101
0182	Unused		1011 0110
0183	Unused		1011 0111
0184	Unused		1011 1000
0185	Unused		1011 1001
0186	Unused		1011 1010
0187	Unused		1011 1011
0188	Unused		1011 1100
0189	Unused		1011 1101
0190	Unused		1011 1110
0191	Unused		1011 1111
0192	Unused		1100 0000
0193	Unused		1100 0001
0194	Unused		1100 0010
0195	Unused		1100 0011
0196	Unused		1100 0100
0197	Unused		1100 0101
0198	Unused		1100 0110
0199	Unused		1100 0111
0200	Unused		1100 1000
0201	Reserved for Military	Reserved - Restricted	1100 1001
0202	Reserved for Military	Reserved - Restricted	1100 1010
0203	Reserved for Military	Reserved - Restricted	1100 1011
0204	Reserved for Military	Reserved - Restricted	1100 1100
0205	Reserved for Military	Reserved - Restricted	1100 1101
0206	Reserved for Military	Reserved - Restricted	1100 1110
0207	Reserved for Military	Reserved - Restricted	1100 1111
0208	Reserved for Military	Reserved - Restricted	1101 0000
0209	Reserved for Military	Reserved - Restricted	1101 0001
0210	Reserved for Military	Reserved - Restricted	1101 0010
0211	Reserved for Military	Reserved - Restricted	1101 0011
0212	Reserved for Military	Reserved - Restricted	1101 0100
0213	Reserved for Military	Reserved - Restricted	1101 0101
0214	Reserved for Military	Reserved - Restricted	1101 0110
0215	Reserved for Military	Reserved - Restricted	1101 0111
0216	Reserved for Military	Reserved - Restricted	1101 1000
0215	Reserved for Military	Reserved - Restricted	1101 0111

AUSTRALIA (CONT'D)

SIC (Decimal)	System	Type	Code (Binary)
0216	Reserved for Military	Reserved - Restricted	1101 1000
0217	Reserved for Military	Reserved - Restricted	1101 1001
0218	Reserved for Military	Reserved - Restricted	1101 1010
0219	Reserved for Military	Reserved - Restricted	1101 1011
0220	Reserved for Military	Reserved - Restricted	1101 1100
0221	Reserved	Reserved	1101 1101
0222	Reserved	Reserved	1101 1110
0223	Reserved	Reserved	1101 1111
0224	Reserved	Reserved	1110 0000
0225	Reserved	Reserved	1110 0001
0226	Reserved	Reserved	1110 0010
0227	Reserved	Reserved	1110 0011
0228	Reserved	Reserved	1110 0100
0229	Reserved	Reserved	1110 0101
0230	Reserved	Reserved	1110 0110
0231	Reserved	Reserved	1110 0111
0232	Reserved	Reserved	1110 1000
0233	Reserved	Reserved	1110 1001
0234	Reserved	Reserved	1110 1010
0235	Reserved	Reserved	1110 1011
0236	Reserved	Reserved	1110 1100
0237	Reserved	Reserved	1110 1101
0238	Reserved	Reserved	1110 1110
0239	Reserved	Reserved	1110 1111
0240	Reserved	Reserved	1111 0000
0241	Reserved	Reserved	1111 0001
0242	Reserved	Reserved	1111 0010
0243	Reserved	Reserved	1111 0011
0244	Reserved		
0245	Reserved		
0246	Reserved		
0247	Reserved		
0248	Reserved		
0249	Reserved		
0250	Reserved		
0251	Reserved		
0252	Reserved		
0253	Reserved		
0254	Reserved		
0255	Reserved		

BRUNEI DARUSSALAM

	Radar in Terminal Area		
SIC	**Radar Data System**	**Radar Type**	**Code Binary**
1	Brunei Terminal Area Radar	PSR/MSSR	0000 0001

CHINA

SIC (Decimal)	Radar Data Source	Code (Binary)
0 ~127	Reserved for non-civil aviation user	
Flight Information Regions		
128	Beijing FIR	1000 0000
129	Shanghai FIR	1000 0001
130	Shenyang FIR	1000 0010
131	Wuhan FIR	1000 0011
132	Guangzhou FIR	1000 0100
133	Kunming FIR	1000 0101
134	Lanzhou FIR	1000 0110
135	Urumqi FIR	1000 0111
136	Hongkong FIR	1000 1000
137	Taibei FIR	1000 1001
138-143	Reserved	
	Air Traffic	
144	**Shenyang ACC**	1001 0000
145	Harbin ACC	1001 0001
146	Hailar ACC	1001 0010
147	Dalian ACC	1001 0011
148	Beijing ACC	1001 0100
149	Hohhot ACC	1001 0101
150	Taiyuan ACC	1001 0110
151	Shanghai ACC	1001 0111
152	Jinan ACC	1001 1000
153	Hefei ACC	1001 1001
154	Nanchang ACC	1001 1010
155	Xiamen ACC	1001 1011
156	Wuhan ACC	1001 1100
157	Zhengzhou ACC	1001 1101
158	Guangzhou ACC	1001 1110
159	Changsha ACC	1001 1111
160	Nanning ACC	1010 0000
161	Kunming ACC	1010 0001
162	Guiyang ACC	1010 0010
163	Chengdu ACC	1010 0011
164	Xi-an ACC	1010 0100
165	Lanzhou ACC	1010 0101
166	Urumqi ACC	1010 0110
167	Guilin ACC	1010 0111
168	Hongkong ACC	1010 1000
169	Qing Dao ACC	1010 1001
170	Taibei ACC	1010 1010
171-191	Reserved	

