

## Enabling ICAO ASBU strategy

Upgrade your system hand in hand with the entire world creating the future global air navigation





#### Indra Avitech solutions for your ASBU implementation

The steps forward set by the ASBU methodology imply a transition to new technologies and new navigation and operational concepts. All these upgrades are data driven operations. Indra Avitech Solutions address exactly the most critical and important core of the strategy: diligent management of the data. We supply top performing systems that allow you to securely store, manage and share information when and where it is required on a system- wide basis, with data being personalized, filtered and accessed as needed. Given such a strong basis, data can then be tailored to fulfil a more precise scope, from map generation and procedure design to other complex systems that allow enhanced situational awareness, systems interoperability and flexible use of airspace. In alignment with ASBU Block 0 and 1, Indra Avitech has already developed and implemented solutions with the latest digital processing and information management in many parts of the world. Our solutions smooth the transition from AIS to AIM by using latest data exchange models such as AIXM for aeronautical information, WXXM for meteorological information and FIXM for flight- and flow information and utilizing Internet protocols in a fully compliant SWIM solution – all essential elements for global interoperability.

For our worldwide references please refer to <u>www.indra-avitech.aero/our-expertise/</u><u>our-references</u>



We are fully conformant to ICAO ASBU Block O, aligned with Block 1 and paving the way to Blocks 2 & 3



### Going global together

ICAO's Aviation System Block Upgrades long-term vision brings together States and stakeholders from every corner of the aviation community to develop a global solution and to provide stateof-the-art 21th century air navigation. The common target is a fully-harmonized global system built on modern performance-based procedures and technologies, capable of sustaining increased capacity and improved environmental efficiency by binding safety improvements and air navigation modernization. ASBU methodology is designed to be flexible and adaptive to each State, so that each can advance its air navigation capacities based on its specific operational requirements.

# We develop solutions aligned with ASBU strategy for every performance improvement areas to achieve the safe, efficient and modern aviation of tomorrow.

### Block 0 2013 - 2018

|         | Airport Operations   | AIM | ATM | MET | MHS | SWIM |
|---------|--|-----|-----|-----|-----|------|
| BO-APTA | Optimization of Approach Procedures including vertical guidance    | •   | •   |     |     |      |
| BO-SURF | Safety and Efficiency of Surface<br>Operations (A-SMGCS Level 1-2) | •   |     |     |     |      |
| BO-ACDM | Improved Airport Operations through<br>Airport-CDM                 | •   | •   | •   | •   | •    |

| Globally In | teroperable Systems and Data   | AIM | ATM | MET | MHS | SWIM |
|-------------|--|-----|-----|-----|-----|------|
| BO-FICE     | Increased Interoperability, Efficiency<br>and Capacity through Ground-Ground-<br>Integration |     | •   |     |     | •    |
| BO-DAIM     | Service Improvement through Digital<br>Aeronautical Information Management                   | •   |     |     |     |      |
| BO-AMET     | Meteorological information supporting enhanced operational efficiency and safety             |     | •   | •   |     |      |

| Eft    | ficient Flight Paths  | AIM | ATM | MET | MHS | SWIM |
|--------|---|-----|-----|-----|-----|------|
| BO-CDO | Improved Flexibility and Efficiency in<br>Descent Profiles (CDOs)                                   | •   | •   |     |     |      |
| BO-CCO | Improved Flexibility and Efficiency in<br>Departure Profiles - Continuous Climb<br>Operations CCOs) | •   | •   |     |     |      |

### Block 1 2019 - 2024

| Airport Operations |  | AIM | ATM | MET | MHS | SWIM |
|--------------------|--|-----|-----|-----|-----|------|
| B1-APTA            | Optimized Airport accesibility   | •   | •   |     |     |      |
| B1-SURF            | Enhanced Safety and Efficiency of<br>Surface Operations - SURF, SURF IA and<br>Enhanced Vision Systems (EVS) | •   |     |     |     |      |
| B1-ACDM            | Optimized Airport Operations through<br>Airport-CDM  |     | •   | •   | •   | •    |
| B1-RATS            | Remotely Operated Aerodrome Control  |     | •   |     |     |      |

| Globally Int | teroperable Systems and Data  | AIM | ATM | MET | MHS | SWIM |
|--------------|---|-----|-----|-----|-----|------|
| B1-FICE      | Increased Interoperability, Efficiency<br>and Capacity through FF-ICE, Step 1<br>application before Departure       |     |     |     |     | •    |
| B1-DAIM      | Service Improvement through Integration of all Digital ATM Information  |     |     |     |     |      |
| B1-SWIM      | Performance Improvement through the application of System Wide Information Management (SWIM)                        |     |     |     |     | •    |
| B1-AMET      | Enhanced Operational Decisions through<br>Integrated Meteorological Information<br>(Planning and Near-Term Service) |     |     | •   |     | •    |

| E       | fficient Flight Paths   | AIM | ATM | MET | MHS | SWIM |
|---------|---|-----|-----|-----|-----|------|
| B1-CDO  | Improved Flexibility and Efficiency in<br>Descent Profiles (CDOs) using VNAV                      | •   | •   |     |     |      |
| B1-RPAS | Initial Integration of Remotely<br>Piloted Aircraft (RPA) Systems into<br>non-segregated airspace | •   | •   | •   |     | •    |

Creating skies together

We guarantee the right Aeronautical Information at the right time

indra-avitech.aero

Indra Avitech GmbH Central Office Bahnhofplatz 3 88045 Friedrichshafen, Germany Email: <u>marketing@indra-avitech.aero</u> Phone: +49 (0) 7541 282-0 Fax: +49 (0) 7541 282-199 Offices in: Langen & Bratislava Indra Avitech reserves the right to modify these specifications without <u>prior notice.</u>

