TRUNG TÂM THÔNG BÁO TIN TỨC HÀNG KHÔNG
BAN ISO

Số: 03 /QĐ-ISO

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

Hà Nội, ngày 02 tháng 01 năm 2024

QUYẾT ĐỊNH

Về việc Ban hành Quy trình Quản lý cơ sở dữ liệu hàng không hệ thống AIM

BAN CHỈ ĐẠO HỆ THỐNG QUẢN LÝ CHẤT LƯỢNG TRUNG TÂM THÔNG BÁO TIN TỨC HÀNG KHÔNG

Căn cứ Quyết định số 655/QĐ-TTHK ngày 10/6/2019 của Giám đốc Trung tâm Thông báo tin tức hàng không về việc ban hành Quy chế hoạt động của Ban chỉ đạo Hệ thống quản lý chất lượng (Ban ISO) Trung tâm Thông báo tin tức hàng không;

Căn cứ Quyết định số 1296/QĐ-TTHK ngày 28/11/2022 của Giám đốc Trung tâm Thông báo tin tức hàng không về việc Kiện toàn Ban chỉ đạo Hệ thống quản lý chất lượng Trung tâm Thông báo tin tức hàng không;

Xét theo yêu cầu Hệ thống quản lý chất lượng theo tiêu chuẩn ISO 9001:2015 và hoạt động của Trung tâm Thông báo tin tức hàng không;

Theo đề nghị của Trưởng Trung tâm Cơ sở dữ liệu hàng không và Trưởng Phòng An toàn - Chất lượng.

QUYẾT ĐỊNH:

Điều 1. Ban hành Quy trình Quản lý cơ sở dữ liệu hàng không hệ thống AIM (QT-CSDL-AIM) thuộc tài liệu Hệ thống Quản lý chất lượng theo tiêu chuẩn ISO 9001:2015 của Trung tâm Thông báo tin tức hàng không.

Điều 2. Quyết định này có hiệu lực thi hành kể từ ngày ký và bãi bỏ Quyết định số 06/QĐ-ISO ngày 12/6/2023 của Ban ISO về việc ban hành Quy trình Phối hợp và cập nhật cơ sở dữ liệu trong ứng dụng Wizad Suite – Hệ thống AIM.

Điều 3. Trưởng các đơn vị liên quan chịu trách nhiệm phổ biến và triển khai áp dụng tài liệu này./.

Nơi nhận:
- Ban Giám đốc;
- Các phòng chuyên môn;
- NV, BĐKT;
- Các Trung tâm;
- Lưu: ATCL (16b).

TM. BAN ISO
TRƯỞNG BAN

M.S.C.N: 0100108624-009 - C.T.N.H.H - TRUNG TÂM THÔNG BÁO TIN TỨC HÀNG KHÔNG - CHI NHÁNH TỔNG CÔNG TY QUẢN LÝ BAY VIỆT NAM CÔNG TY TNHH - Q. LONG BIÊN - TP. HÀ NỘI

PHÓ GIÁM ĐỐC
Phạm Việt Thái

TỔNG CÔNG TY QUẢN LÝ BAY VIỆT NAM

TRUNG TÂM THÔNG BÁO TIN TỨC HÀNG KHÔNG

QT-CSDL-AIM

QUY TRÌNH QUẢN LÝ CƠ SỞ DỮ LIỆU HÀNG KHÔNG HỆ THỐNG AIM

(Ban hành kèm theo Quyết định số 03./QĐ-ISO ngày 02 tháng 01 năm 2024 của Ban ISO)

Trụ sở chính: Số 5/200 – Đường Nguyễn Sơn – Quận Long Biên – Thành phố Hà Nội

Điện thoại: (024) 38728778 - Fax: (024) 38725687

BẢNG THEO DÕI SỬA ĐỔI TÀI LIỆU		
Ngày tháng	**Nội dung thay đổi**	**Ngày hiệu lực**
02/01/2024	Ban hành lần 01	02/01/2024

1. MỤC ĐÍCH

Quy trình này được xây dựng nhằm mục đích thống nhất cách thức, cách kiểm soát hoạt động thực hiện điều phối công việc cho các đơn vị liên quan đến việc: cập nhật cơ sở dữ liệu và tạo sản phẩm trên hệ thống AIM.

2. PHẠM VI ÁP DỤNG

Quy trình này áp dụng đối với cán bộ và nhân viên của Trung tâm Cơ sở dữ liệu hàng không, Phòng AIP, Bản đồ - Phương thức bay, NOTAM Quốc tế.

3. TÀI LIỆU VIỆN DẪN

- Thông tư của Bộ Giao thông vận tải quy định về quản lý và bảo đảm hoạt động bay.
- Quyết định của Cục HKVN về Tài liệu hướng dẫn về tiêu chuẩn – Dịch vụ Thông báo tin tức hàng không (MOS-15).
- Quyết định của Cục HKVN về Tài liệu hướng dẫn về tiêu chuẩn – Bản đồ, sơ đồ hàng không (MOS-4).
- Quyết định của Cục HKVN về Phương thức Quản lý tin tức hàng không dân dụng.
- Quyết định của Cục Hàng không Việt Nam ban hành Hướng dẫn về quy trình thẩm định sản phẩm Thông báo tin tức hàng không, bản đồ, sơ đồ hàng không.
- Tài liệu Hướng dẫn khai thác của Trung tâm Cơ sở dữ liệu hàng không;
- ANNEX 4 – Phụ ước về sơ đồ hàng không.
- ANNEX 14 – Phụ ước về sân bay.
- ANNEX 15 – Phụ ước về Dịch vụ Thông báo tin tức hàng không.
- DOC 8126 – Tài liệu về dịch vụ thông báo tin tức hàng không.
- DOC 9674 – Tài liệu về hệ thống tọa độ toàn cầu.
- DOC 10066 – Tài liệu về Phương thức dịch vụ không vận – Quản lý tin tức hàng không (PANS-AIM).
- DOC 8400 – Tài liệu về Các chữ viết tắt và mã code của ICAO

4. CHỮ VIẾT TẮT

- ADO: Cơ quan/người khởi tạo dữ liệu
- AIC: Thông tri hàng không.
- AIP AMDT: Tập tu chỉnh tin tức hàng không.
- AIP SUP: Tập bổ sung tin tức hàng không.
- AIP: Tập thông báo tin tức hàng không.
- SDO: Khai thác dữ liệu tĩnh.

- BĐPTB: Bản đồ - Phương thức bay.
- Cảng HK: Cảng hàng không.
- Cục HKVN: Cục HKVN.
- CR (Change request): Yêu cầu thay đổi.
- DL và TT: Dữ liệu hàng không và tin tức hàng không
- HK: Hàng không.
- NOF: NOTAM Quốc tế.
- SDO operator: Nhân viên xử lý dữ liệu (vị trí khai thác)
- SDO approver: Nhân viên xử lý dữ liệu (vị trí chấp thuận)
- SĐ/BĐ: Sơ đồ/Bản đồ.
- TBTT HK: Thông báo tin tức hàng không.
- TCT Cảng HKVN: Tổng công ty Cảng hàng không Việt Nam.
- TCT QLB VN: Tổng công ty Quản lý bay Việt Nam.
- Trung tâm CSDLHK: Trung tâm Cơ sở dữ liệu hàng không.
- WS (Workspace): Không gian làm việc.
- VPĐT: Văn phòng điện tử.

5. NỘI DUNG QUY TRÌNH

5.1 Quy trình Phối hợp và cập nhật cơ sở dữ liệu trong ứng dụng Wizard Suite – Hệ thống AIM

5.1.1. Lưu đồ quá trình thực hiện

Bước	Trách nhiệm	Trình tự công việc	Biểu mẫu/Tài liệu liên quan
1.	Cán bộ, nhân viên Trung tâm CSDLHK	ADO	
2.	Nhân viên điều phối	Kiểm tra, đánh giá ban đầu	BM-CSDL-AIM(A1-I1)
3.	Nhân viên điều phối, Cán bộ Trung tâm, Phòng NOF, AIP, BĐPTB	Đề xuất phương án phát hành và thống nhất các thời gian liên quan đến phát hành sản phẩm	
4.	Nhân viên điều phối	Tạo CR, chỉ định không gian làm việc cho các đơn vị liên quan	BM-CSDL-AIM-FORM
5.	Nhân viên xử lý dữ liệu (SDO operator)	Cập nhật CSDL	BM-CSDL-AIM-FORM
6.	Nhân viên xử lý dữ liệu (SDO approver)	Chấp thuận	BM-CSDL-AIM-FORM
7.	Cán bộ, nhân viên Trung tâm CSDLHK	Phối hợp biên soạn và phát hành sản phẩm	
8.	Trung tâm CSDLHK, NOF, AIP, BĐPTB	Kiểm soát sau phát hành	
9.	Trung tâm CSDLHK	Lưu trữ và Ghi nhận cập nhật	BM-CSDL-AIM-BM-CSDL-AIM-FORM

5.1.2. Mô tả lưu đồ

Bước 1: ADO

DL và TT được chuyển từ các cơ quan/người khởi tạo dữ liệu (ADO) đến Trung tâm CSDLHK thông qua các hình thức sau:

+ Văn phòng điện tử;
+ Văn bản giấy;
+ Thư điện tử;
+ Tệp (file) dữ liệu điện tử.

Bước 2: Kiểm tra, đánh giá ban đầu

- Căn cứ vào DL và TT nhận được, nhân viên điều phối chủ trì, phối hợp với các đơn vị liên quan trong Trung tâm (các đơn vị gửi ý kiến về Trung tâm CSDLHK trong vòng 01 ngày làm việc kể từ khi nhận được DL và TT) thực hiện kiểm tra, đánh giá ban đầu thông qua các bảng kiểm tra chất lượng dữ liệu hàng không (checklist) (tính toàn vẹn, độ chính xác, độ phân giải, sự đầy đủ, định dạng dữ liệu, tính kịp thời). Bảng kiểm tra chất lượng dữ liệu hàng không (checklist) được nêu tại các biểu mẫu **BM-CSDL-AIM (A1-I1).**

  + Tính pháp lý của DL và TT nhận được: Các văn bản do Cục HKVN, Cảng HKVN, TCT QLBVN, cơ quan đơn vị của Bộ Quốc phòng, ban hành (có đóng dấu, chữ ký), email của người có thẩm quyền của Cục HKVN;
  + Yêu cầu về chất lượng dữ liệu;
  + DL và TT phù hợp để phát hành sản phẩm TBTTHK (sản phẩm);
  + Phù hợp để cập nhật cơ sở dữ liệu.

- Nếu DL và TT không đáp ứng yêu cầu chất lượng dữ liệu thì nhân viên điều phối sẽ liên hệ với cơ quan/người khởi tạo dữ liệu để xác minh làm rõ.

- Trong trường hợp cần thiết, Trung tâm CSDLHK phối hợp với phòng BĐPTB tiến hành xác minh vật lý đối với DL và TT cần làm rõ thông qua công tác khảo sát, đo đạc tại hiện trường.

- Nếu DL và TT đáp ứng yêu cầu chất lượng DL thì Trung tâm CSDLHK tiến hành cập nhật CSDLHK được quy định tại Bước 5 dưới đây.

Bước 3: Đề xuất phương án phát hành và thống nhất các thời gian liên quan đến phát hành sản phẩm

Sau khi kiểm tra, đánh giá sơ bộ ban đầu DL và TT, nhân viên điều phối thực hiện công tác điều phối để phát hành sản phẩm trên VPĐT/email.

a) Trường hợp DL và TT phù hợp để phát hành AIC/AIP SUP

- Nhân viên điều phối chủ trì:

+ Thống nhất ngày hiệu lực, ngày phát hành, số thứ tự sản phẩm phát hành với Phòng AIP, BĐPTB;

+ Thống nhất AIC/AIP SUP/NOTAM được hủy bỏ (nếu có) với Phòng AIP, NOF;

+ Thống nhất số lượng sơ đồ/bản đồ liên quan đến sản phẩm với Phòng BĐPTB;

b) Trường hợp DL và TT phù hợp để phát hành NOTAM PERM, AIP AMDT

Trường hợp DL và TT phù hợp để phát hành NOTAM PERM:

Căn cứ tính chất, nội dung của DL và TT nhận được, nhân viên điều phối phối hợp với các đơn vị liên quan (Phòng AIP, NOF và/hoặc Phòng BĐ-PTB) để thống nhất hình thức phát hành tin tức. Nếu các đơn vị liên quan xác nhận DL và TT phù hợp để phát hành NOTAM PERM thì Phòng NOF thông báo cho Trung tâm CSDLHK và các đơn vị liên quan số NOTAM phát hành để các đơn vị đồng thời phối hợp theo dõi các NOTAM PERM này cho đến khi được đưa vào AIP AMDT.

Trường hợp DL và TT phù hợp để phát hành AIP AMDT:

- Căn cứ danh mục các trang dự kiến tu chỉnh của Phòng AIP, các bộ phận của Trung tâm CSDLHK sẽ rà soát, có ý kiến trong thời gian 03 ngày làm việc kể từ ngày nhận được danh mục.

- Căn cứ danh mục các trang dự kiến tu chỉnh được Cục HKVN thông qua, nhân viên điều phối chủ trì:

+ Thông báo thời gian hoàn thành việc cập nhật cơ sở dữ liệu liên quan.

+ Thông báo thời gian hoàn thành việc khởi tạo CR và không gian làm việc (WS) cho Phòng AIP, BĐPTB.

Lưu ý:

+ *Nếu các phòng liên quan, Trung tâm CSDLHK không thống nhất được các mốc thời gian, vị trí điều phối báo cáo cán bộ Trung tâm CSDLHK xin ý kiến và báo cáo lãnh đạo Trung tâm đề xuất hướng giải quyết;*

+ *Trường hợp DL và TT nhận muộn không theo thời gian quy định thì nhân viên điều phối báo cáo cán bộ Trung tâm CSDLHK để báo cáo lãnh đạo Trung tâm TBTTHK xin ý kiến chỉ đạo từ Cục HKVN về hình thức phát hành sản phẩm và triển khai theo ý kiến Cục HKVN, nếu phải phát hành NOTAM trước thì nhân viên điều phối thông báo cho Phòng NOTAM Quốc tế và Phòng AIP theo dõi NOTAM phát hành.*

+ *Khi một tập tu chỉnh AIP không được phát hành theo chu kỳ quy định, Phòng AIP thông báo cho Trung tâm CSDLHK và các bên liên quan.*

Bước 4: Tạo CR, chỉ định không gian làm việc (WS) cho các đơn vị liên quan

- Căn cứ vào từng trường hợp cụ thể được nêu tại bước 3, nhân viên điều phối chỉ định không gian làm việc (WS) cho bộ phận xử lý dữ liệu và/hoặc Phòng BĐPTB và/hoặc Phòng AIP.

- Nhân viên điều phối giám sát hoạt động dựa trên CR, điều phối trong cả quá trình cập nhật cơ sở dữ liệu, phát hành sản phẩm.

- Nhân viên điều phối ghi theo biểu mẫu cập nhật dữ liệu hệ thống AIM **(BM-CSDL-AIM-FORM).**

Bước 5: Cập nhật CSDL

- Nhân viên xử lý dữ liệu thực hiện cập nhật dữ liệu tĩnh trên hệ thống AIM đáp ứng yêu cầu về chất lượng dữ liệu theo quy định của ICAO và Việt Nam.