CHINA (CONT'D)

Radar Station			
192	Beijing-1	SSR	1100 0000
193	Beijing-2	PSR/SSR	1100 0001
194	Beijing-3	PSR/SSR	1100 0010
195	Tianjin	SSR	1100 0011
196	Taiyuan	SSR	1100 0100
197	Hohhot	SSR	1100 0101
198	Guangzhou-1	PSR/SSR	1100 0110
199	Guangzhou-2	SSR	1100 0111
200	Shenzhen	PSR/SSR	1100 1000
201	Sanya	PSR/SSR	1100 1001
202	Changsha	SSR	1100 1010
203	Enshi	SSR	1100 1011
204	Wuhan	PSR/SSR	1100 1100
205	Zhengzhou -1	PSR/SSR	1100 1101
206	Zhengzhou -2	PSR/SSR	1100 1110
207	Guilin	SSR	1100 1111
208	Nanning	SSR	1101 0000
209	Shantou	SSR	1101 0001
210	Zhuhai	PSR/SSR	1101 0010
211	Haikou	PSR/SSR	1101 0011
212	Kunming	SSR	1101 0100
213	Chengdu	PSR/SSR	1101 0101
214	Guiyang -1	SSR	1101 0110
215	Guiyang -2	PSR/SSR	1101 0111
216	Chongqing	PSR/SSR	1101 1000
217	Shanghai -1	PSR/SSR	1101 1001
218	Shanghai -2	SSR	1101 1010
219	Shanghai -3	PSR	1101 1011
220	Hefei	SSR	1101 1100
221	Fuzhou	SSR	1101 1101
222	Xiamen	PSR/SSR	1101 1110
223	Lianyungang	SSR	1101 1111
224	Nanjin	PSR/SSR	1110 0000
225	Shenyang	PSR/SSR	1110 0001
226	Dalian	PSR/SSR	1110 0010
227	Xi'an	SSR	1110 0011
228	Lanzhou	SSR	1110 0100
229	Nanchang	SSR	1110 0101
230	Qingdao	SSR	1110 0110
231	Jinan	SSR	1110 0111
232	Urumqi	PSR/SSR	1110 1000
233	Harbin	PSR/SSR	1110 1001
234-258	Reserved		

HONG KONG, CHINA

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars in Terminal Areas			
001	Tai Mo Shan Terminal Area Radar	PSR/MSSR	0000 0001
002	Sha Chau Approach Surveillance Radar	PSR/MSSR	0000 0010
003	Beacon Hill Approach Secondary Surveillance Radar	MSSR	0000 0011
~~011~~	~~Beacon Hill Approach Surveillance~~	~~PSR~~	~~0000 1011~~
Radars in En-Route Airspace			
101	Mount Parker Route Secondary Surveillance Radar	MSSR	0110 0101
111	Mount Parker Route surveillance Radar	PSR	0110 1111

MACAO, CHINA

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars Systems			
001	Coloane Approach Surveillance Radar	PSR/MSSR	1111 0001
002	Reserved for other Radar		
003	Reserved for other Radar		
004	Reserved for other Radar		
005	Reserved for other Radar		

LAOS

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radar in Terminal Areas			
001	Vientiane Terminal Area Radar	PSR/MSSR	0000 0001
Radar in En-Route Airspace			
002	Savannakhet Secondary Surveillance Radar	MSSR	1000 0100

INDONESIA

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Terminal areas and en-route airspace			
001	Medan	PRS/SSR	0000 0001
002	Pekanbaru	PSR/SSR	0000 0010
003	Tanjung Pinang	PSR/SSR	0000 0011
004	Palembang	PSR/SSR	0000 0100
005	Jakarta/CGK	PSR/MSSR	0000 0101
006	Pontianak	PSR/SSR	0000 0110
007	Yogyakarta	PSR/MSSR	0000 0111
008	Surabaya	PSR/SSR	0000 1000
009	Makassar	PSR/SSR	0000 1001
010	Benjarmasin	PSR/SSR	0000 1010
011	Balikpapan	PSR/SSR	0000 1011
012	Denpasar	PSR/MSSR	0000 1100
013	Biak	PSR/SSR	0000 1101
En-route airspace			
101	Banda Aceh	SSR	0110 0101
102	Natuna	MSSR	0110 0110
103	Jakarta/HLP	SSR	0110 0111
104	Semarang	SSR	0110 1000
105	Manado	SSR	0110 1001
106	Kendari	SSR	0110 1010
107	Waingapu	SSR	0110 1011
108	Ambon	SSR	0110 1100
Processing systems			
201	Jakarta/CGK		1100 1001
202	Medan		1100 1010
203	Denpasar		1100 1011
204	Makassar		1100 1100
205	Yogyakarta		1100 1101

