



**The Aeronautical Solutions Specialists**

[www.navya.es](http://www.navya.es)



# **A-Solutions**

**Consultancy & Engineering**  
**Airports, Airlines & Air Navigation**

*Air Solutions*



# How?: Mission, Vision and Values

- ✍ **The Mission:** To provide solutions tailored to the needs of our customers in the aviation sector, to ensure customer satisfaction through high quality and effectiveness of these and the assistance provided by a **highly qualified team**. “Navya seeks to create and maintain a culture based on trust, creativity, integrity, innovation and continuous learning: a knowledge network”.
- ✍ **The Vision:** To focus on providing to aviation industry players worldwide optimal solutions that enable them to reach their full potential and develop the most efficient performance, obtaining a single and sustainable differential advantage, through an **industrial leadership in highly specialized aeronautical solutions**.
- ✍ **The Values:** Navya believes on **teamwork**, professional and personal development of our employees, and fluid and transparent communication to ensure the commitment with the **optimal performance** of the aviation industry. We look forward to contribute positively to Society through our services and our full dedication to customers and employees.



# Who?: About Navya

🦅 Navya, is formed by a team of **professionals highly skilled and specialized** in different areas of **Aviation Industry**, with a deep knowledge, **technical, legal and commercial** :

- Aeronautical Engineers and Air Navigation Technical Experts
- Airports & ASM (Airspace Management) Designers
- Pilots & Air Traffic Controllers
- Experts in Airport Economics (Strategy, Marketing, Business models...)
- Civil Aviation Law experts

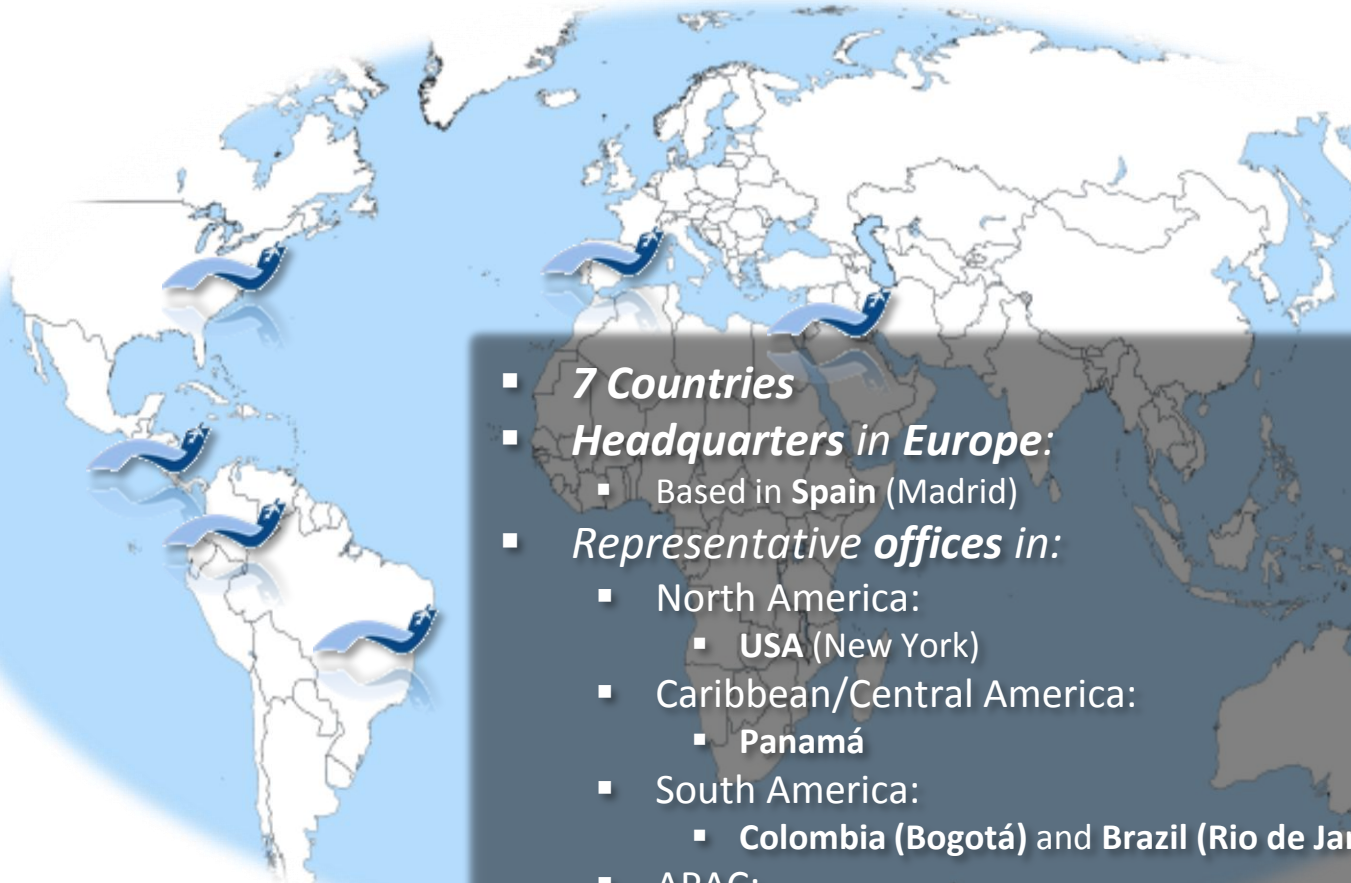
🦅 Navya's renowned reputation in the aviation industry is supported by hundreds of aviation projects carried out for many clients in the sector, which include, among others, **Air Operators, ANSPs, Government agencies, Construction and Renewable Energy companies, and Airports around the world** .

