



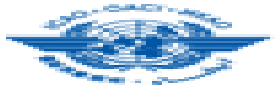
ICAO

UNITING AVIATION

**Workshop on the Mitigation of Loss of Operational
Messages (Flight Plans, NOTAMs, OPMETs)
(Dakar, Senegal, 12 -14 May 2014)**

**Flight Plans, NOTAMs, OPMETs
messages for ANS provision**

**Presented by FX SALAMBANGA Regional Officer,
CNS WACAF**



OUTLINE

I – Definitions

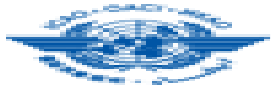
II –Operational purposes

III –Operational requirements

IV – Messages Exchanges principles

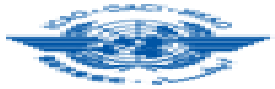
**V– Impact of loss of messages on ANS
provision**

VI – Conclusions



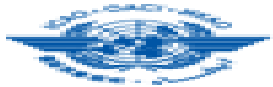
DEFINITIONS

- **Flight Plan:** **Specified information** provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft
- **NOTAM:** A **notice** distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations
- **OPMET** (*Operational meteorological*) : Information bulletin on METAR/SPECI, TAF, SIGMET, AIREPs, Volcanic Ash Advisory, Tropical, Cyclone Advisory
- **Operational Messages** to be pushed in or popped out through a suitable Network (AFTN/AMHS)



Operational purposes

- **FLPs Enable ATC to plan operation based on the expectations on aircraft COM/NAV/SUR capabilities and intention;**
- **NOTAMs enable Aircraft to be aware in advance of service availability/limitation, potential hazards, new procedures**
- **OPMETs bulletins increase aircraft awareness of weather conditions and enable a safer navigation in given weather conditions.**



Operational purposes: Example of Flight Planning Requirements for ADS-B carriage

SSR Mode S descriptors in the flight plan include 2 options for indication of an extended squitter (ADS-B) capability:

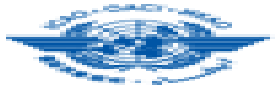
- **E** Transponder — Mode S, including aircraft identification, pressure-altitude and ADS-B out Capability
- **L** Transponder — Mode S, including aircraft identification, pressure-altitude, ADS-B out and enhanced surveillance capability

ADS-B descriptors in the flight plan include 6 options for ADS-B capability:

- **B1** ADS-B “out” capability using 1 090MHz extended squitter.
- **B2** ADS-B “out” and “in” capability using 1 090MHz extended squitter.
- **U1** ADS-B “out” capability using UAT
- **U2** ADS-B “out” and “in” capability using UAT
- **V1** ADS-B “out” capability using VDL Mode 4
- **V2** ADS-B “out” and “in” capability using VDL Mode 4

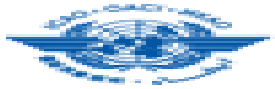
The North Atlantic (NAT) region has clarified flight planning requirements for ADS-B.

NAT 2.1.15.1 All ADS-B approved aircraft intending to operate in the NAT Region shall insert either the B1 or B2 descriptor as appropriate in Item 10b of the flight plan.



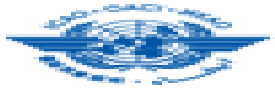
Operational Requirements

- **Availability** (FLPS; NOTAMs OPMETs)
- **Reliability;**
- **Accuracy;**
- **Time constraints;**
- **Interoperability/Interconnection**



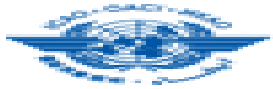
Messages Exchanges Principles

- AFTN principles and procedures
- FLPs, NOTAMs, OPMETs
Principles & Procedures
- Supporting Docs. (Annex 10 Volumes 1, 2 & 3, Annex 3 Doc 8259 Annex 11, Doc 4444)
- Interconnection/interoperation



