REPÚBLICA DE MOÇAMBIQUE

AUTORIDADE DE AVIAÇÃO CIVIL DE MOÇAMBIQUE

CIRCULAR TÉCNICA

CT 175-001 – PROCEDIMENTO PARA VERIFICAÇÃO DA ESTRUTURA E CONTEÚDO A SER PUBLICADO NO AIP

Data: 30 Outubro de 2020

SECÇÃO 1 – GERAL

1.1. AUTORIDADE

A presente Circular Técnica (CT) é emitida sob a autoridade do Presidente do Conselho de Administração do Instituto de Aviação Civil de Moçambique (IACM), nos termos da alínea p) do artigo 9º do Estatuto Orgânico do IACM.

1.2. OBJECTIVO

A presente Circular Técnica (CT) tem por objectivo divulgar a comunidade aeronáutica os meios de divulgação de informação aeronáutica, nomeadamente, AIP, suas emendas e Suplementos.

1.3. ÂMBITO DE APLICÃO

A presente CT aplica-se a todos os utilizadores das publicações de Informação Aeronáutica.

1.4. REFERÊNCIAS

MOZCAR 175 e MOZCATS 175 (Regulamento do IACM)

MOZCAR 139 e MOZCATS 139 (Regulamento do IACM)

MOZCAR 172 e MOZCATS 172 (Regulamento do IACM)

DOS- 08-2018 Requisitos aplicáveis as Organizações de Produção de cartas Aeronáuticas

Doc. 10066 PANS AIM da ICAO

Manual de MAP Doc. 8697 da ICAO

Manual do AIS Doc. 8126 da ICAO

Manual SGQ Doc. 9873 da ICAO

Manual do Sistema Geodésico Mundial 1984 Doc. 9674 da ICAO (WGS-84)

1.5. ALTERAÇÕES

Esta é uma emissão original desta CT.

1.6. INTRODUÇÃO

A Publicação da Informação Aeronáutica (AIP) é um documento elaborado pelo Prestador de Serviço de Informação aeronáutica de cada Estado e de disponibilização obrigatória para toda a comunidade que utiliza informação e dados aeronáuticos.

A publicação do AIP tem por referência o disposto no anexo 15 a Convenção Aviação Civil Internacional, baseando-se igualmente, no que respeita a sua produção em formato eletrónico (eAIP), no material de orientação constante nos Documentos 8126, 10066 PANS AIM e 9855, referente ao uso da Internet para aplicações Aeronáuticas, todos da Organização da Aviação Civil Internacional ICAO).

SECÇÃO 2 – PROCEDIMENTO PARA VERIFICAÇÃO DA ESTRUTURA E CONTEÚDO A SER PUBLICADA NO AIP

A presente parte descreve os procedimentos contidos nos Manuais, MOZCAR e MOZCATS, a serem seguidos pelo provedor de serviço durante a submissão da emenda ou suplemento do AIP. Esta parte está subdividida em: Gestão dos Dados e Conteúdo da Informações Aeronáutica para Publicação no AIP.

2.1 PROCEDIMENTO PARA VERIFICAÇÃO DA ESTRUTURA DO AIP

A Estrutura do AIP deve conter, as seguintes partes:

- **Parte GEN;**

  Esta parte deve incluir:

  GEN 0.1 Prefácio;

  GEN 0.2 Registro de Emendas AIP:

  GEN 0.3 Registro de Suplementos AIP;

  GEN 0.4 Lista de verificação das páginas AIP;

  GEN 0.5 Lista de alterações manuais ao AIP;

  GEN 0.6 Índice da Parte 1.

GEN 1. Regulamentos e requisitos Nacionais

GEN 1.1 Autoridades designadas;

GEN 1.2 Entrada, trânsito e saída de aeronaves;

GEN 1.3 Entrada, trânsito e saída de passageiros e tripulantes;

GEN 1.4 Entrada, trânsito e saída de carga;

GEN 1.5 Instrumentos, equipamentos e documentos de voo da aeronave;

GEN 1.6 Resumo das regulamentações nacionais e acordos ou convenções internacionais;

GEN 1.7 Diferenças dos padrões, práticas recomendadas e procedimentos da ICAO.

GEN 2. Tabelas e códigos

GEN 2.1 Sistema de medição, marcações de aeronaves:

GEN 2.1.1 Unidades de medida;

GEN 2.1.2 Sistema de referência temporal;

GEN 2.1.3 Sistema de referência horizontal;

GEN 2.1.4 Sistema de referência vertical;

GEN 2.1.5 Nacionalidade da aeronave e marcas de registo;

GEN 2.1.6 Feriados;

GEN 2.3 Símbolos do gráfico;

GEN 2.4 Indicadores de localização;

GEN 2.5 Lista de auxiliares de navegação por rádio;

GEN 2.6 Conversão de unidades de medida;

GEN 2.7 Nascer / pôr-do-sol.

GEN 3. Serviços

GEN 3.1 Serviços de informação aeronáutica:

GEN 3.1.1 Serviço responsável;

GEN 3.1.2 Área de responsabilidade;

GEN 3.1.3 Publicações aeronáuticas;

GEN 3.1.4 Sistema AIRAC;

GEN 3.1.5 Serviço de informação pré-voo em aeródromos / heliportos;

GEN 3.1.6 Conjuntos de dados digitais.

GEN 3.2 Cartas Aeronáuticas

GEN 3.2.1 Serviço (s) responsável (s);

GEN 3.2.2 Manutenção de gráficos;

GEN 3.2.3 Acordos de compra;

GEN 3.2.4 Série de cartas aeronáuticas disponíveis;

GEN 3.2.5 Lista de cartas aeronáuticas disponíveis;

GEN 3.2.6 Índice da Carta Aeronáutica Mundial (WAC) - ICAO 1:1 000 000;

GEN 3.2.7 Cartas topográficas;

GEN 3.2.8 Correções em gráficos não contidos no AIP.

GEN 3.3 Serviços de tráfego aéreo:

GEN 3.3.1 Serviço responsável;

GEN 3.3.2 Área de responsabilidade;

GEN 3.3.3 Tipos de serviços;

GEN 3.3.4 Coordenação entre o operador e ATS;

GEN 3.3.5 Altitude mínima de voo;

GEN 3.3.6 Lista de endereços de unidades ATS.

GEN 3.4 Serviços de comunicação e navegação:

GEN 3.4.1 Serviço responsável;

GEN 3.4.2 Área de responsabilidade;

GEN 3.4.3 Tipos de serviço;

GEN 3.4.4 Requisitos e condições;

GEN 3.4.5 Diversos.

GEN 3.5 Serviços meteorológicos:

GEN 3.5.1 Serviço responsável;

GEN 3.5.2 Área de responsabilidade;

GEN 3.5.3 Observações e relatórios meteorológicos;

GEN 3.5.4 Tipos de serviços;

GEN 3.5.5 Notificação exigida dos operadores;

GEN 3.5.6 Relatórios de aeronaves;

GEN 3.5.7 serviço VOLMET;

GEN 3.5.8 SIGMET e serviço AIRMET;

GEN 3.5.9 Outros serviços meteorológicos automatizados.

GEN 3.6 Busca e resgate:

GEN 3.6.1 Serviço (s) responsável (eis);

GEN 3.6.2 Área de responsabilidade;

GEN 3.6.3 Tipos de serviço;

GEN 3.6.4 Acordos SAR;

GEN 3.6.5 Condições de disponibilidade;

GEN 3.6.6 Procedimentos e sinais usados.

GEN 4. Encargos para aeródromos / heliporto de serviços de navegação aérea:

GEN 4.1 Taxas de aeródromo / heliporto;

GEN 4.2 Taxas de serviços de navegação aérea.

- **Parte ENR;**

ENR 0.1 Índice da Parte 2

ENR 1. Regras e procedimentos gerais:

ENR 1.1 Regras gerais;

ENR 1.2 Regras de voo visual;

ENR 1.3 Regras de voo por instrumentos;

ENR 1.4.1 Classificação ATS do espaço aéreo;

ENR 1.4.2 Descrição do espaço aéreo ATS.

ENR 1.5 Procedimentos de espera, aproximação e saída:

ENR 1.5.1 Geral;

ENR 1.5.2 Voos de chegada;

ENR 1.5.3 Voos de partida;

ENR 1.5.4 Outras informações e procedimentos relevantes;

ENR 1.6 Serviços e procedimentos de vigilância ATS:

ENR 1.6.1 Radar primário;

ENR 1.6.2 Radar de vigilância secundário (SSR);

ENR 1.6.3 Vigilância dependente automática - transmissão (ADS-B);
ENR 1.6.4 Outras informações e procedimentos relevantes.

ENR 1.7 Procedimentos de configuração do altímetro;
ENR 1.8 Procedimentos complementares regionais;
ENR 1.9 Gestão do fluxo de tráfego aéreo e gestão do espaço aéreo;
ENR 1.10 Planeamento de voo;
ENR 1.11 Endereçamento de mensagens de plano de voo;

ENR 1.12 Interceptação de aeronaves civis;
ENR 1.13 Interferência ilegal;
ENR 1.14 Incidentes de tráfego aéreo.

ENR 2. ATS Airspace:
ENR 2.1 FIR, UIR, TMA e CTA;
ENR 2.2 Outro espaço aéreo regulamentado;

ENR 3. Rotas ATS:
ENR 3.1 Rotas ATS inferiores;
ENR 3.2 Rotas ATS superiores;
ENR 3.3 Rotas de navegação de área;
ENR 3.4 Rotas de helicóptero;
ENR 3.5 Outras rotas;
ENR 3.6 Retenção em rota.

ENR 4. Sistemas / de Rádio de Navegação:
ENR 4.1 Auxiliares de radionavegação - em rota;
ENR 4.2 Sistemas de navegação especiais;
ENR 4.3 Sistema de navegação global por satélite (GNSS);
ENR 4.4 Designadores de código de nome para pontos significativos;
ENR 4.5 Luzes de solo aeronáuticas - em rota;

ENR 5. Avisos de Navegação:
ENR 5.1 Áreas proibidas, restritas e de perigo;

ENR 5.2 Exercícios militares e áreas de treinamento e zona de identificação de defesa aérea (ADIZ)

ENR 5.3 Outras atividades de um perigoso Natureza e outros perigos potenciais:

ENR 5.3.1 Outras atividades de natureza perigosa;

ENR 5.3.2 Outros perigos potenciais;

ENR 5.4 Obstáculos de navegação aérea;

ENR 5.5 Atividades aéreas esportivas e recreativas;

ENR 5.6 Migração de pássaros e áreas com fauna sensível;

ENR 6. EN-ROUTE CHARTS

- **Parte 3 - AD**

AD 0.1 Índice da Parte 3;

AD 1. Aeródromos/Heliportos – Introdução;

AD 1.1 Disponibilidade de aeródromo/heliporto e condições de uso;

AD 1.1.1 Condições gerais;

AD 1.1.2 Uso de bases aéreas militares;

AD 1.1.3 Procedimentos de baixa visibilidade;

AD 1.1.4 Mínimos operacionais de aeródromo;

AD 1.1.5 Outras informações.

AD 1.2 Serviços de resgate e combate a incêndios e plano de neve:

AD 1.2.1 Serviços de resgate e combate a incêndios;

AD 1.2.2 Plano de neve;

AD 1.3 Índice para aeródromos e heliportos;

AD 1.4 Agrupamento de aeródromos/heliportos;

AD 1.5 Status de certificação de aeródromos.

AD 2. Aeródromos:

AD 2.1 Indicador de localização e nome do aeródromo:

AD 2.2 Dados geográficos e administrativos do aeródromo;

AD 2.3 Horário operacional;

AD 2.4 Serviços e instalações de manuseio;

AD 2.5 Instalações para passageiros;

AD 2.6 Serviços de resgate e combate a incêndios;

AD 2.7 Disponibilidade sazonal – compensação;

AD 2.8 Placas, caminhos de circulação e dados de localização das posições;

AD 2.9 Sistema de orientação e controle de movimento de superfície e marcações;

AD 2.10 Obstáculos de aeródromo;

AD 2.11 Informações meteorológicas fornecidas;

AD 2.12 Características físicas da pista;

AD 2.13 Distâncias declaradas;

AD 2.14 Aproximação e iluminação da pista;

AD 2.15 Outra iluminação e fonte de alimentação secundária;

AD 2.16 Área de pouso de helicóptero;

AD 2.17 Espaço aéreo de serviços de tráfego aéreo;

AD 2.18 Facilidades de comunicação dos serviços de tráfego aéreo;

AD 2.19 Radionavegação e auxiliares de pouso AIP-DS;

AD 2.20 Regulamentos locais do aeródromo;

AD 2.21 Procedimentos de redução de ruído;

AD 2.22 Procedimentos de voo;

AD 2.23 Informações adicionais;

AD 2.24 Cartas relacionadas a um aeródromo;

AD 3. Heliportos:

AD 3.1 Indicador de localização e nome do heliporto;

AD 3.2 Dados geográficos e administrativos do heliporto;

AD 3.3 Horário operacional;

AD 3.4 Serviços e instalações de manuseio;

AD 3.5 Instalações para passageiros;

AD 3.6 Serviços de resgate e combate a incêndios;

AD 3.7 Disponibilidade sazonal – compensação;

AD 3.8 Placa, pistas, caminho de circulação e dados de localização/posições;

AD 3.9 Marcações e marcadores;

AD 3.10 Obstáculos do heliporto;

AD 3.11 Informações meteorológicas fornecidas;

AD 3.12 Dados do heliporto;

AD 3.13 Distâncias declaradas;

AD 3.14 Abordagem e iluminação FATO;

AD 3.15 Outra iluminação e fonte de alimentação secundária;

AD 3.16 Espaço aéreo de serviços de tráfego aéreo;

AD 3.17 Facilidades de comunicação dos serviços de tráfego aéreo;

AD 3.18 Rádio a navegação e auxiliares de pouso;

AD 3.19 Regulamentos locais do heliporto;

AD 3.20 Procedimentos de redução de ruído;

AD 3.21 Procedimentos de voo;

AD 3.22 Informações adicionais;

AD 3.23 Gráficos relacionados a um heliporto;

2.2 Gestão dos Dados Aeronáuticos

O provedor da gestão dos dados aeronáuticos deve submeter as emendas ao IACM para aprovação com os seguintes processos:

2.2.1. Coleta de Informações

a) As publicações de informação aeronáutica produzidas pelo Serviço de Informação Aeronáutica tem como suporte básica a informação e dados prestados por entidades notificadoras credenciadas, nacionais e estrangeiras.

b) A coleta das informações consiste na identificação dos originadores dos dados e deve ser documentada baseada no âmbito dos dados da informação aeronáutica a ser recolhida;

c) Cada elemento dos dados a ser coletado deve ser submetido para um originador de dados identificados, de acordo com o credencial estabelecido entre os originadores dos dados e o serviço de informação aeronáutica (AIS).

2.2.2. Sistema de gestão da qualidade

O Provedor deve estabelecer um sistema de gestão de controlo de qualidade para monitoria e supervisão dos serviços de informação Aeronáutica, cobertos pelo provedor, conforme prescrito no MOZCAR 175.01.3.

Os padrões mínimos do sistema de gestão de controlo de qualidade devem ser conforme o prescrito no Anexo 15, Doc. 8126 da ICAO, MOZCATS parte 175 e outros documentos afins.

2.2.3. Produção de uma emenda do AIP

O provedor de serviço da informação aeronáutica é obrigado por regulamento a manter as informações do AIP atualizadas, sempre que ocorrer alteração.

Todas as alterações e revisões do AIP, deve seguir o cronograma de datas de vigência do AIRAC e as emendas devem ser aprovadas pelo IACM antes da publicação.

2.2.3.1 O pedido de alteração ou revisão do AIP o provedor deve:

- Definir o tipo AIRAC ou REGULAR e o número da emenda;
- Fazer o levantamento de todas as páginas do AIP afectadas pela informação a inserir ou alterar;
- Editar a emenda;
- Definir a data de publicação da emenda;
- Definir a data de efetividade da emenda AIRAC;
- Certificar-se de que todas as páginas da AMDT, incluindo a capa, contem a data de publicação;
- Remeter ao IACM para aprovação;
- Corrigir erros detetados pelo IACM;
- Submeter a emenda corrigida para aprovação;

2.2.4. Produção de um Suplemento do AIP

Para a produção de um Suplemento o provedor deve:

- Definir o tipo AIRAC ou REGULAR e o número do suplemento;
- Editar o suplemento;
- Definir a data de publicação do suplemento;
- Definir a data de efectividade do suplemento AIRAC;
- Remeter ao IACM para aprovação
- Corrigir erros detectados pelo IACM;
- Submeter a emenda corrigida para aprovação;

2.2.5. Produção de Cartas Aeronáuticas

Para a produção de cartas de Aeródromo, Obstáculos, solo e concentração se pássaros o provedor deve:

- Coletar os dados topográficos;
- Efectuar o geoprocessamento dos dados topográficos;
- Introduzir os dados no *software* em uso;
- Elaborar as cartas aeronáuticas usando os requisitos estabelecidos nos regulamentos;
- Cumprir os prazos previstos no Calendário publicado;
- Remeter ao IACM para aprovação;
- Corrigir erros detectados pelo IACM;
- Imprimir as cartas aeronáuticas, garantindo que os requisitos estabelecidos não sejam alterados durante o processo de impressão;
- Distribuir as cartas aeronáuticas

2.3 Modelo do AIP no apêndice 1

2.3.1. A cada emenda do AIP, do Suplemento AIP e Cartas Aeronáuticas deve-se usar e assinalar no formulário de lista de verificação de conformidade número 1 em anexo para garantir que todas as informações pertinentes sejam incluídas em cada parte do AIP.

