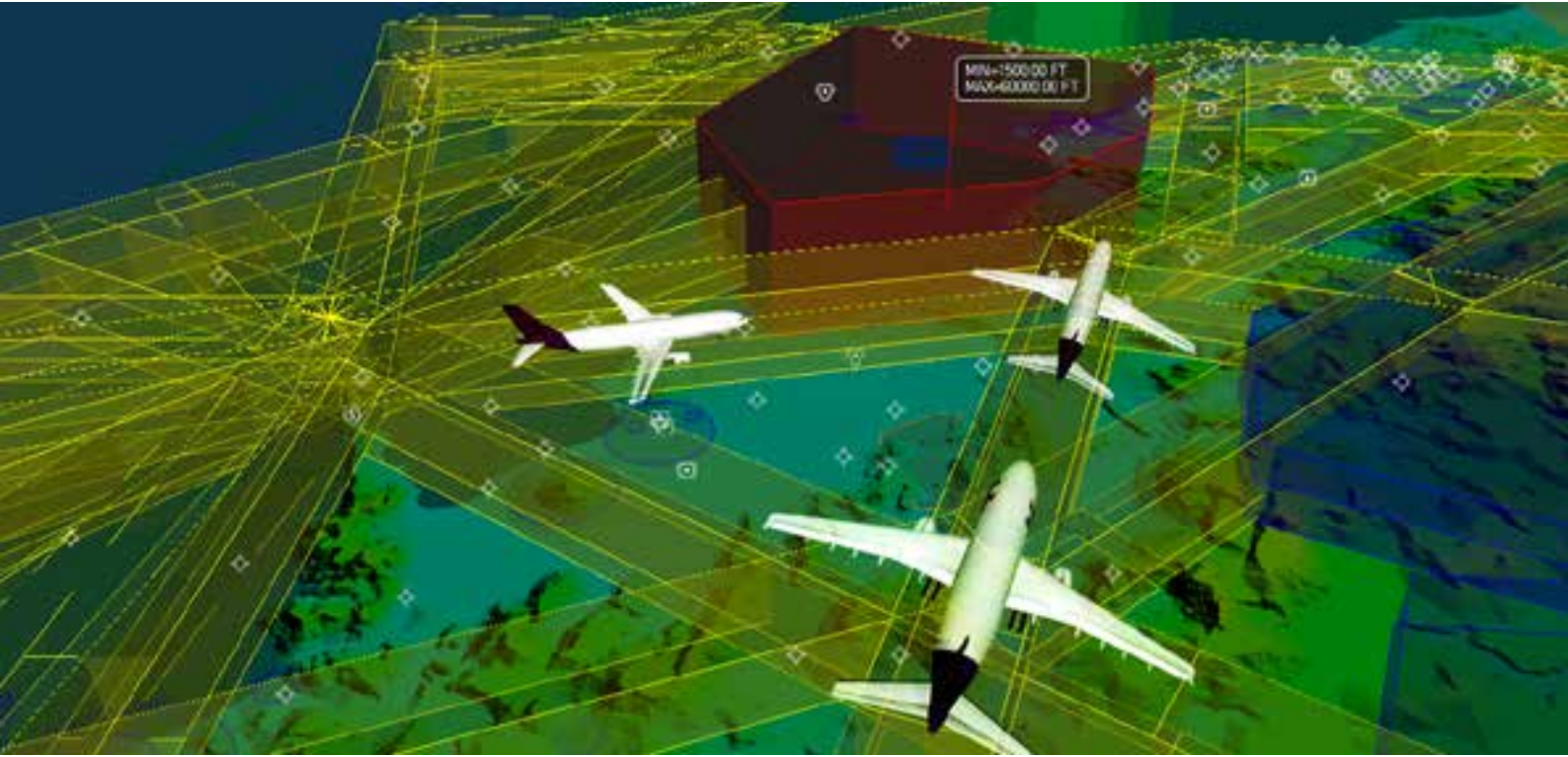


Airspace Designer

Airspace and Route Design



Airspace Designer Capabilities

Airspace Designer is a tool for the advanced management of airways / routes and bounded airspaces. Airspace Designer includes construction rules based on and compliant with PANS-OPS (ICAO doc. 8168, ICAO annex 11), NATO AATCP-1(C) and:

- creates obstacle protection areas for all types of airways and routes (simplified / refined methods), including STARs/arrivals;
- allows users to perform terrain and obstacle assessments by importing and utilizing digital terrain data relevant to procedure design, in any known projection, datum or resolution/accuracy;
- allows user to perform an analysis for the lateral and vertical separation between airspace and airways / routes;
- stores all the data in the central AIS database including usage and services.

