GéoTITAN® is an expert instrument flight procedure design tool for designing flight paths associated with their protection areas, in a geo-referenced aeronautical environment. Using the reference data and a Digital Terrain Model, GéoTITAN® identifies the most significant obstacles and automatically computes the safe altitudes. The solution is operated worldwide in more than 45 countries.

GéoTITAN®
Adopted worldwide.
Together, ENAC PANS-OPS’s expertise and CGX’s knowledge in GIS offer a complete geo-referenced package for procedure designers. The Procedure Design Suite® including GéoTITAN® proposes a set of solutions that meet the schedule of Aeronautical Data Quality (ADQ) issued by Eurocontrol Regulation and ICAO Annex 15 Amendment 37.

Data-driven software
> GéoTITAN® includes its own aeronautical database, and can be also connected to an external database in different including AIXM. It automatically analyses the impacts on a designed procedure in case of a change in the database.

Based on ICAO regulation
> GéoTITAN® is based on ICAO recommended practices described in DOC 8168-OPS/611, ICAO DOC 9613 and ICAO DOC 9905. GéoTITAN® uses a Digital Terrain Models, combined to the aeronautical obstacle database that allows the automated analysis of the relief within protection areas and the computation of the MOCA and OCA.

> GéoTITAN® can create conventional or RNAV/PBN trajectories as well as Annex 14 surfaces (OLS), circling or the CRM.

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WGS-84 coordinates system
> All computations are performed in WGS-84 on the Earth ellipsoid.

Geographical environment
> GéoTITAN® is based on Geographical Information System allowing the management of scanned maps and DTM files, the creation and management of procedure design working files with paths/airways, protection areas, airspace limits, etc.

> GéoTITAN manages and display aeronautical data: aerodromes, navails, etc

> GéoTITAN® display the automatic projection to relevant coordinate systems.

PBN Procedures
> A specific module is dedicated to the design of procedures based on the PBN manual with a high level of automation.

> GéoTITAN® automatically computes the complete protection areas based on the selected application (B-RNAV, RNAV-1, RNAV-2, RNP approach, etc”), including all turns, and the merge when moving from one application to another (example B-RNAV-1 at TMA entrance, or RNAV-1 to RNP approach after the intermediate fix).

Flexibility and manual design
> Although most of the design is automated, it is possible to use CAD tools to address situations where the regulation cannot be applied.

Automated output and Procedure Design Suite®
> Export: Procedures designed with GéoTITAN® can be exported in Data4Flight® that automatically generate the ARINC coding, chart publication, 3D visualization, procedure design ground validation and airspace design.

> Report: a Microsoft Word compatible report can be generated automatically for the CRM studies or for the whole design report, including the parameters of all the items used in the design process.

> GéoTITAN® is part of the Procedure Design Suite® which includes a set of solutions to meet user’s needs:

- Data4Flight® automated ARINC coding and report generation of the procedures designed within GéoTITAN® through an automated and controlled process with minimal manual input. Additionally, Data4Flight® enables to visualize the procedures in 3D, to produce charts, achieve the procedure design ground validation and airspace design.

- AIP-GIS Charting® for chart production and publication. Our solutions are interoperable with AIXM compliant third-party system databases.

Speak with a product specialist