Impact of loss of messages on ANS Provision

- **Safety**
- **Efficiency**
- **Capacity**
- **Environment**



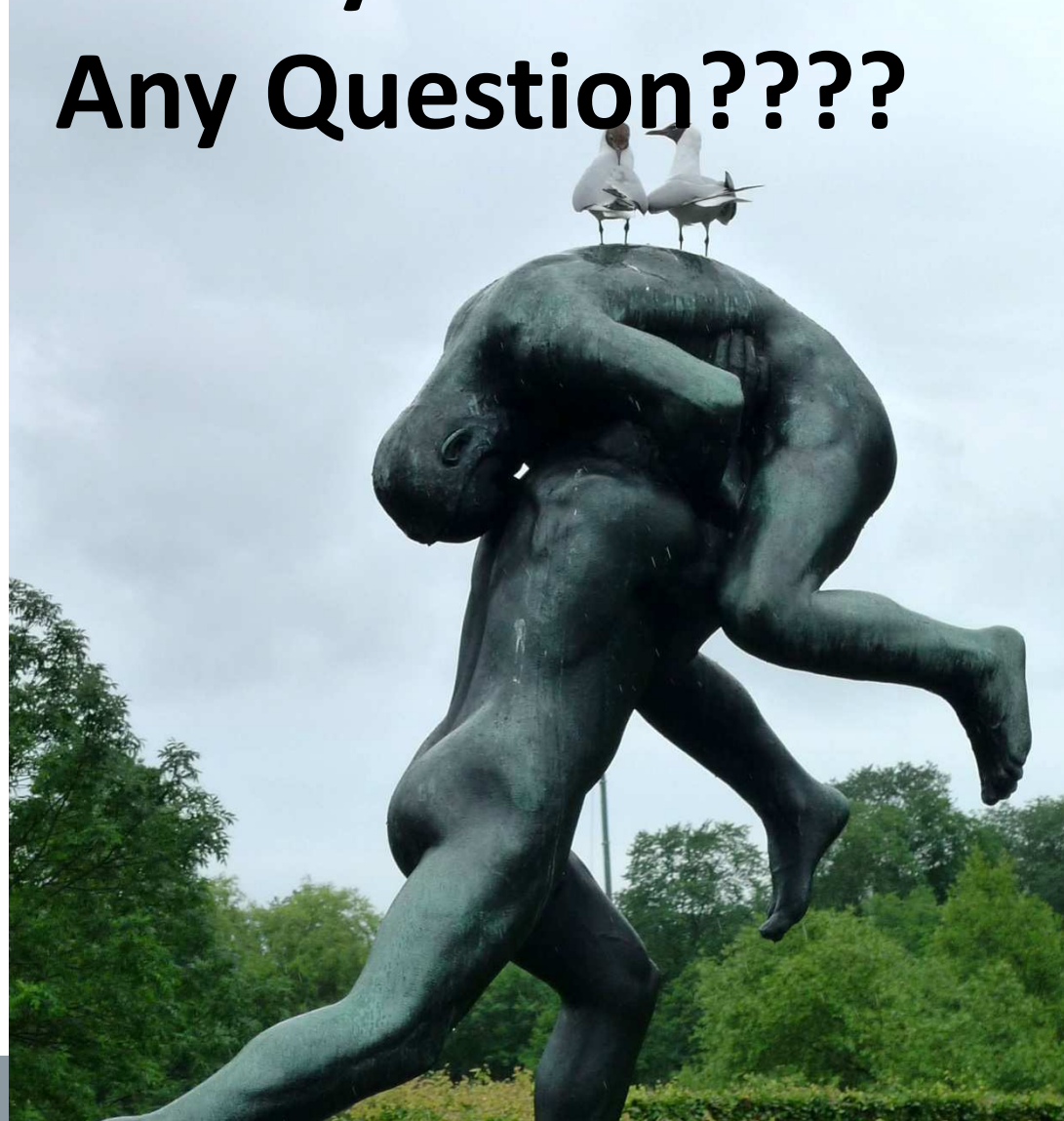
Conclusions

- **Definitions**
- **Operational purposes**
- **Operational requirements**
- **Messages Exchanges principles**
- **Impact of loss of messages on ANS provision**



Thank you for your Kind attention !

Any Question????



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Uniting Aviation on

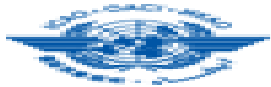
Safety | Security | Environment





Standard types of FLPfield

<i>Field type</i>	<i>Data</i>
3	Message type, number and reference data
5	Description of emergency
7	Aircraft identification and SSR Mode and Code
8	Flight rules and type of flight
9	Number and type of aircraft and wake turbulence category
10	Equipment and capabilities



Standard types of FLPfield

<i>Field type</i>	<i>Data</i>
13	Departure aerodrome and time
14	Estimate data
15	Route
16	Destination aerodrome and total estimated elapsed time destination alternate aerodrome(s)
17	Arrival aerodrome and time
18	Other information
19	Supplementary information
20	Alerting search and rescue information
21	Radio failure information
22	Amendment