Basing upon latest regulations (ICAO Annex 14 & Annex 15, ADQ) and in-house expertise (Data4Flight® software, internal R&D), CGX has developed a web platform OES, dedicated to the analysis and assessment of existing and forthcoming obstacles on aeronautical operations. A true collaborative process-based eSpace, OES helps AIS / AIM to identify, mitigate risks, as regards evaluating impact on the air navigation infrastructure, thus enabling safe decision making.

Obstacle Evaluation Solution®
Accurate risk assessment, safe decision making
Obstacle Evaluation Solution

OES (Obstacle Evaluation Solution) aims at providing national AIS / AIM (especially services, in charge of managing the collection, organization and distribution of aeronautical information as well as evaluating the impact of potential changes on the air navigation infrastructure) with a comprehensive yet powerful Web platform allowing to efficiently evaluate, record then exploit obstacles-related information, according to ICAO Annex 15 and its regional specifications (such as EUROCONTROL in Europe).

The advantages of OES

- 24/7 online service
- Compliance to regulatory requirements (ICAO, ADQ)
- Information centralised and shared between different stakeholders
- Customisation of each user profile’s access
- Customer service and operational efficiency
- Safety
- Easily customisation to a specific business workflow that ensures the data traceability all along obstacles’ life cycle.

Go digital, be data-centered

- Implementation of centralised data storage within interoperable databases and formats

Fully traceable workflow-based chain

- Data collection at any step of the workflow, from data origination to assessment report
- Meta data management
- Evidences got on all performed activities: information verification, validation, transmission and distribution

Web platform

- Gets proponents close to AIS decision-makers
- Facilitates the exchanges, avoids information bottlenecks and helps anticipating NOTAM issuance

Interoperability, scalability, customisation

- Implementation of AIXM 5.1 data model
- Use of web service standards WFS, WMS
- REST API interface with third-party systems
- If required, regional aviation authorities’ requirements can be taken into account in land use assessments (like FAA data ingest, already implemented)
- Use of open source middleware Alfresco, Bonita

Data integrity

- Guaranteed by CRC check implementation

Robustness of operations

- Application tested on tens of thousands real obstacles recorded by the customer

Temporality management

- Obstacles can be declared definitive or temporary, and then calculated at any date (future or past)

User roles

- Role-based architecture (proponent, stakeholder, impact assessment authority…, based upon the customer’s workflow), makes decision process structured and offers users a collaborative eSpace

Safety

- Complete traceability of obstacles’ lifecycle – since the creation until the dismantlement
- Building, antennas, cranes, wind turbines… - all obstacles which can be described using geographical points, curves and areas
- Protection of access to airports and flight routes through knowledge of potential impacts from proposed structures

OES is currently undergoing validation for its first operational use, scheduled for June 2016, by the NAV CANADA Aeronautical Information Management (AIM) group. NAV CANADA is Canada’s private sector civil air navigation services provider.

Speak with a product specialist