2.3.2. Adicionalmente, encontre um modelo do AIP no apêndice 1.

AUTORIDADE DE AVIAÇÃO CIVIL DE MOÇAMBIQUE

O PRESIDENTE DO CONSELHO DE ADMINISTRAÇÃO

Cmdte. João Martins de Abreu

AUTORIDADE DA AVIAÇÃO CIVIL DE MOÇAMBIQUE

Direcção de Infraestruturas e Navegação Aérea

Título: Lista de procedimento para verificação da

Estrutura e Conteúdo a ser publicada no AIP

AIP CHECKLIST 1.0

Form Number: 1

The Team Leader may delegate the assessment of AIP Nevertheless the Team Leader remains responsible. On completion of the assessment, the filled check list shall be enclosed to each amendment the AIP and sent together to IACM for the purpose of assessment.

References are made to the respective: MOZCAR e MOZCAT 175, MOZCAR e MOZCAT 139, Anexo 4, MOZCAR e MOZCAT 172, Anexo 4, Manual de MAP Doc. 8697 da ICAO, Manual do AIS Doc. 8126 da ICAO, Manual SGQ Doc. 9873 da ICAO, Manual do Sistema Geodésico Mundial 1984 Doc. 9674 da ICAO (WGS-84), 10066 PANS AIM da ICAO, DOS- 08-2018 Requisitos aplicáveis as Organizações de Produção de cartas Aeronáuticas

