Air Navigation
Bringing solutions and services, commitment and experience to the complex global ATM environment
About the Air Navigation Division
Since 1992 the Air Navigation Division has been developing and supporting highly customizable and scalable commercial software solutions for both civil and military customers in the aeronautical fields of communications, navigation, surveillance and air traffic management. The division supplies its professional commercial solutions and engineering services worldwide tailoring them to clients' needs in order to fit their specific requirements and workloads. The Air Navigation Division provides integrated systems for instrument flight procedure design and ground validation, a comprehensive suite of applications for aeronautical information management, navigation aids performance assessment, radar siting and electromagnetic compatibility analysis.

Engineering Solutions
IDS’s products and services span two broad segments of air navigation operations:

- **Aeronautical information services and management** – the flow and management of static and dynamic information in full compliance with the ICAO mandate for data quality and integrity as well as the Aeronautical Data Quality Requirements (EU reg. 73/2010). Support for the transition from an Aeronautical Information Services (AIS) to an Aeronautical Information Management (AIM) system. Configurable production of aeronautical data packages, charts and documents, such as Aeronautical Information Publications (AIP), through an automated rules-driven process.

- **Engineering and operations** – the development and ground validation of flight procedures, the design of airspace and the assessment of ground based and satellite navigation aids performance.

Solutions and Services
IDS offers a comprehensive set of solutions and services devoted to assist Air Navigation Service Providers, Airport Operators, Civil Aviation Agencies, Military Aviation and Aviation Industries.

- **FPDAM**, a flight procedure and airspace design system
- **Airspace Designer**, a suite of products dedicated to airspace and route design and management
- **e-TOD**, a terrain and obstacle data management and obstacle charting suite
- **AACS** and **TBA3D**, operational assessment through real time cockpit and airport simulators
- **EMACS**, a family of 3D electromagnetic airport modeling and performance analysis tools for communications, navigation and surveillance
- **FPSAT**, a solution for virtual flyability checks
- **CRONOS**, an Information Management System designed to accommodate the transition from AIS to AIM for NOTAMS, Flight Plans, Meteorological Data Management and Briefing Activities.
- **Ubimex**, a System for Air Traffic Services Message Handling (AMHS)
- **Data Maintenance**, a set of comprehensive products that manage data entry (both tabular and graphical), storage and digital data distribution (including EAD data exchange)

Flexible and scalable approach to enterprise solutions

- **AeroPub**, automated aeronautical publishing
- **WePub**, automated web based aeronautical publishing
- **ICE**, creation and maintenance of aeronautical charts based on GIS technology
- **PLX**, a web application designed to implement and monitor traceable, controlled and auditible processes from data acquisition to data dissemination
- **A-BMS**, an aviation billing management system to assist providers of Air Navigation Services in managing their ANS revenue collection operations

IDS also provides a range of training programs and consultancy services such as:

- Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS) training
- Instrument flight procedure design
- Data loading and migration
- Aeronautical charting and AIP production
- Verification and validation of instrument flight procedures
- AIS to AIM transition in accordance with the ICAO Roadmap

Research & Development
The IDS Air Navigation Division is actively involved in various FP7 International Research Projects in the context of the SESAR and Clean Sky Programs, to develop and demonstrate new systems and operational concepts for the future of European air navigation and air traffic management.

Delivering Benefits
Air Navigation is developing in a highly sophisticated, interdependent environment, where quality and safety are vital, technology is advancing and costs are high. Major operators and key accounts in more than 60 countries now use IDS solutions and services to help them approach such demanding requirements as effectively and strategically as possible. Engineering is at the heart of IDS methodology, leading the company to tackle problem solving through innovation and technical excellence. By working closely with its clients for 30 years on the challenges of automation, IDS has developed industry leading solutions.

IDS’s Air Navigation products and services provide measurable benefits from the automation of air navigation processes:

- **Efficiency** – Consolidating information in a single central database enables multiple departments to share data and documents that have only needed to be entered, checked and validated once.
- **Cost effectiveness** – Automating processes saves time and reduces costs while also increasing productivity.
- **Control and Risk Management** - Greater integration through the use of IDS solutions and products permits a greater level of control over information and workflow management and also an increased level of data quality and integrity.

IDS Flight Procedure Design Organization (FPDO) is recognized by the Italian CAA.