Airspace Designer Features

- ATS data is stored and managed in the IDS Air Nav AeroDB database or a similar Oracle database, with dedicated data translators providing data interchange and AIXM data storage capability.
- Airspace and route design and maintenance through protection areas and bufferization calculations.
- Airspace and route lateral separation using horizontal and vertical buffers.
- Spatial analyses (attribute query, spatial query).
- 3D Visualization using internal 3D viewer and KML export for Google Earth visualization.
- AIP similar reports.

Airspace Designer Modules

ACUAREA4D – Allows the design and management of temporal airspaces (bomb clearance, temporary segregated airspace (TSA), parachuting activities, etc.) and allows coordination between civil and military agencies for planning the emission of NOTAMs. Default airspace geometries can be loaded very quickly in order to speed-up the design activity and NOTAMs can be automatically generated from the design environment itself.

Scenario Information Manager (SIM) – automatically builds scenarios containing ATS data including airspace, routes and FPDAM flight plans to be used in fast time simulation tools such as RAMS and TAAM. All the data for fast time analysis can be exported from the design environment in just a few seconds.

Benefits

Time saving:

- Data loading does not require any conversion.
- Terrain files have already been included for the whole world, additional ones can be added.

Safety:

- Full Quality Assurance documentation in accordance with the ICAO 9906 Vol. III requirements.
- Analysis is driven by default (but configurable) rules and calculations derived from the reference criteria.

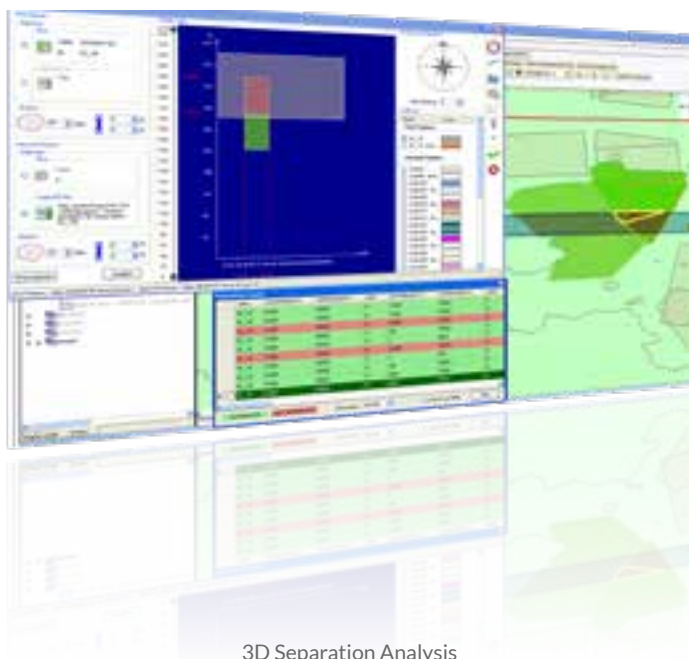
Interoperability:

- The only airspace design system fully integrated in a complete AIS/AIM suite.
- Full integration within the IDS Air Nav suite of products enables the EUROCONTROL Aeronautical Data Quality (ADQ) mandate to be respected. All input and output data for each single step of the design are tracked by PLX
- The user can define via PLX the amount of attributes added by the designer/CNS department (activation hours, services, etc) prior to acceptance by the AIS department.

Regular updates:

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

Airspace Designer is also fully compliant with the latest ICAO requirements in terms of software validation as stated in the ICAO Doc. 9906 Vol. III and EU 552/2004.



3D Separation Analysis



Google Earth route view