- Nhân viên xử lý dữ liệu (vị trí khai thác SDO – SDO operator) thực hiện:

+ Kiểm tra DL và TT đáp ứng yêu cầu chất lượng dữ liệu (tính toàn vẹn, độ chính xác, độ phân giải, sự đầy đủ, định dạng dữ liệu) theo yêu cầu Thông tư BĐHĐB, MOS-15, MOS-4, Phương thức Quản lý tin tức hàng không dân dụng. Đối với tệp (file) dữ liệu điện tử, kiểm tra cấu trúc file theo chuẩn AIXM.

+ Nếu DL và TT không đáp ứng yêu cầu quy định, cần xác minh làm rõ với cơ quan/người khởi tạo dữ liệu, SDO operator thông báo cho nhân viên điều phối để phối hợp xác minh làm rõ. Sau khi xác minh làm rõ nhân viên điều phối thông báo cho nhân viên SDO operator để thực hiện nhiệm vụ.

+ DL và TT phù hợp, cập nhật dữ liệu theo quy định và yêu cầu.

Bước 6: Chấp thuận

Nhân viên xử lý dữ liệu (vị trí chấp thuận SDO - SDO approver) kiểm tra, đối chiếu và chịu trách nhiệm về những thay đổi dữ liệu do SDO operator thực hiện:

+ Trường hợp CSDL sau khi cài nạp được sử dụng để phát hành sản phẩm: SDO approver kiểm tra, SDO operator thực hiện việc cài nạp dữ liệu cho đến khi SDO approver thông qua.

+ Trường hợp CSDL sau khi cài nạp chưa được sử dụng để phát hành sản phẩm: SDO approver kiểm tra, SDO operator đảm bảo việc cài nạp dữ liệu theo yêu cầu của SDO approver. SDO approver sẽ thông qua dữ liệu khi các dữ liệu này được yêu cầu phát hành bằng sản phẩm.

Quá trình cập nhật, kiểm tra, chấp thuận, nhân viên xử lý dữ liệu (SDO operator, SDO approver) ghi theo biểu mẫu cập nhật dữ liệu hệ thống AIM **(BM-CSDL-AIM-FORM).**

Bước 7: Phối hợp biên soạn và phát hành sản phẩm

- Trong quá trình biên soạn sản phẩm:

+ Khi nhận được thông báo của các Phòng AIP, BĐPTB cần xác minh làm rõ dữ liệu (đối với DL và TT có ảnh hưởng đến CSDL): Nhân viên điều phối chủ trì, phối hợp với các phòng liên quan làm rõ với cơ quan/khởi tạo dữ liệu, sau đó thông báo lại các phòng kết quả xác minh, làm rõ.

+ Khi nhận được thông báo của các phòng AIP, BĐPTB về việc dữ liệu cập nhật trong SDO không chính xác, không đầy đủ: Nhân viên điều phối thông báo cho nhân viên xử lý dữ liệu kiểm tra, sửa đổi lại (nếu cần). Mọi thay đổi hay không thay đổi đến CSDL, nhân viên điều phối sẽ thông báo lại cho các phòng liên quan qua VPĐT/điện thoại/email.

- Khi trình dự thảo, nếu yêu cầu điều chỉnh nội dung dự thảo sản phẩm từ Cục HKVN, Phòng AIP và/hoặc Phòng BĐ-PTB có trách nhiệm chuyển các nội dung thẩm định và báo cho nhân viên điều phối, nhân viên điều phối báo cáo cán bộ Trung tâm sau đó khởi tạo các CR mới và thông báo cho các đơn vị liên quan để tiếp tục hoàn thiện sản phẩm cho đến khi Cục HKVN chấp thuận.

Bước 8: Kiểm soát sau phát hành

- Nhân viên điều phối giám sát khả năng truy nguyên dữ liệu, tính toàn vẹn dựa trên CR đưa vào hệ thống AIM. Nhân viên điều phối sẽ sử dụng công cụ đánh giá dữ liệu **(Validate Workspace)** của hệ thống AIM để giám sát tự động tính toàn vẹn, khả năng truy nguyên dữ liệu.
- Trường hợp sản phẩm sau khi phát hành nếu cần điều chỉnh nội dung: Nhân viên điều phối tiếp tục phối hợp với các đơn vị chuyên môn liên quan để thực hiện theo các bước của Quy trình này.
- Trường hợp sản phẩm đến thời hạn hết hiệu lực nhưng tiếp tục được gia hạn bằng sản phẩm mới thay thế cho sản phẩm đã phát hành: Phòng AIP thông báo cho Trung tâm CSDLHK và các đơn vị liên quan để nhân viên điều phối tiếp tục thực hiện điều phối theo các bước của Quy trình này.

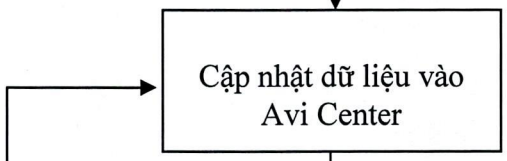
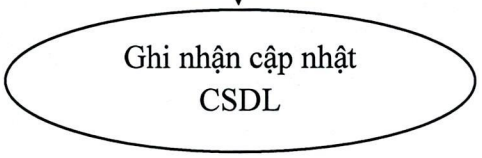
Bước 9: Lưu trữ và ghi nhận cập nhật

- Ghi các nội dung liên quan tới cập nhật CSDL theo biểu mẫu cập nhật dữ liệu hệ thống AIM **(BM-CSDL-AIM-FORM)**.

- Trung tâm CSDLHK lưu trữ Bảng kiểm tra chất lượng dữ liệu hàng không **(BM-CSDL-AIM (A1-I1)),** biểu mẫu cập nhật dữ liệu hệ thống AIM **(BM-CSDL-AIM-FORM)**, hồ sơ phối hợp xử lý dữ liệu HK liên quan.

5.2. Quy trình cài nạp, duy trì, cập nhật dữ liệu hàng không trong CSDL AviCenter - Hệ thống AIM

5.2.1. Lưu đồ quá trình thực hiện

Bước	Trách nhiệm	Trình tự công việc	Biểu mẫu/Tài liệu liên quan
1.	Nhân viên điều phối		
2.	Nhân viên điều phối, nhân viên xử lý dữ liệu		**BM-CSDL-AIM (A1-I1)**
3.	Nhân viên xử lý dữ liệu		**BM-CSDL**
4.	Nhân viên điều phối, cán bộ Trung tâm		**BM-CSDL**
5.	Vị trí xử lý dữ liệu		**BM-CSDL**

5.2.2. Mô tả lưu đồ

Bước 1. Tiếp nhận DL và TT thô

- Nhân viên điều phối nghiên cứu văn bản:
+ Văn bản của Cục HKVN ;
+ Văn bản của Tổng công ty Quản lý bay Việt Nam;
+ Văn bản của Cảng hàng không trực thuộc Tổng công ty Cảng hàng không Việt Nam, Cảng HKQT Vân Đồn;
+ Các văn bản khác, nếu có.
- Rà soát các sản phẩm liên quan hiện còn hiệu lực (nếu có).
- DL và TT thô nhận được là các văn bản có Sơ đồ/Bản đồ kèm theo các phụ lục diễn giải nội dung cần thể hiện.

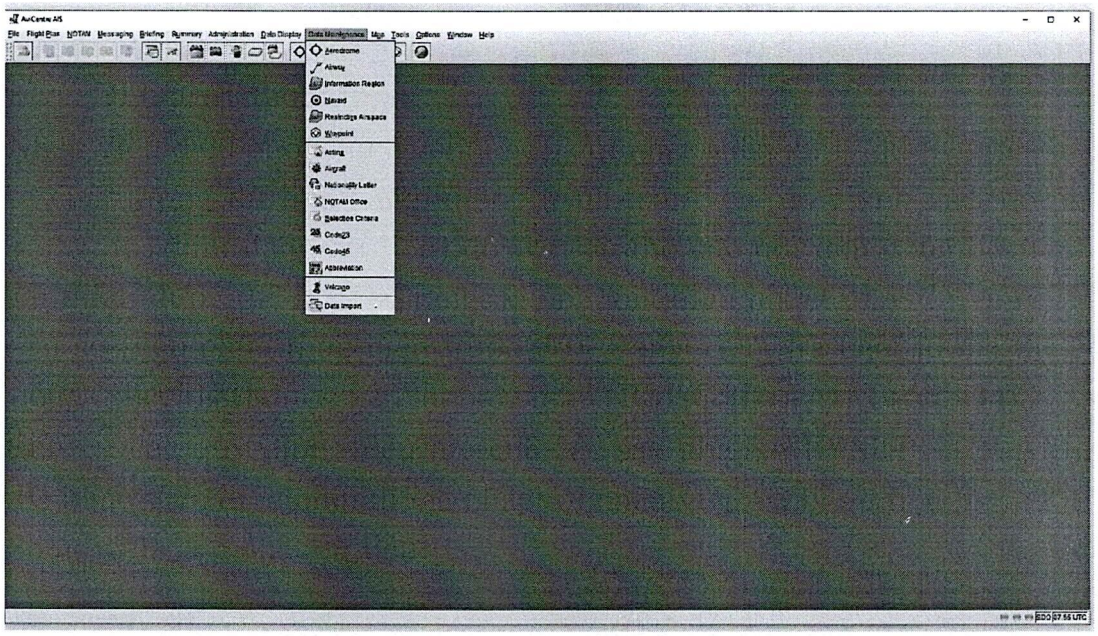
Bước 2. Kiểm tra DL và TT thô

- Nhân viên điều phối hoặc nhân viên xử lý dữ liệu thực hiện kiểm tra tính pháp lý của DL và TT thô.

- Nhân viên điều phối chủ trì phối hợp với nhân viên xử lý dữ liệu tiến hành kiểm tra chất lượng dữ liệu hàng không (tính toàn vẹn, độ chính xác, độ phân giải, sự đầy đủ, định dạng dữ liệu) đối với cụ thể các nội dung của dữ liệu và phần giải thích được thể hiện rõ ràng, không gây hiểu nhầm, đầy đủ và rõ ràng về chữ và số (nếu chưa thực hiện trước đó). Bảng kiểm tra chất lượng dữ liệu hàng không (checklist) được nêu tại biểu mẫu (**BM-CSDL-AIM (A1-I1)).**

- Căn cứ các quy định, hiệu lực của các sản phẩm AIP SUP, AIP AMDT AIP, AIC nhân viên điều phối thống nhất với nhân viên xử lý dữ liệu:

+ Phương án cập nhật dữ liệu



Thông tin cập nhật dữ liệu

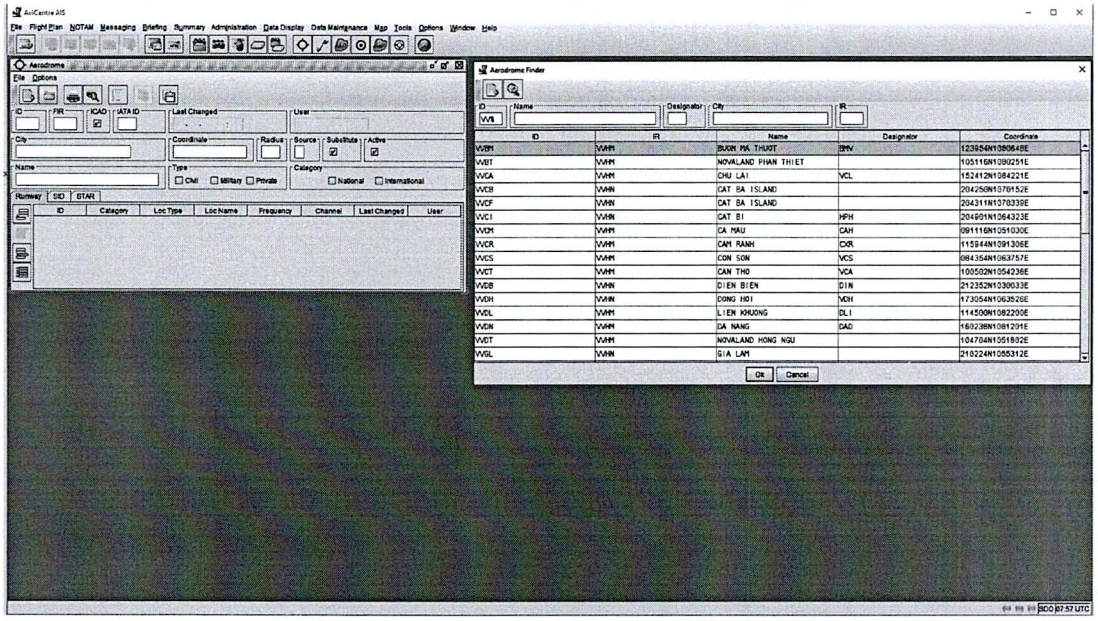
+ Các mốc thời gian: Thời gian dự kiến hoàn thành cập nhật, thời gian kiểm tra dữ liệu nhập, thời gian kích hoạt hiệu lực CSDL.

- Nếu DL và TT thô không đáp ứng các yêu cầu về chất lượng dữ liệu (chính xác, đầy đủ,…) thì nhân viên điều phối trực tiếp liên hệ đến cơ sở cung cấp DL và TT thô như CHKVN; TCTQLBVN; TTTBTTHK; Tổng công ty Cảng hàng không VN, các Cảng hàng không sân bay và các bên liên quan để làm rõ các vấn đề chưa được rõ ràng, các vấn đề còn thiếu, hay các vấn đề dễ gây hiểu nhầm… và yêu cầu cơ sở cung cấp DL và TT thô cung cấp lại dữ liệu cho đầy đủ và phù hợp với yêu cầu hoặc truy cứu nguồn thông tin từ AIP của các nước khác.

- Nếu DL và TT thô đáp ứng theo các yêu cầu, khuyến cáo về chất lượng dữ liệu sẽ thực hiện tiếp quy trình.

Bước 3. Cập nhật dữ liệu vào Avi Center

- Nhân viên xử lý dữ liệu thực hiện cập nhật dữ liệu vào hệ thống AIM module AviCenter.



Cập nhật dữ liệu

- Thời gian thực hiện cập nhật CSDL của nhân viên xử lý dữ liệu thực hiện trước 02 ngày làm việc tính từ khi dữ liệu có hiệu lực.
- Các nội dung cập nhật được nhân viên xử lý dữ liệu ghi vào Phiếu phân loại và kiểm tra dữ liệu **(BM-CSDL)** của Quy trình cập nhật cơ sở dữ liệu tĩnh hàng không **(QT-CSDL-CN).**

Bước 4. Kiểm tra, đánh giá dữ liệu nhập

- Trong quá trình nhập dữ liệu, nhân viên xử lý dữ liệu thực hiện kiểm tra tính chính xác của dữ liệu nhập.
- Sau khi nhập dữ liệu, nhân viên xử lý dữ liệu tiến hành kiểm tra theo từng đối tượng cụ thể, kiểm tra các đối tượng như ATS routes, Navaid, Designated Point….. phải được nhập đúng, rõ ràng, tránh nhầm lẫn.
- Khi nhân viên xử lý dữ liệu đã hoàn tất quá trình kiểm tra dữ liệu, thì sẽ chuyển các nội dung này sang cho nhân viên điều phối, cán bộ Trung tâm kiểm tra toàn bộ quá trình, nội dung kiểm tra được ghi theo biểu mẫu **BM-CSDL.**

Bước 5. Ghi nhận cập nhật CSDL

- Nhân viên xử lý dữ liệu thực hiện ghi Bảng theo dõi cập nhật dữ liệu theo mẫu **BM-CSDL.**
- Nhân viên xử lý dữ liệu cập nhật thông tin đầy đủ về tài liệu sử dụng cập nhật, các bằng chứng cập nhật, các vấn đề phát sinh khi cập nhật.