🦅 Navya is accredited by Bureau Veritas with the quality certificates **ISO 9001 and ISO 14001**



NAVYA

# Where?: Navya worldwide




- **7 Countries**
- **Headquarters in Europe:**
  - Based in **Spain** (Madrid)
- **Representative *offices* in:**
  - North America:
    - **USA** (New York)
  - Caribbean/Central America:
    - **Panamá**
  - South America:
    - **Colombia (Bogotá)** and **Brazil (Rio de Janeiro)**
  - APAC:
    - **UAE (Dubai)**





# With?: Partners & Strategic Alliances

 Navya has established agreements and long term relationships with key partners in the aeronautical arena:

- **CANI / ANS:** The Czech Republic Air Navigation Service Provider and its associated Air Traffic Control Training Institute, one of the most prestigious centers in Europe.
- **SAERCO:** Saerco is the 1st private certified Spanish Air Navigation Service Provider, thanks to the 2-year consulting carried out by Navya. Navya is a Saerco shareholder and Saerco is a Navya shareholder.
- **IFG Miami:** Miami-based company specializing in business aviation and perfect connoisseur of American airport business model.
- **Pildo Labs:** Navya partner that provides consulting, engineering and complete technology solutions in aviation, notably in Global Navigation Satellite Systems.
- **RAHN consulting:** Brazilian consulting firm, specialized in Aviation industry.
- **COPAC:** Navya has an agreement with the Official Spanish Pilots Association to provide technical assistance for aeronautical studies and development of joint training courses.
- **Universidad Politécnica de Madrid:** Navya works closely with the UPM for the delivery of different technical seminars for Air Operators about Operation Management
- **GroupEAD Europe:** German-Spanish provider specialized in Aeronautical information.



# What?: Navya Solutions

*Navya solutions cover a wide range of specialties within the aviation sector, ranging from the design of flight procedures and air navigation studies to feasibility analysis and business consulting in airport privatization processes, through analysis of aeronautical impact, design of Safety Management Systems (SMS), Certifications, Legal advice and on-site/on-line technical training.*



Air Navigation



Infrastructures  
(Airports/Heliports)



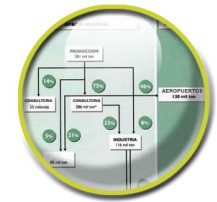
Airlines  
Operations &  
Certification



Training



Safety &  
Security



Aviation  
Economics & Law

## *The Air Solutions specialist*





# Airspace and Air Navigation

- *The foundational and core business of Navya, with the highest level of specialization.*
- **ASM & ANS (ATS/CNS):** *Navya has conducted hundreds of projects thanks to a group of highly qualified experts in Airspace Management & Design and Air Navigation Services, including Air Traffic Services, Communications, Navigations and Surveillance, not only with a deep technical background, but also with a wide knowledge and experience around international legal frameworks, and in permanent contact with National and European Authorities and International Civil Air organizations (OACI, EUROCONTROL, EASA, FAA, AENA, AESA ,DGAC, ...).*
- *Main areas covered by the Air Navigation division are:*
  - **AIA (Aeronautical Impact Analysis & Surveillance)**
  - **ASM (Airspace Management)**
  - **ANS (Air Navigations Services)**







