ENAV numbers

Flights handled in one year	roughly 2 million
Peak of flights managed in one day	6,064
Control Towers (TWRs)	39
Area Control Centres (ACCs)	4
Total sq km of airspace for which ENAV is responsible	752,832
Air/ground contacts per year	31 million
Employees (two thirds of whom with operational tasks)	3,251
Hours of training imparted in 2010	248,000
Investments 2003-2010	1,500 million Euros

enav.it

business.department@enav.it

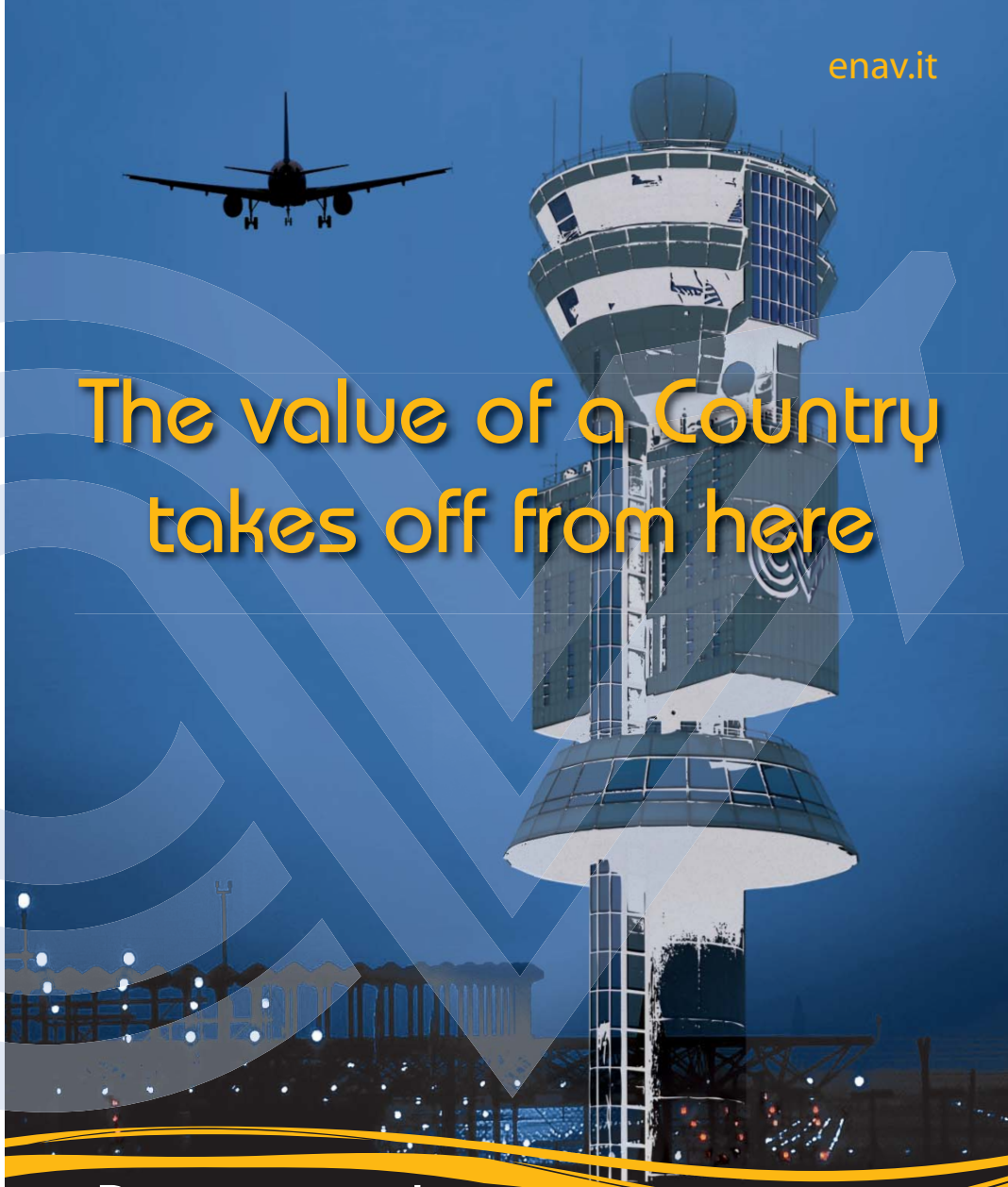
ENAV S.p.A.
ITALIAN COMPANY FOR AIR NAVIGATION SERVICES

ENAV S.p.A. – Via Salaria, 716 – 00138 Roma, Italy – (+39) 06 81661

CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001:2008 SINCERT DNV

Last update: January 2011

enav.it



The value of a Country takes off from here

Design and Aeronautical Consulting

ENAV S.p.A.
ITALIAN COMPANY FOR AIR NAVIGATION SERVICES

Design and Aeronautical Consulting

ENAV Business Solutions: a global offer of high value-added services

AIRSPACE DESIGN

Airspace is a valuable resource for both countries and users. Access and use of airspace is guaranteed to all users categories by taking into due account trends in traffic demand, user specific needs, national security aspects and environmental impact.
In a scenario characterised by the growth of traffic demand and by new user requirements, the organisations involved in airspace planning and management are requested to undertake actions aiming at guaranteeing the rational use of the airspace. ENAV can manage complex projects for the rationalisation of airspace through:

- Analysis of current and forecasted traffic flows
- Analysis of the natural and artificial limitations on flight operations
- Definition and optimisation of the route network
- Development and publication of ICAO aeronautical charts and airport obstacle charts
- Development of coordination procedures between neighbouring ATS units, civil and military authorities and neighbouring countries

FLIGHT PROCEDURES DESIGN

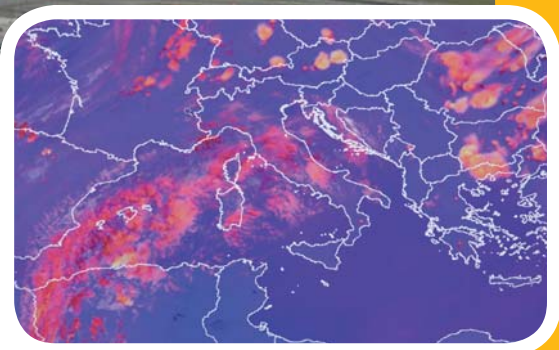
The link between the route network and the airports has considerable importance in the process of airspace rationalisation.
Over time, flight procedures design, both conventional and RNAV, have become increasingly complex for a number of reasons such as: the growing complexity of legislation and design rules, the operational constraints due to the environmental impact, the distance between nearby airports and the national security restrictions.
The systems for the simulation and flight procedures design adopted by ENAV are able to carry out all the phases of the conventional, RNAV and PBN (Performance Based Navigation) flight procedures design, such as:

- Analysis of traffic flows between the airport and the route network
- Analysis of obstacles
- Simulations of electromagnetic coverage of the ground and satellite radio navigation systems
- Analysis of electromagnetic compatibility
- Evaluation of environmental impact
- Analysis of interference with nearby airports and optimisation of traffic flows
- Complete development of the instrumental flight procedures and of the associated protection areas in compliance with ICAO rules
- Drawing up of the documentation and publication of the procedures

ENAV S.p.A.
ITALIAN COMPANY FOR AIR NAVIGATION SERVICES

enav.it

photo by ADR S.p.A.



ENAV Business Solutions: a global offer of high value-added services

DESIGN AND OPTIMISATION OF THE AIRPORT AIR-SIDE COMPONENT

Airports are the place where the activities and interests of numerous stakeholders are located.
The continuing growth of air traffic demand requires a careful planning of the airport operations taking place in the air-side component. This activity shall be taken into due account both in the construction of a new airport and in the overall projects aimed at the optimisation of the available capacity, delay reduction and minimisation of environmental impact.
ENAV has provided leadership in the management of numerous projects aimed at improving the efficiency of the operations, both in regional airports and at HUB level. ENAV is qualified to provide customers with the following consultancy and design services:

- Development of requirements for the design of runways, taxiways and parking areas
- Development of requirements for the design and integration of operational and technical infrastructures (Control Tower)
- Development of requirements for the installation of CNS/ATM systems
- Survey of obstacles posing a danger to operations
- Development and production of ICAO airport mapping, both traditional and digital
- Development of procedures for the ground movement of aircraft and vehicles
- Development of methods for the sharing of decision making processes and information

AERONAUTICAL METEOROLOGY SERVICES

Every organisation responsible for the air navigation services must provide air space users with all the weather information relevant for the safety and efficiency of ground and flight operations through their air traffic service units. ENAV experts can provide consultancy for:

- Projects for the acquisition, integration and automatic dissemination of weather information and forecasts for ATS applications
- Projects for the technical and operational implementation of integrated weather systems and sensors at airport level
- Development of operational procedures for ATC use of meteorological information
- Consultancy and assessment in the SES and ISO 9001 certification processes

