



Liberté Égalité Fraternité

APAC QUALITY ASSURANCE WEBINAR

DSNA, France organization to support Quality Assurance in IPD October 27 2020

direction générale de l'Aviation civile 1 22/10/2020



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Implementing a Quality Assurance System for IPD?

The managing of every stage of a production process to make certain that the goods being produced are of the intended standard.

What are the goods?

The trajectories being designed or maintained.

The Way Points being defined and stored into on board navigation databases.

The coding Path Terminators and the procedure altitudes being published in national AIP.

The stakeholders of the QA are IP designers and data providers.

What are the intended standard of the produced data?

Integrity and accuracy of the data.

Compliance of the data with the users requirements.

Safe integration of the data within the environment (ATC, obstacles, noise).

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Implementing a Quality Assurance System for IPD?

The managing of every stage of a production process to make certain that the goods being produced are of the intended standard.

Implementing a QA system in IPD implies providing all IPD stakeholders with training, tools and documents to guide them in order for them to perform each step of the IPD process as expected to reach the goal.

This the RESPONSIBILITY of the PROCEDURE DESIGN ENTITY to define, implement and maintain its IPD Quality Assurance System.

Managing Quality goes with increasing SAFETY and EFFICENCY.

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Summary

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1.French Context

2.Important steps for quality

3.DSNA Organization











Airports and IPD

DSAC

National Supervisory Authority

Procedure approval
Procedure design assessment
Procedure designer approval
Audit of procedure design entity

DSNA

ANSP (operator)

Design & draft publication

DTA

Regulator

Laws Regulation
Publication

DSNA is the main French ANSP in terms of Instrument Procedure Design

9 Regional Services in charge of APP and AD ATC also in charge of Procedure Design

3 procedure designers per Regional Service.

81 Airports with Conventional and PBN trajectories

220 runway ends 200 runway ends with

vertical guidance

620 PBN procedures 83 ILS procedures

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Quality Assurance system: WHY in DSNA context?

TECHNICAL REASONS:

Workload due to massive PBN implementation (European PBN Implementing Rule for 2023)

Complexity of the design process.

Accuracy and integrity requirements for PBN data (in and out)

Increased level of Safety

Periodic Review

Five years Maintenance cycle.

REGULATORY REASONS:

Certification of « IPD service » at European level by EASA (European Safety Authorithy)

DSNA must provide proofs of the quality of the IPD service provided.

HUMAN REASONS:

Reduce or mitigate the impact of the high level of turn over among the procedure designers.

Increased number of errors due to PBN context (WP coordinates, coding tables...)

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Quality assurance system: HOW in DSNA context?

Organisation of the IPD teams

30 procedure designers spread in 10 regional entities



Four virtual centers of excellence sharing DSNA IPD activities

To reduce the effect of the turn over

To increase exchange and cooperation

To increase quality of the resulted design by sharing local know-how and updating points of view, skills....

Management of the methods to perform IPD

National Working Group (Processes and docs WG) to

Analyze and detail all steps of design process from gathering

- « data and needs » to
- « publication » and « archiving »

Issue templates of documents to address all phases of the design process with actors /data in/data out

Issue technical documents to highlight some specific design criteria

Management of the tools to perform IPD

National Working Group (Tools WG) to

Test and validate all tools used for design process

Record and address demands for new tools

Issue guidance documents to support the use of the validated design tools.

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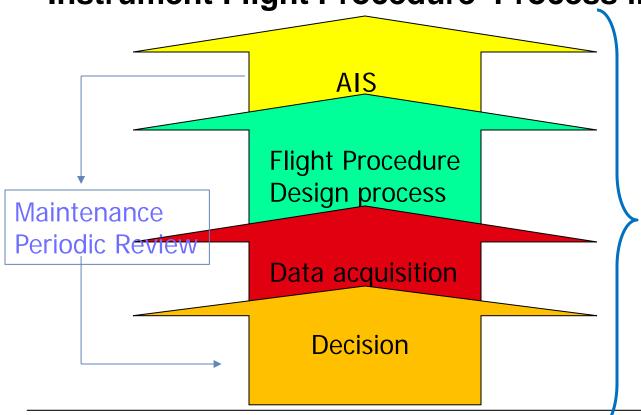








Instrument Flight Procedure Process in ICAO DOC 9906





17 identified steps





Major/basic steps to improve quality in design process

ANCHOR the design process in a document describing

all steps,

actors

duties of the design process

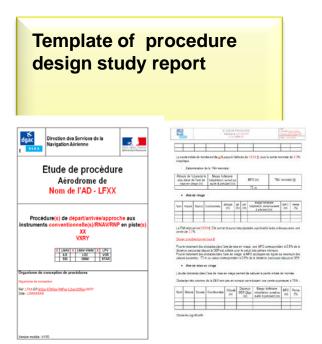
as defined and accepted by the design entity.

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Conception, Mise en Service et Suivi
de procédures d'approche PBN
(OOMICO PRII)
(COMISS PBN)
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Projet / Opération : COMISS PBN
Version: V1R2 mars 2019
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Major/basic steps to improve quality in design process



Using ONLY validated Tools



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Good practices for documents management

Mes fichiers

des compétences

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Using a document management tool platform



create, deliver, and share documents online among **ALL** Procedure Design actors

Coordination nationale des procédures Modéré Tableau de bord du site Espace documentaire Calendrier Wiki Membres du site Wiki - Liens utiles Remarque sur le site Profil du site Ce site a pour vocation de regrouper les documents utiles à Bienvenue sur l'activité de conception de procédures de vol aux instruments : Fonctionnement interne Coordination nationale des procédures **DSNA** · documents de politique générale du domaine et indicateurs PRO-018 DSNA: • informations sur le pilotage de l'activité Activité Procédures de vol aux outils & Méthode - Supports de formation Etablissement des procédures instruments • documents concernant les membres du personnel impliqués dans de vol aux instruments l'établissement des procédures de vol aux instruments et leur suivi Gestionnaire(s) du site : Laure • textes divers : réglementaires, qualité, consignes, référentiels PRO-006 DSNA: Gestion TRUCHOT, GEODe-MOA-DSNA-

extérieurs (OACI, dont PANS-OPS et IFPP, CANSO, Eurocontrol,

IATA etc.), quides internes et modes opéraroires

Corinne BOUSQUET •

Rechercher des fichiers, persc

Id, Magali CLOVIS, Philippe

Create a IPD community

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Sites ▼

Tâches *

Personnes





Good practices for documents management

Management tool platform:

a MANDATORY MEDIUM



- 1. Regulation
- 2. Specific requirements
- 3. Training document
- 4. List of validated tools
- 5. List and storage of template documents
- 6. Description of the processes
- 7. Storage of all published technical report

- 1. Improve communication among IPD
- 2. Updated documents
- 3. Exchange of skill and know-how
- 4. Improve and consolidate the continuous training of new PD
- 5. Allow a better management and follow-up of the PBN strategy implementation
- 6. Contribute to ease telework

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Main bodies to support Quality through management and follow-up of the design process

DSNA Steering Committee to assess PBN IFR IPD implementation:

Definition of IPD strategy (PBN)

Rules to support IPD process

Regular assessment of producted quality

Feedback from Data Houses

DSNA TF responsible of:

Approval of the documents and processes proposed by « Processes and docs WG »

Requirement for **new documents** to be standardized

Approval of the validated tools

Requirement for **new automated features** or tools

PD to use documents tool and perform the IPD process









Conclusion: Price of the Quality in Procedure design

Time and collaboration

Training and regular assessment

Change in working methods

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Thank You. Questions?