Provider Name : _____

Postal address: _____

Evaluation date: _____

Name of Team Leader: _____

AIP amendment number: _____

Checked by: _____

Revised by: _____

Date of Approval: : _____

Date: 30/10/2020

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
PART 1 – General (GEN)				
0.1	**GEN 0.1 Preface** Brief description of the AIP, including:			
	1) Name of the publishing authority;			
	2) Applicable ICAO documents;			
	3) Publication media (i.e. printed, online or other electronic media);			
	4) AIP structure and established regular amendment interval; M,K			
	5) Copyright policy, if applicable; and			
	6) Service to contact in case of detected AIP errors or omissions.			
0.2	**GEN 0.2 Record of AIP Amendments** A record of AIP Amendments and AIRAC AIP Amendments (published in accordance with the AIRAC system) containing:			
	1) Amendment number;			
	2) Publication date;			
	3) Date inserted (for the AIRAC AIP Amendments, effective date); and			
	4) Initials of officer who inserted the amendment.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
0.3	**GEN 0.3 Record of AIP Supplements** A record of issued AIP Supplements containing:			
	1) Supplement number;			
	2) Supplement subject;			
	3) AIP section(s) affected;			
	4) Period of validity; and			
	5) Cancellation record.			
0.4	**GEN 0.4 Checklist of AIP pages** A checklist of AIP pages containing:			
	1) Page number/chart title; and			
	2) Publication or effective date (day, month by name and year) of the aeronautical information.			
0.5	**GEN 0.5 List of hand amendments to the AIP** A list of current hand amendments to the AIP containing:			
	1) AIP page(s) affected;			
	2) Amendment text; and			
	3) AIP Amendment number by which a hand amendment was introduced.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
0.6	**GEN 0.6 Table of contents to Part 1** A list of sections and subsections contained in Part 1 — General (GEN).			
	GEN 1. NATIONAL REGULATIONS AND REQUIREMENTS			
1.1	**GEN 1.1 Designated authorities** The addresses of designated authorities concerned with the facilitation of international air navigation (civil aviation, meteorology, customs, immigration, health, en-route and aerodrome/heliport charges, agricultural quarantine and aircraft accident investigation) containing, for each authority:			
	1) Designated authority;			
	2) Name of the authority;			
	3) Postal address;			
	4) Telephone number;			
	5) Telefax number;			
	6) e-mail address;			
	7) Aeronautical fixed service (AFS) address; and			
	8) Website address, if available.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
1.2	**GEN 1.2 Entry, transit and departure of aircraft** Regulations and requirements for advance notification and applications for permission concerning entry, transit and departure of aircraft on international flights.			
1.3	**GEN 1.3 Entry, transit and departure of passengers and crew** Regulations (including customs, immigration and quarantine, and requirements for advance notification and applications for permission) concerning entry, transit and departure of non-immigrant passengers and crew.			
1.4	**GEN 1.4 Entry, transit and departure of cargo** Regulations (including customs, and requirements for advance notification and applications for permission) concerning entry, transit and departure of cargo.			
1.5	**GEN 1.5 Aircraft instruments, equipment and flight documents** Brief description of aircraft instruments, equipment and flight documents, including:			
	1) Instruments, equipment (including aircraft communication, navigation and surveillance equipment) and flight documents to be carried on aircraft, including any special requirement in addition to the provisions specified in Annex 6, Part I, Chapters 6 and 7; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	2) Emergency locator transmitter (ELT), signalling devices and life-saving equipment as presented in Annex 6, Part I, 6.6 and Part II, 2.4.5, where so determined by regional air navigation agreement, for flights over designated land areas.			
1.6	**GEN 1.6 Summary of national regulations and international agreements/ conventions** A list of titles and references and, where applicable, summaries of national regulations affecting air navigation, together with a list of international agreements/conventions ratified by the State.			
1.7	**GEN 1.7 Differences from ICAO Standards, Recommended Practices and Procedures** A list of significant differences between national regulations and practices of the State and related ICAO provisions, including:			
	1) Provision affected (Annex and edition number, paragraph); and			
	2) Difference in full text.			
	GEN 2. TABLES AND CODES			
2.1	**GEN 2.1 Measuring system, aircraft markings, holiday**			
2.1.1	**GEN 2.1.1 Units of measurement** Description of units of measurement used including table of units of			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	measurement.			
2.1.2	**GEN 2.1.2 Temporal reference system** Description of the temporal reference system (calendar and time system) employed, together with an indication of whether or not daylight saving hours are employed and how the temporal reference system is presented throughout the AIP.			
2.1.3	**GEN 2.1.3 Horizontal reference system** Brief description of the horizontal (geodetic) reference system used, including:			
	1) Name/designation of the reference system;			
	2) Identification and parameters of the projection;			
	3) Identification of the ellipsoid used;			
	4) Identification of the datum used;			
	5) Area(s) of application; and			
	6) An explanation, if applicable, of the asterisk used to identify those coordinates that do not meet the accuracy requirements.			
2.1.4	**GEN 2.1.4 Vertical reference system** Brief description of the vertical reference system used, including:			
	1) Name/designation of the reference system;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	2) Description of the geoid model used including the parameters required for height transformation between the model used and EGM-96; and			
	3) An explanation, if applicable, of the asterisk used to identify those elevations/geoid undulations that do not meet the accuracy requirements.			
2.1.5	**GEN 2.1.5 Aircraft nationality and registration marks** Indication of aircraft nationality and registration marks adopted by the State.			
2.1.6	**GEN 2.1.6 Public holidays** A list of public holidays with indication of services being affected.			
2.2	**GEN 2.2 Abbreviations used in aeronautical information products** A list of alphabetically arranged abbreviations and their respective significations used by the State in its AIP and in the distribution of aeronautical data and aeronautical information with appropriate annotation for those national abbreviations that are different from those contained in the *Procedures for Air Navigation Services — ICAO Abbreviations and Codes* (PANS-ABC, Doc 8400).			
2.3	**GEN 2.3 Chart symbols** A list of chart symbols arranged according to the chart series where symbols are applied.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.4	**GEN 2.4 Location indicators** A list of alphabetically arranged location indicators assigned to the locations of aeronautical fixed stations to be used for encoding and decoding purposes. An annotation to locations not connected to the aeronautical fixed service (AFS) shall be provided.			
2.5	**GEN 2.5 List of radio navigation aids** *#AIP-DS#* A list of radio navigation aids arranged alphabetically, containing:			
	1) Identifier;			
	2) Name of the station;			
	3) Type of facility/aid; and			
	4) Indication whether aid serves en-route (E), aerodrome (A) or dual (AE) purposes			
2.6	**GEN 2.6 Conversion of units of measurement** Tables for conversion or, alternatively, conversion formulae between:			
	1) Nautical miles and kilometres and vice versa;			
	2) Feet and metres and vice versa;			
	3) Decimal minutes of arc and seconds of arc and vice versa; and			
	4) Other conversions as appropriate.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.7	**GEN 2.7 Sunrise/sunset** Information on the time of sunrise and sunset including a brief description of criteria used for determination of the times given and either a simple formulae or table from which times may be calculated for any location within its territory/area of responsibility, or an alphabetical list of locations for which the times are given in a table with a reference to the related page in the table and the sunrise/sunset tables for the selected stations/locations, including:			
	1) Station name;			
	2) ICAO location indicator;			
	3) Geographical coordinates in degrees and minutes;			
	4) Date(s) for which times are given;			
	5) Time for the beginning of morning civil twilight;			
	6) Time for sunrise			
	7) Time for sunset; and			
	8) Time for the end of evening civil twilight.			
	GEN 3. SERVICES			
	GEN 3.1 Aeronautical information services			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.1.1	**GEN 3.1.1 Responsible service** Description of the aeronautical information service (AIS) provided and its major components, including:			
	1) Service/unit name;			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address;			
	7) Website address, if available;			
	8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and			
	9) An indication if service is not H24.			
3.1.2	**GEN 3.1.2 Area of responsibility** The area of responsibility for the AIS.			
3.1.3	**GEN 3.1.3 Aeronautical publications** Description of the elements of the aeronautical information products, including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) AIP and related amendment service;			
	2) AIP Supplements;			
	3) AIC;			
	4) NOTAM and pre-flight information bulletins (PIB);			
	5) Checklists and lists of valid NOTAM; and			
	6) Bow they may be obtained.			
3.1.4	**GEN 3.1.4 AIRAC system** Brief description of the AIRAC system provided including a table of present and near future AIRAC dates.			
3.1.5	**GEN 3.1.5 Pre-flight information service at aerodromes/heliports** A list of aerodromes/heliports at which pre-flight information is routinely available, including an indication of relevant:			
	1) Elements of the aeronautical information products held; 2) Maps and charts held; and			
	3) General area of coverage of such information.			
3.1.6	**GEN 3.1.6 Digital data sets** Description of the available data sets, including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Data set title;			
	2) Short description;			
	3) Data subjects included;			
	4) Geographical scope; and			
	5) If applicable, limitations related to its usage.			
	6) Contact details of how data sets may be obtained, containing:			
	a) Name of the individual, service or organization responsible;			
	b) Street address and e-mail address of the individual, service or organization responsible;			
	c) Telefax number of the individual, service or organization responsible;			
	d) Contact telephone number of the individual, service or organization responsible;			
	e) Hours of service (time period including time zone when contact can be made);			
	f) Online information that can be used to contact the individual, service or organization; and			
	g) Supplemental information, if necessary, on how and when to contact the individual, service or organization.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	GEN 3.2 Aeronautical charts			
3.2.1	**GEN 3.2.1 Responsible service(s)** Description of service(s) responsible for the production of aeronautical charts, including:			
	1) Service name;			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address;			
	7) Website address, if available;			
	8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and			
	9) An indication if service is not H24.			
3.2.2	**GEN 3.2.2 Maintenance of charts** Brief description of how aeronautical charts are revised and amended.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.2.3	**GEN 3.2.3 Purchase arrangements** Details of how charts may be obtained, containing:			
	1) Service/sales agency(ies);			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address; and			
	7) Website address, if available.			
3.2.4	**GEN 3.2.4 Aeronautical chart series available** A list of aeronautical chart series available followed by a general description of each series and an indication of the intended use.			
3.2.5	**GEN 3.2.5 List of aeronautical charts available** A list of aeronautical charts available, including:			
	1) Title of series;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	2) Scale of series;			
	3) Name and/or number of each chart or each sheet in a series;			
	4) Price per sheet; and			
	5) Date of latest revision.			
3.2.6	**GEN 3.2.6 Index to the World Aeronautical Chart (WAC) — ICAO 1:1 000 000** An index chart showing coverage and sheet layout for the WAC 1:1 000 000 produced by a State. If Aeronautical Chart — ICAO 1:500 000 is produced instead of WAC 1:1 000 000, index charts shall be used to indicate coverage and sheet layout for the Aeronautical Chart — ICAO 1:500 000.			
3.2.7	**GEN 3.2.7 Topographical charts** Details of how topographical charts may be obtained, containing:			
	1) Name of service/agency(ies);			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	7) Website address, if available.			
3.2.8	**GEN 3.2.8 Corrections to charts not contained in the AIP** A list of corrections to aeronautical charts not contained in the AIP, or an indication where such information can be obtained.			
	GEN 3.3 Air traffic services			
3.3.1	**GEN 3.3.1 Responsible service** Description of the air traffic service (ATS) and its major components, including:			
	1) Service name;			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address;			
	7) Website address, if available;			
	8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.3.2	**GEN 3.3.2 Area of responsibility** Brief description of area of responsibility for which ATS is provided.			
3.3.3	**GEN 3.3.3 Types of services** Brief description of main types of ATS provided.			
3.3.4	**GEN 3.3.4 Coordination between the operator and ATS** General conditions under which coordination between the operator and air traffic services is effected.			
3.3.5	**GEN 3.3.5 Minimum flight altitude** The criteria used to determine minimum flight altitudes.			
3.3.6	**GEN 3.3.6 ATS units address list** A list of ATS units and their addresses arranged alphabetically, containing:			
	1) Unit name;			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	7) Website address, if available.			
	GEN 3.4 Communication and navigation services			
3.4.1	**GEN 3.4.1 Responsible service** Description of the service responsible for the provision of telecommunication and navigation facilities, including:			
	1) Service name;			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address;			
	7) Website address, if available;			
	8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and			
	9) An indication if service is not H24.			
3.4.2	**GEN 3.4.2 Area of responsibility** Brief description of area of responsibility for which telecommunication service is provided.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.4.3	**GEN 3.4.3 Types of service** Brief description of the main types of service and facilities provided, including:			
	1) Radio navigation services;			
	2) Voice and/or data link services;			
	3) Broadcasting service;			
	4) Language(s) used; and			
	5) An indication of where detailed information can be obtained.			
3.4.4	**GEN 3.4.4 Requirements and conditions** Brief description concerning the requirements and conditions under which the communication service is available.			
3.4.5	**GEN 3.4.5 Miscellaneous** Any additional information (e.g. selected radio broadcasting stations, telecommunications diagram).			
	GEN 3.5 Meteorological services			
3.5.1	**GEN 3.5.1 Responsible service** Brief description of the meteorological service responsible for the provision of meteorological information, including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Service name;			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address;			
	7) Website address, if available;			
	8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and			
	9) An indication if service is not H24.			
3.5.2	**GEN 3.5.2 Area of responsibility** Brief description of area and/or air routes for which meteorological service is provided.			
3.5.3	**GEN 3.5.3 Meteorological observations and reports** Detailed description of the meteorological observations and reports provided for international air navigation, including:			
	1) Name of the station and the ICAO location indicator;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	2) Type and frequency of observation including an indication of automatic observing equipment;			
	3) Types of meteorological reports (e.g. METAR) and availability of a trend forecast;			
	4) Specific type of observation system and number of observation sites used to observe and report surface wind, visibility, runway visual range, cloud base, temperature and, where applicable, wind shear (e.g. anemometer at intersection of runways, transmissometer next to touchdown zone, etc.);			
	5) Hours of operation; and			
	6) Indication of aeronautical climatological information available.			
3.5.4	**GEN 3.5.4 Types of services** Brief description of the main types of service provided, including details of briefing, consultation, display of meteorological information, flight documentation available for operators and flight crew members, and of the methods and means used for supplying the meteorological information.			
3.5.5	**GEN 3.5.5 Notification required from operators** Minimum amount of advance notice required by the meteorological authority from operators in respect of briefing, consultation and flight documentation and other meteorological information they require or change.			
3.5.6	**GEN 3.5.6 Aircraft reports**			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	As necessary, requirements of the meteorological authority for the making and transmission of aircraft reports.			
3.5.7	**GEN 3.5.7 VOLMET service** Description of VOLMET and/or D-VOLMET service, including:			
	1) Name of transmitting station;			
	2) Call sign or identification and abbreviation for the radio communication emission;			
	3) Frequency or frequencies used for broadcast;			
	4) Broadcasting period;			
	5) Hours of service;			
	6) List of aerodromes/heliports for which reports and/or forecasts are included; and			
	7) Reports, forecasts and SIGMET information included and remarks.			
3.5.8	**GEN 3.5.8 SIGMET and AIRMET service** Description of the meteorological watch provided within flight information regions or control areas for which air traffic services are provided, including a list of the meteorological watch offices with:			
	1) Name of the meteorological watch office and the ICAO location indicator;			
	2) Hours of service;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	3) Flight information region(s) or control area(s) served;			
	4) SIGMET validity periods;			
	5) Specific procedures applied to SIGMET information (e.g. for volcanic ash and tropical cyclones);			
	6) Procedures applied to AIRMET information (in accordance with relevant regional air navigation agreements);			
	7) ATS unit(s) provided with SIGMET and AIRMET information; and			
	8) Additional information (e.g. concerning any limitation of service, etc.).			
3.5.9	**GEN 3.5.9 Other automated meteorological services** Description of available automated services for the provision of meteorological information (e.g. automated pre-flight information service accessible by telephone and/or computer modem), including:			
	1) Service name;			
	2) Information available;			
	3) Areas, routes and aerodromes covered; and			
	4) Telephone and telefax number(s), e-mail address, and, if available, website address.			
	GEN 3.6 Search and rescue			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.6.1	**GEN 3.6.1 Responsible service(s)** Brief description of service(s) responsible for the provision of search and rescue (SAR), include			
	1) Service/unit name;			
	2) Postal address;			
	3) Telephone number;			
	4) Telefax number;			
	5) e-mail address;			
	6) AFS address;			
	7) Website address, if available; and			
	8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed.			
3.6.2	**GEN 3.6.2 Area of responsibility** Brief description of area of responsibility within which SAR services are provided.			
3.6.3	**GEN 3.6.3 Types of service**			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	Brief description and geographical portrayal, where appropriate, of the type of service and facilities provided including indications where SAR aerial coverage is dependent upon significant deployment of aircraft.			
3.6.4	**GEN 3.6.4 SAR agreements** Brief description of SAR agreements in force, including provisions for facilitating entry and departure of other States' aircraft for search, rescue, salvage, repair or salvage in connection with lost or damaged aircraft, either with airborne notification only or after flight plan notification.			
3.6.5	**GEN 3.6.5 Conditions of availability** Brief description of provisions for SAR, including the general conditions under which the service and facilities are available for international use, including an indication of whether a facility available for SAR is specialized in SAR techniques and functions, or is specially used for other purposes but adapted for SAR purposes by training and equipment, or is only occasionally available and has no particular training or preparation for SAR work.			
3.6.6	**GEN 3.6.6 Procedures and signals used** Brief description of the procedures and signals employed by rescue aircraft and a table showing the signals to be used by survivors			
GEN 4.				
	GEN 4. CHARGES FOR AERODROMES/HELIPORTS AND AIR NAVIGATION SERVICES			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
4.1	**GEN 4.1Aerodrome/heliport charges** Brief description of type of charges which may be applicable at aerodromes/heliports available for international use, including:			
	1) Landing of aircraft;			
4.2	2) Parking, *hangarage* and long-term storage of aircraft;			
	3) Passenger service;			
	4) Security;			
	5) Noise-related items;			
	6) Other (customs, health, immigration, etc.);			
	7) Exemptions/reductions; and			
	8) Methods of payment.			
4.3	**GEN 4.2 Air navigation services charges** Brief description of charges which may be applicable to air navigation services provided for international use, including:			
	1) Approach control;			
	2) Route air navigation services;			
	3) Cost basis for air navigation services and exemptions/reductions; and			
	4) Methods of payment.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
PART 2 — EN-ROUTE (ENR)				
	ENR 0.1 Table of contents to Part 2 A list of sections and subsections contained in Part 2 — En-route.			
	ENR 1. GENERAL RULES AND PROCEDURES			
1.1	**ENR 1.1 General rules** The requirement is for publication of the general rules as applied within the State.			
1.2	**ENR 1.2 Visual flight rules** The requirement is for publication of the visual flight rules as applied within the State.			
1.3	**ENR 1.3 Instrument flight rules** The requirement is for publication of the instrument flight rules as applied within the State.			
	ENR 1.4 ATS airspace classification and description			
1.4.1	**ENR 1.4.1 ATS airspace classification** Description of ATS airspace classes in the form of the ATS airspace classification table in			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	Annex 11, Appendix 4, appropriately annotated to indicate those airspace classes not used by the State.			
1.4.2	**ENR 1.4.2 ATS airspace description** Other ATS airspace descriptions as applicable, including general textual descriptions.			
	ENR 1.5 Holding, approach and departure procedures			
1.5.1	**ENR 1.5.1 General** The requirement is for a statement concerning the criteria on which holding, approach and departure procedures are established. If different from ICAO provisions, the requirement is for presentation of criteria used in a tabular form.			
1.5.2	**ENR 1.5.2 Arriving flights** The requirement is to present procedures (conventional or area navigation or both) for arriving flights which are common to flights into or within the same type of airspace. If different procedures apply within a terminal airspace, a note to this effect shall be given together with a reference to where the specific procedures can be found.			
1.5.3	**ENR 1.5.3 Departing flights** The requirement is to present procedures (conventional or area navigation or both) for departing flights which are common to flights departing from any aerodrome/heliport.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
1.5.4	**ENR 1.5.4 Other relevant information and procedures** Brief description of additional information, e.g. entry procedures, final approach alignment, holding procedures and patterns.			
	ENR 1.6 ATS surveillance services and procedures			
1.6.1	**ENR 1.6.1 Primary radar** Description of primary radar services and procedures, including:			
	1) Supplementary services;			
	2) The application of radar control service;			
	3) Radar and air-ground communication failure procedures;			
	4) Voice and CPDLC position reporting requirements; and			
	5) Graphic portrayal of area of radar coverage.			
1.6.2	**ENR 1.6.2 Secondary surveillance radar (SSR)** Description of secondary surveillance radar (SSR) operating procedures, including:			
	1) Emergency procedures;			
	2) Air-ground communication failure and unlawful interference procedures;			
	3) The system of SSR code assignment;			
	4) Voice and CPDLC position reporting requirements; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	5) Graphic portrayal of area of SSR coverage.			
1.6.3	**ENR 1.6.3 Automatic dependent surveillance — broadcast (ADS-B)** Description of automatic dependent surveillance — broadcast (ADS-B) operating procedures, including:			
	1) Emergency procedures;			
	2) Air-ground communication failure and unlawful interference procedures;			
	3) Aircraft identification requirements;			
	4) Voice and CPDLC position reporting requirements; and			
	5) Graphic portrayal of area of ADS-B coverage.			
1.6.4	**ENR 1.6.4 Other relevant information and procedures** Brief description of additional information and procedures, e.g. radar failure procedures and transponder failure procedures.			
1.7	**ENR 1.7 Altimeter setting procedures** The requirement is for a statement of altimeter setting procedures in use, containing:			
	1) Brief introduction with a statement concerning the ICAO documents on which the procedures are based together with differences to ICAO provisions, if any;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	2) Basic altimeter setting procedures;			
	3) Description of altimeter setting region(s);			
	4) Procedures applicable to operators (including pilots); and			
	5) Table of cruising levels.			
1.8	**ENR 1.8 Regional supplementary procedures** The requirement is for presentation of regional supplementary procedures (SUPPs) affecting the entire area of responsibility.			
1.9	**ENR 1.9 Air traffic flow management and airspace management** Brief description of air traffic flow management (ATFM) system and airspace management, including:			
	1) ATFM structure, service area, service provided, location of unit(s) and hours of operation;			
	2) Types of flow messages and descriptions of the formats; and			
	3) Procedures applicable for departing flights, containing:			
	a) Service responsible for provision of information on applied ATFM measures;			
	b) Flight plan requirements; and			
	c) Slot allocations.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	4) Information on overall responsibility regarding airspace management within FIR(s), details of civil/military airspace allocation and management coordination, structure of manageable airspace (allocation and changes to allocation) and general operating procedures.			
1.10	**ENR 1.10 Flight planning** The requirement is to indicate any restriction, limitation or advisory information related to the flight planning stage which may assist the user in the presentation of the intended flight operation, including:			
	1) Procedures for the submission of a flight plan;			
	2) Repetitive flight plan system; and			
	3) Changes to the submitted flight plan.			
1.11	**ENR 1.11 Addressing of flight plan messages** The requirement is for an indication, in tabular form, of the addresses allocated to flight plans, showing:			
	1) Category of flight (IFR, VFR or both);			
	2) Route (into or via FIR and/or TMA); and			
	3) Message address.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
1.12	**ENR 1.12 Interception of civil aircraft** The requirement is for a complete statement of interception procedures and visual signals to be used with a clear indication of whether ICAO provisions are applied and, if not, that differences exist.			
1.13	**ENR 1.13 Unlawful interference** The requirement is for presentation of appropriate procedures to be applied in case of unlawful interference.			
1.14	**ENR 1.14 Air traffic incidents** Description of air traffic incidents reporting system, including:			
	1) Definition of air traffic incidents;			
	2) Use of the "Air Traffic Incident Reporting Form";			
	3) Reporting procedures (including in-flight procedures); and			
	4) Purpose of reporting and handling of the form.			
	ENR 2. ATS AIRSPACE			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.1	**ENR 2.1 FIR, UIR, TMA AND CTA** *#AIP-DS#* Detailed description of flight information regions (FIR), upper flight information regions (UIR), and control areas (CTA) (including specific CTA such as TMA), including:			
	1) Name, geographical coordinates in degrees and minutes of the FIR/UIR lateral limits and in degrees, minutes and seconds of the CTA lateral limits, vertical limits and class of airspace;			
	2) Identification of unit providing the service;			
	3) Call sign of aeronautical station serving the unit and language(s) used, specifying the area and conditions, when and where to be used, if applicable;			
	4) Frequencies, and if applicable SATVOICE number, supplemented by indications for specific purposes; and			
	5) Remarks.			
2.2	**ENR 2.2 Other regulated airspace** Where established, a detailed description of other types of regulated airspace and airspace classification.			
	ENR 3. ATS ROUTES			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.1	**ENR 3.1 Lower ATS routes** *#AIP-DS#* Detailed description of lower ATS routes, including:			
	1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including "compulsory" or "on-request" reporting points;			
	2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;			
	3) Upper and lower limits or minimum en-route altitudes, to the nearest higher 50 m or 100 ft, and airspace classification;			
	4) lateral limits and minimum obstacle clearance altitudes;			
	5) Direction of cruising levels;			
	6) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and			
	7) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.2	**ENR 3.2 Upper ATS routes** # *AIP-DS#* Detailed description of upper ATS routes, including:			
	1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of al significant points defining the route including "compulsory" or "on-request" reporting points;			
	2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;			
	3) Upper and lower limits and airspace classification;			
	4) lateral limits;			
	5) Direction of cruising levels;			
	6) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and			
	7) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.3	**ENR 3.3 Area navigation routes** *#AIP-DS#* Detailed description of PBN (RNAV and RNP) routes, including:			
	1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of al significant points defining the route including "compulsory" or "on-request" reporting points;			
	2) In respect of waypoints defining an area navigation route, additionally as applicable: a) Station identification of the reference VOR/DME;			
	b) Bearing to the nearest degree and the distance to the nearest tenth of a kilometre or tenth of a nautical mile from the reference VOR/DME, if the waypoint is not collocated with it; and			
	c) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft);			
	3) Magnetic bearing to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between defined end-points and distance between each successive designated significant point;			
	4) Upper and lower limits and airspace classification;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	5) Direction of cruising levels;			
	6) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and			
	7) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.			
3.4	**ENR 3.4 Helicopter routes** # *AIP-DS#* Detailed description of helicopter routes, including:			
	1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including "compulsory" or "on-request" reporting points;			
	2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;			
	3) Upper and lower limits and airspace classification;			
	4) Minimum flight altitudes to the nearest higher 50 m or 100 ft;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	5) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and			
	6) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.			
3.5	**ENR 3.5 Other routes** *#AIP-DS#* The requirement is to describe other specifically designated routes which are compulsory within specified area (s).			
3.6	**ENR 3.6 En-route holding** *#AIP-DS#* The requirement is for a detailed description of en-route holding procedures, containing:			
	1) Holding identification (if any) and holding fix (navigation aid) or waypoint with geographical coordinates in degrees, minutes and seconds;			
	2) Inbound track;			
	3) Direction of the procedure turn;			
	4) Maximum indicated airspeed;			
	5) Minimum and maximum holding level;			
	6) Time/distance outbound; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	7) Indication of the controlling unit and its operating frequency.			
	ENR 4. RADIO NAVIGATION AIDS/SYSTEMS			
4.1	**ENR 4.1 Radio navigation aids — en-route** *#AIP-DS#* A list of stations providing radio navigation services established for en-route purposes and arranged alphabetically by name of the station, including:			
	1) Name of the station and magnetic variation to the nearest degree and for VOR, station declination to the nearest degree used for technical line-up of the aid;			
	2) Identification;			
	3) Frequency/channel for each element;			
	4) Hours of operation;			
	5) Geographical coordinates in degrees, minutes and seconds of the position of the transmitting antenna;			
	6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft); and			
	7) Remarks.			
4.2	**ENR 4.2 Special navigation systems** *#AIP-DS#* Description of stations associated with special navigation systems (DECCA, LORAN, etc.), including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Name of station or chain;			
	2) Type of service available (master signal, slave signal, colour);			
	3) Frequency (channel number, basic pulse rate, recurrence rate, as applicable);			