NEW ZEALAND

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars Systems			
001	Auckland	PSR	0000 0001
002	Rua-o-te-whenua	SSR	0000 0010
003	Te Wereaiti	SSR	0000 0011
004	Balance	SSR	0000 0100
005	Ohakea	PSR	0000 0101
006	Hawkins Hill	PSR/SSR	0000 0110
007	Mt. Robertson	SSR	0000 0111
008	Christchurch	PSR	0000 1000
009	Cass Peak	SSR	0000 1001

PAPUA NEW GUINEA

SIC (Decimal)	Radar Data System	Radar Type	Code (Binary)
	Radar in Terminal Area	PSR/SSR	000 0001
001	Port Moresby Approach		

PHILIPPINES

SIC (Decimal)	Radar Data System	Radar Type	Code (Binary)
Radars in Terminal Areas			
001	Manila	PSR/MSSR	0000 0001
002	Mactan	PSR/SSR	0000 0010
003	Subic	PSR/SSR	0000 0011
004	Clark*	PSR/MSSR	0000 0100
Radars in En-Route Airspace			
101	Tagaytay	SSR**	0110 0101
102	Laoag	MSSR	0110 0110
103	Mt. Luay, Cebu	MSSR	0110 0111
104	Palawan	***	0110 1000
105	Samal, Davao	***	0110 1001
106	Zamboanga	***	0110 1010
Radar Data Processing System			
201	Manila APP – TRDP		1100 1001
202	Mactan APP – TRDP		1100 1010
203	Subic APP – TRDP		1100 1011
204	Clark APP – TRDP*		1100 1100
205	Manila ACC – RDP		1100 1101
206	Manila ACC – Wide Area TRDP***		1100 1110
207	Manila ACC – ERDP ***		1100 1111

Note:

* For installation in 2004

** To be replaced in the CNS/ATM implementation; either MSSR or Mode - S

*** For installation in the CNS/ATM implementation; either MSSR or Mode - S

REPUBLIC OF KOREA

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars in Terminal Areas			
001	Kimpo	PSR/MSSR	0000 0001
005	Kimhae	PSR/SSR	0000 0101
010	Cheju	PSR/MSSR	0000 1010
015	Inchon	PSR/MSSR (new installation)	0000 1111
020/025	Reserved for other Radar		
031/050	Reserved for Military Radars		
Radars in En-Route Airspace			
119/138	Reserved for En-Route (Planned)		
Processing Systems			
210	Taegu ACC		1101 0010
215	Kimpo ARTS		1101 0111
220	Kimhae ARTS		1101 1100
225	Cheju ARTS		1110 0001
230	Inchon ARTS		1110 0110
236/255	Reserved for Military ARTS		

SINGAPORE

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars in Terminal Areas			
001	ASR 1	PSR/MSSR	0000 0001
002	ASR 2	PSR/MSSR	0000 0010
005	LSR	PSR/MSSR	0000 0101
Processing System			
065	ATCC – RDPA		0100 0001
066	ATCC – RDPB		0100 0010

SRI LANKA

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars in Terminal Areas			
001	Bandaranaike International Airport Colomblo	PSR	0000 0001
Radars in En-Route Airspace			
011	Pidurutalagala	PSR/MSSR	0000 1011
021	Area Control Centre - Ratmalana Airport Colombo		0001 0101
022	Approach Control Centre - Bandaranaike International Airport, Colombo		0001 0110

THAILAND

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars in Terminal Areas and En-Route Airspace			
001	Donmuang	PSR/MSSR	0000 0001
006	Chiangmai	PSR/MSSR	0000 0110
007	Mae Hong Son	MSSR	0000 0111
012	Ubonratchathani	MSSR	0000 1100
016	Suratthani	PSR	0001 0000
021	Phuket	PSR	0001 0101
026	Hatyai	MSSR	00011010
Processing System			
228	ATCC – RDPA		1110 0100
229	ATCC – RDPB		1110 0101

VIETNAM

SIC (Decimal)	Radar Data System	Radar type	Code (Binary)
Radars in Terminal Areas and En-Route Airspace			
001	Noi Bai/Ha Noi (Radar Data head 1)	PSR/MSSR	0000 0001
002	Son Tra/Da Nang	PSR/MSSR	0000 0010
003	Tan son Nhat/Ho chi Minh	PSR/MSSR	0000 0011
Radars in En-Route Airspace			
131	Noi Bai/Ha Noi (Radar Data Head 2)	PSR/SSR	1000 0011
132	Vinh	MSSR	1000 0100
133	Qui Nhon	MSSR	1000 0101
134	Ca Mau	MSSR	1000 0110
Processing Systems			
221	ATCC - RDP Noi Bai/Ha Noi		1101 1101
222	ATCC - RDP Tan Son Nhat/Ho Chi Minh		1101 1110