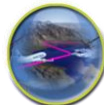
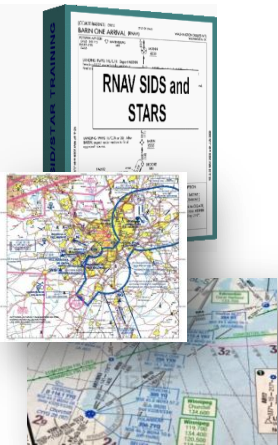
# Airspace and Air Navigation

➤ *Main areas covered by the Air Navigation division are:*

- **AIA (Aeronautical Impact Analysis)**
  - ✓ Aeronautical **Easement & Screening Studies** (Obstacles & Radioelectrical)
  - ✓ Getting approval for construction of potentially dangerous structures
  - ✓ **Aeronautical Operational Impact and Safety Assessment**
- **ASM (Airspace Management)**
  - ✓ **Air Space Structure, Feasibility and Compatibility Analysis**
  - ✓ **Flight Procedures Design (SID/STARs , Approach, Charts, Radar Vectorial Guidance)**
  - ✓ **Routes Planning and Optimization**
  - ✓ **New Airports Planning & Design and Runway Capacity studies**
- **ANS (Air Navigations Services)**
  - ✓ Technical assistance for **certification of ANSPs providers**
    - **ATM/CNS/AIS/MET service providers**
  - ✓ **ATM Safety Management**
  - ✓ **RNAV / RNP**: Design of advanced area navigation procedures
  - ✓ **GNSS /SBAS** : Satellite-based navigation procedures
  - ✓ **PBN Concept**



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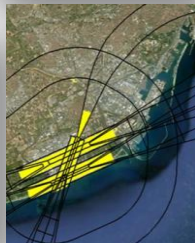
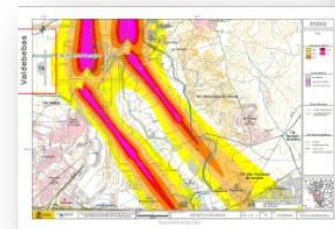
# Aeronautical Infrastructures



*With a wide experience and knowledge in multiple activities in the airport environment, Navya provides a unique added value through a multidisciplinary approach, adapted to customer needs and based on the use of latest methodologies and tools, delivering Airport Operational Support, Management, Consultancy & Training*

*Projects undertaken by Navya for different **Airports & Heliports worldwide** include:*

- Full/Partial **Fast-Time Simulations (FTS)** of Airport environment and traffic applying **own developed software** tools for the determination of capacity parameters
- **Feasibility Analysis**, Socio-Economic Impact and **Strategy & Marketing Plans**
- **Airport Planning, Functional Design** and Director Plans
- **Capacity Estimation/Optimization, Traffic Prognosis** and **Route Development**
- **Obstacle Limitation Surfaces Analysis & Surveillance** according to OACI Annex 14
- **Noise Abatement**: Measurement, simulation, analysis and mitigation measures
- **OACI Airport Certifications**:
  - ✓ Technical Studies for **legalization, authorization, regulatory implications...**
- **Emergency Plans** and Security/Autoprotection Manuals elaboration
- **Airport Cartography and Topography** according to OACI Annex 15
- **New Airports/Heliports** projects



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# Airlines



*Navya provides to Air Operators a full range of services, from specialized consulting for International Certifications to technical assistance for Airline Operations*

- **Certification/Legal requirements**

- ✓ **EASA-OPS adaptation** to new regulatory requirements, replacing EUOPS
- ✓ **AOC Certification**, including start-up and manuals elaboration technical assistance
- ✓ **IOSA Certification**, advising on internal and external audits (to be carried out every 2 years)
- ✓ **Quality Auditing** assistance for any regulatory/quality requirement (ISO 9001, ISO 14001, etc)



- **Airline Tech Operations Engineering**, design, support and monitoring:

- ✓ **Routes Analysis, In-Flight Procedures, Air Navigation optimization:**

- Drift-Down procedures, Escape Routes in case of depressurization, Optimal Flight Procedures

- ✓ **Aerodrome Analysis** : Engine Out Flight Procedure (**EOSID**) before/after Decision Point

- ✓ **Ops Manuals** elaboration, **legal updating** service

- **Safety Management Systems (SMS)** design, development and monitoring

- **Insurance**: Technical Assistance/Management through Aviation Insurance companies.