	4) Hours of operation;			
	5) Geographical coordinates in degrees, minutes and seconds of the position of the transmitting station; and			
	6) Remarks.			
4.3	**ENR 4.3 Global navigation satellite system (GNSS)** A list and description of elements of the global navigation satellite system (GNSS) providing the navigation service established for en-route purposes and arranged alphabetically by name of the element, including:			
	1) The name of the GNSS element, (GPS, GLONASS, EGNOS, MSAS, WAAS, etc.);			
	2) Frequency(ies), as appropriate;			
	3) Geographical coordinates in degrees, minutes and seconds of the nominal service area and coverage area; and			
	4) Remarks.			
4.4	**ENR 4.4 Name-code designators for significant points**			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	#AIP-DS# A list of alphabetically arranged name-code designators (five-letter pronounceable "name-code") established for significant points at positions not marked by the site of radio navigation aids, including:			
	1) Name-code designator;			
	2) Geographical coordinates in degrees, minutes and seconds of the position;			
	3) Reference to ATS or other routes where the point is located; and			
	4) Remarks, including supplementary definition of positions where required.			
4.5	**ENR 4.5 Aeronautical ground lights — en-route** *#AIP-DS#* A list of aeronautical ground lights and other light beacons designating geographical positions which are selected by the State as being significant, including:			
	1) Name of the city or town or other identification of the beacon;			
	2) Type of beacon and intensity of the light in thousands of candelas;			
	3) Characteristics of the signal;			
	4) Operational hours; and			
	5) Remarks.			
	ENR 5. NAVIGATION WARNINGS			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
5.1	**ENR 5.1 Prohibited, restricted and danger areas** *#AIP-DS#* Description, supplemented by graphic portrayal where appropriate, of prohibited, restricted and danger areas together with information regarding their establishment and activation, including:			
	1) Identification, name and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;			
	2) Upper and lower limits; and			
	3) Remarks, including time of activity.			
5.2	**ENR 5.2 Military exercise and training areas and air defence identification zone (ADIZ)** *#AIP-DS#* Description, supplemented by graphic portrayal where appropriate, of established military training areas and military exercises taking place at regular intervals, and established air defence identification zone (ADIZ), including:			
	1) Geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;			
	2) Upper and lower limits and system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	3) Remarks, including time of activity and risk of interception in the event of penetration of ADIZ.			
	ENR 5.3 Other activities of a dangerous nature and other potential hazards			
5.3.1	**ENR 5.3.1 Other activities of a dangerous nature** *#AIP-DS#* Description, supplemented by charts where appropriate, of activities that constitute a specific or obvious danger to aircraft operation and could affect flights, including:			
	1) Geographical coordinates in degrees and minutes of centre of area and range of influence;			
	2) Vertical limits;			
	3) Advisory measures;			
	4) Authority responsible for the provision of information; and			
	5) Remarks, including time of activity.			
5.3.2	**ENR 5.3.2 Other potential hazards** *#AIP-DS#* Description, supplemented by charts where appropriate, of other potential hazards that could affect flights(active volcanoes, nuclear power stations, etc.), including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Geographical coordinates in degrees and minutes of location of potential hazard;			
	2) Vertical limits;			
	3) Advisory measures;			
	4) Authority responsible for the provision of information; and			
	5) Remarks.			
5.4	**ENR 5.4 Air navigation obstacles** *#OBS-DS#* A list of obstacles affecting air navigation in Area 1 (the entire State territory), including:			
	1) Obstacle identification or designation;			
	2) Type of obstacle;			
	3) Obstacle position, represented by geographical coordinates in degrees, minutes and seconds;			
	4) Obstacle elevation and height to the nearest metre or foot; and			
	5) Type and colour of obstacle lighting (if any).			
5.5	**ENR 5.5 Aerial sporting and recreational activities** *#AIP-DS#* Brief description, supplemented by graphic portrayal where appropriate, of intensive aerial sporting and recreational activities together with conditions under which they are carried out, including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Designation and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;			
	2) Vertical limits;			
	3) Operator/user telephone number; and			
	4) Remarks, including time of activity.			
5.6	**ENR 5.6 Bird migration and areas with sensitive fauna** Description, supplemented by charts where practicable, of movements of birds associated with migration, including migration routes and permanent resting areas and areas with sensitive fauna.			
6	**ENR 6. EN-ROUTE CHARTS** The requirement is for the En-route Chart — ICAO and index charts to be included in this section.			
PART 3 — AERODROMES (AD)				
0.1	**AD 0.1 Table of contents to Part 3** A list of sections and subsections contained in Part 3 — Aerodromes (AD).			
	AD 1. AERODROMES/HELIPORTS — INTRODUCTION			
	AD 1.1 Aerodrome/heliport availability and conditions of use			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
1.1.1	**AD 1.1.1 General conditions** Brief description of the State's designated authority responsible for aerodromes and heliports, including:			
	1) The general conditions under which aerodromes/heliports and associated facilities are available for use; and			
	2) A statement concerning the ICAO documents on which the services are based and a reference to the AIP location where differences, if any, are listed.			
1.1.2	**AD 1.1.2 Use of military air bases** Regulations and procedures, if any, concerning civil use of military air bases.			
1.1.3	**AD 1.1.3 Low visibility procedures** The general conditions under which the low visibility procedures applicable to Cat II/III operations at aerodromes, if any, are applied			
1.1.4	**AD 1.1.4 Aerodrome operating minima** Details of aerodrome operating minima applied by the State.			
1.1.5	**AD 1.1.5 Other information** If applicable, other information of a similar nature.			
	AD 1.2 Rescue and firefighting services and snow plan			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
1.2.1	**AD 1.2.1 Rescue and firefighting services** Brief description of rules governing the establishment of rescue and firefighting services at aerodromes and heliports available for public use together with an indication of rescue and firefighting categories established by a State.			
1.2.2	**AD 1.2.2 Snow plan** Brief description of general snow plan considerations for aerodromes/heliports available for public use at which snow conditions are normally liable to occur, including:			
	1) Organization of the winter service;			
	2) Surveillance of movement areas;			
	3) Measuring methods and measurements taken;			
	4) Actions taken to maintain the usability of movement areas;			
	5) System and means of reporting;			
	6) The cases of runway closure; and			
	7) Distribution of information about snow conditions.			
1.3	**AD 1.3 Index to aerodromes and heliports** A list, supplemented by graphic portrayal, of aerodromes and heliports within a State, including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Aerodrome/heliport name and ICAO location indicator;			
	2) Type of traffic permitted to use the aerodrome/heliport (international/national, IFR/VFR, scheduled/non-scheduled, general aviation, military and other); and			
	3) Reference to AIP, Part 3 subsection in which aerodrome/heliport details are presented.			
1.4	**AD 1.4 Grouping of aerodromes/heliports** Brief description of the criteria applied by the State in grouping aerodromes/heliports for production/distribution/provision of information purposes (international/national; primary/secondary; major/other; civil/military; etc.).			
1.5	**AD 1.5 Status of certification of aerodromes** A List of aerodromes in the State, indicating the status of certification, including:			
	1) Aerodrome name and ICAO location indicator;			
	2) Date and, if applicable, validity of certification; and			
	3) Remarks, if any.			
	AD 2. AERODROMES			
2.1	****** AD 2.1 Aerodrome location indicator and name** The requirement is for the ICAO location indicator allocated to the aerodrome			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	and the name of aerodrome. An ICAO location indicator shall be an integral part of the referencing system applicable to all subsections in section AD 2.			
2.2	****** AD 2.2 Aerodrome geographical and administrative data** The requirement is for aerodrome geographical and administrative data, including:			
	1) Aerodrome reference point (geographical coordinates in degrees, minutes and seconds) and its site;			
	2) Direction and distance of aerodrome reference point from centre of the city or town which the aerodrome serves;			
	3) Aerodrome elevation to the nearest metre or foot, reference temperature and mean low temperature;			
	4) Where appropriate, geoid undulation at the aerodrome elevation position to the nearest metre or foot;			
	5) Magnetic variation to the nearest degree, date of information and annual change;			
	6) Name of aerodrome operator, address, telephone and telefax numbers, e-mail address, AFS address and, if available, website address;			
	7) Types of traffic permitted to use the aerodrome (IFR/VFR); and			
	8) Remarks.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.3	****** AD 2.3 Operational hours** Detailed description of the hours of operation of services at the aerodrome, including:			
	1) Aerodrome operator;			
	2) Customs and immigration;			
	3) Health and sanitation;			
	4) AIS briefing office;			
	5) ATS reporting office (ARO);			
	6) MET briefing office;			
	7) Air traffic service;			
	8) Fuelling;			
	9) Handling;			
	10) Security;			
	11) De-icing; and			
	12) Remarks.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.4	****** AD 2.4 Handling services and facilities** Detailed description of the handling services and facilities available at the aerodrome, including:			
	1) Cargo-handling facilities;			
	2) Fuel and oil types;			
	3) Fuelling facilities and capacity;			
	4) De-icing facilities;			
	5) Hangar space for visiting aircraft;			
	6) Repair facilities for visiting aircraft; and			
	7) Remarks.			
2.5	****** AD 2.5 Passenger facilities** Passenger facilities available at the aerodrome, provided as a brief description or a reference to other information sources such as a website, including:			
	1) Hotel(s) at or in the vicinity of aerodrome;			
	2) Restaurant(s) at or in the vicinity of aerodrome;			
	3) Transportation possibilities;			
	4) Medical facilities;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	5) Bank and post office at or in the vicinity of aerodrome;			
	6) Tourist office; and			
	7) Remarks.			
2.6	****** AD 2.6 Rescue and firefighting services** Detailed description of the rescue and firefighting services and equipment available at the aerodrome, including:			
	1) Aerodrome category for firefighting;			
	2) Rescue equipment;			
	3) Capability for removal of disabled aircraft; and			
	4) Remarks.			
2.7	****** AD 2.7 Seasonal availability — clearing** Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:			
	1) Type(s) of clearing equipment;			
	2) Clearance priorities; and			
	3) Remarks.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.8	****** AD 2.8 Aprons, taxiways and check locations/positions data** Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:			
	1) Designation, surface and strength of aprons;			
	2) Designation, width, surface and strength of taxiways;			
	3) Location and elevation to the nearest metre or foot of altimeter checkpoints;			
	4) Location of VOR checkpoints;			
	5) position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds; and			
	6) Remarks.			
2.9	****** AD 2.9 Surface movement guidance and control system and marking** Brief description of the surface movement guidance and control system and runway and taxiway markings, including:			
	1) Use of aircraft stand identification signs, taxiway guide lines and visual docking/parking guidance system at aircraft stands;			
	2) Runway and taxiway markings and lights;			
	3) Stop bars and runway guard lights (if any);			
	4) Other runway protection measures; and			
	5) Remarks.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.10	****** AD 2.10 Aerodrome obstacles** *#OBS-DS#* Detailed description of obstacles, including: 1) Obstacles in Area 2:			
	a) Obstacle identification or designation;			
	b) Type of obstacle;			
	c) Obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;			
	d) Obstacle elevation and height to the nearest metre or foot;			
	e) Obstacle marking, and type and colour of obstacle lighting (if any); and			
	f) NIL indication, if appropriate.			
	2) The absence of an Area 2 data set for the aerodrome is to be clearly stated and obstacle data are to be provided for: a) Obstacles that penetrate the obstacle limitation surfaces;			
	b) Obstacles that penetrate the take-off flight path area obstacle identification surface; and			
	c) Other obstacles assessed as being hazardous to air navigation.			
	3) Indication that information on obstacles in Area 3 is not provided, or if provided: a) obstacle identification or designation;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	b) Type of obstacle;			
	c) Obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;			
	d) Obstacle elevation and height to the nearest tenth of a metre or tenth of a foot;			
	e) Obstacle marking, and type and colour of obstacle lighting (if any);			
	f) If appropriate, an indication that the list of obstacles is available as a digital data set, and a reference to GEN 3.1.6; and			
	g) NIL indication, if appropriate.			
2.11	****** AD 2.11 Meteorological information provided** Detailed description of meteorological information provided at the aerodrome and an indication of which meteorological office is responsible for the service enumerated, including:			
	1) Name of the associated meteorological office;			
	2) Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours;			
	3) Office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts;			
	4) Availability of the trend forecasts for the aerodrome, and interval of issuance;			
	5) Information on how briefing and/or consultation is provided;			
	6) Types of flight documentation supplied and language(s) used in flight			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	documentation;			
	7) Charts and other information displayed or available for briefing or consultation;			
	8) Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;			
	9) The air traffic services unit(s) provided with meteorological information; and			
	10) Additional information (e.g. concerning any limitation of service).			
2.12	****** AD 2.12 Runway physical characteristics** Detailed description of runway physical characteristics, for each runway, including:			
	1) Designations;			
	2) True bearings to one-hundredth of a degree;			
	3) Dimensions of runways to the nearest metre or foot;			
	4) Strength of pavement (PCN and associated data) and surface of each runway and associated stopways;			
	5) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds for each threshold and runway end and, where appropriate, geoid undulation of:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	— Thresholds of a non-precision approach runway to the nearest metre or foot; and			
	— Thresholds of a precision approach runway to the nearest tenth of a metre or tenth of a foot;			
	6) Elevations of: — Thresholds of a non-precision approach runway to the nearest metre or foot; and			
	— Thresholds and the highest elevation of the touchdown zone of a precision approach runway to the nearest tenth of a metre or tenth of a foot;			
	7) Slope of each runway and associated stopways;			
	8) Dimensions of stopway (if any) to the nearest metre or foot;			
	9) Dimensions of clearway (if any) to the nearest metre or foot;			
	10) Dimensions of strips;			
	11) Dimensions of runway end safety areas;			
	12) Location (which runway end) and description of arresting system (if any);			
	13) The existence of an obstacle-free zone; and			
	14) Remarks.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.13	****** AD 2.13 Declared distances** Detailed description of declared distances to the nearest metre or foot for each direction of each runway, including:			
	1) Runway designator;			
	2) Take-off run available;			
	3) Take-off distance available, and if applicable, alternative reduced declared distances;			
	4) Accelerate-stop distance available;			
	5) Landing distance available; and			
	6) Remarks, including runway entry or start point where alternative reduced declared distances have been declared.			
2.14	****** AD 2.14 Approach and runway lighting** Detailed description of approach and runway lighting, including:			
	1) Runway designator;			
	2) Type, length and intensity of approach lighting system;			
	3) Runway threshold lights, colour and wing bars;			
	4) Type of visual approach slope indicator system;			
	5) Length of runway touchdown zone lights;			
	6) Length, spacing, colour and intensity of runway centre line lights;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	7) Length, spacing, colour and intensity of runway edge lights;			
	8) Colour of runway end lights and wing bars;			
	9) Length and colour of stopway lights; and			
	10) Remarks.			
2.15	****** AD 2.15 Other lighting and secondary power supply** Description of other lighting and secondary power supply, including:			
	1) Location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any);			
	2) Location and lighting (if any) of anemometer/landing direction indicator;			
	3) Taxiway edge and taxiway centre line lights;			
	4) Secondary power supply including switch-over time; and			
	5) Remarks.			
2.16	****** AD 2.16 Helicopter landing area** Detailed description of helicopter landing area provided at the aerodrome, including:			
	1) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds and, where appropriate, geoid undulation of the geometric centre of touchdown and lift-off (TLOF) or of each threshold of final approach and take-off (FATO) area: — For non-precision approaches, to the nearest metre or foot; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	— For precision approaches, to the nearest tenth of a metre or tenth of a foot;			
	2) TLOF and/or FATO area elevation:			
	— For non-precision approaches, to the nearest metre or foot; and			
	— For precision approaches, to the nearest tenth of a metre or tenth of a foot;			
	3) TLOF and FATO area dimensions to the nearest metre or foot, surface type, bearing strength and marking;			
	4) True bearings to one-hundredth of a degree of FATO;			
	5) Declared distances available, to the nearest metre or foot;			
	6) Approach and FATO lighting; and			
	7) Remarks.			
2.17	****** AD 2.17 Air traffic services airspace** *#AIP-DS#* Detailed description of air traffic services (ATS) airspace organized at the aerodrome, including:			
	1) Airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits;			
	2) Vertical limits;			
	3) Airspace classification;			
	4) Call sign and language(s) of the ATS unit providing service;			
	5) Transition altitude;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	6) Hours of applicability; and			
	7) Remarks.			
2.18	****** AD 2.18 Air traffic services communication facilities** Detailed description of ATS communication facilities established at the aerodrome, including:			
	1) Service designation;			
	2) Call sign;			
	3) Channel(s);			
	4) SATVOICE number(s), if available;			
	5) Logon address, as appropriate;			
	6) Hours of operation; and			
	7) Remarks.			
2.19	****** AD 2.19 Radio navigation and landing aids** *#AIP-DS#* Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the aerodrome, including:			
	1) Type of aids, magnetic variation to the nearest degree, as appropriate, and type of supported operation for ILS/MLS, basic GNSS, SBAS, and GBAS, and for VOR/ILS/MLS also station declination to the nearest degree used for technical line-up of the aid;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	2) Identification, if required;			
	3) Frequency(ies), channel number(s), service provider and reference path identifier(s) (RPI), as appropriate;			
	4) Hours of operation, as appropriate;			
	5) Geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate;			
	6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft); elevation of GBAS reference point to the nearest metre or foot, and the ellipsoid height of the point to the nearest metre or foot. For SBAS, the ellipsoid height of the landing threshold point (LTP) or the fictitious threshold point (FTP) to the nearest metre or foot;			
	7) Service volume radius from the GBAS reference point to the nearest kilometre or nautical mile; and			
	8) Remarks.			
2.20	****** AD 2.20 Local aerodrome regulations** Detailed description of regulations applicable to the use of the aerodrome, including the acceptability of training flights, non-radio and microlight aircraft and similar, and to ground manoeuvring and parking but excluding flight procedures.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.21	****** AD 2.21 Noise abatement procedures** Detailed description of noise abatement procedures established at the aerodrome.			
2.22	****** AD 2.22 Flight procedures** Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization at the aerodrome. When established, detailed description of the low visibility procedures at the aerodrome, including:			
	1) Runway(s) and associated equipment authorized for use under low visibility procedures;			
	2) Defined meteorological conditions under which initiation, use and termination of low visibility procedures would be made;			
	3) Description of ground marking/lighting for use under low visibility procedures; and			
	4) Remarks.			
2.23	****** AD 2.23 Additional information** Additional information at the aerodrome, such as an indication of bird concentrations at the aerodrome, together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
2.24	****** AD 2.24 Charts related to an aerodrome** The requirement is for charts related to an aerodrome to be included in the following order:			
	1) Aerodrome/Heliport Chart — ICAO;			
	2) Aircraft Parking/Docking Chart — ICAO;			
	3) Aerodrome Ground Movement Chart — ICAO;			
	4) Aerodrome Obstacle Chart — ICAO Type A (for each runway);			
	5) Aerodrome Obstacle Chart — ICAO Type B (when available);			
	6) Aerodrome Terrain and Obstacle Chart — ICAO (Electronic);			
	7) Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways);			
	8) Area Chart — ICAO (departure and transit routes);			
	9) Standard Departure Chart — Instrument — ICAO;			
	10) Area Chart — ICAO (arrival and transit routes);			
	11) Standard Arrival Chart — Instrument — ICAO;			
	12) ATC Surveillance Minimum Altitude Chart — ICAO;			
	13) Instrument Approach Chart — ICAO (for each runway and procedure type);			
	14) Visual Approach Chart — ICAO; and			
	15) Bird concentrations in the vicinity of the aerodrome.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.0	**AD 3. HELIPORTS** When a helicopter landing area is provided at the aerodrome, associated data shall be listed only under **** AD 2.16.			
3.1	****** AD 3.1 Heliport location indicator and name** The requirement is for the ICAO location indicator assigned to the heliport and the name of heliport. An ICAO location ndicator shall be an integral part of the referencing system applicable to all subsections in section AD 3.			
3.2	****** AD 3.2 Heliport geographical and administrative data** The requirement is for heliport geographical and administrative data, including:			
	1) Heliport reference point (geographical coordinates in degrees, minutes and seconds) and its site;			
	2) Direction and distance of heliport reference point from centre of the city or town which the heliport serves;			
	3) Heliport elevation to the nearest metre or foot, reference temperature and mean low temperature;			
	4) Where appropriate, geoid undulation at the heliport elevation position to the nearest metre or foot;			
	5) Magnetic variation to the nearest degree, date of information and annual change;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	6) Name of heliport operator, address, telephone and telefax numbers, e-mail address, AFS address and, if available, website address;			
	7) Types of traffic permitted to use the heliport (IFR/VFR); and			
	8) Remarks.			
3.3	****** AD 3.3 Operational hours** Detailed description of the hours of operation of services at the heliport, including			
	1) Heliport operator;			
	2) Customs and immigration;			
	3) health and sanitation;			
	4) AIS briefing office;			
	5) ATS reporting office (ARO);			
	6) MET briefing office;			
	7) Air traffic service;			
	8) Fuelling;			
	9) Handling;			
	10) Security;			
	11) De-icing; and			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	12) Remarks.			
3.4	****** AD 3.4 Handling services and facilities** Detailed description of the handling services and facilities available at the heliport, including			
	1) Cargo-handling facilities;			
	2) Fuel and oil types;			
	3) Fuelling facilities and capacity;			
	4) De-icing facilities;			
	5) Hangar space for visiting helicopters;			
	6) Repair facilities for visiting helicopters; and			
	7) Remarks.			
3.5	****** AD 3.5 Passenger facilities** Passenger facilities available at the heliport, provided as a brief description or as a reference to other information sources such as a website, including:			
	1) Hotel(s) at or in the vicinity of the heliport;			
	2) Restaurant(s) at or in the vicinity of the heliport;			
	3) Transportation possibilities;			
	4) Medical facilities;			
	5) Bank and post office at or in the vicinity of the heliport;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	6) Tourist office; and			
	7) Remarks.			
3.6	****** AD 3.6 Rescue and firefighting services** Detailed description of the rescue and firefighting services and equipment available at the heliport, including:			
	1) Heliport category for firefighting;			
	2) Rescue equipment;			
	3) Capability for removal of disabled helicopters; and			
	4) Remarks.			
3.7	****** AD 3.7 Seasonal availability — clearing** Detailed description of the equipment and operational priorities established for the clearance of heliport movement areas, including:			
	1) Type(s) of clearing equipment;			
	2) Clearance priorities; and			
	3) Remarks.			
3.8	****** AD 3.8 Aprons, taxiways and check locations/positions data** Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Designation, surface and strength of aprons, helicopter stands;			
	2) Designation, width and surface type of helicopter ground taxiways;			
	3) Width and designation of helicopter air taxiway and air transit route;			
	4) location and elevation to the nearest metre or foot of altimeter checkpoints;			
	5) location of VOR checkpoints;			
	6) Position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds; and			
	7) Remarks.			
3.9	****** AD 3.9 Markings and markers** Brief description of final approach and take-off area and taxiway markings and markers, including			
	1) Final approach and take-off markings;			
	2) Taxiway markings, air taxiway markers and air transit route markers; and			
	3) Remarks.			
3.10	****** AD 3.10 Heliport obstacles** *#OBS-DS#* Detailed description of obstacles, including:			
	1) Obstacle identification or designation;			
	2) Type of obstacle;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	3) Obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;			
	4) Obstacle elevation and height to the nearest metre or foot;			
	5) Obstacle marking, and type and colour of obstacle lighting (if any); and			
	6) NIL indication, if appropriate.			
3.11	****** AD 3.11 Meteorological information provided** Detailed description of meteorological information provided at the heliport and an indication of which meteorological office is responsible for the service enumerated, including:			
	1) Name of the associated meteorological office;			
	2) Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours;			
	3) Office responsible for preparation of TAFs, and periods of validity of the forecasts;			
	4) Availability of the trend forecasts for the heliport, and interval of issuance;			
	5) Information on how briefing and/or consultation is provided;			
	6) Type of flight documentation supplied and language(s) used in flight documentation;			
	7) Charts and other information displayed or available for briefing or consultation;			
	8) Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	9) The ATS unit(s) provided with meteorological information; and			
	10) Additional information (e.g. concerning any limitation of service).			
3.12	****** AD 3.12 Heliport data** Detailed description of heliport dimensions and related information, including:			
	1) Heliport type (surface-level, elevated or helideck);			
	2) Touchdown and lift-off (TLOF) area dimensions to the nearest metre or foot;			
	3) True bearings to one-hundredth of a degree of final approach and take-off (FATO) area;			
	4) Dimensions to the nearest metre or foot of FATO, and surface type;			
	5) Surface and bearing strength in tonnes (1 000 kg) of TLOF;			
	6) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds and, where appropriate, geoid undulation of the geometric centre of TLOF or of each threshold of FATO: — For non-precision approaches, to the nearest metre or foot; and			
	— For precision approaches, to the nearest tenth of a metre or tenth of a foot;			
	7) TLOF and/or FATO slope and elevation: — For non-precision approaches, to the nearest metre or foot; and			
	— For precision approaches, to the nearest tenth of a metre or tenth of a foot;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	8) Dimensions of safety area;			
	9) Dimensions, to the nearest metre or foot, of helicopter clearway;			
	10) The existence of an obstacle-free sector; and			
	11) Remarks.			
3.13	****** AD 3.13 Declared distances** Detailed description of declared distances to the nearest metre or foot, where relevant for a heliport, including:			
	1) Take-off distance available, and if applicable, alternative reduced declared distances;			
	2) Rejected take-off distance available;			
	3) Landing distance available; and			
	4) Remarks, including entry or start point where alternative reduced declared distances have been declared.			
3.14	****** AD 3.14 Approach and FATO lighting** Detailed description of approach and FATO lighting, including:			
	1) Type, length and intensity of approach lighting system;			
	2) Type of visual approach slope indicator system;			
	3) Characteristics and location of FATO area lights;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	4) Characteristics and location of aiming point lights;			
	5) Characteristics and location of TLOF lighting system; and			
	6) Remarks.			
3.15	****** AD 3.15 Other lighting and secondary power supply** Description of other lighting and secondary power supply, including:			
	1) Location, characteristics and hours of operation of heliport beacon;			
	2) Location and lighting of wind direction indicator (WDI);			
	3) Taxiway edge and taxiway centre line lights;			
	4) Secondary power supply including switch-over time; and			
	5) Remarks.			
3.16	****** AD 3.16 Air traffic services airspace** *#AIP-DS#* Detailed description of air traffic services (ATS) airspace organized at the heliport, including:			
	1) Airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits;			
	2) Vertical limits;			
	3) Airspace classification;			
	4) Call sign and language(s) of ATS unit providing service;			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	5) Transition altitude;			
	6) Hours of applicability; and			
	7) Remarks.			
3.17	****** AD 3.17 Air traffic services communication facilities** Detailed description of ATS communication facilities established at the heliport, i			
	1) Service designation;			
	2) Call sign;			
	3) Channel(s);			
	4) SATVOICE number(s), if available;			
	5) Logon address, as appropriate;			
	6) Hours of operation; and			
	7) Remarks.			
3.18	****** AD 3.18 Radio navigation and landing aids** *#AIP-DS#* Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the heliport, including:			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	1) Type of aids, magnetic variation to the nearest degree, as appropriate, and type of supported operation for ILS/MLS basic GNSS, SBAS and GBAS, and for VOR/ILS/MLS also station declination to the nearest degree used for technical line-up of the aid;			
	2) Identification, if required;			
	3) Frequency(ies), channel number(s), service provider and reference path identifier(s) (RPI), as appropriate;			
	4) Hours of operation, as appropriate;			
	5) Geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate;			
	6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft elevation of GBAS reference point to the nearest metre or foot, and the ellipsoid height of the point to the nearest metre or foot. For SBAS, the ellipsoid height of the landing threshold point (LTP) or the fictitious threshold point (FTP) to the nearest metre or foot;			
	7) Service volume radius from the GBAS reference point to the nearest kilometre or nautical mile; and			
	8) Remarks.			
3.19	****** AD 3.19 Local heliport regulations** Detailed description of regulations applicable to the use of the heliport, including the acceptability of training flights, non-radio and microlight aircraft and similar, and to ground manoeuvring and parking but excluding flight procedures.			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
3.20	****** AD 3.20 Noise abatement procedures** Detailed description of noise abatement procedures established at the heliport.			
3.21	****** AD 3.21 Flight procedures** Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization established at the heliport. When established, detailed description of the low visibility procedures at the heliport, including:			
	1) Touchdown and lift-off (TLOF) area(s) and associated equipment authorized for use under low visibility procedures;			
	2) Defined meteorological conditions under which initiation, use and termination of low visibility procedures would be made;			
	3) Description of ground marking/lighting for use under low visibility procedures; and			
	4) Remarks.			
3.22	****** AD 3.22 Additional information** Additional information about the heliport, such as an indication of bird concentrations at the heliport, together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.			
3.23	****** AD 3.23 Charts related to a heliport** The requirement is for charts related to a heliport to be included in the following			