6. HỒ SƠ CẦN LƯU

TT	Tên hồ sơ	Nơi quản lý	Thời gian lưu
1.	Biểu mẫu cập nhật dữ liệu hệ thống AIM	Trung tâm CSDLHK	5 năm
2.	Các Bảng kiểm tra chất lượng dữ liệu hàng không	Trung tâm CSDLHK	5 năm
3.	Phiếu phân loại và kiểm tra dữ liệu	Trung tâm CSDLHK	5 năm

7. PHỤ LỤC KÈM THEO

TT	Tên hồ sơ	Nơi quản lý
1.	Biểu mẫu cập nhật dữ liệu hệ thống AIM	BM-CSDL-AIM-FORM
2.	Các Bảng kiểm tra chất lượng dữ liệu hàng không	BM-CSDL-AIM (A1-I1)

BIỂU MẪU CẬP NHẬT DỮ LIỆU HỆ THỐNG AIM

Tên CR	
Ngày hiệu lực (Từ/đến)	
Căn cứ:	
Có/không Đính kèm	
Số CR:	
Số WS:	
Ấn phẩm được chỉ định	
(Các) sơ đồ được chỉ định	

Bước	Nhiệm vụ	Kiểm tra	Ghi chú	Ngày	Bởi
1	Tạo/Chấp thuận/thông qua CR				
2	Tham chiếu chỉ định				
	Tạo WS				
	Tạo ấn phẩm				
	Tạo tham chiếu sơ đồ				
3	Biên soạn trong SDO lần thứ nhất				
4	Kiểm tra/chấp thuận SDO lần thứ nhất				
5	Biên soạn SDO lần thứ hai				
6	Kiểm tra/chấp thuận SDO lần thứ hai				
7	Biên soạn SDO lần thứ ba				
8	Kiểm tra/chấp thuận SDO lần thứ ba				
9	Đóng WS và đẩy dữ liệu vào hệ thống				

BIỂU MẪU CẬP NHẬT DỮ LIỆU HỆ THỐNG AIM

Ghi chú	Xử lý DL bởi	Kiểm tra bởi

CHECK LIST A1 Table A 1-1 Aerodrome/Heliport data (Aerodrome-Heliport) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	S/U	Note	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Aerodrome / Heliport				A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.							
1.1		Designator			Designator of the aerodrome / heliport							
1.1.1			ICAO location indicator	Text	The four letter ICAO location indicator of the aerodrome/heliport, as listed in ICAO DOC 7910 (Location Indicators).		if any					
1.1.2			Designator IATA	Text	The identifier that is assigned to a location in accordance with rules (resolution 767) governed by the International Air Transport Association (IATA).		if any					
1.1.3			Other	Text	A locally defined airport identifier, if other than an ICAO Location Indicator							
1.2		Name		Text	The primary official name of an aerodrome as designated by an appropriate authority.							
1.3		Served city		Text	The full name of the city or town the aerodrome/heliport is serving							
1.4		Type of traffic permitted										
1.4.1			International_national	Code list	Indication if international and/or national flights are permitted at the aerodrome/heliport							
1.4.2			IFR_VFR	Code list	Indication if IFR and/or VFR flights are permitted at the aerodrome/heliport							
1.4.3			Sched_nonsched	Code list	Indication if scheduled and/or nonscheduled flights are permitted at the aerodrome/heliport							
1.4.4			Civil_military	Code list	Indication if civil commercial aviation and/or general aviation and/or military flights are permitted at the aerodrome/heliport							
1.4.5			Restricted_use	Text	Indication if an aerodrome or heliport is not open for the public (Only for the use of the owners).							
1.5		Heliport type		Text	The type of the heliport as mentioned in Annex 14 Volume II (Surface-level, elevated, shipboard or helideck)							
1.6		Control type		Text	Indication if an aerodrome is under civil control, military control or joint control							
1.7		Certified ICAO		Text	Indication if airport is/is not certified according to the ICAO rules							
1.8		Certification date		Date	The date when the airport certification has been issued by the supervising authority.							
1.9		Certification expiration date		Date	The date when the airport certification will become invalid.							
1.10		Field elevation										
1.10.1			Elevation	Elevation	The vertical distance above Mean Sea Level (MSL) of the highest point of the landing area.			surveyed		1m or 1 ft		
1.10.2			Geoid undulation	Height	Geoid undulation at the aerodrome/ heliport elevation position		where appropriate	surveyed		1 m or 1 ft		
1.11		Reference temperature		Value	The monthly mean of the daily maximum temperatures for the hottest month of the year at an aerodrome. This temperature should be averaged over a period of years. (ICAO recommendation)							
1.12		Mean low temperature		Value	The mean lowest temperature of the coldest month of the year, for the last five years of data at the aerodrome elevation.							

1.13		Magnetic variation			The angular difference between True North and Magnetic North.							
1.13.1			Angle	Angle	The magnetic variation angle value			surveyed		1 degree		
1.13.1			Date	Date	The date on which the magnetic variation had the corresponding value.							
1.13.2			Annual change	Value	The annual rate of change of the magnetic variation.							
1.14		Reference point			The designated geographical location of an aerodrome.							
1.14.1			Position	Point	Geographical location of aerodrome reference point.			surveyed/ calculated		1 sec		
1.14.2			Site	Text	The location of the reference point on the aerodrome.							
1.14.3			Direction	Text	Direction of aerodrome reference point from centre of the city or town which the aerodrome serves							
1.14.4			Distance	Distance	Distance of aerodrome reference point from centre of the city or town which the aerodrome serves							
2	Landing direction indicator				A device to indicate visually the direction currently designated for landing and for take-off.							
2.1		Location		Text	Location of landing direction indicator							
2.2		Lighting		Text	Lighting of landing direction indicator		if any					
3	Secondary Power Supply											
3.1		Characteristics		Text	The description of the secondary power supply							
3.2		Switch-over time		Value	Secondary power supply switch-over time							
4	Anemometer				Device used for measuring wind speed							
4.1		Location		Text	Location of anemometer							
4.2		Lighting		Text	Lighting of anemometer		if any					
5	ABN / IBN				Aerodrome beacon / identification beacon used to indicate the location of an aerodrome/heliport from the air.							
5.1		Location		Text	Location of aerodrome/heliport beacon/identification beacon		if any					
5.2		Characteristics		Text	Description of aerodrome/heliport beacon/identification beacon							
5.3		Hours of operation		Schedule	Hours of operation of aerodrome/heliport beacon/identification beacon							
6	Wind Direction Indicator											
6.1		Location		Text	Location of wind direction indicator							
6.2		Lighting		Text	Lighting of wind direction indicator							
7	RVR observation site				The observation site of Runway Visual Range.							
7.1		Position		Point	Geographical location of runway visual range (RVR) observation sites							
8	Frequency Area				Designated part of a surface movement area where a specific frequency is required by air traffic control or ground control.							
8.1		Station		Text	Name of the station providing the service							
8.2		Frequency		Value	Frequency of the station providing the service							
8.3		Boundary		Polygon	Area boundary of the frequency area							
9	Hot spot				A location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.							
9.1		Identifier		Text	The identifier of the hot spot							

9.2		Annotation		Text	Additional information about the hot spot							
9.3		Geometry		Polygon	The geographical area of the hot spot							

CHECK LIST A2 Table A 1-1 Aerodrome/Heliport data (Runway) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Runway				A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft. (Annex 14)							
1.1		Designator		Text	The full textual designator of the runway, used to uniquely identify it at an aerodrome/heliport. E.g. 09/27, 02R/20L, RWY 1.							
1.2		Nominal length		Distance	The declared longitudinal extent of the runway for operational (performance) calculations.			surveyed		1 m or 1 ft		
1.3		Nominal width		Distance	The declared transversal extent of the runway for operational (performance) calculations.			surveyed		1 m or 1 ft		
1.4		Geometry		Polygon	Geometries of Runway Element, RunwayDisplacedArea and							
1.5		Centre line points										
1.5.1			Position	Point	The geographical location of runway centre line at each end of the runway, at the stopway and at the origin of each take-off flight path area, and at each significant change in slope of runway and stopway	Definition from Annex 4 3.8.4.2		surveyed				
1.5.2			Elevation	Elevation	The elevation of the corresponding centre line point. (See Annex 14 I 2.3.2: ---- for non-precision approaches ... any significant high and low intermediate points along the runway shall be measured to the accuracy of one-half metre or foot...) See Note 3)			surveyed				
1.5.3			Geoid undulation	Height	The geoid undulation at the corresponding centre line point							
1.6		RWY exit line										
1.6.1			Exit guidance line	Line	The geographical location of the runway exit line			surveyed		1/100 sec		
1.6.2			Colour	Text	Colour of runway exit line							
1.6.3			Style	Text	Style of runway exit line							
1.6.4			Directionality	Code List	Directionality of RWY exit line (one-way or two-way)							
1.7		Surface type		Text	The surface type of the runway defined as specified in Annex 14 Volume I							
1.8		Strength										
1.8.1			PCN	Text	Pavement classification number							
1.8.2			Pavement type	Text	Pavement type for aircraft classification number — pavement classification number (ACN-PCN) determination							
1.8.3			Subgrade category	Text	Subgrade strength category							
1.8.4			Allowable pressure	Text	Maximum allowable tire pressure category or maximum allowable tire pressure value							
1.8.5			Evaluation method	Text	The evaluation method used							
1.9		Strip			A defined area including the runway and the stop-way if provided a) to reduce the risk of damage to aircraft running off a runway; and b) to protect aircraft flying over it during take-off or landing operations							
1.9.1			Length	Distance	The longitudinal extent of the runway strip.							
1.9.2			Width	Distance	The transversal extent of the runway strip							
1.9.3			Surface type	Text	The surface type of the runway strip							
1.10		Shoulder			An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.							
1.10.1			Geometry	Polygon	The geographical location of the shoulders							

1.10.2			Surface type	Text	The surface type of the shoulder							
1.10.3			Width	Distance	The width of the runway shoulder			surveyed		1 m or 1 ft		
1.11		Blastpad			The area provided to reduce the erosive effects of jet blast and propeller wash.							
1.11.1			Geometry	Polygon	The geographical location of the blastpad							
1.12		Obstacle free zone		Text	Existence of an obstacle-free zone for a precision approach runway category I	when provided						
1.13		RWYmarking										
1.13.1			Type	Text	Type of runway marking							
1.13.2			Description	Text	Description of the runway markings							
1.13.3			Geometry	Polygon	The geographical location of the runway marking							
1.14		RWY center line LGT										
1.14.1			Length	Distance	The longitudinal extent of the runway centre line lights							
1.14.2			Spacing	Distance	Spacing of runway centre line lights							
1.14.3			Colour	Text	Colour of runway centre line lights							
1.14.4			Intensity	Text	Intensity of runway centre line lights							
1.14.5			Position	Point	Geographical location of each individual light of the runway center line lights							
1.15		RWY Edge LGT										
1.15.1			Length	Distance	The longitudinal extent of the runway edge lights							
1.15.2			Spacing	Distance	Spacing of the runway edge lights							
1.15.3			Colour	Text	Colour of runway edge lights							
1.15.4			Intensity	Text	Intensity of runway edge lights							
1.15.5			Position	Point	Geographical location of each individual light of the runway edge lights							
1.16		Reference Code			The intent of the reference code is to provide a simple method for interrelating the numerous specifications concerning the characteristics of aerodromes so as to provide a series of aerodrome facilities that are suitable for the aeroplanes that are intended to operate at the aerodrome							
1.16.1			Number	Code list	A number based on the aeroplane reference field length							
1.16.2			Letter	Code list	A letter based on the aeroplane wingspan and outer main gear wheel span							
1.17		Restriction		Text	Description of restrictions imposed on runway							
2	Runway Direction											
2.1		Designator		Text	The full textual designator of the landing and take-off direction. Examples: 27, 35L, 01R.							
2.2		True bearing		Bearing	The true bearing of the runway.			surveyed		1/100 degree		
2.3		Type		Text	Type of runway: precision (CAT I, II, III) / non-precision / non-instrument							
2.4		Threshold			The beginning of that portion of the runway usable for landing.							
2.4.1			Position	Point	Geographical location for runway threshold			surveyed		1/100 sec		
2.4.2			Elevation	Elevation	Elevation of the runway threshold							
2.4.3			Geoid undulation	Height	WGS-84 Geoid undulation at runway threshold position							
2.4.4			Type	Text	The indication if the threshold is displaced/ not displaced. A displaced threshold is not located at the extremity of a runway.							
2.4.5			Displacement	Distance	Distance of displaced threshold	If displaced threshold		surveyed		1m or 1ft		
2.5		Runway end			Runway end (flight path alignment point)							
2.5.1			Position	Point	Location of the runway end in the direction of departure			surveyed		1/100 sec		
2.5.2			Elevation	Elevation	Elevation of the end position of the runway							

2.6		Departure end of runway			Departure end of the runway (DER), which is the end of the area declared suitable for take-off (i.e. the end of the runway or, where a clearway is provided, the end of the clearway).	Beginning of departure procedure						
2.6.1			Position	Point	Geographical location of DER							
2.6.2			Elevation	Elevation	The elevation of DER is the elevation of the end of the runway or the elevation of the end of the clearway, whichever is higher.							
2.7		Touchdown zone			The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.							
2.7.1			Elevation	Elevation	Highest elevation of the touchdown zone of a precision approach runway	precision approach RWY						
2.7.2			Slope	Value	The slope of the runway touchdown zone							
2.8		Slope		Value	Slope of the runway							
2.9		LAHSO			Land and Hold Short Operations							
2.9.1			Geometry	Line	Geographical location of Land and Hold Short Operations (LAHSO)							
2.9.2			Protected element	Text	Name of runway or taxiway being protected							
2.10		Displaced area			That portion of a runway between the beginning of the runway and the displaced threshold.							
2.10.1			Geometry	Polygon	Geographical location of the displaced area							
2.10.2			PCN	Text	Pavement classification number of the displaced area							
2.10.3			Surface type	Text	The surface type of the displaced area							
2.10.4			Aircraft restriction	Text	Usage restriction for specific aircraft type							
2.11		Stopway			A defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.							
2.11.1			Length	Distance	The longitudinal extent of stopway	if any		surveyed		1 m or 1 ft		
2.11.2			Width	Distance	Width of the stopway			surveyed		1 m or 1 ft		
2.11.3			Geometry	Polygon	Geographical location of the stopway							
2.11.4			Slope	Value	Slope of stopway							
2.11.5			Surface type	Text	The surface type of the stopway							
2.12		Clearway			A defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.							
2.12.1			Length	Distance	The longitudinal extent of the clearway			surveyed		1 m or 1 ft		
2.12.2			Width	Distance	The transversal extent of the clearway			surveyed		1 m or 1 ft		
2.12.3			Ground profile		The vertical profile (or slope) of the clearway	if any						
2.13		RESA			An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.							
2.13.1			Length	Distance	The longitudinal extent of Runway End Safety Area							
2.13.2			Width	Distance	The transversal extent of the Runway End Safety Area							
2.13.3			Longitudinal slope	Value	Longitudinal slope of Runway End Safety Area							
2.13.4			Transverse slope	Value	Tranverse slope Runway End Safety Area							
2.14		Declared distances										
2.14.1			TORA	Distance	Take-off run available - The length of runway declared available and suitable for the ground run of an aeroplane taking off.			surveyed		1 m or 1 ft		
2.14.2			TODA	Distance	Take-off distance available - The length of the take-off run available plus the length of the clearway, if provided.			surveyed		1 m or 1 ft		

