



COMPANY PROFILE

Integra Consult A/S (Integra) is a privately-owned Danish consultancy company more than 30 years of experience providing consultancy services for the aviation and defence industries.



Over the years, Integra has performed consultancy projects in more than 60 countries for all types of aviation organisations, including:

- International organisations
 (EU Commission, EUROCONTROL,
 ICAO, NATO, etc.)
- Air Navigation Service Providers
- Airport operators
- National Authorities and Governments

Integra has in addition worked closely with the major international banks like EBRD, African Development Bank and EIB on projects which they provide financial support to for both the implementation of the project and for post-implementation evaluations.



Integra's business idea is to ensure our customers long-lasting improvements in their productivity. The way in which we do this builds on impartial analyses, innovative project ideas and a professional implementation. Our mission in all the projects we perform is to provide high quality consultancy services that add value to our customers at reasonable cost.





OUR CORE SERVICES



Integra provides consultancy services within the following main areas

Operations & Effectiveness

- Capacity and Cost efficiency
- New operational concepts
- Procedures and airspace design
- Airport operations
- Safety Assessments
- Expert support

Planning & Projects

- Strategic Planning
- CNS/ATM Master Planning
- Project & Programme Management
- Safety ManagementSystems

Infrastructure & Technology

- Technical Solution concepts and strategies
- ATM/CNS systems procurements
- Safety Assessments
- Expert support

Aviation Law& Regulations

- Legal & Regulatory support
- ComplianceManagement



Based on successful completion of several projects, Integra has gained vast experience in securing on-time delivery and strong management of projects in complex environments. All our services are tailored to the individual customer and its specific environment and are based on standard concepts and methods to ensure integrity. These standards are well proven and lead to cost-effective solutions for our clients. Integra's solutions meet the highest international standards regarding applicability and safety.

Our company focuses on basic principles of service provision such as:

- Providing immediate response to customer needs.
- Seeking practical solutions that conform to legislative and regulatory requirements as well as international standards.
- Ensuring the consistency and quality of the services provided.

Integra is committed to long-term relationships with our customers. This close relationship ensures that our company has complete understanding of the situation faced by the customer, thus enabling Integra to provide services that adapt to the local environment.

Our basic principles are that all contracts are based on fixed time and price and that both parties to the contract are in agreement of the expected results of the services. This policy is part of our company's quality assurance system, which is implemented in all our projects. Integra works actively with quality concepts and we constantly strive to improve the quality of our activities, from marketing and selling to completion of the project.





OUR CONSULTANTS

Our key asset is our high-profile consultants, many with a background from an ANSP, national authority, EU or other relevant institutions or defence organisations. Our consultants are experienced aviation consultants with an average of 10+ years of experience in project planning, estimating, cost control, issue and risk mitigation and in managing cross-functional teams on small to large complex projects. All our consultants are trained and specialised in project management processes.



Integra employees are from different countries with various educational backgrounds and expertise.

They are used to work in international environments ensuring easy adaptation to any context. Most ATM/CNS projects require a multidisciplinary project team in order to respond to the several objectives of the projects and perform these projects to a high level of quality.

The profiles of our consultants and those of our associated companies are:

- Technical consultants with experience in the ATM environment and master's degrees in engineering.
- Management consultants with many years of experience in senior positions in the ATM and aviation industry.
- Operational consultants who are licensed air traffic controllers/air defence controllers.
- Safety and quality system consultants, some of whom are registered auditors.
- Project consultants who specialise in various disciplines of project monitoring, control and implementation.
 In this area Integra also has consultants with specific knowledge of different procurement rules (i.e. EU and EBRD).





Technical ability, precision, professionalism and team orientation are values Integra appreciate.

We also welcome human qualities like enthusiasm, commitment and innovative thinking.

When putting a team together, we make an effort to compose it of consultants with different educational and cultural backgrounds and of different ages.





EXPERIENCE WITH AIRPORTS

Integra covers the full range of services required in connection with the airside development of an airport. The services cover all the phases from the initial planning to the operation of the airport.



Our competencies include assistance in relation to all planning aspects such as strategic planning, master plans, business plans, feasibility studies etc. As part of these plans we provide recommendations and detailed plans for the infrastructure needed to make full use of the established potential. Such recommendations and plans include airport layout, air and landside facilities, terminals, runways, technical equipment, commercial facilities, investment plans, time schedules, financial issues and risk analyses.

Furthermore, we provide expert advice on safety management systems, security, operational issues, Airport Collaborative Decision Making (A-CDM) and environmental issues. Our previous assignments range from Greenfield airports to development of smaller regional or former military airports into profitable business units, including possible advice on PPP, BOT, etc.

Integra is often used in connection with assessing possibilities for airport capacity improvements (airside) often where such improvements also need to involve the ATS providers at the airport, which often is a separate company. With the details knowledge of airport operations and ATS provision, including the associated technical systems, Integra is ideally suited to foster a cooperative approach between Stakeholders to ensure a consolidated and agreed plan for the airport development.



Our recent projects cover:

 The assessment of the capacity improvements at NAIA required to reach the airport throughput in terms of passengers required by a potential concessionaire.

Integra addressed the airside capacity area (RWY and TWY) and capacity of airspace and ATS service provision, A-CMD and the associated technical concepts for future ATM/CNS system support. Besides providing the potential Concessionaire experts in operations, technical solutions, etc. coordinated such improvements both the Air Navigation Service, the construction companies addressing airport infrastructure, airlines, etc. Further information in this project is provided in the attached.

 Support to Copenhagen Airport is respect to the introduction routing and planning of surface movements, airport safety nets, departure management and Airport Operation Plan (AOP/NOP integration).