Ref.	ITEMS TO CHECK	SATISFACTORY		COMMENTS
		YES	NO	
	order:			
	1) Aerodrome/Heliport Chart — ICAO;			
	2) Area Chart — ICAO (departure and transit routes);			
	3) Standard Departure Chart — Instrument — ICAO;			
	4) Area Chart — ICAO (arrival and transit routes);			
	5) Standard Arrival Chart — Instrument — ICAO;			
	6) ATC Surveillance Minimum Altitude Chart — ICAO;			
	7) Instrument Approach Chart — ICAO (for each procedure type);			
	8) Visual Approach Chart — ICAO; and			
	9) Bird concentrations in the vicinity of heliport.			

This completed Compliance Checklist of .....AIP has been developed and approved by:

OPERATOR ACCOUNTABLE OFFICER			
PROVIDER NAME	**FULL NAME IN BLOCK LETTERS**	**DATE**	**AMENDEMENT NUMBER**

Approved by:			
	Timóteo Isaac Muchanga		01
SIGNATURE OF DIRECTOR OF INFRASTRUCTURE AND AIR NAVIGATION	**FULL NAME IN BLOCK LETTERS**	**DATE** 29/10/2020	**AMENDEMENT NUMBER**

Appendix 1

CONTENTS OF THE AERONAUTICAL INFORMATION PUBLICATION (AIP)

PART 1 — GENERAL (GEN)

When the AIP is produced as one volume, the preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments appear only in Part 1 — GEN, and the annotation "not applicable" shall be entered against each of these subsections in Parts 2 and 3.

If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments shall be included in each volume.

GEN 0.1 Preface

Brief description of the AIP, including:

1) Name of the publishing authority;

2) Applicable ICAO documents;

3) Publication media (i.e. printed, online or other electronic media);

4) AIP structure and established regular amendment interval;

5) Copyright policy, if applicable; and

6) Service to contact in case of detected AIP errors or omissions.

GEN 0.2 Record of AIP Amendments

A record of AIP Amendments and AIRAC AIP Amendments (published in accordance with the AIRAC system) containing:

1) Amendment number;

2) Publication date;

3) Date inserted (for the AIRAC AIP Amendments, effective date); and

4) Initials of officer who inserted the amendment

GEN 0.3 Record of AIP Supplements

A record of issued AIP Supplements containing:

1) Supplement number;

2) Supplement subject;

3) AIP section(s) affected;

4) Period of validity; and

5) Cancellation record.

GEN 0.4 Checklist of AIP pages

A checklist of AIP pages containing:

1) Page number/chart title; and

2) Publication or effective date (day, month by name and year) of the aeronautical information.

GEN 0.5 List of hand amendments to the AIP

A list of current hand amendments to the AIP containing:

1) AIP page(s) affected;

2) Amendment text; and

3) AIP Amendment number by which a hand amendment was introduced.

GEN 0.6 Table of contents to Part 1

A list of sections and subsections contained in Part 1 — General (GEN).

Note.— Subsections may be listed alphabetically.

GEN 1. NATIONAL REGULATIONS AND REQUIREMENTS

GEN 1.1 Designated authorities

The addresses of designated authorities concerned with the facilitation of international air navigation (civil aviation, meteorology, customs, immigration, health, en-route and aerodrome/heliport charges, agricultural quarantine and aircraft accident investigation) containing, for each authority:

1) Designated authority;

2) Name of the authority;

3) Postal address;

4) Telephone number;

5) Telefax number;

6) E-mail address;

7) Aeronautical fixed service (AFS) address; and

8) Website address, if available.

GEN 1.2 Entry, transit and departure of aircraft

Regulations and requirements for advance notification and applications for permission concerning entry, transit and departure of aircraft on international flights.

GEN 1.3 Entry, transit and departure of passengers and crew

Regulations (including customs, immigration and quarantine, and requirements for advance notification and applications for permission) concerning entry, transit and departure of non-immigrant passengers and crew.

GEN 1.4 Entry, transit and departure of cargo

Regulations (including customs, and requirements for advance notification and applications for permission) concerning entry, transit and departure of cargo.

Note.— Provisions for facilitating entry and departure for search, rescue, salvage, investigation, repair or salvage in connection with lost or damaged aircraft are detailed in section GEN 3.6, Search and rescue.

GEN 1.5 Aircraft instruments, equipment and flight documents

Brief description of aircraft instruments, equipment and flight documents, including:

1) Instruments, equipment (including aircraft communication, navigation and surveillance equipment) and flight documents to be carried on aircraft, including any special requirement in addition to the provisions specified in Annex 6, Part I, Chapters 6 and 7; and

2) Emergency locator transmitter (ELT), signalling devices and life-saving equipment as presented in Annex 6, Part I, 6.6 and Part II, 2.4.5, where so determined by regional air navigation agreement, for flights over designated land areas.

GEN 1.6 Summary of national regulations and international agreements/conventions

A list of titles and references and, where applicable, summaries of national regulations affecting air navigation, together with a list of international agreements/conventions ratified by the State.

GEN 1.7 Differences from ICAO Standards, Recommended Practices and Procedures

A list of significant differences between national regulations and practices of the State and related ICAO provisions, including:

1) Provision affected (Annex and edition number, paragraph); and

2) Difference in full text.

All significant differences shall be listed under this subsection. All Annexes shall be listed in numerical order even if there is no difference to an Annex, in which case a NIL notification shall be provided. National differences or the degree of non-application of the regional supplementary procedures (SUPPs) shall be notified immediately following the Annex to which the supplementary procedure relates.

GEN 2. TABLES AND CODES

GEN 2.1 Measuring system, aircraft markings, holidays

GEN 2.1.1 Units of measurement

Description of units of measurement used including table of units of measurement.

GEN 2.1.2 Temporal reference system

Description of the temporal reference system (calendar and time system) employed, together with an indication of whether or not daylight saving hours are employed and how the temporal reference system is presented throughout the AIP.

GEN 2.1.3 Horizontal reference system

Brief description of the horizontal (geodetic) reference system used, including:

1) Name/designation of the reference system;

2) Identification and parameters of the projection;

3) Identification of the ellipsoid used;

4) Identification of the datum used;

5) Area(s) of application; and

6) An explanation, if applicable, of the asterisk used to identify those coordinates that do not meet the accuracy requirements.

GEN 2.1.4 Vertical reference system

Brief description of the vertical reference system used, including:

1) Name/designation of the reference system;

2) Description of the geoid model used including the parameters required for height transformation between the model used and EGM-96; and

3) An explanation, if applicable, of the asterisk used to identify those elevations/geoid undulations that do not meet the accuracy requirements.

GEN 2.1.5 Aircraft nationality and registration marks

Indication of aircraft nationality and registration marks adopted by the State.

GEN 2.1.6 Public holidays

A list of public holidays with indication of services being affected.

GEN 2.2 Abbreviations used in aeronautical information products

A list of alphabetically arranged abbreviations and their respective significations used by the State in its AIP and in the distribution of aeronautical data and aeronautical information with appropriate annotation for those national abbreviations that are different from those contained in the Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC, Doc 8400).

Note.— A list of alphabetically arranged definitions/glossary of terms may also be added.

GEN 2.3 Chart symbols

A list of chart symbols arranged according to the chart series where symbols are applied.

GEN 2.4 Location indicators

A list of alphabetically arranged location indicators assigned to the locations of aeronautical fixed stations to be used for encoding and decoding purposes. An annotation to locations not connected to the aeronautical fixed service (AFS) shall be provided.

GEN 2.5 List of radio navigation aids

#AIP-DS# A list of radio navigation aids arranged alphabetically, containing:

1) Identifier;
2) Name of the station;
3) Type of facility/aid; and
4) Indication whether aid serves en-route (E), aerodrome (A) or dual (AE) purposes.

GEN 2.6 Conversion of units of measurement

Tables for conversion or, alternatively, conversion formulae between:

1) Nautical miles and kilometres and vice versa;
2) Feet and metres and vice versa;
3) Decimal minutes of arc and seconds of arc and vice versa; and
4) Other conversions as appropriate.

GEN 2.7 Sunrise/sunset

Information on the time of sunrise and sunset including a brief description of criteria used for determination of the times given and either a simple formulae or table from which times may be calculated for any location within its territory/area of responsibility, or an alphabetical list of locations for which the times are given in a table with a reference to the related page in the table and the sunrise/sunset tables for the selected stations/locations, including:

1) Station name;
2) ICAO location indicator;
3) Geographical coordinates in degrees and minutes;
4) Date(s) for which times are given;
5) Time for the beginning of morning civil twilight;
6) Time for sunrise;
7) Time for sunset; and
8) Time for the end of evening civil twilight.

