ITU REGIONAL WORKSHOP Role of Telecommunications/ICT in disaster management for the Central African Region

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ASECNA

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SINCE 1959

17 AFRICAN MEMBER STATES & FRANCE

- 16,000,000 km²
- 5 Flight information Regions
- Headquarter in Dakar
- 17 Offices in Africa
- 2 Offices in Paris and Montreal (ICAO)
Air Navigation Safety
Service Provider

ATC
- CNS
- ATM
- MET
- WARNING

FIS

Navigation
Météo
Navigation
AERONAUTICAL MOBILE SERVICE (AMS)

- HF Vocal COMMUNICATIONS
- VHF VOCAL COMMUNICATIONS
- Controller Pilot Data Link Communications (CPDLC)
AERONAUTICAL FIXED SERVICES (AFS)

- AFTN
- GTS: MET
- ATS/DS
- Remote control & Remote Maintenance
- Navigation & Surveillance Datas Transmission (GNSS & ADS)
Regional Meteorological Telecommunication Network for Region I (Africa)

point-to-point circuits implementation (transmission speed in kbit/s)

RTH, CRT
NMC, CMN
Centre in other region
MTN circuit, circuit RPT
Regional circuit
Interregional circuit
NI Not implemented
NO Not operational
AFISNET to SUPPORT Satellite Based Augmentation System (SBAS) for GNSS

- Installation of Four (04) Rims in LOME (Togo), Douala (Cameroun), Brazzaville (Congo), N’Djamena (Tchad)
- Statistical and dynamical trials with ASECNA ATR 42 flycheck aircraft
- Data transmission by AFISNET from each site to Toulouse and using a leased line between Toulouse and Honefoss
AFISNET TO SUPPORT GNSS Trials

Douala: RIMS and VSAT
Brazzaville: RIMS and VSAT
Lomé: RIMS and VSAT
N’Djaména: RIMS and VSAT
Brazzaville: RIMS and VSAT

INTELSAT
INMARSAT

AFISNET

GPS signals
RIMS data to CPF
EGNOS navigation Message (integrity and corrections)

Thales Router
Honefoss (NORVEGE)
Toulouse

Ranging +GES ESTB CPF

AFISNET TO SUPPORT GNSS Trials
Hub Stations in ASECNA

- 2 INTELSAT B STANDARD STATION
  - DAKAR
  - ANTANARIVO

- 3 INTELSAT F2 STANDARD STATIONS
  - NIMEY
  - BRAZZAVILLE
  - NDJAMENA
Exemple of ASECNA VSAT

- Digital Technology
- Antenna diameter from 3m30 to 4m60
- Solar cells power supply
- Installation by internal teams
Thank you