

FPDAM

Flight Procedure Design and Airspace Management



FPDAM Design Environment Capabilities

FPDAM is IDS AirNav's market leading solution for flight procedure design. Its versatile, expandable modules provide an interactive three-dimensional environment which enables users to create, visualize, check and maintain instrument flight procedures compliant with international standards. FPDAM includes construction rules based on and compliant with PANS-OPS (ICAO doc. 8168, 9905, Annex 11 & 14), FAA TERPS, Canadian TP 308 and:

- Fully supports all types of procedures including: SID/departures, STARs/arrivals and approaches for conventional, RNAV/PBN, RNP AR, APV/LPV, GLS, Baro-VNAV guidance systems;
- Allows users to perform terrain and obstacle assessments by importing and utilizing digital terrain data relevant to procedure design in any known projection, datum and resolution/accuracy;
- Automates complex procedure design functions within its design environment;
- Ensures tight control of the system configuration, design elements and design criteria related to flight safety issues through connection to a controlled aeronautical database.

FPDAM Features

- ATS data is stored and managed in the IDS AirNav AeroDB database; with dedicated data translators providing data interchange capabilities (ARINC, AIXM and custom formats);
- Terrain and raster database (3D terrain elevation data and images) management;
- Protection area builder (VOR/TACAN, NDB, LOC, ILS, DME, PAR, SRE, RNAV/PBN, RNP APCH AR, GBAS, SBAS, APV I & II) and SID for conventional and RNAV procedures;
- Obstruction assessment, clearance, OCA/H, DA/DH, MDA/H and PDG/CG calculator;
- Holding, base turn, procedure turn, DF, RF, TF turns, MSA/ESA (for conventional and RNAV), circling areas and protection areas builder;
- ILS obstacle assessment surfaces (OAS), BASIC ILS surface builder and embedded CRM analysis;
- Helicopter procedures (CAT H) including PinS;
- Procedure report builder including submission forms;
- Lateral/vertical separation analysis of different types of procedures within a single project;

FPDAM Modules

AeroChart – automatically builds and maintains SID, STAR and Approach charts from the FPDAM project database. This can be done simply by selecting the relevant flight procedure, a preconfigured template and then running the symbolization process. New chart layouts can be created and background graphic information such as topography and terrain maps can be used.

SSA Encoder – allows SID, STAR and Approach procedures to be stored in the central AIS database for subsequent data transfer via ARINC files or other formats.



Benefits

Time saving:

- Data loading (DEM, DTED, BT, SRTM) does not require any conversion.
- It just takes a few minutes to read the source files and then finish the design in 2 hours.

Safety:

- On-line checks against reference criteria (ICAO, TERPS, ARINC, etc). During the design process the user receives warning alerts of any non-compliance without blocking the execution of other operations.
- Full Quality Assurance documentation in accordance with the ICAO 9906 Vol. III requirements.

Interoperability:

- The only design system fully integrated in a complete AIS/AIM suite.
- Full integration within the IDS AirNav suite of products enables the EUROCONTROL Aeronautical Data Quality (ADQ) mandate to be respected. The full design process, as stated in ICAO 9906, can be defined and all input and output data for each single step are tracked by PLX
- FPDAM is globally the most used system within design organizations (ANSPs/CAAs/Airlines/Airport Authorities) and this ensures full compliance with operational needs.

Regular updates:

- FPDAM is continually updated ensuring that all calculations are in accordance with current criteria and applicable annexes and changes.