GEN 3. SERVICES

GEN 3.1 Aeronautical information services

GEN 3.1.1 Responsible service

Description of the aeronautical information service (AIS) provided and its major components, including:

1) Service/unit name;

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address;

7) Website address, if available;

8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

9) An indication if service is not H24.

GEN 3.1.2 Area of responsibility

The area of responsibility for the AIS.

GEN 3.1.3 Aeronautical publications

Description of the elements of the aeronautical information products, including:

1) AIP and related amendment service;

2) AIP Supplements;

3) AIC;

4) NOTAM and pre-flight information bulletins (PIB);

5) Checklists and lists of valid NOTAM; and

6) How they may be obtained.

When an AIC is used to promulgate publication prices, that shall be indicated in this section of the AIP.

GEN 3.1.4 AIRAC system

Brief description of the AIRAC system provided including a table of present and near future AIRAC dates.

GEN 3.1.5 Pre-flight information service at aerodromes/heliports

A list of aerodromes/heliports at which pre-flight information is routinely available, including an indication of relevant:

1) Elements of the aeronautical information products held;

2) Maps and charts held; and

3) General area of coverage of such information.

GEN 3.1.6 Digital data sets

Description of the available data sets, including:

1) Data set title;

2) Short description;

3) Data subjects included;

4) Geographical scope; and

5) If applicable, limitations related to its usage.

6) Contact details of how data sets may be obtained, containing:

a) Name of the individual, service or organization responsible;

b) Street address and e-mail address of the individual, service or organization responsible;

c) Telefax number of the individual, service or organization responsible;

d) Contact telephone number of the individual, service or organization responsible;

e) Hours of service (time period including time zone when contact can be made);

f) Online information that can be used to contact the individual, service or organization; and

g) Supplemental information, if necessary, on how and when to contact the individual, service or organization.

GEN 3.2 Aeronautical charts

GEN 3.2.1 Responsible service(s)

Description of service(s) responsible for the production of aeronautical charts, including:

1) Service name;

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address;

7) Website address, if available;

8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

9) An indication if service is not H24.

GEN 3.2.2 Maintenance of charts

Brief description of how aeronautical charts are revised and amended.

GEN 3.2.3 Purchase arrangements

Details of how charts may be obtained, containing:

1) Service/sales agency(ies);

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address; and

7) Website address, if available.

GEN 3.2.4 Aeronautical chart series available

A list of aeronautical chart series available followed by a general description of each series and an indication of the intended use.

GEN 3.2.5 List of aeronautical charts available

A list of aeronautical charts available, including:

1) Title of series;

2) Scale of series;

3) Name and/or number of each chart or each sheet in a series;

4) Price per sheet; and

5) Date of latest revision.

GEN 3.2.6 Index to the World Aeronautical Chart (WAC) — ICAO 1:1 000 000

An index chart showing coverage and sheet layout for the WAC 1:1 000 000 produced by a State. If Aeronautical Chart — ICAO 1:500 000 is produced instead of WAC 1:1 000 000, index charts shall be used to indicate coverage and sheet layout for the Aeronautical Chart — ICAO 1:500 000.

GEN 3.2.7 Topographical charts

Details of how topographical charts may be obtained, containing:

1) Name of service/agency(ies);

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address; and

7) Website address, if available.

GEN 3.2.8 Corrections to charts not contained in the AIP

A list of corrections to aeronautical charts not contained in the AIP, or an indication where such information can be obtained.

GEN 3.3 Air traffic services

GEN 3.3.1 Responsible service

Description of the air traffic service (ATS) and its major components, including:

1) Service name;

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address;

7) Website address, if available;

8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

9) An indication if service is not H24.

GEN 3.3.2 Area of responsibility

Brief description of area of responsibility for which ATS is provided.

GEN 3.3.3 Types of services

Brief description of main types of ATS provided.

GEN 3.3.4 Coordination between the operator and ATS

General conditions under which coordination between the operator and air traffic services is effected.

GEN 3.3.5 Minimum flight altitude

The criteria used to determine minimum flight altitudes.

GEN 3.3.6 ATS units address list

A list of ATS units and their addresses arranged alphabetically, containing:

1) Unit name;

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address; and

7) Website address, if available.

GEN 3.4 Communication and navigation services

GEN 3.4.1 Responsible service

Description of the service responsible for the provision of telecommunication and navigation facilities, including:

1) Service name;

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address;

7) Website address, if available;

8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

9) An indication if service is not H24.

GEN 3.4.2 Area of responsibility

Brief description of area of responsibility for which telecommunication service is provided.

GEN 3.4.3 Types of service

Brief description of the main types of service and facilities provided, including:

1) Radio navigation services;

2) Voice and/or data link services;

3) Broadcasting service;

4) Language(s) used; and

5) An indication of where detailed information can be obtained.

GEN 3.4.4 Requirements and conditions

Brief description concerning the requirements and conditions under which the Communication service is available.

GEN 3.4.5 Miscellaneous

Any additional information (e.g. selected radio broadcasting stations, telecommunications diagram).

GEN 3.5 Meteorological services

GEN 3.5.1 Responsible service

Brief description of the meteorological service responsible for the provision of meteorological information, including:

1) Service name;

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address;

7) Website address, if available;

8) A statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

9) An indication if service is not H24.

GEN 3.5.2 Area of responsibility

Brief description of area and/or air routes for which meteorological service is provided.

GEN 3.5.3 Meteorological observations and reports

Detailed description of the meteorological observations and reports provided for international air navigation, including:

1) Name of the station and the ICAO location indicator;

2) Type and frequency of observation including an indication of automatic observing equipment;

3) Types of meteorological reports (e.g. METAR) and availability of a trend forecast;

4) specific type of observation system and number of observation sites used to observe and report surface wind, visibility, runway visual range, cloud base, temperature and, where applicable, wind shear (e.g. anemometer at intersection of runways, transmissometer next to touchdown zone, etc.);

5) Hours of operation; and

6) Indication of aeronautical climatological information available.

GEN 3.5.4 Types of services

Brief description of the main types of service provided, including details of briefing, consultation, display of meteorological information, flight documentation available for operators and flight crew members, and of the methods and means used for supplying the meteorological information.

GEN 3.5.5 Notification required from operators

Minimum amount of advance notice required by the meteorological authority from operators in respect of briefing, consultation and flight documentation and other meteorological information they require or change.

GEN 3.5.6 Aircraft reports

As necessary, requirements of the meteorological authority for the making and transmission of aircraft reports.

GEN 3.5.7 VOLMET service

Description of VOLMET and/or D-VOLMET service, including:

1) Name of transmitting station;

2) Call sign or identification and abbreviation for the radio communication emission;

3) Frequency or frequencies used for broadcast;

4) Broadcasting period;

5) Hours of service;

6) List of aerodromes/heliports for which reports and/or forecasts are included; and

7) Reports, forecasts and SIGMET information included and remarks.

GEN 3.5.8 SIGMET and AIRMET service

Description of the meteorological watch provided within flight information regions or control areas for which air traffic services are provided, including a list of the meteorological watch offices with:

1) Name of the meteorological watch office and the ICAO location indicator;

2) Hours of service;

3) Flight information region(s) or control area(s) served;

4) SIGMET validity periods;

5) Specific procedures applied to SIGMET information (e.g. for volcanic ash and tropical cyclones);

6) Procedures applied to AIRMET information (in accordance with relevant regional air navigation agreements);

7) ATS unit(s) provided with SIGMET and AIRMET information; and

8) Additional information (e.g. concerning any limitation of service, etc.).

GEN 3.5.9 Other automated meteorological services

Description of available automated services for the provision of meteorological information (e.g. automated pre-flight information service accessible by telephone and/or computer modem), including:

1) Service name;

2) Information available;

3) Areas, routes and aerodromes covered; and

4) Telephone and telefax number(s), e-mail address, and, if available, website address.

GEN 3.6 Search and rescue

GEN 3.6.1 Responsible service(s)

Brief description of service(s) responsible for the provision of search and rescue (SAR), including:

1) Service/unit name;

2) Postal address;

3) Telephone number;

4) Telefax number;

5) E-mail address;

6) AFS address;

7) Website address, if available; and

8) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed.

GEN 3.6.2 Area of responsibility

Brief description of area of responsibility within which SAR services are provided.

Note.— A chart may be included to supplement the description of the area.

GEN 3.6.3 Types of service

Brief description and geographical portrayal, where appropriate, of the type of service and facilities provided including indications where SAR aerial coverage is dependent upon significant deployment of aircraft.

GEN 3.6.4 SAR agreements

Brief description of SAR agreements in force, including provisions for facilitating entry and departure of other States' aircraft for search, rescue, salvage, repair or salvage in connection with lost or damaged aircraft, either with airborne notification only or after flight plan notification.

GEN 3.6.5 Conditions of availability

Brief description of provisions for SAR, including the general conditions under which the service and facilities are available for international use, including an indication of whether a facility available for SAR is specialized in SAR techniques and functions, or is specially used for other purposes but adapted for SAR purposes by training and equipment, or is only occasionally available and has no particular training or preparation for SAR work.

GEN 3.6.6 Procedures and signals used

Brief description of the procedures and signals employed by rescue aircraft and a table showing the signals to be used by survivors.

GEN 4. CHARGES FOR AERODROMES/HELIPORTS AND AIR NAVIGATION SERVICES

Note.— Reference may be made to where details of actual charges may be found, if not itemized in this chapter.

GEN 4.1 Aerodrome/heliport charges

Brief description of type of charges which may be applicable at aerodromes/heliports available for international use, including:

1) Landing of aircraft;

2) Parking, hangarage and long-term storage of aircraft;

3) Passenger service;

4) Security;

5) Noise-related items;

6) Other (customs, health, immigration, etc.);

7) Exemptions/reductions; and

8) Methods of payment.

GEN 4.2 Air navigation services charges

Brief description of charges which may be applicable to air navigation services provided for international use, including:

1) Approach control;

2) Route air navigation services;

3) Cost basis for air navigation services and exemptions/reductions; and

4) Methods of payment.

PART 2 — EN-ROUTE (ENR)

If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments shall be included in each volume. In the case of an AIP being published as one volume, the annotation "not applicable" shall be entered against each of the above subsections.

ENR 0.1 Table of contents to Part 2

A list of sections and subsections contained in Part 2 — En-route.

Note.— Subsections may be listed alphabetically.

ENR 1. GENERAL RULES AND PROCEDURES ENR

1.1 General rules

The requirement is for publication of the general rules as applied within the State.

ENR 1.2 Visual flight rules

The requirement is for publication of the visual flight rules as applied within the State.

ENR 1.3 Instrument flight rules

The requirement is for publication of the instrument flight rules as applied within the State.

ENR 1.4 ATS airspace classification and description

ENR 1.4.1 ATS airspace classification

Description of ATS airspace classes in the form of the ATS airspace classification table in Annex 11, Appendix 4, appropriately annotated to indicate those airspace classes not used by the State.

ENR 1.4.2 ATS airspace description

Other ATS airspace descriptions as applicable, including general textual descriptions.

ENR 1.5 Holding, approach and departure procedures

ENR 1.5.1 General

The requirement is for a statement concerning the criteria on which holding, approach and departure procedures are established. If different from ICAO provisions, the requirement is for presentation of criteria used in a tabular form.

ENR 1.5.2 Arriving flights

The requirement is to present procedures (conventional or area navigation or both) for arriving flights which are common to flights into or within the same type of airspace. If different procedures apply within a terminal airspace, a note to this effect shall be given together with a reference to where the specific procedures can be found.

ENR 1.5.3 Departing flights

The requirement is to present procedures (conventional or area navigation or both) for departing flights which are common to flights departing from any aerodrome/heliport.

ENR 1.5.4 Other relevant information and procedures

Brief description of additional information, e.g. entry procedures, final approach alignment, holding procedures and patterns.

ENR 1.6 ATS surveillance services and procedures

ENR 1.6.1 Primary radar

Description of primary radar services and procedures, including:

1) Supplementary services;

2) The application of radar control service;

3) Radar and air-ground communication failure procedures;

4) Voice and CPDLC position reporting requirements; and

5) Graphic portrayal of area of radar coverage.

ENR 1.6.2 Secondary surveillance radar (SSR)

Description of secondary surveillance radar (SSR) operating procedures, including:

1) Emergency procedures;

2) Air-ground communication failure and unlawful interference procedures;

3) The system of SSR code assignment;

4) Voice and CPDLC position reporting requirements; and

5) Graphic portrayal of area of SSR coverage.

Note.— The SSR description is of particular importance in areas or routes where the possibility of interception exists.

ENR 1.6.3 Automatic dependent surveillance — broadcast (ADS-B)

Description of automatic dependent surveillance — broadcast (ADS-B) operating procedures, including:

1) Emergency procedures;

2) air-ground communication failure and unlawful interference procedures;

3) Aircraft identification requirements;

4) Voice and CPDLC position reporting requirements; and

5) Graphic portrayal of area of ADS-B coverage.

Note.— The ADS-B description is of particular importance in areas or routes where the possibility of interception exists.

ENR 1.6.4 Other relevant information and procedures

Brief description of additional information and procedures, e.g. radar failure procedures and transponder failure procedures.

ENR 1.7 Altimeter setting procedures

The requirement is for a statement of altimeter setting procedures in use, containing:

1) Brief introduction with a statement concerning the ICAO documents on which the procedures are based together with differences to ICAO provisions, if any;

2) Basic altimeter setting procedures;

3) Description of altimeter setting region(s);

4) Procedures applicable to operators (including pilots); and

5) Table of cruising levels.

ENR 1.8 Regional supplementary procedures

The requirement is for presentation of regional supplementary procedures (SUPPs) affecting the entire area of responsibility.

ENR 1.9 Air traffic flow management and airspace management

Brief description of air traffic flow management (ATFM) system and airspace management, including:

1) ATFM structure, service area, service provided, location of unit(s) and hours of operation;

2) Types of flow messages and descriptions of the formats; and

3) Procedures applicable for departing flights, containing:

a) Service responsible for provision of information on applied ATFM measures;

b) Flight plan requirements; and c) slot allocations.

4) information on overall responsibility regarding airspace management within FIR(s), details of civil/military airspace allocation and management coordination, structure of manageable airspace (allocation and changes to allocation) and general operating procedures.

ENR 1.10 Flight planning

The requirement is to indicate any restriction, limitation or advisory information related to the flight planning stage which may assist the user in the presentation of the intended flight operation, including:

1) Procedures for the submission of a flight plan;

2) Repetitive flight plan system; and

3) Changes to the submitted flight plan.

ENR 1.11 Addressing of flight plan messages

The requirement is for an indication, in tabular form, of the addresses allocated to flight plans, showing:

1) Category of flight (IFR, VFR or both);

2) Route (into or via FIR and/or TMA); and

3) Message address.

ENR 1.12 Interception of civil aircraft

The requirement is for a complete statement of interception procedures and visual signals to be used with a clear indication of whether ICAO provisions are applied and, if not, that differences exist.

Note.— A list of significant differences between national regulations and practices of the State and related ICAO provisions is found in Gen 1.7.

ENR 1.13 Unlawful interference

The requirement is for presentation of appropriate procedures to be applied in case of unlawful interference.

ENR 1.14 Air traffic incidents

Description of air traffic incidents reporting system, including:

1) Definition of air traffic incidents;

2) Use of the "Air Traffic Incident Reporting Form";

3) Reporting procedures (including in-flight procedures); and

4) Purpose of reporting and handling of the form.

Note.— A copy of the Air Traffic Incident Report Form (PANS ATM, Doc 4444, Appendix 4) may be included for reference.

ENR 2. ATS AIRSPACE

ENR 2.1 FIR, UIR, TMA and CTA

#AIP-DS# Detailed description of flight information regions (FIR), upper flight information regions (UIR), and control areas (CTA) (including specific CTA such as TMA), including:

1) Name, geographical coordinates in degrees and minutes of the FIR/UIR lateral limits and in degrees, minutes and seconds of the CTA lateral limits, vertical limits and class of airspace;

2) Identification of unit providing the service;

3) Call sign of aeronautical station serving the unit and language(s) used, specifying the area and conditions, when and where to be used, if applicable;

4) Frequencies, and if applicable SATVOICE number, supplemented by indications for specific purposes; and

5) Remarks.

#AIP-DS# Control zones around military air bases not otherwise described in the AIP shall be included in this subsection. Where the requirements of Annex 2 concerning flight plans, two-way communications and position reporting apply to all flights in order to eliminate or reduce the need for interceptions and/or where the possibility of interception exists and the maintenance of guard on the VHF emergency channel 121.5 MHz is required, a statement to this effect shall be included for the relevant area(s) or portion(s) thereof.