2.14.3			ASDA	Distance	Accelerate-stop distance available - The length of the take-off run available plus the length of the stopway, if provided.			surveyed		1 m or 1 ft		
2.14.4			LDA	Distance	Landing distance available - The length of runway which is declared available and suitable for the ground run of an aeroplane landing.			surveyed		1 m or 1 ft		
2.14.5			Remarks	Text	Remarks including runway entry or start point where alternative reduced declared distances have been declared.							
2.15		RWY End LGT										
2.15.1			Colour	Text	Colour of runway end lights							
2.15.2			Position	Point	Geographical location of each individual light of the runway end lights							
2.16		SWY LGT										
2.16.1			Length	Distance	The longitudinal extent of stopway lights							
2.16.2			Colour	Text	Colour of stopway lights							
2.16.3			Position	Point	Geographical location of each individual light of the stopway lights							
2.17		Approach lighting system										
2.17.1			Type	Text	Classification of the approach lighting system using as criteria the ICAO Annex 14 standards							
2.17.2			Length	Distance	The longitudinal extent of approach lighting system							
2.17.3			Intensity	Text	A code indicating the relative intensity of the lighting system							
2.17.4			Position	Point	Geographical location of each individual light of the approach lighting system							
2.18		RWY threshold lights										
2.18.1			Colour	Text	Colour of runway threshold lights							
2.18.2			Wing bar color	Text	Colour of runway threshold wing bars							
2.18.3			Position	Point	Geographical location of each individual light of the threshold and wing bar lights							
2.19		Touchdown zone lights										
2.19.1			Length	Distance	The longitudinal extent of the runway touchdown zone lights							
2.19.2			Position	Point	Geographical location of each individual light of the touchdown zone lights							
2.20		Visual approach slope indicator										
2.20.1			MEHT	Height	Minimum Eye Height over the Threshold							
2.20.2			Position	Point	Geographical location of Visual approach slope indicator system							
2.20.3			Angle	Angle	Nominal approach slope angle(s)							
2.20.4			Type	Text	Type of VGSI (VASI, PAPI etc.)							
2.20.5			Displacement angle	Angle	Where the axis of the system is not parallel to the runway centre line, the angle of displacement							
2.20.6			Displacement direction	Text	Where the axis of the system is not parallel to the runway centre line, the direction of displacement, i.e. left or right							
2.21		Arresting gear		Line	Geographical location of the arresting gear cable across the runway							
2.22		Arresting system			High energy absorbing material located at the end of a runway or stopway designed to crush under the weight of an aircraft as the material exerts deceleration forces on the aircraft landing gear.							
2.22.1			Geometry	Polygon	The geographical location of the arresting system							
2.22.2			Setback	Distance	Setback of the arresting system							
2.22.3			Length	Distance	The longitudinal extent of arresting system							
2.22.4			Width	Distance	The transverse extent of arresting system							
3	Radio altimeter area											
3.1		Length		Distance	The longitudinal extent of radio altimeter area							

3.2		Width		Distance	The transverse extent of radio altimeter area							
3.3		Geometry		Polygon	Geographical location of radio altimeter area							

Note 1)	Threshold elevation for runways with non-precision approaches			surveyed		1 m or 1 ft	
	Threshold elevation for runways with precision approaches			surveyed		0.1 m or 0.1 ft	
Note 2)	WGS-84 geoid undulation at runway threshold, non-precision approaches			surveyed		1 m or 1 ft	
	WGS-84 geoid undulation at runway threshold, precision approaches			surveyed		0.1 m or 0.1 ft	
Note 3)	Elevation of the runway end and any significant high and low intermediate						
	Elevation of the runway end and the highest elevation of the touchdown zone						

CHECK LIST A3 Table A 1-1 Aerodrome/Heliport data (TLOF-FATO) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	FATO				Final approach and take-off area. A defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by helicopters operated in performance class 1, the defined area includes the rejected take-off area available.							
1.1		Threshold			The beginning of that portion of the FATO usable for landing.							
1.1.1			Position	Point	Geographical location of FATO threshold			surveyed		1/100 sec		
1.1.2			Elevation	Elevation	Elevation of the FATO threshold							
1.1.3			Geoid undulation	Height	WGS-84 Geoid undulation at FATO threshold position							
1.2		Departure end of runway			Departure end of the runway (DER), which is the end of the area declared suitable for take-off (i.e. the end of the runway or, where a clearway is provided, the end of the clearway or the end of the final approach and take-off (FATO) area).				BM-CL-CSDL-B1			
1.2.1			Position	Point	Geographical location of DER			surveyed		1/100 sec		
1.2.2			Elevation	Elevation	The elevation of the DER is the higher of the elevations of the beginning and end of the runway/FATO.							
1.3		Type		Text	Type of FATO according to ICAO Heliport Manual (Doc 9261)							
1.4		Designation		Text	The full textual designator of the landing and take-off area.							
1.5		Length		Distance	The longitudinal extent of FATO			surveyed		1 m or 1 ft		
1.6		Width		Distance	The transversal extent of FATO							
1.7		Geometry		Polygon	Geographical location of FATO element							
1.8		Slope		Value	The slope of FATO							
1.9		Surface type		Text	The surface type of FATO							
1.10		True bearing		Bearing	The true bearing of FATO			surveyed		1/100 degree		
1.11		Declared distances										
1.11.1			TODAH	Distance	Take-off distance available - The length of the FATO plus the length of helicopter clearway (if provided)	and if applicable, alternative reduced declared distances;		surveyed		1 m or 1 ft		
1.11.2			RTODAH	Distance	Rejected Take-off distance available - The length of the FATO declared available and suitable for helicopters operated in performance class 1 to complete a rejected take-off.			surveyed		1 m or 1 ft		
1.11.3			LDAH	Distance	Landing distance available - The length of the FATO plus any additional area declared available and suitable for helicopters to complete the landing manoeuvre from a defined height.			surveyed		1 m or 1 ft		
1.11.4			Remarks	Text	Remarks including entry or start point where alternative reduced declared distances have been declared.							
1.12		FATO marking										
1.12.1			Description	Text	Description of FATO markings							
1.13		Approach lighting system										
1.13.1			Type	Text	Classification of the approach lighting system using as criteria the ICAO Annex 14 standards							
1.13.2			Length	Distance	The longitudinal extent of approach lighting system.							

1.13.3			Intensity	Text	A code indicating the relative intensity of the lighting system.							
1.13.4			Position	Point	Geographical location of each individual light of the approach lighting system							
1.14		Area lights										
1.14.1			Description	Text	Characteristics of area lights							
1.14.2			Position	Point	Geographical location of each individual light of the area lights							
1.15		Aiming point lights										
1.15.1			Description	Text	Characteristics of aiming point lights							
1.15.2			Position	Point	Geographical location of each individual light of the aiming point lights							
2	TLOF				Touchdown and lift-off area. An area on which a helicopter may touch down or lift off.							
2.1		Designator		Text	The full textual designator of TLOF							
2.2		Centre point										
2.2.1			Position	Point	Geographical location of TLOF geometric centre			surveyed		1/100 sec		
2.2.2			Elevation	Elevation	Elevation of the TLOF geometric centre							
2.2.3			Geoid undulation	Height	WGS-84 Geoid undulation at TLOF geometric centre position							
2.3		Length		Distance	The longitudinal extent of TLOF			surveyed		1 m or 1 ft		
2.4		Width		Distance	The transversal extent of TLOF			surveyed		1 m or 1 ft		
2.5		Geometry		Polygon	Geographical location of TLOF element							
2.6		Slope		Value	The slope of TLOF							
2.7		Surface type		Text	The surface type of TLOF							
2.8		Bearing strength		Value	The bearing strength of TLOF					1 tone		
2.9		Visual approach slope indicator		Text	Type of visual approach slope indicator system							
2.10		Marking										
2.10.1			Description	Text	Description of TLOF markings							
3	Safety area				A defined area on a heliport surrounding the FATO which is free of obstacles, other than those required for air navigation purposes, and intended to reduce the risk of damage to helicopters accidentally diverging from the FATO.							
3.1		Length		Distance	The longitudinal extent of safety area							
3.2		Width		Distance	The transversal extent of safety area							
3.3		Surface type		Text	The surface type of safety area							
4	Helicopter clearway				A defined area on the ground or water, selected and/or prepared as a suitable area over which a helicopter operated in performance class 1 may accelerate and achieve a specific height.							
4.1		Length		Distance	The longitudinal extent of the helicopter clearway							
4.2		Ground profile		Value	Vertical profile (or slope) of helicopter clearway							

Note 1)	FATO threshold, for heliports with or without a PinS approach			surveyed		1 m or 1 ft	
	FATO threshold, for heliports intended to be operated in accordance			surveyed		1 m or 1 ft (non-	
Note 2)	WGS–84 geoid undulation at FATO threshold, TLOF geometric centre,			surveyed		1 m or 1 ft	
	WGS–84 geoid undulation at FATO threshold, TLOF geometric centre,			surveyed		1 m or 1 ft (non-	

CHECK LIST A4 Table A 1-1 Aerodrome/Heliport data (Apron-Taxiway) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Apron				A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.							
1.1		Designator		Text	The full textual name or designator used to identify an apron at an							
1.2		Geometry		Polygon	Geographical location of the apron			surveyed		1/10 sec		
1.3		Type		Text	Classification of the primary use for the apron							
1.4		Aircraft restriction		Text	Usage restriction (prohibition) for specified aircraft type							
1.5		Surface type		Text	The surface type of the apron							
1.6		Strength										
1.6.1			PCN	Text	Pavement classification number of apron							
1.6.2			Pavement type	Text	Pavement type for aircraft classification number — pavement classification number (ACN-PCN) determination							
1.6.3			Subgrade category	Text	Subgrade strength category of apron							
1.6.4			Allowable pressure	Text	Maximum allowable tire pressure category or maximum allowable tire pressure value							
1.6.5			Evaluation method	Text	The evaluation method used to determine the apron strength							
1.7		Elevation		Elevation	The elevation of the apron							
2	Taxiway				A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another,							
2.1		Designator		Text	The full textual designator of the taxiway.							
2.2		Width		Distance	The transversal extent of the taxiway.			surveyed		1 m or 1 ft	U	
2.3		Geometry		Polygon	Geographical location of the taxiway element							
2.4		Bridge		Text	Type of bridge (none, overpass, underpass)							
2.5		Surface type		Text	Surface type of taxiway							
2.6		Strength										
2.6.1			PCN	Text	Pavement classification number of taxiway							
2.6.2			Pavement type	Text	Pavement type for aircraft classification number — pavement classification number (ACN-PCN) determination							

2.6.3			Subgrade category	Text	Subgrade strength category of taxiway							
2.6.4			Allowable pressure	Text	Maximum allowable tire pressure category or maximum allowable tire pressure value							
2.6.5			Evaluation method	Text	The evaluation method used to determine the taxiway strength							
2.7		Aircraft restrictions		Text	Usage restriction (prohibition) for specified aircraft type							
2.8		Reference code letter		Code list	A letter based on the aeroplane wingspan and outer main gear wheel span							
2.9		Center line points										
2.9.1			Position	Point	Geographical coordinates of taxiway center line points			surveyed		1/100 sec		
2.9.2			Elevation	Elevation	Elevation of taxiway center line points			surveyed				
2.10		Shoulder			An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.							
2.10.1			Geometry	Polygon	Geographical location of the taxiway shoulder							
2.10.2			Surface type	Text	Surface type of taxiway shoulder							
2.10.3			Width	Distance	The width of the taxiway shoulder			surveyed		1 m or 1 ft		
2.11		Guidance lines										
2.11.1			Geometry	Line	Geographical location of guidance lines			surveyed		1/100 sec		
2.11.2			Colour	Text	Colour of taxiway guidance lines							
2.11.3			Style	Text	Style of taxiway guidance lines							
2.11.4			Wingspan	Value	Wingspan							
2.11.5			Maxspeed	Value	Maximum speed							
2.11.6			Direction	Text	Direction							
2.12		Intermediate holding		Line	Intermediate holding position marking line			surveyed		1/100 sec		
2.13		Taxiway marking										
2.13.1			Description	Text	Description of taxiway marking							
2.14		Taxiway edge lights										
2.14.1			Description	Text	Description of taxiway edge lights							
2.14.2			Position	Point	Geographical location of each individual light of the taxiway edge lights							
2.15		Taxiway centre line lights										
2.15.1			Description	Text	Description of taxiway centre line lights							
2.15.2			Position	Point	Geographical location of each individual light of the taxiway center line lights							
2.16		Stop bars										
2.16.1			Description	Text	Description of the stop bars	if any						
2.16.2			Geometry	Line	Location of the stop bar							
2.17		Runway guard lights										

2.17.1			Description	Text	Description of the runway guard lights and other runway protection measures	if any						
2.17.2			Position	Point	Location of the stop bar	Configuration A						
2.17.3			Geometry	Line	Location of the stop bar	Configuration B						
2.18		Runway holding position			A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/ MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower.							
2.18.1			Geometry	Line	Geographical location of runway holding position			surveyed		1/100 sec		
2.18.2			Protected runway	Text	Designator of the runway protected							
2.18.3			Catstop	Code list	CAT of runway (0, I, II, III)							
2.18.4			RWY ahead text	Text	Actual text as it exists in the marking. For example, RWY AHEAD or RUNWAY AHEAD.							
2.19		Intermediate holding position	Geometry	Line	Geographical location of intermediate holding position - A designated position intended for traffic control at which taxiing aircraft and vehicles shall stop and hold until further cleared to proceed, when so instructed by the aerodrome control tower.							
3	Helicopter ground taxiway				A ground taxiway intended for the ground movement of wheeled undercarriage helicopters. (Annex 14)							
3.1		Designator		Text	The full textual designator of helicopter ground taxiway							
3.2		Center line points		Point	Geographical location of helicopter ground center line taxiway points			surveyed/ calculated				
3.3		Elevation		Elevation	Elevation of helicopter ground taxiway			surveyed				
3.4		Width		Distance	The transversal extent of the helicopter ground taxiway			surveyed				
3.5		Surface type		Text	The surface type of the helicopter ground taxiway							
3.6		Intersection marking line		Line	Helicopter ground taxiway intersection marking line			surveyed		1/100 sec		
3.7		Lighting										
3.7.1			Description	Text	Description of helicopter ground taxiway light							
3.7.2			Position	Point	Geographical location of each individual light of the helicopter ground taxiway lights							
3.8		Marking										
3.8.1			Description	Text	Description of helicopter ground taxiway marking							
4	Helicopter air taxiway				A defined path on the surface established for the air taxiing of helicopters. (Annex							

