AIS/MAP PERSONNEL ADEQUACY, COMPETENCY, EXPERIENCE AND FACILITIES

1.0 PURPOSE
This Advisory Circular (AC) provides guidelines on the standard procedures for determining the required personnel adequacy, competency experience and, facilities including equipment necessary for the provision of Aeronautical Information Services and charts (AIS/MAP).

2.0 REFERENCES
2.2. Doc 8126 AIS Manual
2.3. Doc 7192

3.0 GUIDANCE AND PROCEDURES
3.1. Personnel
3.1.1. General
3.1.1.1. The objective of AIS is to ensure the flow of information necessary for the safety, regularity and efficiency of international air navigation. The role and importance of aeronautical information/data changed significantly with the implementation of area navigation (RNAV), required navigation performance (RNP) and airborne computer-based navigation systems.

3.1.1.2. Corrupt or erroneous aeronautical information/data can potentially affect the safety of air navigation. To satisfy the uniformity and consistency in the provision of aeronautical information that is required for the operational use by computer-based navigation systems, ANSPs must ensure high standards in recruitment and training of personnel.

3.1.1.3. Increasing emphasis should be placed on quality systems and data management, in addition to the “traditional” skills. In order to satisfy these fundamental criteria, it is essential for the ANSP to determine the knowledge and skill requirements and prescribe a training program for AIS/MAP technical officers engaged in the provision of aeronautical information services and aeronautical charts. The programme should include initial, OJT, recurrent and refresher training.

3.1.2. Recruitment
3.1.3. Training, experience and Competency
3.1.3.1. When determining the scope and depth of skills required of AIS/MAP personnel, it is necessary to analyse the duties and tasks required of them. A summary of the principal tasks is provided in this section for necessary guidance.

3.1.3.2. **AIS Aerodrome Unit** – Shall prepare and maintain briefing material;
- Prepare pre-flight information for aircrew and aircraft operators;
- Provide face to face briefing to aircrew and aircraft operators;
- Operate remote briefing equipment;
- Maintain briefing office displays and wall charts;
- Clarify publications;
- Provide in-flight information to air traffic control;
- Receive post-flight information from aircrew and take appropriate action;
- Maintain AIS/MAP library of reference material; and
- Provide on the job training.

3.1.3.3. **International NOTAM Office** – shall collect, collate and verify NOTAM information;
- Originate NOTAM/ SNOWTAM/ ASHTAM;
- Receive and re-distribute incoming NOTAM/SNOWTAM/ASHTAM;
- Maintain NOTAM database;
- Prepare and issue trigger NOTAM;
- Originate and maintain NOTAM checklists; and
- Prepare and issue list of valid NOTAM.

3.1.3.4. **AIS/MAP Database** – shall collect, compile and validate static (AIP) data;
- Prepare static (AIP) data for database;
- Collect, compile and validate dynamic data;
- Prepare dynamic data for database;
- Maintain database;
- Perform data quality and integrity checks.

3.1.3.5. **AIS/MAP Publication, Editing and Text producing** - shall Operate the desk-top publishing system;
- Prepare, edit and compile the Aeronautical Information Publication (AIP), AIP Amendments, AIP Supplements, Aeronautical Information Circulars (AIC) and Checklists;
- Print and distribute elements of the Integrated Aeronautical Information Package (IAIP)(except NOTAM);
- Air Navigation Commission Maintain central AIS/MAP library of national and international IAIPs.

3.1.3.6. **AIS/MAP Cartographic Unit** - shall collect and collate source data for preparation of aeronautical charts;
- Compile and prepare aeronautical charts, maps (and instrument procedures as required);
- Amend aeronautical charts, maps and instrument procedures;
- Pre-and post-press proofing;
- Prepare chart elements/material ready for printing.

3.1.4. Adequacy:
3.1.4.1. The manpower requirement for a particular AIS/MAP unit shall be dependent on the following factors:-
   a) The volume of aircraft operations
   b) Extent to which civil aviation facilities are provided
c) Amount of information to be processed  
d) Hours of service/watch  
e) The level of automation of the AIS/MAP systems

3.1.4.2 A general guidance as to the minimum requirements for staff and accommodation is given in the table below.

<table>
<thead>
<tr>
<th>UNIT</th>
<th>TECHNICAL STAFF</th>
<th>SPACE (Square Metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 AIS HQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>3</td>
<td>28-93</td>
</tr>
<tr>
<td>Small</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>2 AIS NOF (24 Hours)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>6</td>
<td>28-37</td>
</tr>
<tr>
<td>Small</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>3 AIS AD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>Small</td>
<td>2</td>
<td>14</td>
</tr>
</tbody>
</table>

3.2. Facilities and Equipment  
The following minimum facilities and equipment in addition to the basic office furniture and stationary should be provided for each of the following offices:-

3.2.1. AIS International NOTAM Office (NOF) and Aerodrome Unit  
a) Adequate table/counter space for processing information  
b) Adequate filing systems  
c) Full teleprinters services (receive and transmit) linked to the AFS  
d) PC/ computer terminal, printer, connection to the internet  
e) Aeronautical Information Management System  
f) Photocopier  
g) Telephone  
h) Fax  
i) Clock.  
j) Reference charts and documents to facilitate pre-flight briefing  
k) Ample office space that is accessible to the operators

3.2.2. AIS Headquarters Unit  
a) Personal Computers (PCs) for each post, printer and connection to the internet  
b) Photocopying equipment  
c) Plotter  
d) Digitizing Board  
e) Typewriter terminal (AFS/AFTN connection)  
f) Telephones  
g) Fax equipment  
h) Clock  
i) Aeronautical Information Management System  
j) Aeronautical Charting System.  
k) Filling cabinets for the AIS/MAP technical Library
1) Ample office space

3.2.3. AIS Cartographic Unit: In addition to the facilities required at the HQ unit the following:
   a) Software for production of Aeronautical Charts
   b) Equipment to for production of Aeronautical Charts

______________________________
Civil Aviation Authority