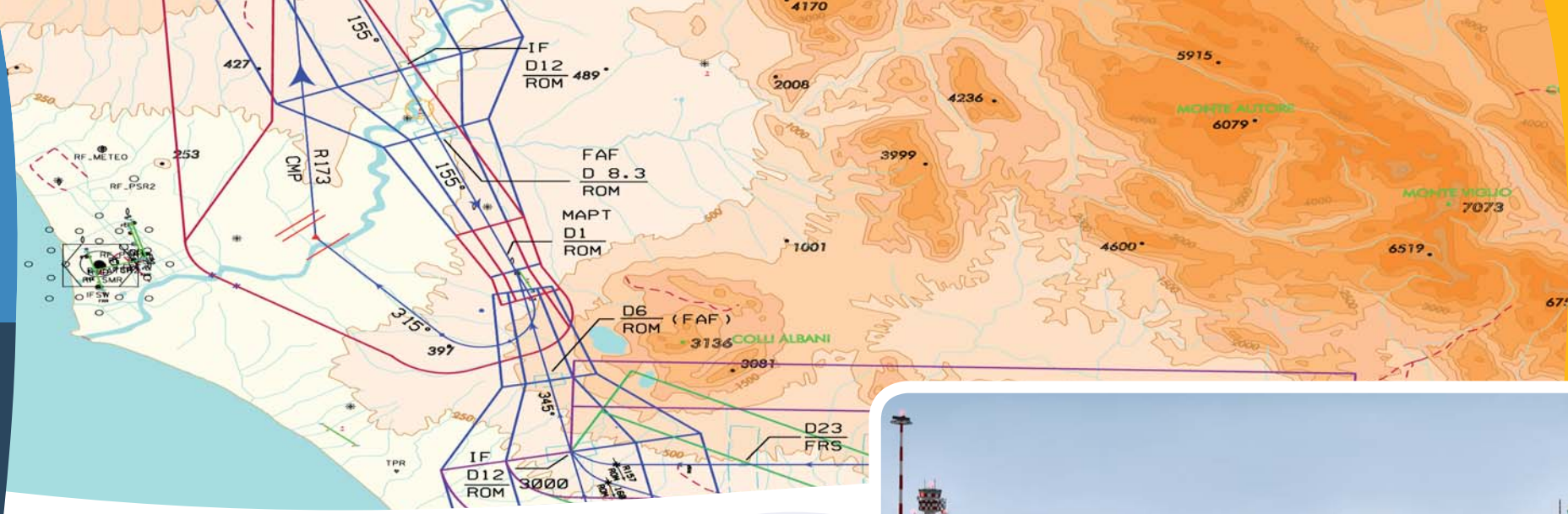
DESIGN AND REALISATION OF AERONAUTICAL DATABASES OF TERRAIN AND AIRPORT OBSTACLES

For an optimal and safe use of modern navigation systems during all the flight phases, the ground movement of aircraft and vehicles, and other applications such as the design of flight procedures, simulation and synthetic vision, accurate numerical representations of terrain and obstacles are required for the use in combination with aeronautical data.
ENAV can provide consultancy and technical support for the planning and creation of computer databases for the terrain and for obstacles in accordance with Annexe 15 ICAO (Amendment 33) and the strictest ISO standards for the collection, management, display and quality of the data for the areas identified by customers.

ENAV S.p.A.
ITALIAN COMPANY FOR AIR NAVIGATION SERVICES

enav.it

ENAV Business Solutions: a global offer of high value-added services



MANAGEMENT AND PUBLICATION OF AERONAUTICAL INFORMATION

The air traffic service units must be constantly informed about the situation and availability of the airspace under their responsibility, and the impact on air traffic. Thanks to its advanced technological platform, ENAV can provide customers with:

- The production of all the components of the Integrated Aeronautical Information Package (AIP, AIP supplements, NOTAM, PIB, AIC)
- Consultancy for the creation of a technological platform to implement the Integrated Aeronautical
- Information Package

PRE–FLIGHT INFORMATION SYSTEM

Pre-flight Information System is based on Self Briefing. Self Briefing is an innovative and easy way for Aircraft Operators, Pilots and Organizations to access pre-flight information through the Internet. In just few simple steps you can collect the Aeronautical Information required for the pre-flight operations.
Accessing to our AIS, MET, FPL databases you can easily retrieve NOTAM, SNOWTAM, ASHTAM, MET messages for your Integrated Briefing to plan your flight. Through our web application you can also fill and send automatically your FPL, CHG, DLA, CNL messages to the concerned ATS validation units and receive a copy of your AFTN messages.
Online real-time ATFM messages will keep you always updated and informed about the status of your Flight Plan.
Self Briefing, the modern way to access complete, high-quality and timely aeronautical information will assist you during your pre-flight operations, everywhere you are and anywhere you fly.

photo by ADR S.p.A.

DEVELOPMENT, SIMULATION AND VALIDATION OF NEW OPERATIONAL PROCEDURES, CONCEPTS AND SYSTEMS

The advancement of operational procedures and Air Traffic Management systems is a basic requisite for reaching the objectives of safety, capacity and efficiency associated with the traffic demand forecast for the near future.
The management of technological innovation projects for the ATM sector requires a gradual and interdisciplinary approach.
ENAV has advanced research and development facilities with an excellent capacity of simulation and trials in all the CNS/ATM sectors; it works in cooperation with other corresponding European research and development centres, intergovernmental bodies and the domestic and international industries in the sector.
The ENAV research and development facilities can provide the following services for all the projects regarding operational procedures, new organizations (e.g. airports, ATS centres), the introduction of new technology and new HMI:

- Development of analytical models
- Fast-time/model-based simulations
- Real-time/human in the loop simulations
- "Shadow Mode" experimentations and "Live Trials" involving parallel operations
- Safety impact assessments
- Cost-benefits analyses associated with new implementations
- Experiments and testing for new systems
- Pre-operational validation

ENAV S.p.A.
ITALIAN COMPANY FOR AIR NAVIGATION SERVICES

enav.it