A description of designated areas over which the carriage of an emergency locator transmitter (ELT) is required and where aircraft shall continuously guard the VHF emergency frequency 121.5 MHz, except for those periods when aircraft are carrying out communications on other VHF channels or when airborne equipment limitations or cockpit duties do not permit simultaneous guarding of two channels.

Note.— Other types of airspace around civil aerodromes/heliports such as control zones and aerodrome traffic zones are described in the relevant aerodrome or heliport section.

ENR 2.2 Other regulated airspace

Where established, a detailed description of other types of regulated airspace and airspace classification.

ENR 3. ATS ROUTES

Note 1.— Bearings, tracks and radials are normally magnetic. In areas of high latitude, where it is determined by the appropriate authority that reference to Magnetic North is impractical, another suitable reference, i.e. True North or Grid North, may be used.

Note 2.— Changeover points established at the midpoint between two radio navigation aids, or at the intersection of the two radials in the case of a route which changes direction between the navigation aids, need not be shown for each route segment if a general statement regarding their existence is made.

Note 3.— Guidance material on the organization of ATS route publication is contained in the Aeronautical Information Services Manual (Doc 8126).

ENR 3.1 Lower ATS routes

#AIP-DS# Detailed description of lower ATS routes, including:

1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;

3) Upper and lower limits or minimum en-route altitudes, to the nearest higher 50 m or 100 ft, and airspace classification;

4) Lateral limits and minimum obstacle clearance altitudes;

5) Direction of cruising levels;

6) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and

7) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the defined navigation specification is not considered to be an integral part of the route designator.

ENR 3.2 Upper ATS routes

#AIP-DS# Detailed description of upper ATS routes, including:

1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;

3) Upper and lower limits and airspace classification;

4) Lateral limits;

5) Direction of cruising levels;

6) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and

7) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, defined navigation specification is not considered to be an integral part of the route designator.

ENR 3.3 Area navigation routes

#AIP-DS# Detailed description of PBN (RNAV and RNP) routes, including:

1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

2) In respect of waypoints defining an area navigation route, additionally as applicable:

   a) Station identification of the reference VOR/DME;

b) Bearing to the nearest degree and the distance to the nearest tenth of a kilometre or tenth of a nautical mile from the reference VOR/DME, if the waypoint is not collocated with it; and

c) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft);

3) Magnetic bearing to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between defined end-points and distance between each successive designated significant point;

4) Upper and lower limits and airspace classification;

5) Direction of cruising levels;

6) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and

7) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, defined navigation specification is not considered to be an integral part of the route designator.

ENR 3.4 Helicopter routes

#AIP-DS# Detailed description of helicopter routes, including:

1) Route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

2) Tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;

3) Upper and lower limits and airspace classification;

4) Minimum flight altitudes to the nearest higher 50 m or 100 ft;

5) The navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and

6) Remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, defined navigation specification is not considered to be an integral part of the route designator.

ENR 3.5 Other routes

#AIP-DS# The requirement is to describe other specifically designated routes which are

compulsory within specified area(s).

Note.— Arrival, transit and departure routes which are specified in connection with procedures for traffic to and from aerodromes/heliports need not be described since they are described in the relevant section of Part 3 — Aerodromes.

ENR 3.6 En-route holding

#AIP-DS# The requirement is for a detailed description of en-route holding procedures, containing:

1) Holding identification (if any) and holding fix (navigation aid) or waypoint with geographical coordinates in degrees, minutes and seconds;

2) Inbound track;

3) Direction of the procedure turn;

4) Maximum indicated airspeed;

5) Minimum and maximum holding level;

6) Time/distance outbound; and

7) Indication of the controlling unit and its operating frequency.

Note.— Obstacle clearance criteria related to holding procedures are contained in Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volumes I and II.

ENR 4. RADIO NAVIGATION AIDS/SYSTEMS ENR

4.1 Radio navigation aids — en-route

#AIP-DS# A list of stations providing radio navigation services established for en-route purposes and arranged alphabetically by name of the station, including:

1) Name of the station and magnetic variation to the nearest degree and for VOR, station declination to the nearest degree used for technical line-up of the aid;

2) Identification;

3) Frequency/channel for each element;

4) Hours of operation;

5) Geographical coordinates in degrees, minutes and seconds of the position of the transmitting antenna;

6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft); and

7) Remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column. Facility coverage shall be indicated in the remarks column.

ENR 4.2 Special navigation systems

#AIP-DS# Description of stations associated with special navigation systems (DECCA, LORAN, etc.), including:

1) Name of station or chain;

2) Type of service available (master signal, slave signal, colour);

3) Frequency (channel number, basic pulse rate, recurrence rate, as applicable);

4) Hours of operation;

5) Geographical coordinates in degrees, minutes and seconds of the position of the transmitting station; and

6) Remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column. Facility coverage shall be indicated in the remarks column.

ENR 4.3 Global navigation satellite system (GNSS)

A list and description of elements of the global navigation satellite system (GNSS) providing the navigation service established for en-route purposes and arranged alphabetically by name of the element, including:

1) The name of the GNSS element, (GPS, GLONASS, EGNOS, MSAS, WAAS, etc.);

2) Frequency(ies), as appropriate;

3) Geographical coordinates in degrees, minutes and seconds of the nominal service area and coverage area; and

4) Remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column.

ENR 4.4 Name-code designators for significant points

#AIP-DS# A list of alphabetically arranged name-code designators (five-letter pronounceable "name-code") established for significant points at positions not marked by the site of radio navigation aids, including:

1) name-code designator;

2) Geographical coordinates in degrees, minutes and seconds of the position;

3) Reference to ATS or other routes where the point is located; and

4) Remarks, including supplementary definition of positions where required.

ENR 4.5 Aeronautical ground lights — en-route

#AIP-DS# A list of aeronautical ground lights and other light beacons designating geographical positions which are selected by the State as being significant, including:

1) Name of the city or town or other identification of the beacon;

2) Type of beacon and intensity of the light in thousands of candelas;

3) Characteristics of the signal;

4) Operational hours; and

5) Remarks.

ENR 5. NAVIGATION WARNINGS

ENR 5.1 Prohibited, restricted and danger areas

#AIP-DS# Description, supplemented by graphic portrayal where appropriate, of prohibited, restricted and danger areas together with information regarding their establishment and activation, including:

1) Identification, name and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

2) Upper and lower limits; and

3) Remarks, including time of activity.

Type of restriction or nature of hazard and risk of interception in the event of penetration shall be indicated in the remarks column.

ENR 5.2 Military exercise and training areas and airdefence identification zone (ADIZ)

#AIP-DS# Description, supplemented by graphic portrayal where appropriate, of established military training areas and military exercises taking place at regular intervals, and established air defence identification zone (ADIZ), including:

1) Geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

2) Upper and lower limits and system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures; and

3) Remarks, including time of activity and risk of interception in the event of penetration of ADIZ.

ENR 5.3 Other activities of a dangerous nature and other potential hazards

ENR 5.3.1 Other activities of a dangerous nature

#AIP-DS# Description, supplemented by charts where appropriate, of activities that constitute a specific or obvious danger to aircraft operation and could affect flights, including:

1) Geographical coordinates in degrees and minutes of centre of area and range of influence;

2) Vertical limits;

3) Advisory measures;

4) Authority responsible for the provision of information; and

5) Remarks, including time of activity.

ENR 5.3.2 Other potential hazards

#AIP-DS# Description, supplemented by charts where appropriate, of other potential hazards that could affect flights (active volcanoes, nuclear power stations, etc.), including:

1) Geographical coordinates in degrees and minutes of location of potential hazard;

2) Vertical limits;

3) Advisory measures;

4) Authority responsible for the provision of information; and

5) Remarks.

ENR 5.4 Air navigation obstacles

#OBS-DS# A list of obstacles affecting air navigation in Area 1 (the entire State territory), including:

1) Obstacle identification or designation;

2) Type of obstacle;

3) Obstacle position, represented by geographical coordinates in degrees, minutes and seconds;

4) Obstacle elevation and height to the nearest metre or foot; and

5) Type and colour of obstacle lighting (if any).

Note 1.— An obstacle whose height above the ground is 100 m and higher is considered an obstacle for Area 1. Note 2.— Specifications concerning the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations/heights for obstacles in Area 1 are given in Appendix 1.

ENR 5.5 Aerial sporting and recreational activities

#AIP-DS# Brief description, supplemented by graphic portrayal where appropriate, of intensive aerial sporting and recreational activities together with conditions under which they are carried out, including:

1) Designation and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

2) Vertical limits;

3) Operator/user telephone number; and

4) Remarks, including time of activity.

Note.— This subsection may be subdivided into different sections for each different category of activity, giving the indicated details in each case.

ENR 5.6 Bird migration and areas with sensitive fauna

Description, supplemented by charts where practicable, of movements of birds associated with migration, including migration routes and permanent resting areas and areas with sensitive fauna.

ENR 6. EN-ROUTE CHARTS

The requirement is for the En-route Chart — ICAO and index charts to be included in this section.

PART 3 — AERODROMES (AD)

If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments shall be included in each volume. In the case of an AIP being published as one volume, the annotation "not applicable" shall be entered against each of the above subsections

AD 0.1 Table of contents to Part 3

A list of sections and subsections contained in Part 3 — Aerodromes (AD).

Note.— Subsections may be listed alphabetically.

AD 1. AERODROMES/HELIPORTS — INTRODUCTION

AD 1.1 Aerodrome/heliport availability and conditions of use

AD 1.1.1 General conditions

Brief description of the State's designated authority responsible for aerodromes and heliports, including:

1) The general conditions under which aerodromes/heliports and associated facilities are available for use; and

2) A statement concerning the ICAO documents on which the services are based and a reference to the AIP location where differences, if any, are listed.

AD 1.1.2 Use of military air bases

Regulations and procedures, if any, concerning civil use of military air bases.

AD 1.1.3 Low visibility procedures

The general conditions under which the low visibility procedures applicable to Cat II/III operations at aerodromes, if any, are applied.

AD 1.1.4 Aerodrome operating minima

Details of aerodrome operating minima applied by the State.

AD 1.1.5 Other information

If applicable, other information of a similar nature.

AD 1.2 Rescue and firefighting services and snow plan

AD 1.2.1 Rescue and firefighting services

Brief description of rules governing the establishment of rescue and firefighting services at aerodromes and heliports available for public use together with an indication of rescue and firefighting categories established by a State.

AD 1.2.2 Snow plan

Brief description of general snow plan considerations for aerodromes/heliports available for public use at which snow conditions are normally liable to occur, including:

1) Organization of the winter service;

2) Surveillance of movement areas;

3) Measuring methods and measurements taken;

4) Actions taken to maintain the usability of movement areas;

5) System and means of reporting;

6) The cases of runway closure; and

7) Distribution of information about snow conditions.

Note.— Where different snow plan considerations apply at aerodromes/heliports, this subsection may be subdivided accordingly.

AD 1.3 Index to aerodromes and heliports

A list, supplemented by graphic portrayal, of aerodromes and heliports within a State, including:

1) Aerodrome/heliport name and ICAO location indicator;

2) Type of traffic permitted to use the aerodrome/heliport (international/national, IFR/VFR, scheduled/non-scheduled, general aviation, military and other); and

3) Reference to AIP, Part 3 subsection in which aerodrome/heliport details are presented.

AD 1.4 Grouping of aerodromes/heliports

Brief description of the criteria applied by the State in grouping aerodromes/heliports for production/distribution/provision of information purposes (international/national; primary/secondary; major/other; civil/military; etc.).

AD 1.5 Status of certification of aerodromes

A list of aerodromes in the State, indicating the status of certification, including:

1) Aerodrome name and ICAO location indicator;

2) Date and, if applicable, validity of certification; and

3) Remarks, if any.

AD 2. AERODROMES

Note.— **** is to be replaced by the relevant ICAO location indicator.

**** AD 2.1 Aerodrome location indicator and name

The requirement is for the ICAO location indicator allocated to the aerodrome and the name of aerodrome. An ICAO

Location indicator shall be an integral part of the referencing system applicable to all subsections in section AD 2.

**** AD 2.2 Aerodrome geographical and administrative data

The requirement is for aerodrome geographical and administrative data, including:

1) Aerodrome reference point (geographical coordinates in degrees, minutes and seconds) and its site;

2) Direction and distance of aerodrome reference point from centre of the city or town which the aerodrome serves;

3) Aerodrome elevation to the nearest metre or foot, reference temperature and mean low temperature;

4) Where appropriate, geoid undulation at the aerodrome elevation position to the nearest metre or foot;

5) Magnetic variation to the nearest degree, date of information and annual change;

6) Name of aerodrome operator, address, telephone and telefax numbers, e-mail address, AFS address and, if available, website address;

7) Types of traffic permitted to use the aerodrome (IFR/VFR); and

8) Remarks.

**** AD 2.3 Operational hours

Detailed description of the hours of operation of services at the aerodrome, including:

1) Aerodrome Operator;
2) Customs And Immigration;
3) Health And Sanitation;
4) Ais Briefing Office;
5) Ats Reporting Office (Aro);
6) Met Briefing Office;
7) Air Traffic Service;
8) Fuelling;
9) Handling;
10) Security;
11) De-icing; and
12) Remarks.

**** AD 2.4 Handling services and facilities

Detailed description of the handling services and facilities available at the aerodrome, including:

1) Cargo-handling facilities;
2) Fuel and oil types;
3) Fuelling facilities and capacity;
4) De-icing facilities;
5) Hangar space for visiting aircraft;
6) Repair facilities for visiting aircraft; and
7) Remarks.

**** AD 2.5 Passenger facilities

Passenger facilities available at the aerodrome, provided as a brief description or a reference to other information sources such as a website, including:

1) Hotel(S) at or in the vicinity of aerodrome;
2) Restaurant(S) at or in the vicinity of aerodrome;

3) Transportation possibilities;

4) Medical facilities;

5) Bank and post office at or in the vicinity of aerodrome;

6) Tourist office; and

7) Remarks.

**** AD 2.6 Rescue and firefighting services

Detailed description of the rescue and firefighting services and equipment available at the aerodrome, including:

1) Aerodrome category for firefighting;

2) Rescue equipment;

3) Capability for removal of disabled aircraft; and

4) Remarks.

**** AD 2.7 Seasonal availability — clearing

Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:

1) Type(s) of clearing equipment;

2) Clearance priorities; and

3) Remarks.

**** AD 2.8 Aprons, taxiways and check locations/positions data

Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

1) Designation, surface and strength of aprons;

2) Designation, width, surface and strength of taxiways;

3) Location and elevation to the nearest metre or foot of altimeter checkpoints;

4) Location of VOR checkpoints;

5) Position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds; and

6) Remarks.

If check locations/positions are presented on an aerodrome chart, a note to that effect shall be provided under this subsection.

**** AD 2.9 Surface movement guidance and Control system and markings

Brief description of the surface movement guidance and control system and runway and taxiway markings, including:

1) Use of aircraft stand identification signs, taxiway guide lines and visual docking/parking guidance system at aircraft stands;

2) Runway and taxiway markings and lights;

3) Stop bars and runway guard lights (if any);

4) Other runway protection measures; and

5) Remarks.

**** AD 2.10 Aerodrome obstacles

#OBS-DS# Detailed description of obstacles, including:

1) Obstacles in Area 2:

a) Obstacle identification or designation;

b) Type of obstacle;

c) Obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

d) Obstacle elevation and height to the nearest metre or foot;

e) Obstacle marking, and type and colour of obstacle lighting (if any); and f) NIL indication, if appropriate.

Note 1.— Annex 15, Chapter 5 provides a description of Area 2 while Appendix 8, Figure A8-2 of this document contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 2.

Note 2.— Specifications concerning the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 2 are given in Appendix 1.

2) The absence of an Area 2 data set for the aerodrome is to be clearly stated and obstacle data are to be provided for:

a) Obstacles that penetrate the obstacle limitation surfaces;

b) Obstacles that penetrate the take-off flight path area obstacle identification surface; and

c) Other obstacles assessed as being hazardous to air navigation.

3) Indication that information on obstacles in Area 3 is not provided, or if provided:

a) Obstacle identification or designation;

b) Type of obstacle;

c) Obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

d) Obstacle elevation and height to the nearest tenth of a metre or tenth of a foot;

e) Obstacle marking, and type and colour of obstacle lighting (if any);

f) If appropriate, an indication that the list of obstacles is available as a digital data set, and a reference to GEN 3.1.6; and

g) NIL indication, if appropriate.

Note 1.— Annex 15, Chapter 5, provides a description of Area 3 while Appendix 8, Figure A8-3 of this document contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 3.

Note 2.— Specifications concerning the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 3 are given in Appendix 1.

**** AD 2.11 Meteorological information provided

Detailed description of meteorological information provided at the aerodrome and an indication of which meteorological office is responsible for the service enumerated, including:

1) Name of the associated meteorological office;

2) Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours;

3) Office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts;

4) Availability of the trend forecasts for the aerodrome, and interval of issuance;

5) Information on how briefing and/or consultation is provided;

6) Types of flight documentation supplied and language(s) used in flight documentation;

7) Charts and other information displayed or available for briefing or consultation;

8) Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;

9) The air traffic services unit(s) provided with meteorological information; and

10) Additional information (e.g. concerning any limitation of service).