4.1		Designator			The full textual designator of helicopter air taxiway							
4.2		Center line points		Point	Geographical location of helicopter air taxiway center line points			surveyed/ calculated				
4.3		Elevation		Elevation	Elevation of helicopter air taxiway			surveyed				
4.4		Width		Distance	The transversal extent of the helicopter air taxiway			surveyed				
4.5		Surface type		Text	Surface type of helicopter air taxiway							
4.6		Lighting										
4.6.1			Description	Text	Description of helicopter air taxiway							
4.6.2			Position	Point	Geographical location of each individual light of the helicopter air taxiway lights							
4.7		Marking										
4.7.1			Description	Text	Description of helicopter air taxiway marking							
5	Helicopter air transit routes				A defined path established for the movement of helicopters from one part of a heliport to another. A taxi-route includes a helicopter air or ground taxiway which is centred on the taxi-route.							
5.1		Designator		Text	Designator of helicopter air transit route							
5.2		Geometry		Line	Geographical location of helicopter air transit route							
5.3		Width		Distance	The transversal extent of the helicopter air transit route			Surveyed				
6	INS checkpoint											
6.1		Position		Point	Geographical location of the INS check point	where available		surveyed		1/100 sec		
7	VOR checkpoint											
7.1		Position		Point	Geographical location of the VOR check point	where available						
7.2		Frequency		Value	Frequency of the VOR check point							
8	Altimeter checkpoint											
8.1		Position		Point	Geographical location of altimeter checkpoints							
8.2		Elevation		Elevation	Elevation of altimeter checkpoints							
9	Aircraft stand				A designated area on an apron intended to be used for parking an aircraft							
9.1		Name		Text	Name of the aircraft stand point							
9.2		Acft stand points	Position	Point	Geographical location of aircraft stand			surveyed		1/100 sec		
9.2.1			Aircraft types	Code list	Aircraft types							
9.3		Identification sign		Text	Description of aircraft stand identification sign							
9.4		Visual docking parking guidance system		Text	Description of visual docking/parking guidance system at the aircraft stand							

9.5		Parking stand area		Polygon	Geographical location of parking stand area							
9.6		Jetway		Code list	Jetway available at aircraft stand							
9.7		Fuel		Code list	Fuel available at aircraft stand							
9.8		Ground power		Code list	Ground power available at aircraft stand							
9.9		Towing		Code list	Towing available at aicraft stand							
9.10		Terminal		Text	Terminal building reference							
9.11		Surface type		Text	Surface type of the aircraft stand							
9.12		Aircraft restriction		Text	Usage restriction (prohibition) for specified aircraft type							
9.13		PCN		Text	Pavement classification number of aircraft stand							
9.14		Stand guidance line										
9.14.1			Geometry	Line	Geographical location of stand guidance line			surveyed		1/100 sec		
9.14.2			Elevation	Elevation	Parking guidance line points elevation			surveyed				
9.14.3			Direction	Text	Direction of stand guidance line							
9.14.4			Wingspan	Value	Wingspan							
9.14.5			Colour	Code list	Colour of stand guidance line							
9.14.6			Style	Code list	Style of stand guidance line							
10	Helicopter stand				An aircraft stand which provides for parking a helicopter and where ground taxi operations are completed or where the helicopter touches down and lifts off for air taxi operations. (Annex 14)							
10.1		Name		Text	Name of helicopter stand							
10.2		Position		Point	Geographical location of helicopter stand point/ INS checkpoints			surveyed		1/100 sec		
11	De-icing area				A facility where frost, ice or snow is removed (de-icing) from the aeroplane to provide clean surfaces, and/or where clean surfaces of the aeroplane receive protection (anti-icing) against the formation of frost or ice and accumulation of snow or slush for a limited period of time.							
11.1		Identifier		Text	Identifier of de-icing area							
11.2		Geometry		Polygon	Geographical location of de-icing area			surveyed		1/10 sec		
11.3		Surface type		Text	The surface type of the deicing area							
11.4		Idbase		Text	Name of underlying Taxiway, Parkingstand or Apron Element							
11.5		Aircraft restriction		Text	Usage restriction (prohibition) for specified aircraft type							

CHECK LIST A5 Table A1-1 Aerodrome data (Communication Facilities) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Communication facility											
1.1		Service designation		Text	Designation of the service provided							
1.2		Call sign		Text	Call sign of the communication facility							
1.3		Channel		Text	Channel/Frequency of the communication facility							
1.4		Logon address		Text	The logon address of the facility	as appropriate						
1.5		Hours of operation		Schedule	Operational hours of the station serving the unit							

CHECK LIST B1 Table A1-2 Airspace data (ATS Airspace) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	ATS Airspace				Airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified.							
1.1		Type		Text	Type of ATS airspace according to ICAO Annex 11.							
1.2		Name		Text	The designator given to an airspace by a responsible authority							
1.3		Lateral limits		Polygon	The surface defining the horizontal shape of the Airspace			See note 1)				
1.4		Vertical limits										
1.4.1			Upper limit	Altitude	The upper limit of the airspace							
1.4.2			Lower limit	Altitude	The lower limit of the airspace			calculated		50 m or 100 ft		
1.5		Class of airspace		Code list	A categorisation of airspace which determines the operating rules, flight requirements, and services provided, as indicated in Annex 11, Section 2.6 and Appendix 4							
1.6		Transition altitude		Altitude	The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.							
1.7		Hours of applicability		Schedule	The hours of applicability of the airspace							
1.8		ATS Unit			Unit providing service							
1.8.1			Name	Text	The name of the unit providing the service							
1.8.2			Call sign	Text	The call sign of the aeronautical station serving the unit							
1.8.3			Language	Code list	Information on the language(s) used, specifying area and conditions, when and where to be used, if applicable							
1.8.4			Applicability	Text	Information on the area and conditions when to be used							
1.8.5			Hours of service	Schedule	Operational hours of the station serving the unit							
1.9		SATVOICE number										
1.9.1			Value	Value	The SATVOICE number of the ATS airspace							
1.9.2			Purpose	Text	Indications for specific purposes of the SATVOICE number.							

Note 1)	FIR, UIR			declared		1 min	
	TMA, CTA			calculated		1 sec	
	CTR			calculated		1 sec	

CHECK LIST B2 Table A1-2 Airspace data (Special Activities Airspace) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Special activity airspace											
1.1		Type		Code list	Type of special activity airspace (See Note 1)							
1.2		Identification		Text	The identification assigned to uniquely identify the airspace							
1.3		Name		Text	The name given to the airspace by a responsible authority							
1.4		Lateral limits		Polygon	The surface defining the horizontal shape of the airspace		See Note 2) for P,R,D Areas only					
1.5		Vertical limits										
1.5.1			Upper limit	Altitude	The upper limit of the airspace							
1.5.2			Lower limit	Altitude	The lower limit of the airspace							
1.6		Restriction		Text	Type of restriction or nature of hazard							
1.7		Activation		Text	Information on system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures;							
1.8		Time of activity		Schedule	Time interval when the special activity takes place							
1.9		Risk of interception		Text	Risk of interception in the event of penetration							

Note 1) type:	Prohibited Area		Note 2)	calculated		1 sec		
	Restricted Area			declared		1 min		
	Danger Area							
	Military Exercise Area							
	Military Training Area							
	Air Defence Identification Zone (ADIZ)							
	Other							

CHECK LIST B3 Table A1-2 Airspace data (Aerial Sporting Activities) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Aerial sporting activities airspace				Airspace with intensive aerial sporting and recreational activities							
1.1		Type of activity		Text	Type of aerial sporting or recreational activity							
1.2		Designator		Text	The designation of the airspace							
1.3		Lateral limits		Polygon	The surface defining the horizontal shape of the airspace							
1.4		Vertical limits										
1.4.1			Upper limit	Altitude	The upper limit of the airspace							
1.4.2			Lower limit	Altitude	The lower limit of the airspace							
1.5		Time of activity		Schedule	Time interval when the activity takes place							
1.6		Operator		Text	Contact details (Tel. Nr. or Frequency) of operator / user							

CHECK LIST B4 Table A1-2 Airspace data (Other Regulated Airspace) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Other regulated airspace											
1.1		Type		Text	Type of airspace (RVSM, ELT etc.)							
1.2		Identification		Text	The identification assigned to uniquely identify the airspace							
1.3		Name		Text	The name given to the airspace by a responsible authority							
1.4		Lateral limits		Polygon	The surface defining the horizontal shape of the airspace							
1.5		Vertical limits										
1.5.1			Upper limit	Altitude	The upper limit of the airspace							
1.5.2			Lower limit	Altitude	The lower limit of the airspace							
1.6		Restriction		Text	Type of restriction if any							
1.7		Activation		Text	Information on system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures.							
1.8		Time of activity		Schedule	Time interval when the special activity takes place							

CHECK LIST B5 Table A1-2 Airspace data (ATC Sectors) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	U/S	Orig Type	U/S	Pub. Res.	U/S	Comments
1	ATS control sector											
1.1		Identification		Text	The identification given to the sector							
1.2		Lateral limits		Polygon	The surface defining the horizontal shape of the ATC-sector							
1.3		Vertical limits										
1.3.1			Upper limit	Altitude	The upper limit of the sector							
1.3.2			Lower limit	Altitude	The lower limit of the sector							

CHECK LIST C1 Table A1-3 ATS and other routes data (ATS Route) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	ATS Route				A specified route designed for channeling the flow of traffic as necessary for the provision of air traffic services.							
1.1		Designator		Text	Designators for ATS routes according to Annex 11 Appendix 1 (or Appendix 3 for standard departure and arrival routes).							
2	Other Route				A specified route designed for channeling the flow of traffic as necessary without provision of air traffic services							
2.1		Designator		Text	Designator of the route							
2.2		Type		Text	Type of route (e.g. VFR uncontrolled navigation routes)							
2.3		Flight rules		Code list	Information on the flight rules that apply on the route (IFR / VFR)							
3	Route segment											
3.1		Navigation specification		Text	Designation of the navigation specification(s) applicable to a specified segment(s) - There are two kinds of navigation specifications: Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH. Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.							
3.2		From point			Reference to the first point of a route segment							
3.2.1			Designator	Text	The coded designators or name-codes of significant point							
3.2.2			Reporting	Code list	Indication of ATS / MET reporting requirement "compulsory" or "on-request"							
3.3		To point			Reference to the second point of a route segment							
3.3.1			Designator	Text	The coded designators or name-codes of significant point							
3.3.2			Reporting	Code list	Indication of the ATS / MET reporting requirement "compulsory" or "on-request"							
3.4		Track		Bearing	Track, VOR radial or magnetic bearing of a route segment			calculated (terminal arrival departure)		1 degree (terminal arrival departure)		
3.5		Change-over point		Point	The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omnidirectional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.	in case of VOR radial						
3.6		Length		Distance	The geodesic distance between from point and to point							
3.7		Upper limit		Altitude	The upper limit of the route segment							
3.8		Lower limit		Altitude	The lower limit of the route segment							

3.9		MEA		Altitude	Minimum en-route altitude (MEA). The altitude for an en-route segment that provides adequate reception of relevant navigation facilities and ATS communications, complies with the airspace structure and provides the required obstacle clearance.	Lower ATS Routes		calculated		50 m or 100 ft		
3.10		MOCA		Altitude	Minimum obstacle clearance altitude (MOCA). The minimum altitude for a defined segment of flight that provides the required obstacle clearance.	Lower ATS routes		calculated		50 m or 100 ft		
3.11		Minimum flight altitude		Altitude	Minimum flight altitude	Helicopter route		calculated		50 m or 100 ft		
3.12		Lateral Limits		Distance	Lateral limits of route							
3.13		Restrictions		Text	Indication on any area speed and level/altitude restrictions where established.							
3.14		Direction of cruise levels			Indication on the direction of the cruising level (even, odd, NIL)							
3.14.1			Forward	Code list	Indication on the direction of the cruising level (even, odd, NIL) from first point to second point of route segment							
3.14.2			Backward	Code list	Indication on the direction of the cruising level (even, odd, NIL) from second point to first point of route segment							
3.15		Availability		Text	Information on the route availability							
3.16		Class of airspace		Text	Classification of airspace (A, B, ... G) which determines the operating rules, flight requirements, and services provided. According to Annex 11, Appendix 4							
3.17		PBN requirements			Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace requirements	PBN only						
3.17.1			Navigation performance requirements	Text	The navigation accuracy requirement for each PBN (RNAV or RNP) route segment							
3.17.2			Sensor requirements	Text	Indication on the sensor requirements including any navigation specification limitations							
3.18		Controlling unit										
3.18.1			Name	Text	Name of the unit providing the service							
3.18.2			Channel	Text	Operating channel / frequency of controlling unit							
3.18.3			Logon address	Text	A specified code used for data link logon to the controlling ATS unit	if applicable						
4	AMA											
4.1		Lateral Limits		Distance	Lateral limits of the sectors							
4.2		Vertical Limit		Altitude	Area Minimum Altitude (AMA) - The minimum altitude to be used under instrument meteorological conditions (IMC), that provides a minimum obstacle clearance within a specified area, normally formed by parallels and meridians.							
5	MVA											
5.1		Lateral Limits		Distance	Lateral limits of the sectors							
5.2		Vertical Limit		Altitude	Minimum Vector Altitude							

Note 1)	U) Upper		Airway segments length		calculated		1/10 km or 1/10 NM			

	K) Helicopter		Terminal arrival/departure route segments length		calculated		1/100 km or 1/100 NM		
	S) Supersonic								
	T) Tacan								
	Other								

CHECK LIST C2 Table A1-3 ATS and other routes data (Waypoint) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Waypoint											
1.1		Identification		Text	Names, coded designators or name-codes assigned to the significant point.							
1.2		Position		Point	Geographical location of the waypoint			surveyed calculated		1 sec		
1.3		Formation										
1.3.1			Navaid	Text	The station identification of the reference VOR/DME							
1.3.2			Bearing	Bearing	The bearing from the reference VOR/DME, if the waypoint is not collocated with it.							
1.3.3			Distance	Distance	The distance from the reference VOR/DME, if the waypoint is not collocated with it.							
						Note 1.		routine		calculated		1/10 degree
						Note 2.		routine		calculated		2/10 km (1/10 NM)

CHECK LIST C3 Table A1-3 ATS and other routes data (En-Route Holding) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	U/S	Orig Type	U/S	Pub. Res.	U/S	Comments
1	En-route Holding				A predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance.							
1.1		Identification		Text	Identification of the holding procedure							
1.2		Fix		Text	Identification of the holding procedure fix							
1.3		Waypoint		Point	Geographical location of the holding waypoint			surveyed calculated		1 sec		
1.4		Inbound track		Bearing	The inbound track of the holding procedure							
1.5		Turn Direction		Text	Direction of the procedure turn							
1.6		Speed		Value	Maximum indicated airspeed							
1.7		Level										
1.7.1			Minimum holding level	Altitude	Minimum holding level of the holding procedure							
1.7.2			Maximum holding level	Altitude	Maximum holding level of the holding procedure							
1.8		Time/distance outbound		Value	Time/distance value of the holding procedure							
1.9		Controlling unit										
1.9.1			Name	Text	Indication of the controlling unit							
1.9.2			Frequency	Value	The operating frequency/channel of the controlling unit							
1.10		Special holding entry procedure		Text	Textual description of the Special VOR/DME entry procedure	In case an entry radial to a secondary fix at the end of the outbound leg has been established for a VOR/DME holding pattern						

