ASBU and Implementation
Challenge

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ASBU IMPLEMENTATION

ASBU industry consideration

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Relationship between what is preconized in ASBU 0 and what is implemented at Atech ATM/ATFM systems

In addition, since that ASBU 1 is up to debut, in 2018, present some upcoming features at Atech ATM/ATFM systems
ATECH ATM/ATFM PRODUCTS

Air Traffic Management
powered by SAGITARIO system
ATECH ATM/ATFM PRODUCTS

Air Traffic Flow Management

powered by SIGMA system

powered by SKYFLOW system
ATECH ATM/ATFM PRODUCTS

Training & Simulation Platform for Air Traffic Control

powered by PLATAO system
ATECH ATM/ATFM PRODUCTS

Aerodrome Flight Information System

powered by COSMOS system
ATECH ATM/ATFM SYSTEMS DISTRIBUTION

ACC-AZ
ACC-RE
ACC-AQ
ACC-BS
ACC-CW

ATFM-RJ
ATFM-SJ

ATM : SAGITARIO
ATFM : SIGMA
TRAIN./SIMU. : PLATAO
Globally Interoperable Systems and Data

B0-25: Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration

AIDC and OLDI are available in SAGITARIO for inter-center and intra-center coordination. “Silent coordination” benefits air traffic controller from automatic and seamless coordination with adjacent FIRs as well as between positions at Air Traffic Control Centers.
Globally Interoperable Systems and Data

B0-30: Service Improvement through Digital Aeronautical Information Management

As a component of SAGITARIO, SIGMA and COSMOS system, Atech has developed a integration with AIM databases, capable of managing all aeronautical information based on **AIXM 5.1 standard**.
SAGITARIO has been integrated to a **CSWS (Convective Severe Weather System)**. Air traffic controllers and planners can have meteorological situation awareness to plan trajectories - in a pre-tactical context, as well as for handling trajectories - in a tactical context.
In order to handle tactical context, next version of SAGITARIO – to be deployed in 2018 – will have full access to available meteorological information, based on standard protocols (GRIB, WXXM).
Globally Interoperable Systems and Data

B1-25: Increased Interoperability, Efficiency and Capacity though FF-ICE, Step 1 Application before Departure
B1-30: Service Improvement through Integration of all Digital ATM Information
B1-31: Performance Improvement through the application of System-Wide Information Management (SWIM)

Attech and DECEA has participated in SWIM trials, such as Mini Global II (FAA) and SWIM Global Demonstration (SESAR). These experiences guided both DECEA and ATECH to plan the DECEA SWIM Platform.
In 2015, DECEA has signed an agreement with EUROCONTROL, which encompasses exchanging of flight plan information before departure. In 2017, Atech started to implement and deploy, in phases, the **DECEA SWIM Platform**

**Globally Interoperable Systems and Data**

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Airport Operations

B0-15: Improved Runway Traffic Flow through Runway Sequencing (AMAN/DMAN)

SAGITARIO system is integrated to **AMAN system**, providing complete integration among ACC, APP and TWR.
Airport Operations

**B0-20: Improved Flexibility and Efficiency in Departure Profiles - Continuous Climb Operations (CCO)**

SAGITARIO provides to ATC planner and air traffic controller all the information related to **PBN**, obtained from flight plan.
B1-80: Optimized Airport Operations through Airport-CDM Total Airport Management

The SWIM Platform, as explained previously, will be the enabler for a full A-CDM management, foresee to 2022. Before that, currently, DECEA is allowing airports operator to receive a remote display from SAGITARIO in its AOCC.
COSMOS is a dedicated solution for remotely operated airports. The system is connected to radar network and AFTN, receiving tracks and flight plans. In addition, it can be connected to the surveillance cameras of the airport. It has been tested in Amazonic Center (ACC-AZ).
DECEA has consistently invested resources in **SIGMA system**, which has brought excellent outcomes, **reducing delays and optimizing the airspace**.
SAGITARIO has incorporated a multi sensor tracking engine, capable of fusing information from radars, ADS-B antennas and MLAT/WAM antennas, providing the best and accurate information to air traffic controller.
B0-102: Increased Effectiveness of Ground-Based Safety Nets
B1-102: Ground-based Safety Nets on Approach

SAGITARIO is incorporating all the **Safety Net alerts**, as recommended by EUROCONTROL, such as: STCA, MSAW, AIW, etc.
Efficient Flight Path

**B0-40: Improved Safety and Efficiency through the initial application of Data Link En-Route**

SAGITARIO has full **ADS-C and CPDLC** capabilities, allowing full air traffic service for oceanic flights.
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