ITU Regional Development Forum for Africa (RDF-AFR)

**'Digital transformation for a sustainable and equitable digital future:
Accelerating the implementation of the SDGs in Africa"**

organized by the International Telecommunication Union in collaboration with the
Ministry of Innovation and Technology, Ethiopia

3-5 October 2023
Addis Ababa, Ethiopia

Please note that submitted information will be presented during the RDF-AFR P2C Roundtables and
it will also be reflected on the pledging platform of the Partner2Connect Digital Coalition.

CONTRIBUTION FORM

ORGANIZATION: ASECNA

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TITLE: : Initiatives de l'ASECNA en matière de transformation digitale pour la navigation aérienne
en Afrique / ASECNA's digital transformation initiatives for air navigation in Africa

DESCRIPTION OF ACTION:

Air traffic management is increasingly based on space technologies and digital data exchange,
gradually leading to the dismantling of conventional facilities scattered throughout the ground on
the continent. Digitalization, virtualization of production sites and artificial intelligence in general
are gradually integrating the heart of air traffic management activities. It is in this context of digital
transformation that ASECNA has set up innovative projects in line with its desire to work towards a
Single African Sky, in line with the AU's Agenda 2063, and in view of SATMA's role as a catalyst
entrusted to ASECNA, the most important of which are:

1. The deployment of ADS-B satellite technology whose operational implementation in control
   centres took place since January 2020 for the guidance of en route and approaching aircraft in
   terminal regions, combined with digital data links in addition to voice, for dialogue between
   pilots and air traffic controllers.
   The possibilities offered by this technology make it possible to deploy other value-added
   solutions such as:
   - The creation of airspace without roads or with a rationalized route network (FRA);
   - Reducing minimum separations of aircraft en route, in remote continental airspace and in
     our oceanic airspace (ASEPS);
   - The implementation of traffic flow management (ATFM);
2. Implementation of an SBAS satellite navigation system deployed by Africa for Africa and
   recognized by ICAO called ANGA which provides a continental reinforcement system, in
   accordance with the African Union space policy (navigation and positioning). This system
   integrates several types of services:
   - Open service (OS) for non-security critical applications.
   - Safety of Life (SoL) service for users for whom safety is essential, for aviation and in this area
     the expected benefits include the reduction of accident risks, the reduction of flight times
     and therefore fuel consumption, the protection of the environment by reducing the carbon
     footprint.
   - ANGA Data Access Service (ADAS) for users or service providers connected to a system
     data server for non-aviation applications (maritime, security, geolocation, etc.)

COUNTRIES in FOCUS:

Currently: Benin - Burkina - Cameroon - Central African Republic - Comoros - Congo - Ivory Coast - Gabon - Guinea Bissau- Equatorial Guinea - Madagascar - Mali - Mauritania - Niger - Rwanda- Senegal - Chad - Togo.

The system is planned to be deployed across the 54 countries of African continent.

YEARS of IMPLEMENTATION:

ADS-B satellite digital technology ☒ 2020

SBAS ☒ 2020 Trial service

☒ 2025 Operational commissioning of signal L1

RELEVANT ITU REGIONAL INITIATIVE:

☐ AFR1: Supporting digital transformation to usher in a rapid transition to a digital economy while accelerating innovation in Africa

☐ AFR2: Implementation and expansion of broadband infrastructures, connectivity and emerging technologies

☒ AFR3: Building trust, safety and security in the use of telecommunications/ICTs and protection of personal data

☒ AFR4: Fostering emerging technologies and innovation ecosystems

Please find more information on the ITU Regional Initiatives 2023-2025, as defined by WTDC-22, here.

RELATED ITU-D PRIORITIES AS DEFINED BY THE ITU WORLD TELECOMMUNICATION DEVELOPMENT CONFERENCE 2022

☐ Affordable connectivity

☒ Digital transformation

☒ Enabling policy and regulatory environment

☒ Resource mobilization and international cooperation

☒ Inclusive and secure telecommunications/ICTs for sustainable development

Please find more information on the ITU-D Priorities, as defined by WTDC-22, here.

RELATED ITU PRIORITIES AS DEFINED BY ITU PLENIPOTENTIARY CONFERENCE 2022

☒ Spectrum use for space and terrestrial services

☐ International telecommunication numbering resources

☒ Inclusive and secure telecommunication/ICT infrastructure and services

☒ Digital applications

☒ Enabling environment

Please find more information on the ITU Priorities, as defined by PP-22, here

RELATED WSIS ACTION LINE: [Tick the relevant boxes or delete the irrelevant items]

☐ C1: The role of governments and all stakeholders in the promotion of ICTs for development

☒ C2: Information and communication infrastructure

☐ C3: Access to information and knowledge

☒ C4: Capacity building

☒ C5: Building confidence and security in the use of ICTs

☐ C6: Enabling environment

☐ C7: ICT applications

☐ C8: Cultural diversity and identity, linguistic diversity and local content

☐ C9: Media

☐ C10: Ethical dimensions the Information Society

☐ C11: International and regional cooperation

RELATED SDG: [Tick the relevant boxes or delete the irrelevant items]

☐ SDG 1: No Poverty

☐ SDG 2: Zero Hunger

☐ SDG 3: Good Health and Well- being

☐ SDG 4: Quality Education

☐ SDG 5: Gender Equality

☐ SDG 6: Clean Water and Sanitation

☐ SDG 7: Affordable and Clean Energy

☐ SDG 8: Decent Work and Economic Growth

☒ SDG 9: Industry, Innovation and Infrastructure

☒ SDG 10: Reduced Inequalities

☐ SDG 11: Sustainable Cities and Communities

☐ SDG 12: Responsible Consumption and Production

☐ SDG 13: Climate Action

☐ SDG 14: Life Below Water

☐ SDG 15: Life on Land

☐ SDG 16: Peace, Justice and Strong Institutions

☒ SDG 17: Partnerships for the SDGs