

INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE



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

THIRD EDITION

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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)

ADDRESSING SCHEME OF RADAR-SURVEILLANCE DATA EXCHANGE

1. General

In order to avoid ambiguity, every radar-system shall have a unique identification in an area where ASTERIX is used for the exchange of (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 ASTERIX System Identifier format shall be composed of two subfields as illustrated. The format of System Identifier field of radar data exchange shall be composed of two subfields as illustrated below:

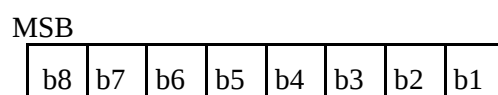


	Field Name	Element Type	Field Size
SAC	System Area Code	Binary	One octet
SIC	System Identification Code	Binary	One octet

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:

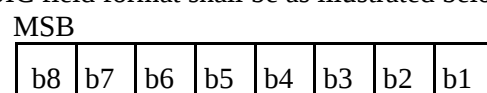


Where: b represents a binary digit and the MSB stands for Most Significant Bit

2.1.3 System Identification Code (SIC)

2.1.3.1 The SIC shall consist of an eight-bit number assigned to every system (surveillance station, processing system, server, etc.) located in the geographical area or country defined by the SAC. 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:



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. SIC is managed by State and there is little value for ICAO APAC to manage the SIC. Considering the workload to manage the SIC and the negligible benefits, ICAO APAC will not manage SIC.
- 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
A2	Afghanistan	1010 0010	44	Maldives	0100 0100
02	American Samoa	0000 0010	46	Marshall Islands	0100 0110
04	Australia	0000 0100	48	Micronesia	0100 1000
A4	Australia	1010 0100	50	Mongolia	0101 0000
06	Bangladesh	0000 0110	52	Myanmar	0101 0010
08	Bhutan	0000 1000	54	Nauru	0101 0100
10	Brunei Darussalam	0001 0000	56	Nepal	0101 0110
12	Cambodia	0001 0010	58	New Caledonia	0101 1000
16	China	0001 0110	60	New Zealand	0110 0000
1A	China	0001 1010	62	Niue Island	0110 0010
1C	China	0001 1100	64	Pakistan	0110 0100
A6	China	1010 0110	66	Palau	0110 0110
AA	China	1010 1010	68	Papua New Guinea	0110 1000
18	Hong Kong, China	0001 1000	72	Philippines	0111 0010
40	Macao, China	0100 0000	74	Republic of Korea	0111 0100
20	Taibei, China	0010 0000	76	Samoa	0111 0110
22	Cook Islands	0010 0010	78	Singapore	0111 1000
24	DPR. of Korea	0010 0100	80	Solomon Islands	1000 0000
26	Fiji	0010 0110	82	Sri Lanka	1000 0010
28	French Polynesia	0010 1000	84	Thailand	1000 0100
30	India	0011 0000	86	Tonga	1000 0110
32	Indonesia	0011 0010	88	Tuvalu	1000 1000
34	Japan	0011 0100	90	United States	1001 0000
36	Kiribati	0011 0110	92	Vanuatu	1001 0010
38	Lao PDR.	0011 1000	94	Vietnam	1001 0100
42	Malaysia	0100 0010	96	Wallis Islands	1001 0110

* 14, 70 is intentionally left blank