CHECK LIST D1:Table A1-4 Instrument flight procedure data (Procedure) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Procedure											
1.1		Identification										
1.1.1			FAS Guidance	Code list	The name describing the type of radio navigation aid providing the final approach lateral guidance. This could be: ILS, VOR, RNAV, etc	APCH						
1.1.2			Runway	Text	The runway designator of the landing and take-off direction. Examples: 27, 35L, 01R.							
1.1.3			Circling	Code list	Indication if a procedure is/ is not a circling approach	APCH						
1.1.4			Multiple Code	Text	A single letter suffix, starting with the letter z following the radio navigation aid type shall be used if two or more procedures to the same runway cannot be distinguished by the radio navigation aid type only. For example: VOR y Rwy 20 VOR z Rwy 20	APCH						
1.1.5			NS Limiter	Text	Sensor specific information in case of a limitation of use	PBN only						
1.1.6			Name	Text	Name of the instrument flight procedure							
1.2		Plain Language Designation										
1.2.1			Basic Indicator	Text	The basic indicator shall be the name or name-code of the significant point where the standard departure route terminates.	SID, STAR						
1.2.2			Validity Indicator	Text	The validity indicator shall be a number from 1 to 9.	SID, STAR						
1.2.3			Route Indicator	Text	The route indicator shall be one letter of the alphabet. The letters "I" and "O" shall not be used.	SID, STAR						
1.2.4			Visual Indication	Text	Indication if the route has been established for use by aircraft operating in accordance with the visual flight rules (VFR)	VFR only						
1.3		Coded Designation										
1.3.1			Significant Point	Text	The coded designator or name-code of the significant point	SID, STAR						
1.3.2			Validity Indicator	Text	The Validity Indicator of the procedure	SID, STAR						
1.3.4			Route Indicator	Text	The Route Indicator of the procedure	SID, STAR						
1.4		Procedure Type		Code list	Indication of the type of procedure (departure, arrival, approach, other)							
1.5		PBN or Conventional		Code list	Indication if the procedure is PBN or Conventional	IFR only						
1.6		Precision Type		Text	The instrument procedure type. Instrument approach procedures are classified as follows: Non-precision approach (NPA) procedure. - An instrument approach procedure which utilizes lateral guidance but does not utilize vertical guidance. Approach procedure with vertical guidance (APV). - An instrument procedure which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations. Precision approach (PA) procedure. - An instrument approach procedure using precision lateral and vertical guidance with minima as determined by the category of operation.	APCH						
1.7		Aircraft Category		Code list	Indication of which aircraft categories the procedure is intended for							
1.8		Magnetic variation		Angle	The magnetic variation considered for the procedure design							
1.9		OCA/H			Obstacle clearance Altitude (Height)	APCH						

1.9.1			Aircraft category	Code list	Aircraft category according to ICAO Doc 8168 Vol I or II	APCH							
1.9.2			Approach type	Code list	Approach type (e.g. Straight-in Cat I, Cat II, LLZ, Circling ...) or specific navigation aid (e.g. stepdown fixes), or a specific navigation specification	APCH							
1.9.3			Altitude	Altitude	The lowest altitude used in establishing compliance with appropriate obstacle clearance criteria.	APCH							
1.9.4			Height	Height	The lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria.	APCH							
1.10		DA/H			Decision Altitude (Height)	APCH							
1.10.1			Aircraft category	Code list	Aircraft category according to ICAO Doc 8168 Vol I or II	APCH							
1.10.2			Approach type	Code list	Approach type (e.g. Straight-in, Circling ...) or specific navigation aid (e.g. stepdown fixes), or a specific navigation specification	APCH							
1.10.3			Altitude	Altitude	A specified altitude in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established	APCH							
1.10.4			Height	Height	A specified height in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established	APCH							
1.11		MDA/H			Minimum Descent Altitude (Height)	APCH							
1.11.1			Aircraft category	Code list	Aircraft category according to ICAO Doc 8168 Vol I or II	APCH							
1.11.2			Approach type	Code list	Approach type (e.g. Straight-in, Circling ...) or specific navigation aid (e.g. stepdown fixes), or a specific navigation specification	APCH							
1.11.3			Altitude	Altitude	A specified altitude in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference.	APCH							
1.11.4			Height	Height	A specified height in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference.	APCH							
1.12		MSA			Minimum sector altitude - The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.	IFR only							
1.12.1			Sector start angle	Angle	Start angle of a sector								
1.12.2			Sector end angle	Angle	End angle of a sector								
1.12.3			Based on Fix	Text	Center of the MSA								
1.12.4			Altitude	Altitude	The minimum altitude for each sector								
1.12.5			Restrictions	Text	Minimum sector altitude - The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.								
1.12.6			Radius	Value	The radius of each sector								
1.13		TAA			Terminal arrival altitude - The lowest altitude that will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an arc of a circle defined by a 46 km (25 NM) radius centred on the initial approach fix (IAF), or where there is no IAF on the intermediate approach fix (IF), delimited by straight lines joining the extremity of the arc to the IF. The combined TAAs associated with an approach procedure shall account for an area of 360 degrees around the IF.	APCH, PBN only							

1.13.1			Reference point	Text	TAA reference point (IAF or IF)								
1.13.2			IAF	Text	TAA Initial Approach Fix reference point								
1.13.3			IF	Text	TAA Intermediate Fix reference point								
1.13.4			Dist To IAF	Distance	The distance of the TAA area boundary from the IAF								
1.13.5			Altitude	Altitude	The terminal arrival altitude value								
1.13.6			Sector start angle	Angle	Start angle of a sector (bearing to TAA reference point								
1.13.7			Sector end angle	Angle	End angle of a sector (bearing to TAA reference point)								
1.13.8			Stepdown arc	Distance	Radius of inner area with lower altitude.								
1.14		Nav Spec Name		Text	A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications: Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH. Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.	PBN only							
1.15		Operating minima		Text	Aerodrome Operating Minima - The limits of usability of an aerodrome for: a) take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions; b) landing in precision approach and landing operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the category of the operation; c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H); and d) landing in non-precision approach and landing operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions	APCH, DEP							
1.16		Temperature											
1.16.1			Minimum temperature	Value	Minimum temperature reference	APCH, PBN only							
1.16.2			Maximum temperature	Value	Maximum temperature reference	APCH, PBN only							
1.17		Remote Altimeter Source		Text	Cautionary note indicating the altimetry source	APCH							
1.18		Proc Ref Datum		Text	Airport or landing threshold	APCH							
1.19		PBN Requirements			Specific requirements related to a PBN procedure	PBN							
1.19.1				Code list	Identification of the navigation specification (RNAV 5, PBN 0.3 ...)								
1.19.2			Navigation specification	Text	Any navigation sensor limitations (GNSS required ...)								
1.19.3			Functional requirements	Text	Any required functionalities that are described as options in the navigation specification, that is, not included in the core navigation specification (RF required ...)								
2	Procedure Segment					SID, STAR, APCH							
2.1		Start		Text	Identification of the start point of the segment								
2.2		End		Text	Identification of the end point or a description of the end of the segment								

2.3		End fix functionality		Code list	Indication if the end fix is a fly-by point (A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure) or fly-over point (A waypoint at which a turn is initiated in order to join the next segment of a route or procedure)	PBN						
2.4		End fix role		Code list	Indication of the role of the end fix (MAPt, IF, IAF, FAF, MAHF...)							
2.5		Procedure altitude/height		Altitude/Height	A specified altitude/height flown operationally a tor above the minimum altitude/height and established to accommodate a stabilized descent at prescribed descent gradient/angle in the intermediate/final approach segment.	SID, STAR, APCH certain segments only						
2.6		MOCA		Altitude	The minimum altitude for a defined segment that provides the required obstacle clearance.	SID, STAR, APCH						
2.7		Distance		Distance	Geodesic distance to the nearest tenth of a kilometer or tenth of a nautical mile between each successive designated significant point;			calculated		1/100 km or 1/100 NM		
2.8		True bearing		Bearing	True track to the nearest tenth of a degree to the nearest degree between each successive significant point;	SID, STAR, APCH		calculated		1/10 degree		
2.9		Magnetic bearing		Bearing	Magnetic track to the nearest tenth of a degree to the nearest degree between each successive significant point;	SID, STAR, APCH		calculated		1 degree		
2.10		Gradient		Value		APCH, DEP						
2.11		Speed		Value	Speed limit at a significant point, expressed in units of 10 knots applicable							
2.12		Controlling obstacle				APCH, DEP						
2.12.1			Type	Text	Indication if the obstacle is lit/unlit, type of obstacle (church/wind turbine,...)							
2.12.2			Position	Point	Coordinates of the controlling obstacle							
2.12.3			Elevation:	Elevation	Elevation of the top of the controlling obstacle							
3	Final Approach Segment				That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.	SBAS APCH GBAS APCH						
3.1		Operation type		Text	A number that indicates the type of the final approach segment (e.g "0" is coded for a straight-in approach procedure including offset procedures.)							
3.2		Approach performance designator		Text	A number that identifies the type of an approach. ("0" is used to identify an LPV approach procedure and a "1" indicates a Category I approach procedure)							
3.3		SBAS provider		Text	Identifier of a particular satellite-based approach system service provider	SBAS only						
3.4		RPDS		Text	Reference path data selector (RPDS) - A numerical identifier that is unique on a frequency in the broadcast region and used to select the FAS data block.	GBAS only						
3.5		RPI		Text	Reference Path Identifier - A four-character identifier that is used to confirm selection of the correct approach procedure.							
3.6		LTP/FTP			Landing threshold point (LTP) or fictitious threshold point (FTP)							
3.6.1			Position	Point	Latitude and Longitude of the LTP/FTP					0.0005" (0.01")		
3.6.2			Ellipsoid height	Elevation	The height of the LTP/FTP above the WGS-84 ellipsoid					0.1 m		
3.6.3			Orthometric height	Elevation	The height of the LTP/FTP as related to the geoid and presented as an MSL elevation							
3.7		FPAP			Flight path alignment point (FPAP)							
3.7.1			Position	Point	Latitude and Longitude of the FPAP					0.0005" (0.01")		

3.7.2			Orthometric height	Elevation	The height of the FPAP as related to the geoid and presented as an MSL elevation							
3.8		TCH		Height	Approach Threshold Crossing Height (TCH) - The designated crossing height of the flight path angle above the LTP (or FTP).			calculated		0.05 m		
3.9		GPA		Value	Glide Path Angle (GPA) - The angle of the approach path (glide path) with respect to the horizontal plane defined according to WGS-84 at the LTP/FTP.					0.01°		
3.10		Course Width at threshold		Value	The semi-width of the lateral course width at the LTP/FTP, defining the lateral offset at which the receiver will achieve full-scale deflection.					0.25 m		
3.11		Delta Length Offset		Distance	The distance from the stop end of the runway to the FPAP. It defines the location where lateral sensitivity changes to the missed approach sensitivity.					8 m		
3.12		HAL		Value	Horizontal Alert Limit	SBAS only						
3.13		VAL		Value	Vertical Alert Limit	SBAS only						
3.14		FAS Data Block		Text	Binary string describing the Final Approach Segment (FAS) data block generated with an appropriate software tool. The FAS data block is set of parameters to identify a single precision approach or APV and define its associated approach							
3.15		CRC Remainder		Text	An 8-character hexadecimal representation of the calculated remainder bits used to determine the integrity of the FAS data block data during transmission and storage.							

CHECK LIST D2: Table A1-4 Instrument flight procedure data (Fix) **CR:**

ORIGINATION: **BY:**

COMPLETED CHECK DATE:

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Procedure Fix											
1.1		Identification		Text	Names, coded designators or name-codes assigned to the significant point.							
1.2		ATC Reporting requirements		Text	Indication of ATS / MET reporting requirement "compulsory", "on-request" or "nil"							
1.3		VFR Reporting point		Text	Bridge, Church Name	VFR						
1.4		Position		Point	Geographical location of the fix			See Note 1)				
1.5		Type		Text	Indication of the type of fix, such as: Navaid, Int, WPT							
1.6		Formations										
1.6.1			Navaid	Text	The station identification of the reference VOR/DME							
1.6.2			Bearing	Bearing	The bearing from the reference VOR/DME, if the waypoint is not collocated with it.			See Note 2)				
1.6.3			Distance	Distance	The distance from the reference VOR/DME, if the waypoint is not collocated with it.			calculated		1/100 km or 1/100 NM		
								See Note 3)				

Note 1.		surveyed / calculated		1 sec		
		surveyed / calculated		1/10 sec		

Note 2.		calculated		1/10 degree		
		calculated		1/100 degree		

Note 3.						
		calculated		1/100 km or 1/100 NM		

CHECK LIST D3: Table A1-4 Instrument flight procedure data (Procedure Holding) **CR:**

ORIGINATION: **BY:**

COMPLETED CHECK DATE:

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Req.	S/U	Comments
1	Procedure Holding				A predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance.							
1.1		Identification		Text	Identification of the holding procedure							
1.2		Fix		Point	Geographical location that serves as a reference for a holding procedure.							
1.3		Inbound course		Angle	Inbound true course					1/10 degree		
1.4		Outbound course		Angle	Outbound true course					1/10 degree		
1.5		Leg distance		Distance	Outbound distance of the leg					1/10 km or 1/10 NM		
1.6		Leg time		Value	Outbound time of the leg							
1.7		Limiting radial		Angle	Limiting radial from the VOR/DME on which the holding is based							
1.8		Turn direction		Value	Direction of the procedure turn							
1.9		Minimum altitude		Altitude	Minimum holding level to the nearest higher 50 m or 100 ft/flight level			calculated		50 m or 100 ft/flight level		
1.10		Maximum altitude		Altitude	Maximum holding level to the nearest higher 50 m or 100 ft/flight level					50 m or 100 ft/flight level		
1.11		Speed		Value	Maximum indicated air speed					10 kts		
1.12		Magnetic variation										
1.12.1			Angle	Angle	The magnetic variation of the radio navigation aid of the procedure							
1.12.2			Date	Date	The date on which the magnetic variation had the corresponding value.							
1.13		Nav Spec Name		Text	Name of the Navigation Specification - set of aircraft and aircrew requirements needed to support a navigation application within a defined airspace concept	RNAV/RNP						

CHECK LIST D4: Table A1-4 Instrument flight procedure data (ATIF Notes) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Comments
1	AITF				Notes on charts (Aeronautical Information in Textual Format)					
1.1		Non-align between Instrument and Visual Slope Indications		Text						
1.2		Missed Approach Description		Text	Missed approach description for the procedure					
1.3		SID/STAR Route Description		Text	Textual description of the SID or STAR procedure					
1.4		Missed Apch Climb Gradient		Value	The value of the missed apprach climb gradient for the approach procedure					
1.5		CAT H Note		Text						
1.6		CAT D Large		Text						
1.7		Authorization Required		Text	Indication that RNP AR					
1.8		Units of Measure		Text						
1.9		GNSS In-Lieu-Of		Text						
1.10		Comm Failure		Text	Communication failure description					
1.11		Surveillance/Radar Required		Text						
1.12		SID Close-in Obstacle Note		Text	Indication wherever close-in obstacles exist which were not considered in the determination of the published procedure design gradient					
1.13		Off-Set Alignment		Text						
1.14		PDG greater then 3%		Text						