**** AD 2.12 Runway physical characteristics

Detailed description of runway physical characteristics, for each runway, including:

1) Designations;

2) True bearings to one-hundredth of a degree;

3) Dimensions of runways to the nearest metre or foot;

4) Strength of pavement (PCN and associated data) and surface of each runway and associated stopways;

5) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds for each threshold and runway end and, where appropriate, geoid undulation of:

— Thresholds of a non-precision approach runway to the nearest metre or foot; and

— Thresholds of a precision approach runway to the nearest tenth of a metre or tenth of a foot;

6) Elevations of:

— Thresholds of a non-precision approach runway to the nearest metre or foot; and

— Thresholds and the highest elevation of the touchdown zone of a precision approach runway to the nearest tenth of a metre or tenth of a foot;

7) Slope of each runway and associated stopways;

8) Dimensions of stopway (if any) to the nearest metre or foot;

9) Dimensions of clearway (if any) to the nearest metre or foot;

10) Dimensions of strips;

11) Dimensions of runway end safety areas;

12) Location (which runway end) and description of arresting system (if any);

13) The existence of an obstacle-free zone; and

14) Remarks.

**** AD 2.13 Declared distances

Detailed description of declared distances to the nearest metre or foot for each direction of each runway, including:

1) Runway designator;

2) Take-off run available;

3) Take-off distance available, and if applicable, alternative reduced declared distances;

4) Accelerate-stop distance available;

5) Landing distance available; and

6) Remarks, including runway entry or start point where alternative reduced declared distances have been declared.

If a runway direction cannot be used for take-off or landing, or both, because it is operationally forbidden, then this shall be declared and the words "not usable" or the abbreviation "NU" entered (Annex 14, Volume I, Attachment A, Section 3).

**** AD 2.14 Approach and runway lighting

Detailed description of approach and runway lighting, including:

1) Runway designator;

2) Type, length and intensity of approach lighting system;

3) Runway threshold lights, colour and wing bars;

4) Type of visual approach slope indicator system;

5) Length of runway touchdown zone lights;

6) Length, spacing, colour and intensity of runway centre line lights;

7) Length, spacing, colour and intensity of runway edge lights;

8) Colour of runway end lights and wing bars;

9) Length and colour of stopway lights; and

10) Remarks.

**** AD 2.15 Other lighting and secondary power supply

Description of other lighting and secondary power supply, including:

1) Location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any);

2) Location and lighting (if any) of anemometer/landing direction indicator;

3) Taxiway edge and taxiway centre line lights;

4) Secondary power supply including switch-over time; and

5) Remarks.

**** AD 2.16 Helicopter landing area

Detailed description of helicopter landing area provided at the aerodrome, including:

1) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds and, where appropriate, geoid undulation of the geometric centre of touchdown and lift-off (TLOF) or of each threshold of final approach and take-off (FATO) area:

— For non-precision approaches, to the nearest metre or foot; and

— For precision approaches, to the nearest tenth of a metre or tenth of a foot;

2) TLOF and/or FATO area elevation:

— For non-precision approaches, to the nearest metre or foot; and

— For precision approaches, to the nearest tenth of a metre or tenth of a foot;

3) TLOF and FATO area dimensions to the nearest metre or foot, surface type, bearing strength and marking;

4) True bearings to one-hundredth of a degree of FATO;

5) Declared distances available, to the nearest metre or foot;

6) Approach and FATO lighting; and

7) Remarks.

**** AD 2.17 Air traffic services airspace

#AIP-DS# Detailed description of air traffic services (ATS) airspace organized at the aerodrome, including:

1) Airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits;

2) Vertical limits;

3) Airspace classification;

4) Call sign and language(s) of the ats unit providing service;

5) Transition altitude;

6) Hours of applicability; and

7) Remarks.

**** AD 2.18 Air traffic services communication facilities

Detailed description of ATS communication facilities established at the aerodrome, including:

1) Service designation;

2) Call sign;

3) Channel(s);

4) SATVOICE number(s), if available;

5) Logon address, as appropriate;

6) Hours of operation; and

7) Remarks.

**** AD 2.19 Radio navigation and landing aids

#AIP-DS# Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the aerodrome, including:

1) Type of aids, magnetic variation to the nearest degree, as appropriate, and type of supported operation for ILS/MLS, basic GNSS, SBAS, and GBAS, and for VOR/ILS/MLS also station declination to the nearest degree used for technical line-up of the aid;

2) Identification, if required;

3) Frequency(ies), channel number(s), service provider and reference path identifier(s) (RPI), as appropriate;

4) Hours of operation, as appropriate;

5) Geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate;

6) Elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft); elevation of GBAS reference point to the nearest metre or foot, and the ellipsoid height of the point to the nearest metre or foot. For SBAS, the ellipsoid height of the landing threshold point (LTP) or the fictitious threshold point (FTP) to the nearest metre or foot;

7) Service volume radius from the GBAS reference point to the nearest kilometre or nautical mile; and

8) Remarks.

When the same aid is used for both en-route and aerodrome purposes, a description shall also be given in section ENR 4. If the GBAS serves more than one aerodrome, description of the aid shall be provided under each aerodrome. If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column. Facility coverage shall be indicated in the remarks column.

**** AD 2.20 Local aerodrome regulations

Detailed description of regulations applicable to the use of the aerodrome, including the acceptability of training flights, non-radio and microlight aircraft and similar, and to ground manoeuvring and parking but excluding flight procedures.

**** AD 2.21 Noise abatement procedures

Detailed description of noise abatement procedures established at the aerodrome.

**** AD 2.22 Flight procedures

Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization at the aerodrome. When established, detailed description of the low visibility procedures at the aerodrome, including:

1) Runway(s) and associated equipment authorized for use under low visibility procedures;

2) Defined meteorological conditions under which initiation, use and termination of low visibility procedures would be made;

3) Description of ground marking/lighting for use under low visibility procedures; and

4) Remarks.

**** AD 2.23 Additional information

Additional information at the aerodrome, such as an indication of bird concentrations at the aerodrome, together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.

**** AD 2.24 Charts related to an aerodrome

The requirement is for charts related to an aerodrome to be included in the following order:

1) Aerodrome/Heliport Chart — ICAO;

2) Aircraft Parking/Docking Chart — ICAO;

3) Aerodrome Ground Movement Chart — ICAO;

4) Aerodrome Obstacle Chart — ICAO Type A (for each runway);

5) Aerodrome Obstacle Chart — ICAO Type B (when available);

6) Aerodrome Terrain and Obstacle Chart — ICAO (Electronic);

7) Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways);

8) Area Chart — ICAO (departure and transit routes);

9) Standard Departure Chart — Instrument — ICAO;

10) Area Chart — ICAO (arrival and transit routes);

11) Standard Arrival Chart — Instrument — ICAO;

12) ATC Surveillance Minimum Altitude Chart — ICAO;

13) Instrument Approach Chart — ICAO (for each runway and procedure type);

14) Visual Approach Chart — ICAO; and

15) Bird concentrations in the vicinity of the aerodrome.

If some of the charts are not produced, a statement to this effect shall be given in section GEN 3.2.

Note.— A page pocket may be used in the AIP to include the Aerodrome Terrain and Obstacle Chart — ICAO (Electronic) on appropriate electronic media.

AD 3. HELIPORTS

When a helicopter landing area is provided at the aerodrome, associated data shall be listed only under **** AD 2.16.

Note.— **** is to be replaced by the relevant ICAO location indicator.

**** AD 3.1 Heliport location indicator and name

The requirement is for the ICAO location indicator assigned to the heliport and the name of heliport. An ICAO location indicator shall be an integral part of the referencing system applicable to all subsections in section AD 3.

**** AD 3.2 Heliport geographical and administrative data

The requirement is for heliport geographical and administrative data, including:

1) Heliport reference point (geographical coordinates in degrees, minutes and seconds) and its site;

2) Direction and distance of heliport reference point from centre of the city or town which the heliport serves;

3) Heliport elevation to the nearest metre or foot, reference temperature and mean low temperature;

4) Where appropriate, geoid undulation at the heliport elevation position to the nearest metre or foot;

5) Magnetic variation to the nearest degree, date of information and annual change;

6) Name of heliport operator, address, telephone and telefax numbers, e-mail address, AFS address and, if available, website address;

7) Types of traffic permitted to use the heliport (IFR/VFR); and

8) Remarks.

**** AD 3.3 Operational hours

Detailed description of the hours of operation of services at the heliport, including:

1) Heliport operator;

2) Customs and immigration;

3) Health and sanitation;

4) AIS briefing office;

5) ATS reporting office (ARO);

6) MET briefing office;

7) Air traffic service;

8) Fuelling;

9) Handling;

10) Security;

11) De-icing; and

12) Remarks.

**** AD 3.4 Handling services and facilities

Detailed description of the handling services and facilities available at the heliport, including:

1) Cargo-handling facilities;

2) Fuel and oil types;

3) Fuelling facilities and capacity;

4) De-icing facilities;

5) Hangar space for visiting helicopters;

6) Repair facilities for visiting helicopters; and

7) Remarks.

**** AD 3.5 Passenger facilities

Passenger facilities available at the heliport, provided as a brief description or as a reference to other information sources such as a website, including:

1) Hotel(s) at or in the vicinity of the heliport;

2) Restaurant(s) at or in the vicinity of the heliport;

3) Transportation possibilities;

4) Medical facilities;

5) Bank and post office at or in the vicinity of the heliport;

6) Tourist office; and

7) Remarks.

**** AD 3.6 Rescue and firefighting services

Detailed description of the rescue and firefighting services and equipment available at the heliport, including:

1) Heliport category for firefighting;

2) Rescue equipment;

3) Capability for removal of disabled helicopters; and

4) Remarks.

**** AD 3.7 Seasonal availability — clearing

Detailed description of the equipment and operational priorities established for the clearance of heliport movement areas, including:

1) Type(s) of clearing equipment;

2) Clearance priorities; and

3) Remarks.

**** AD 3.8 Aprons, taxiways and check locations/positions data

Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

1) Designation, surface and strength of aprons, helicopter stands;

2) Designation, width and surface type of helicopter ground taxiways;

3) Width and designation of helicopter air taxiway and air transit route;

4) Location and elevation to the nearest metre or foot of altimeter checkpoints;

5) Location of VOR checkpoints;

6) Position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds; and

7) Remarks.

If check locations/positions are presented on a heliport chart, a note to that effect shall be provided under this subsection.

**** AD 3.9 Markings and markers

Brief description of final approach and take-off area and taxiway markings and markers, including:

1) Final approach and take-off markings;

2) Taxiway markings, air taxiway markers and air transit route markers; and

3) Remarks.

**** AD 3.10 Heliport obstacles

#OBS-DS# Detailed description of obstacles, including:

1) Obstacle identification or designation;

2) Type of obstacle;

3) Obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

4) Obstacle elevation and height to the nearest metre or foot;

5) Obstacle marking, and type and colour of obstacle lighting (if any); and

6) NIL indication, if appropriate.

**** AD 3.11 Meteorological information provided

Detailed description of meteorological information provided at the heliport and an indication of which meteorological office is responsible for the service enumerated, including:

1) Name of the associated meteorological office;

2) Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours;

3) Office responsible for preparation of TAFs, and periods of validity of the forecasts;

4) Availability of the trend forecasts for the heliport, and interval of issuance;

5) Information on how briefing and/or consultation is provided;

6) Type of flight documentation supplied and language(s) used in flight documentation;

7) Charts and other information displayed or available for briefing or consultation;

8) Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;

9) The ATS unit(s) provided with meteorological information; and

10) Additional information (e.g. concerning any limitation of service).

**** AD 3.12 Heliport data

Detailed description of heliport dimensions and related information, including:

1) Heliport type (surface-level, elevated or helideck);

2) Touchdown and lift-off (TLOF) area dimensions to the nearest metre or foot;

3) True bearings to one-hundredth of a degree of final approach and take-off (FATO) area;

4) Dimensions to the nearest metre or foot of FATO, and surface type;

5) Surface and bearing strength in tonnes (1 000 kg) of TLOF;

6) Geographical coordinates in degrees, minutes, seconds and hundredths of seconds and, where appropriate, geoid undulation of the geometric centre of TLOF or of each threshold of FATO:

— For non-precision approaches, to the nearest metre or foot; and

— For precision approaches, to the nearest tenth of a metre or tenth of a foot;

7) TLOF and/or FATO slope and elevation:

— For non-precision approaches, to the nearest metre or foot; and

— For precision approaches, to the nearest tenth of a metre or tenth of a foot;

8) Dimensions of safety area;

9) Dimensions, to the nearest metre or foot, of helicopter clearway;

10) The existence of an obstacle-free sector; and

11) Remarks.

**** AD 3.13 Declared distances

Detailed description of declared distances to the nearest metre or foot, where relevant for a heliport, including:

1) Take-off distance available, and if applicable, alternative reduced declared distances;

2) Rejected take-off distance available;

3) Landing distance available; and

4) Remarks, including entry or start point where alternative reduced declared distances have been declared.

**** AD 3.14 Approach and FATO lighting

Detailed description of approach and FATO lighting, including:

1) Type, length and intensity of approach lighting system;

2) Type of visual approach slope indicator system;

3) Characteristics and location of FATO area lights;

4) Characteristics and location of aiming point lights;

5) Characteristics and location of TLOF lighting system; and

6) Remarks.

**** AD 3.15 Other lighting and secondary power supply

Description of other lighting and secondary power supply, including:

1) Location, characteristics and hours of operation of heliport beacon;

2) Location and lighting of wind direction indicator (WDI);

3) Taxiway edge and taxiway centre line lights;

4) Secondary power supply including switch-over time; and

5) Remarks.

**** AD 3.16 Air traffic services airspace

#AIP-DS# Detailed description of air traffic services (ATS) airspace organized at the heliport, including:

1) Airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits;

2) Vertical limits;

3) Airspace classification;

4) Call sign and language(s) of ATS unit providing service;

5) Transition altitude;

6) Hours of applicability; and

7) Remarks.

**** AD 3.17 Air traffic services communication facilities

Detailed description of ATS communication facilities established at the heliport, including:

1) Service designation;

2) call sign;

3) Channel(s);

4) SATVOICE number(s), if available;

5) Logon address, as appropriate;

6) Hours of operation; and

7) Remarks.

**** AD 3.18 Radio navigation and landing aids

#AIP-DS# Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the heliport, including:

1) type of aids, magnetic variation to the nearest degree, as appropriate, and type of supported operation for ILS/MLS, basic GNSS, SBAS and GBAS, and for VOR/ILS/MLS also station declination to the nearest degree used for technical line-up of the aid;

2) Identification, if required;

3) Frequency(ies), channel number(s), service provider and reference path identifier(s) (RPI), as appropriate;

4) Hours of operation, as appropriate;

5) Geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate;

6) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft), elevation of GBAS reference point to the nearest metre or foot, and the ellipsoid height of the point to the nearest metre or foot. For SBAS, the ellipsoid height of the landing threshold point (LTP) or the fictitious threshold point (FTP) to the nearest metre or foot;

7) Service volume radius from the GBAS reference point to the nearest kilometre or nautical mile; and

8) Remarks.

When the same aid is used for both en-route and heliport purposes, a description shall also be given in section ENR 4. If the GBAS serves more than one heliport, description of the aid shall be provided under each heliport. If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column. Facility coverage shall be indicated in the remarks column.

**** AD 3.19 Local heliport regulations

Detailed description of regulations applicable to the use of the heliport, including the acceptability of training flights, non-radio and microlight aircraft and similar, and to ground manoeuvring and parking but excluding flight procedures.

**** AD 3.20 Noise abatement procedures

Detailed description of noise abatement procedures established at the heliport.

**** AD 3.21 Flight procedures

Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization established at the heliport. When established, detailed description of the low visibility procedures at the heliport, including:

1) Touchdown and lift-off (TLOF) area(s) and associated equipment authorized for use under low visibility procedures;

2) defined meteorological conditions under which initiation, use and termination of low visibility procedures would be made;

3) Description of ground marking/lighting for use under low visibility procedures; and

4) Remarks.

**** AD 3.22 Additional information

Additional information about the heliport, such as an indication of bird concentrations at the heliport, together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.

**** AD 3.23 Charts related to a heliport

The requirement is for charts related to a heliport to be included in the following order:

1) Aerodrome/Heliport Chart — ICAO;
2) Area Chart — ICAO (departure and transit routes);
3) Standard Departure Chart — Instrument — ICAO;
4) Area Chart — ICAO (arrival and transit routes);
5) Standard Arrival Chart — Instrument — ICAO;
6) ATC Surveillance Minimum Altitude Chart — ICAO;
7) Instrument Approach Chart — ICAO (for each procedure type);
8) Visual Approach Chart — ICAO; and
9) bird concentrations in the vicinity of heliport.

If some of the charts are not produced, a statement to this effect shall be given in section GEN 3.2.