- **Financial**: Technical reports for **Due Diligences** with financial institutions

- **Leasing/Purchase** Technical assistance :

- ✓ **Aircrafts leasing/purchase, ACMI, dry /wet lease and full-charter**



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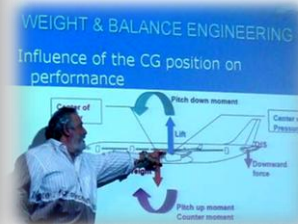




# Training: Courses & Seminars

➤ *Navya provides a comprehensive portfolio of in-company and on-line Aviation-related **Training** seminars and courses and an extensive experience backed by the collaboration with different Universities, Airlines, ANSPs, Consulting firms, etc.*

- **Technical Management Seminars for Air Operators**, in collaboration with the Universidad Politécnica de Madrid
- **Airports Management Program**
- **Airport Operations Administration Program**
- **Airspace Management Program**
- **Flight Procedures Courses**
- **Airports Certification**
- **CNS for ATSEPs Advanced Program**
- **Air Traffic Management Seminars**
- **PBN Course for Pilots with GTA**



➤ *Additionally, Navya is the precursor of the comprehensive aviation training program **SIENA**, which was developed in collaboration with RHAN, an Aeronautical Consulting based in Rio de Janeiro (Brazil)*



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# Training: SIENA Program

~ **SIENA** is a comprehensive and ambitious **Aviation Training initiative** jointly designed and developed by **NAVYA** (in Europe) and **RHAN** (in America) for Air Operators, Air Navigation Service Providers, Airports and Aeronautical Infrastructures responsables, ATCs, Pilots, etc, covering the following areas:



~ Training modular courses can be tailored to customer needs, and delivered **in-house**, at client's premises or in any of the two Training Centers located in **Madrid** and **Rio de Janeiro**, and through **E-learning**.





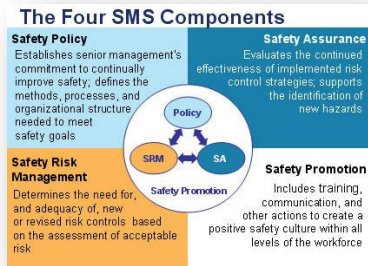


# Air Safety & Security

➤ **Air Safety and Air Security** are two key cornerstones of growing importance in the Aviation industry.

➤ **Navya** has become a **specialist** in providing solutions for a full range of needs arising from new policies and regulations for all European and global industry and the worldwide recommendations derived from the new **ICAO Annex 19**:

- **Safety Management Systems (SMS):** FHA, PSSA, SSA..
- **Risk Management:**
  - ✓ Hazard Identification, Severity and Mitigation
  - ✓ Risk & Safety Objectives Classification Schemes Methodologies (**RCS/SOCS**)
- Technical assistance to accomplish with international and local Safety and Security **regulatory requirements** for:
  - ✓ Airliners, Airports, ANSPs, Aircraft design & production, UAV...
- **Safety cases**
- **Certifications** for ANSPs, Airliners, Aviation Designers/Productors
- **Security, Emergency and Auto-protection Manuals**
- Radioelectric impact: Incidence of obstacles in radio signal emitters/navaids



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# Air Business/Legal Solutions

➤ **Navya** delivers not only technical solutions but *Business, Legal and Strategic* advice on aeronautical areas for the different players and needs of the whole Aviation Industry:

- **Airport Economics**

- ✓ Identification of Opportunities from **Aeronautical/Non Aeronautical activities**
- ✓ **Director Plans/Business Plans**
- ✓ **Strategy & Marketing Plans**
- ✓ **Tenders/Bidding Process** design, development, management and supervision

- **Legal advisory**

- ✓ Processing of documents and **permits for Aviation Authorities**
  - Licenses, permissions, studies, translations, authorizations...
- ✓ **Aeronautical impact analysis** for Permanent and Temporary obstacles
- ✓ Construction and Wind farms permissions
- ✓ **Radioelectric impact analysis** for Telecom/radiosignal emitters
- ✓ Lease/Rent/Concessionary contracts elaboration and supervision



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# Certifications

*Navya extensive experience and know-how permits to offer a complete assistance in a number of complex certification processes existing in the Aviation industry, not only to obtain the initial accreditation/homologation but to preserve and periodically renew them, among others:*

- **ANSPs:** ATC, CNS, AIS, MET designation by **National Aviation Authorities**
- **Air Operators:** **AOC** and **IOSA** Certificates, **EASA Ops**, **Quality auditing...**
- **Airports:** **OACI Airport Certification**
- **Aviation Design&Production:** **DOA** certification
- **Aviation Production:** **POA** certification







# Whom: References

*Navya* has developed hundreds of projects in different areas of the aviation consultancy to many clients, not only in the air industry but also from other segments, delivering the highest levels of quality, reaching the highest standards of customer satisfaction and building narrow and long terms relationships :

**Public Administration:** Air Navigation Service Providers, Public Airports, Regional Governments, City Councils, European Agencies, ...