CHECK LIST D5: Table A1-4 Instrument flight procedure data (Helicopter Procedure) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Publ. Res.	S/U	Comments
1	Helicopter Procedure Specifics											
1.1		Helicopter Procedure Title (RNAV 263)		Text	Identification of the helicopter procedure							
1.2		HCH		Height	Heliport crossing height			calculated		1 m or 1 ft		
1.3		IDF		Point	Initial departure fix	DEP						
1.4		MAPt		Point	Missed Approach Point	APCH						
1.5		Direct Visual Segment			For PinS APP: the portion of flight that connects directly the PinS to the landing location. For PinS DEP: the portion of flight that connects directly the landing location to							
1.5.1			Track	Line								
1.5.2			Distance	Distance								
1.5.3			Bearing	Angle								
1.5.4			Crossing height	Height								
1.6		Manoeuvring VS			Manoeuvring Visual Segment - PinS visual segment protected for the following manoeuvres: For PinS APCH: Visual manoeuvre from the MAPt around the heliport or landing location to land from a direction other than directly from the MAPt. For PinS DEP: Take-off in a direction other than directly to the IDF followed by visual manoeuvre to join the instrument segment at the IDF.	APCH DEP						
1.6.1			Center line	Angle	Centre line of take-off climb surface	DEP						
1.6.2			Manoeuvring Area	Polygon	Area where the pilot is expected to manoeuvre visually	APCH DEP						
1.6.3			No Manoeuvring Area	Polygon	Area where manoeuvring is prohibited	APCH DEP						
1.6.4			Ingress Tracks	Line	Maneuvering Visual Segment - PinS visual segment protected for the following manoeuvres: For PinS APCH: Visual manoeuvre from the MAPt around the heliport or landing location to land from a direction other than directly from the MAPt. For PinS DEP: Take-off in a direction other than directly to the IDF followed by visual manoeuvre to join the instrument segment at the IDF.	APCH DEP						
1.7		HAS			Height above surface diagram	APCH						
1.7.1			Radius	Distance								
1.7.2			Height above Surface	Height								
1.8		Proceed Visually Text		Text	Text indicating that the procedure has Proceed Visually instruction							
1.9		Proceed VFR Text		Text	Text indicating that the procedure has Proceed VFR instruction							
1.10		VSDA		Value	Visual segment descent angle							
1.11		Ingress Tracks										
1.11.1			Length	Distance								
1.11.2			Width	Distance								
1.11.3			Bearing	Angle								

CHECK LIST E1 Table A1-5 Radio navigation aids/systems data (Radio Navaid) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No	Subject	Property	Sub-Property	Type	Description	Note	S\U	Orig Type	S\U	Pub. Res.	S\U	Comment
1	Radio navigation aid											
1.1		Type		Text	Type of radio navigation aid							
1.2		Identification		Text	The code assigned to uniquely identify the navaid							
1.3		Name		Text	The textual name assigned to the navaid							
1.4		Purpose		Code list	Indication whether navigation aid serves en-route (E), aerodrome (A) or dual (AE) purposes.							
1.5		Aerodrome/heliport served		Text	The ICAO location indicator or name of the aerodrome/heliport served							
1.6		Runway served		Text	Designator of the runway served							
1.7		Operating authority		Text	Name of the operating authority of the facility							
1.8		Type of supported ops		Code list	Indication of the type of supported operation for ILS/MLS and GBAS							
1.9		Co-location		Text	Information that a navaid is co-located with another navaid							
1.10		Hours of operation		Schedule	The hours of operation of the radio navigation aid							
1.11		Magnetic variation			The angular difference between True North and Magnetic North							
1.11.1			Angle	Angle	The magnetic variation at the radio navigation aid	ILS/NDB				See Note 1)		
1.11.2			Date	Date	The date on which the magnetic variation had the corresponding value.							
1.12		Station declination		Angle	An alignment variation of the navaid between the zero degree radial and true north, determined at the time the station is calibrated.	VOR/ILS/MLS						
1.13		Zero bearing direction		Text	Direction of the 'zero bearing' provided by the station. For example: magnetic north, true north	VOR						
1.14		Frequency		Value	Frequency or tuning frequency of the radio navigation aid							
1.15		Channel		Text	The channel number of the radio navigation aid	DME						
1.16		Position		Point	Geographical location of the radio navigation aid					See Note 2)		
1.17		Elevation		Elevation	The elevation of the transmitting antenna of DME The elevation of GBAS reference point	DME GBAS				See Note 3)		
1.18		Ellipsoidal height		Height	The ellipsoid height of the GBAS reference point,	GBAS						
1.19		Localizer alignment										
1.19.1			Bearing	Bearing	The localizer course	ILS Localizer		surveyed		1/100 degree (if true)		
1.19.2			Type	Text	Type of localizer alignment, true or magnetic	ILS Localizer						
1.20		Zero azimuth alignment		Bearing	MLS zero azimuth alignment	MLS		surveyed		1/100 degree (if true)		
1.21		Angle		Angle	The angle of the glide path of an ILS or the normal glide path angle for the MLS installation	ILS GP /MLS						
1.22		RDH		Value	The value of the ILS Reference Datum Height (ILS RDH).	ILS GP		calculated		0.1m or 0.1ft		
1.23		Localizer antenna rwy end distance		Distance	ILS localizer runway/FATO end distance	ILS Localizer		calculated		1 m or 1 ft		
1.24		ILS glideslope antenna TRSH distance		Distance	ILS glideslope antenna - threshold distance along centerline	ILS GP		calculated		1 m or 1 ft		
1.25		ILS marker TRSH distance		Distance	ILS marker - threshold distance	ILS		calculated		1 m or 1 ft		
1.26		ILS DME antenna TRSH		Distance	ILS DME antenna - threshold distance along centerline	ILS		calculated		1 m or 1 ft		
1.27		MLS azimuth antenna rwy end distance		Distance	MLS azimuth antenna - runway/FATO end distance	MLS		calculated		1 m or 1 ft		

1.28		MLS elevation antenna TRHS distance		Distance	MLS elevation antenna - threshold distance along centre line	MLS		calculated		1 m or 1 ft		
1.29		MLS DME antenna TRHS		Distance	MLS DME/P antenna - threshold distance along centre line	MLS		calculated		1 m or 1 ft		
1.30		Signal polarization		Code list	GBAS signal polarization (GBAS/H or GBAS/E)	GBAS						
1.31		DOC		Text	Designated operational coverage (DOC or standard service volume SSV) as range or service volume radius from the navaid / GBAS reference point, height and sectors if required							

Note 1)		ILS Localizer		surveyed		1 degree
		NDB		surveyed		1 degree
Note 2)		Aerodrome		surveyed		1/10 sec
		GBAS Ref Point				
		Enroute		surveyed		1 sec
Note 3)		DME		surveyed		30 m (100 ft)
		DME/P		surveyed		3 m (10 ft)
		GBAS Ref Point				1 m or 1 ft

CHECK LIST E2 Table A1-5 Radio navigation aids/systems data (Aeronautical Ground Light) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Aeronautical ground lights				Ground lights and other light beacons designating geographical positions which are selected by the State as being significant.							
1.1		Type		Text	Type of beacon							
1.2		Designator		Text	The code assigned to uniquely identify to the beacon							
1.3		Name		Text	The name of the city or town or other identification of the beacon							
1.4		Intensity		Value	Intensity of the light of the beacon					1000 candela		
1.5		Characteristics		Text	Information about the characteristics of beacon							
1.6		Hours of operations		Schedule	The hours of operation of the beacon							
1.7		Position		Point	Geographical location of the beacon							
2	Marine lights											
2.1		Position		Point	Geographical location of the beacon							
2.2		Visibility range		Distance	The visibility range of the beacon							
2.3		Characteristics		Text	Information about the characteristics of the beacon							

CHECK LIST E3 Table A1-5 Radio navigation aids/systems data (GNSS) **CR:**

ORIGINATION: **BY:**

COMPLETED CHECK DATE:

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	GNSS				A worldwide position and time determination system that includes one or more satellite constellations, aircraft receivers and system integrity monitoring, augmented as necessary to support the required navigation performance for the intended operation.							
1.1		Name		Text	The name of the GNSS element (GPS, GBAS, GLONASS, EGNOS, MSAS, WAAS, etc.)							
1.2		Frequency		Value	Frequency of the GNSS	as appropriate						
1.3		Service area		Polygon	Geographical location of the GNSS service area							
1.4		Coverage area		Polygon	Geographical location of the GNSS coverage area							
1.5		Operating authority		Text	Name of the operating authority of the facility							

CHECK LIST E4 Table A1-5 Radio navigation aids/systems data (Special Navigation Systems) **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No.	Subject	Property	Sub-Property	Type	Description	Note	S/U	Orig Type	S/U	Pub. Res.	S/U	Comments
1	Special navigation				Stations associated with special navigation systems (DECCA, LORAN, etc.).							
1.1		Type		Text	Type of service available (master signal, slave signal, colour).							
1.2		Designator		Text	The code assigned to uniquely identify to the special navigation system							
1.3		Name		Text	The textual name assigned to the special navigation system							
1.4		Frequency		Value	Frequency (channel number, basic pulse rate, recurrence rate, as applicable) of the special navigation system							
1.5		Hours of operations		Schedule	The hours of operation of the special navigation system							
1.6		Position		Point	Geographical location of the special navigation system			surveyed /				
1.7		Operating authority		Text	Name of the operating authority of the facility							
1.8		Facility coverage		Text	Description of special navigation system facility coverage							

CHECK LIST F1 Table A1-6 Obstacle data (Obstacle) **CR:**

ORIGINATION: **BY:**

COMPLETED CHECK DATE:

S (Satisfactory) U (Unsatisfactory) If U is marked. The comments shall be shown.

No	Subject	Property	Sub-Property	Type	Description	Note	S\U	Orig Type	S\U	Pub. Res.	S\U	Comments
1	Obstacle				All fixed (whether temporary or permanent) and mobile obstacles or parts							
1.1		Obstacle identifier		Text	Unique identifier of obstacle							
1.2		Operator / Owner		Text	Name and Contact information of obstacle operator or owner							
1.3		Geometry type		Code list	An indication whether the obstacle is a point, line or polygon.							
1.4		Horizontal position					See Note 1)					
1.4.1				Point								
1.4.2				Line								
1.4.3				Polygon	Horizontal position of obstacle							
1.5		Horizontal extent		Distance	Horizontal extent of the obstacle							
1.6		Elevation		Elevation	Elevation of the highest point of the obstacle.		See Note 2)					
1.7		Height		Height	Height of the obstacle above ground							
1.8		Type		Text	Type of obstacle							
1.9		Date and time stamp		Date	Date and time the obstacle was created							
1.10		Operations		Text	Feature operations of mobile obstacles							
1.11		Effectivity		Text	Effectivity of temporary types of obstacles							
1.12		Lighting										
1.12.1			Type	Text	Type of lighting							
1.12.2			Colour	Text	Colour of the obstacle lighting							
1.13		Marking		Text	Type of marking of obstacle							
1.14		Material		Text	Predominant surface material of the obstacle							

Note 1)	Obstacles in Area 1		surveyed		1 sec	
	Obstacles in Area 2 (including 2a, 2b, 2c, 2d, take-off flight path area and obstacle limitation surfac		surveyed		1/10 sec	
	Obstacles in Area 3		surveyed		1/10 sec	
	Obstacles in Area 4		surveyed			
Note 2)	Obstacles in Area 1		surveyed		1 m or 1 ft	
	Obstacles in Area 2 (including 2a, 2b, 2c, 2d, take-off flight path area and obstacle limitation surfac		surveyed		1 m or 1 ft	
	Obstacles in Area 3		surveyed		0.1 m or 0.1 ft 0.01 m	
	Obstacles in Area 4		surveyed		0.1 m	

CHECK LIST G1-1: Table A1-8. Terrain data **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

No	Subject	Area 1	S/U	Area 2	S/U	Area 3	S/U	Area 4	S/U	Notes
1	Post spacing	3 arc seconds (approx. 90 m)		1 arc second (approx. 30 m)		0.6 arc seconds (approx. 20 m)		0.3 arc seconds (approx. 9 m)		
2	Vertical accuracy	30 m		3 m		0.5 m		1 m		
3	Vertical resolution	1 m		0.1 m		0.01 m		0.1 m		
4	Horizontal	50 m		5 m		0.5 m		2.5 m		
5	Confidence level	90%		90%		90%		90%		
6	Integrity	routine		essential		essential		essential		
7	Maintenance	as required		as required		as required		as required		

CHECK LIST G1_2: Table A1-9. Data types **CR:**

ORIGINATION:

COMPLETED CHECK DATE: **BY:**

No.	Type	Description (2)	Data elements	S/U	Notes
1	Point				
1.1		A pair of coordinates (latitude and longitude) referenced to the mathematical reference ellipsoid which define the position of the point on the surface of the Earth.	Latitude		
1.2			Longitude		
1.3			Horizontal reference system		
1.4			Units of measurement		
1.5			Horizontal accuracy achieved		
2	Line	Sequence of Points defining a linear object	Sequence of Points		
3	Polygon	Sequence of Points forming the boundary of the polygon. The first and last Point are identical.	Closed sequence of Points		
4	Height				
4.1		The vertical distance of a level, point or an object considered as a point, measured from a specific datum.	Numerical value		
4.2			Vertical reference system		
4.3			Units of measurement		
4.4			Vertical accuracy achieved		
5	Altitude				
5.1		The vertical distance of a level, a point or an object considered as a point, measured from mean sea level.	Numerical value		
5.2			Vertical reference system		
5.3			Units of measurement		
5.4			Vertical accuracy achieved		
6	Elevation				
6.1		The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.	Numerical value		
6.2			Vertical reference system		
6.3			Units of measurement		
6.4			Vertical accuracy		
7	Distance				
7.1		A linear value	Numerical value		
7.2			Units of measurement		
7.3			Accuracy achieved		
8	Angle /				
8.1		An angular value	Numerical value		
8.2			Units of measurement		
8.3			Accuracy achieved		
9	Value				
9.1		Any measured, declared or derived value not listed above.	Numerical Value		
9.2			Units of Measurement		
9.3			Accuracy achieved		

10	Date	A calendar date referencing a particular day or month	Text		
11	Schedule	A repetitive time period, composed of one or more intervals or special dates (e.g. holidays) occurring cyclically	Text		
12	Code list	A set of predefined Text strings or values	Text		
13	Text	Free text	String of characters without constraints		

CHECK LIST H1: Table A1-7 Geographic data **CR**

ORIGINATION:

COMPLETED CHECK DATE: **BY**

No.	Subject	Property	Sub-Property	Type	S/U	Description	Note	Orig Type	S/U	Pub. Res.	S/U	Notes
1	Buildings					Buildings (of operational significance) and other salient/prominent (aerodrome) features						
1.1		Name		Text		Name of the building						
1.2		Geometry		Polygon		Geographical location of the building						
2	Built up areas					Areas covered by cities, towns and villages						
2.1		Name		Text		Name of the build-up area						
2.2		Geometry		Point/ Polygon		Geographical location of the build-up area						
3	Railroads					All railroads having landmark value						
3.1		Name		Text		Name of the railroad						
3.2		Geometry		Line		Geographical location of the railroads						
4	Highways and Roads					All highways and roads having landmark value						
4.1		Name		Text		Name of highways and roads						
4.2		Geometry		Line		Geographical location of highways and roads						
5	Landmarks					Natural and cultural landmarks, such as bridges, prominent transmission lines, permanent cable car installations, wind turbines, mine structures, forts, ruins, levees, pipelines, rocks, bluffs, cliffs, sand dunes, isolated lighthouses and lightships, when considered to be of importance for visual air navigation.						
5.1		Characteristics		Text		Description of the landmark						
5.2		Geometry		Point		Geographical location of the landmark						
6	Political boundaries					International political boundaries						
6.1		Geometry		Line		Geographical location of international political boundaries						
7	Hydrography					All water features comprising shore lines, lakes, rivers and streams (including those non-perennial in nature), salt lakes, glaciers and ice caps						
7.1		Name		Text		Name of the water feature						
7.2		Geometry		Line/ Polygon		Geographical location of water feature						
8	Wooded areas					Wooded areas						
8.1		Geometry		Polygon		Geographical location of wooded area						

CHECK LIST H2: Table A1-7 Geographic data **CR**

ORIGINATION:

COMPLETED CHECK DATE: **BY**

No.	Subject	Property	Sub-Property	Type	S/U	Description	Note	Orig Type	S/U	Pub. Res.	S/U	Notes
1	Service roads					Part of aerodrome surface used by service vehicles						
1.1		Geometry		Polygon		Geographical location of the service roads						
1.2		featbase		Text		Identification of the feature type affected						
1.3		Idbase		Text		Name of the underlying taxiway, parking stand area or apron						
2	Construction area					Part of aerodrome area under construction						
2.1		Geometry		Polygon		Geographical location of the construction area						
3	Aircraft movement unsuitable area					Areas unsuitable for aircraft movement						
3.1		Geometry		Polygon		Depicted movement area permanently unsuitable for aircraft, clearly identified as such						
4	Survey control point					A monumented survey control point						
4.1		idnumber		Text		Special unique identifier permanently assigned to a feature						
4.2		Location		Point		Geographical location of the survey control point						
4.3		Elevation		Elevation		Elevation of survey control point						
5	ASRN node					A vertex in a graph defining the Aerodrome Surface Routing Network						
5.1		idnetwrk		Text		Logical name comprised of a delimited list of names for one or more features associated with this ASRN						
5.2		idthr		Text		Name of feature instance						
5.3		idnumber		Text		Special unique identifier permanently assigned to a feature instance by a data provider						
5.4		termref		Text		Terminal building associated with the feature instance						
5.5		nodetype		Text		Type of node						
5.6		catstop		Text		Low visibility operation category of holding position						
5.7		Position		Point		Geographical location of the ASRN node						
6	ASRN edge					A connection between teo nodes in a graph defining the Aerodrome Surface Routing Network						
6.1		idnetwrk		Text		Logical name comprised of a delimited list of names for one or more features associated with this ASRN						
6.2		direc		Text		Directionality of corresponding feature instance, which can be one-way or two-way						
6.3		node1ref		Text		The idnumber of the ASRN Node corresponding to the start point of the edge geometry						
6.4		node2ref		Text		The idnumber of the ASRN Node corresponding to the end point of the edge geometry						
6.5		edgetype		Text		Type of edge						
6.6		edgederv		Text		Derivation method of edge geometry						
6.7		Geometry		Line		Geographical location of the ASRN edge						

CHECK LIST I1: Table A1-10 Information about national and local regulation, services and procedures **CR**

ORIGINATION:

COMPLETED CHECK DATE: **BY**

No.	Type	S/U	Notes
1	**National regulations and requirements**		
1.1	Civil aviation regulation		
1.1.1.	Name, contact information and description of the civil aviation authorities concerned with the facilitation of international air navigation.		
1.1.2	National regulations and international agreements / conventions ratified by the State affecting air navigation		
1.1.3.	Differences between national regulations and practices of the State and related ICAO provisions, including:		
	a) Provision concerned (Annex number, title, edition number and paragraph)		
	b) The complete text of the difference.		
1.1.4	Regulations and other requirements concerning entry, transit and departure of aircraft on international flights including;		
	a) Regulations applicable to all types of operations		
	b) Scheduled flight		
	c) Non-scheduled flights		
	d) Private flights		
1.1.5	Aircraft instruments, equipment and flight documents, including:		
	a) Instruments, equipment (including aircraft communication and navigation equipment) and flight documents to be carried on aircraft.		
	b) Emergency locator transmitter (ELT), signalling devices and lifesaving equipment		
1.1.6	Information on rules as applied within the State:		
	a) General rules		
	b) Visual flight rules		
	c) Instrument flight rules		
1.1.7	General conditions under which low visibility procedures applicable to Cat II/III operations at aerodromes are applied.		
1.1.8	The details of aerodrome operating minima applied by the State.		
1.1.9	ATS airspace classification and description		
1.1.10	Conditions under which coordination between the aerodrome operator and air traffic services is effected		
1.1.11	Criteria used to determine minimum flight altitudes.		
1.1.12	Name, contact information and description of the authorities concerned with aircraft accident investigation.		
1.1.13	Interception procedures and visual signals to be used with a clear indication of whether ICAO provisions are applied and, if not, that differences exist.		
1.1.14	Procedures to be applied in case of unlawful interference.		
1.1.15	Information on the traffic incidents reporting system.		
1.2	Aerodrome regulation and requirements		
1.2.1	Name, contact information and description of the State's designated authority responsible for aerodromes and heliports.		
1.2.2	ICAO documents on which the operation of aerodromes is based.		

1.2.3	General conditions under which aerodromes/heliports and associated facilities are available for use.		
1.2.4	Criteria applied by the State in grouping aerodromes/heliports shall be provided for the production/distribution/provision of information purposes (e.g. international/national; primary/secondary; major/other; civil/military; etc.).		
1.2.5	Regulations concerning civil use of military air bases.		
1.2.6	Rules governing the establishment of rescue and firefighting services at aerodromes and heliports together with an indication of rescue and firefighting categories established by the State.		
1.2.7	Information on general snow plan considerations for aerodromes/heliports available for public use at which snow conditions are normally liable to occur		
1.3.	Customs regulation and requirements		
1.3.1.	Name, contact information and description of the customs authorities.		
1.3.2	Customs regulations and requirements concerning entry, transit and departure passengers and crew.		
1.3.3	Customs regulations and requirements concerning entry, transit and departure of cargo and other articles.		
1.4.	Immigration regulation and requirements		
1.4.1.	Name, contact information and description of the immigration authorities.		
1.4.2	Immigration regulations and requirements concerning entry, transit and departure passengers and crew.		
1.5.	Health regulation and requirements		
1.5.1.	Name, contact information and description of the health authorities.		
1.5.2	Regulations and requirements concerning public health measures applied to aircraft on entry, transit and departure on international flights.		
1.5.3	Public health regulations and requirements concerning entry, transit and departure passengers and crew.		
1.6.	Agricultural quarantine regulation and requirements		
1.6.1.	Name, contact information and description of the authorities concerned with agricultural quarantine.		
1.6.2	Agricultural quarantine regulations and requirements concerning entry, transit and departure of cargo.		
2	**Information on services and procedures**		
2.1	Aeronautical information services		
2.1.1	Name, contact information and description of aeronautical information service and charting service provided		
2.1.2	Indication if service is not H24		
2.1.3	ICAO documents on which the service is based.		
2.1.4	Area of responsibility		
2.1.5	Information on the elements of the aeronautical information products managed by the aeronautical information services including how they may be obtained.		
2.1.6	Information on the AIRAC system provided including present and near future AIRAC dates.		
2.1.7	Information on the pre-flight information service available at aerodromes/heliports		
	a) Elements of the Aeronautical Information Products held;		
	b) Maps and charts held; and		
	c) General area of coverage of such data.		
	Information on aeronautical charts and chart series availability including:		

2.1.8	a) Title of series;		
	b) Scale of series;		
	c) Name and/or number of each chart or each sheet in a series;		
	d) Information on maintenance (chart revision and amendment);		
	e) Information on how charts may be obtained;		
2.1.9	Information on availability of topographical charts		
2.2	Air traffic services and procedures		
2.2.1.	Name, contact information and description of air traffic service provider and ATS units		
2.2.2	ICAO documents on which the service is based		
2.2.3	Indication if service is not H24		
2.2.4	Area of responsibility		
2.2.5	Types of air traffic services provided		
2.2.6	Holding, approach and departure procedures:		
	a) Criteria on which holding, approach and departing procedures are established,		
	b) Procedures (conventional or area navigation or both) for arriving flights which are common to flights into or within the same type of airspace		
	c) Information if different procedures apply within a terminal airspace		
	d) Procedures (conventional or area navigation or both) for departing flights which are common to flights departing from any aerodrome/heliport.		
	e) Other relevant information and procedures e.g. entry procedures, final approach alignment, holding procedures and patterns.		
2.2.7	ATS surveillance services and procedures for:		
	a) Primary radar		
	b) Secondary surveillance radar (SSR)		
	c) Automatic dependent surveillance – broadcast (ADS-B)		
	d) Other relevant information and procedures, e.g. radar failure procedures and transponder failure procedures		
2.2.8	Altimeter setting procedures		
2.2.9	Regional supplementary procedures (SUPPs) affecting the entire area of responsibility.		
2.2.10	Information on air traffic flow management (ATFM) system and airspace management		
2.2.11	Flight planning		
	a) Restriction, limitation or advisory information related to the flight planning stage which may assist the user in the presentation of the intended flight operation		
	b) Information on addressing of flight plans		
2.2.12	Information on the type of air navigation service charges including methods of payment and exemptions/reductions where applicable.		
2.3	Communication services		
2.3.1.	Name, contact information and description of service provider of telecommunication and navigation facilities		
2.3.2	ICAO documents on which the service is based		
2.3.3	Indication if service is not H24.		

2.3.4	Area of responsibility		
2.3.5	Information on types of services and facilities provided and an indication where detailed information can be obtained.		
2.3.6	Information on requirements and conditions under which the communication service is available.		
2.4	Meteorological services		
2.4.1	Name, contact information and description of the authorities concerned with meteorology and of the meteorological service.		
2.4.2.	ICAO documents on which the service is based.		
2.4.3	Indication if service is not H24		
2.4.4	Area of responsibility		
2.4.5	Information on meteorological observations and reports provided for international air navigation		
	a) Name of the station and the ICAO location indicator;"		
	b) Type and frequency of observation including an indication of automatic observing equipment;		
	c) Types of meteorological reports (e.g. METAR) and availability of a trend forecast;		
	d) 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.);		
	e) Hours of operation; and		
	f) Indication of aeronautical climatological information available.		
2.4.6	Information on the main type of service provided		
2.4.7	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.		
2.4.8	Requirements of the meteorological authority for the making and transmission of aircraft reports		
2.4.9	Information on VOLMET and/or D-VOLMET service, including:		
	a) Name of transmitting station;"		
	b) call sign or identification and abbreviation for the radio communication emission;		
	c) Frequency or frequencies used for broadcast;		
	d) Broadcasting period;		
	e) Hours of service;		
	f) list of aerodromes/heliports for which reports and/or forecasts are included; and		
	g) Reports, forecasts and SIGMET information included.		
2.4.10	SIGMET and AIRMET service: Information on 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:		
	a) Name of the meteorological watch office, ICAO location indicator;"		
	b) Hours of service;		
	c) Flight information region(s) or control area(s) served;		
	d) SIGMET validity periods;		
	e) Specific procedures applied to SIGMET information (e.g. for volcanic ash and tropical cyclones);		
	f) Procedures applied to AIRMET information (in accordance with relevant regional air navigation agreements);		

	g) The air traffic services unit(s) provided with SIGMET and AIRMET		
2.4.11	Information on other available automated services for the provision of meteorological information.		
2.5	Services, procedures and local regulations on aerodromes and heliports		
2.5.1	Information on aerodrome / heliport operator including:		
	a) Name and contact information		
	b) Operational hours		
2.5.2	Information on local regulations applicable to the traffic at use of the aerodrome including the acceptability of training flights, non-radio and micro light aircraft and similar, and to ground manoeuvring and parking.		
2.5.3	Information on the type of aerodrome/heliport charges including methods of payment and exemptions/reductions where applicable.		
2.5.4	Information on noise abatement procedures established at the aerodrome.		
2.5.5	Information on the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization at the aerodrome.		
2.5.6	Information on low visibility procedures		
	a) Runway(s) and associated equipment authorized for use under low visibility procedures;		
	b) Information on meteorological conditions under which initiation, use and termination of low visibility procedures would be made.		
	c) Description of ground marking/lighting for use under low visibility procedures		
2.5.7	Information on bird concentrations at the aerodrome, together with an indication of significant daily movement between resting and feeding areas.		
2.5.8	Information on runway friction measuring devices and runway friction level minima.		
2.5.9	Information on the equipment and operational priorities established for the clearance of aerodrome movement areas including type(s) of clearing equipment and clearance priorities		
2.5.10	Information on the rescue and firefighting services and equipment available at the aerodrome, including:		
	a) aerodrome category for firefighting;		
	b) rescue equipment;		
	c) capability for removal of disabled aircraft		
2.5.11	Information on passenger facilities available at the aerodrome/heliport at or in the vicinity of aerodrome or a reference to other information sources such as a website:		
	a) hotels		
	b) restaurants		
	c) transportation		
	d) medical facilities		
	e) bank and post office		
	f) tourist office		
2.5.12	Information on handling services and facilities available at the aerodrome/heliport including:		
	a) cargo-handling facilities		
	b) fuel and oil types		

	c) fuelling facilities and capacity and hours of service;		
	d) de-icing facilities and hours of service		
	e) hangar space for visiting aircraft		
	f) repair facilities for visiting aircraft		
2.5.13	Information on the existence of an obstacle free zone / sector		
2.5.14	Meteorological information provided at the aerodrome and an indication of which meteorological office is responsible for the service enumerated, including:		
	a) name of the associated meteorological office and information on hours of service		
	b) office responsible for preparation of TAFs and periods of validity, interval of issuance of the forecasts, availability of the trend forecasts for the aerodrome, and interval of issuance		
	c) information on how briefing and/or consultation is provided		
	d) types of flight documentation supplied and language(s) used in flight documentation;		
	e) charts and other information displayed or available for briefing or consultation;		
	f) supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;		
	g) the air traffic services unit(s) provided with meteorological information; and		
	h) additional information (e.g. concerning any limitation of service, etc.).		
2.5.15	Information on hours of operation of AIS briefing office		
2.5.16	Information on hours of operation of ATS reporting office (ARO)		
2.5.17	Information on hours of operation of MET briefing office		
2.5.18	Information on hours of operation of air traffic service		
2.5.19	Information on hours of operation of customs and immigration		
2.5.20	Information on hours of operation of health and sanitation		
2.5.21	Information on hours of operation of security		
2.6	Search and Rescue services and procedures		
2.6.1	Name, contact information and description of the authorities responsible for search and rescue.		
2.6.2	ICAO documents on which the service is based.		
2.6.3	Area of responsibility		
2.6.4	Types of services		
2.6.5	Information on SAR agreements		
2.6.6	Brief description on provisions for SAR including general conditions under which the service and facilities are available for international use, including an indication of whether a facility available for search and rescue 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.		
2.6.7	Procedures and signals employed by rescue aircraft and also the signals to be used by survivors.		