Copenhagen Airport has been a long-lasting Client of Integra and Integra has assisted the airport during many of their key CNS/ATM projects, including implementation of A-SMGCS level 1 and 2, now to be expanded to further levels.



Our recent projects cover:

- Operational and human factor support to projects under the SESAR programme for research and development of operational improvements related to:
 - Enhanced Arrivals and Departures
 - Integrated Surface Management
 - Airport Safety Nets
 - Integrated Airport Operations

 Support to FINAVIA, where Integra assisted in analysing the future issues from an airport perspective when separation Finnish airports, namely Helsinki airport from the ATS service provision.

Such work included how the design the cooperation between FINAVIA and ANS of Finland and the regulatory support needed for such arrangement.

Further information in this project is provided in the attached.





EXPERIENCE WITH ATM/CNS

Integra has been supporting both ANS providers and airports in the specification, design, procurement and implementation of CNS/ATM equipment and systems in many occasions and ATM/CNS systems have been one of Integra core competences throughout to 30 years of existence.



One traditional project is for systems procurement, where Integra assists air navigation service providers and airports in developing Master Plans, tender specifications for CNS/ATM systems and infrastructure to be procured and subsequently supporting the organisation during the tendering process (pre-qualification and tendering), including the evaluation and recommendations for contract award, system implementation and commissioning.

Other traditional area of work relates to the introduction of new operational concepts with the related changes to the ATM/CNS systems. Support cover both provision of operational and technical experts to support the client, acting as project/programme managers, performing safety assessments and developing safety cases, assessing training needs and developing training plans and syllabus' for requalification / refreshment training of air traffic controllers, etc.



Brunei,

where Integra assisted the ANSP/CAA in development of a ATM/CNS Master Plan, the procurement of a complete set of ATM/CNS systems through international competitive tender and assisted in the implementation and commissioning of the systems.

Dubai,

where Integra assisted the relevant ministry and ANSP in developing operational and technical specifications for new ATM systems for Dubai and Al Maktoum International Airports, including associated systems for APP, Remote Tower and fallback ACC.

• FAB CE,

where Integra provides operational and safety experts to support the implementation of FAB CE projects (FRA, FUA, etc.), technical rationalization (e.g. centralised surveillance services), harmonisation of ATCO licensing and ATSEP certification, etc. Integra is providing expert support to the FAB implementation programme in operational, technical and programme management.

Further information in this projects is provided in the attached.





EXPERIENCEWITH AIRSPACE CAPACITY



Integra expertise in Airspace Capacity related areas stems partly from the many projects performed by Integra over the year and partly from the operational background of key Integra staff, which prior to their employment in Integra has participated in major airspace design projects for their respective Air Navigation Service Providers and on a European level, for example covering:

Participation in the FIN/SWE
 Cross border military training area implementation airspace design and concept development

 Participation in the EUROCONTROL Route Network Development Sub Group (RNDSG) and Airspace Management Sub Group (ASMSG) and ICAO Route Development Group East (RDGE) NEFAB Airspace Design Group Leader, NEFAB Operational Concept Development



Performance Review Body,

where Integra provides the lead expert on capacity for the support to the PRB. In close cooperation with the Commission, the Performance Review Unit and the Network Manager Integra performs monitoring of the performance of the Air Navigation Service providers in terms of planned and achieved capacity, assessing the reasons for any deviation from defined targets and provide recommendations for improvements to be implemented. Integra also supports the PRB in the review and assessment of the Performance Plans under establishment for RP3, again closely in cooperation with the Network Manager in respect to the assessment of the effectiveness of measures proposed by ANSPs to achieve capacity targets from 2020 through to 2024. This involves assessing potential effect of multiple measures like staffing, infrastructure development, airspace redesign, operational improvements

Functional Airspace Block, Central Europe (FAB CE)

where Integra has provided the operational support for common projects in the FAB, for airspace aspects in areas like Free Route Airspace, Advance Flexible Use of Airspace, flexible cross-border airspace delegation, etc.



Network Manager (EUROCONTROL),

which Integra has supported for many years related to introduction of changes to their Network Services (flight planning, flow and capacity management, etc.) and introduction of new demand and capacity balancing concepts. Integra has supported the Network Manager for safety assessments of all new services and has supported the Network Manager in the Cost-Benefits Analysis on the new concepts like Short-Term ATFCM measures, Dynamic Demand and Capacity Balancing, Modelling weather impact on network flows.

NAIA (as referred above),

where Integra similar to this project, was responsible to assess and define improvements to the ATS provision in order to support the level of operations required for the airport expansion plans. This involved assessment of the capacity related mainly to the approach and departure to the airport, but also general capacity for feeding traffic to/from approach/departure sectors and potential redesign of airspace (extending TMA, etc.).



SESAR,

where Integra has been involved as operational, safety and human factor experts in several, core operational and technical improvements, including:

- Enhanced Arrivals and Departures
- Integrated Surface Management
- Airport Safety Nets
- Optimised Airspace Users Operations
- Controller Tools and Team Organization
 for the Provision of Separation in Air Traffic Management
- Controller Working Position / Human Machine Interface
- 4D Trajectory Management and
- Integrated Airport Operations
- Virtualization of ATM systems (ATSP and ADSP separation, dynamic sectorisation, including SWIM components part thereof).

Integra's support covered provision of experts in operational, human factor and operational validation aspect related to the subject areas and the performance of safety assessments following the Safety Reference Material.

Further information in this project is provided in the attached





THANK YOU FOR YOUR ATTENTION.

ANY QUESTIONS?