**Airports:** Public, Private and International Airports, with projects ranging from Concept Design to Business and Strategy Plans, through Airspace management, Flight procedures, Aeronautical impact, obstacle and radioelectric easements and noise abatement studies...

**ANSPs (Air Navigation Service Providers):** Assistance in processes for Air Traffic and CNS services certification and designation

**Air Operators:** Providing technical assistance for Operations Management, Certifications (AOC, IOSA...), Market Research, Air Navigation studies, Due Diligences/financial reports...

**Construction & Utilities:** Operating impact and Aeronautical Safety studies for building companies and renewable energy infrastructures (wind farms), etc

**Consulting, Engineering and Professional Associations ...**





# Public organizations

**Aena**



**SENASA**



**Generalitat  
de Catalunya**



**Gobierno  
de Canarias**



**GOBIERNO  
de  
CANTABRIA**



- *Aena Navegación Aérea*
- *SENASA*
- *Generalitat de Catalunya*
- *Junta de Andalucía*
- *Dirección de Transportes Gobierno de Canarias*
- *Dirección de transportes Gobierno de Cantabria*
- *Diputación de Huelva*
- *Servicio Cántabro de salud*
- *GSA: European GNSS Agency*
- *INCASOL. Institut Català del Sòl*
- *Ayuntamiento Sant Josep de Sa Talaia*
- *Ayuntamiento de Getafe*
- *Ayuntamiento de Paracuellos del Jarama*
- *Ayuntamiento de Telde...*







# Airports



## *Public Airports in Spain*

- ~ Aena Aeropuertos
  - ~ Madrid, Barcelona, Vigo, Asturias, Girona...
  - ~ Majorca, Lanzarote, Fuerteventura, La Palma...
- ~ Aeroports Catalunya
- ~ Dirección de Aeropuertos de Madrid

## *Private Airports in Spain*

- ~ Aeroport Castelló Concesiones Aeroportuarias
- ~ Aeropuerto de Ciudad Real
- ~ Aeroport Seo de Urgell

## *International Airports*

- ~ **EUROPE (Other)**
  - ~ Andorra
- ~ **ASIA**
  - ~ Chennai (India)
  - ~ Trabzon (Turkey)
  - ~ TIA Katmandu (Nepal)
  - ~ Najran Airport (Arabia)
- ~ **AFRICA**
  - ~ Dakkar (Senegal)
  - ~ Morocco Airports





# Air Operators



**Aviation**

**BinterCanarias**



-  **IBERIA**
-  **BINTER CANARIAS**
-  **NAYSA**
-  **TAG AVIATION**
-  ....



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# ANSPs (ATS/CNS)

**Aena**



## *Air Navigations Service Providers*

 *AENA Navegación Aérea*

 *SAERCO*

 Certification as 1st Private ANSP in Spain



## *CNS Providers*

 *INDRA*

 Certification as 1st CNS Provider in Spain



 *SAERCO*





# Consulting & Engineering



SENER



AERTEC



GHESA



CEMOSA



DELOITTE



INTEGRALSA



ITELAZPI



LOUIS BERGER-AIRIA



INDRA



INOCOSA-AECOM



PROINTEC



GRUPO AFIRMA/QUAVIT



MICAEL CONSULTING





# Renewable Energy



- ~ Vestas Eólica
- ~ IBERDROLA Renovables
- ~ COMIOLICA GPS
- ~ GAMESA
- ~ GUASCOR-WIND
- ~ RIVAT WIND
- ~ ABO-WIND
- ~ NORVENTO
- ~ ENHOL Energía
- ~ Parques Eólicos de Treviño







# Infrastructures/Construction



- ACCIONA
- Valenor
- Grupo Jorge
- GRUPO AFIRMA/QUABIT
- EMTE SISTEMAS
- Banco Popular
- ....





# Other organizations



**COPAC**

COLEGIO OFICIAL DE PILOTOS  
DE LA AVIACIÓN COMERCIAL



Asociación Empresarial Eólica



Grupo de Desarrollo Rural  
VALLE DEL GUADALUPE

## *Professional Associations*

- Asociación de Empresarios Eólicos
- COPAC: Colegio de Pilotos de la Aviación Comercial
- Grupo de Desarrollo Rural Valle del Guadalupe
- ...



# *Thank you !*



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