Global Operational Data Link Document (GOLD)

Implementation and Amendments

Federal Aviation Administration

AFI CNS SG /4, Dakar, Senegal, 25-29 July 2011

Presented by the Secretariat

GOLD

Overview

- **Status**

- **About the GOLD**

- **Implementation considerations**

- **Candidate proposals for amendments**

- **Follow-on activity**

- **Summary**

GOLD status

- **14 June 2010 – GOLD, First Edition, issued**

- **25 June 2010 – North Atlantic (NAT) SPG/46 adopts GOLD**

- **28 June 2010 – State letter from ICAO Asia-Pacific Regional Director adopts GOLD**

  - recalled that APANPIRG/20 (September 2009) concluded to adopt the GOLD upon its release

  - requested administrations "to promulgate GOLD to ADS/CPDLC system users including aircraft operators and air navigation service providers for them to make full use of the document"

GOLD status (continued)

- **All subordinate ATS coordinating groups (formal and informal) in NAT and the Asia-Pacific Regions have adopted the GOLD**

- **18 May 2010 – South Atlantic FIT supports GOLD**

- **GOLD supersedes**

  - FANS 1/A Operations Manual (FOM)

  - Guidance Material for ATS Data Link Services in North Atlantic Airspace (NAT Data Link GM)
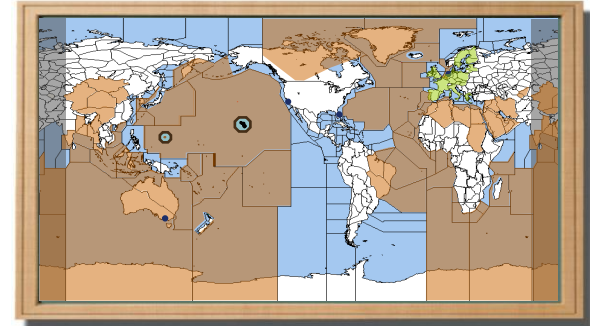
GOLD status (continued)

- **25 Nov 2010 – European Air Navigation Planning Group (EANPG) mandated the Programme Coordination Group (COG) to**

  - Address the practical aspects of harmonization of the LINK2000+ Operational Guidance and GOLD documents

  - Establish a mechanism to advance this work

  - Report to EANPG/53 (Nov 2011)

GOLD – benefits

- **It is being accepted WORLDWIDE**

- **It provides cost-effective and practical solutions to advance safety, improve efficiency, and save the environment**

  – Harmonizes implementation for seamless operations

  – Provides guidance material to facilitate implementation

  – Contributes to safe application of reduced separations

  – Provides a baseline for next generation data link (NextGen)

- **It has buy-in from those who plan for, implement, provide and use data link services daily**

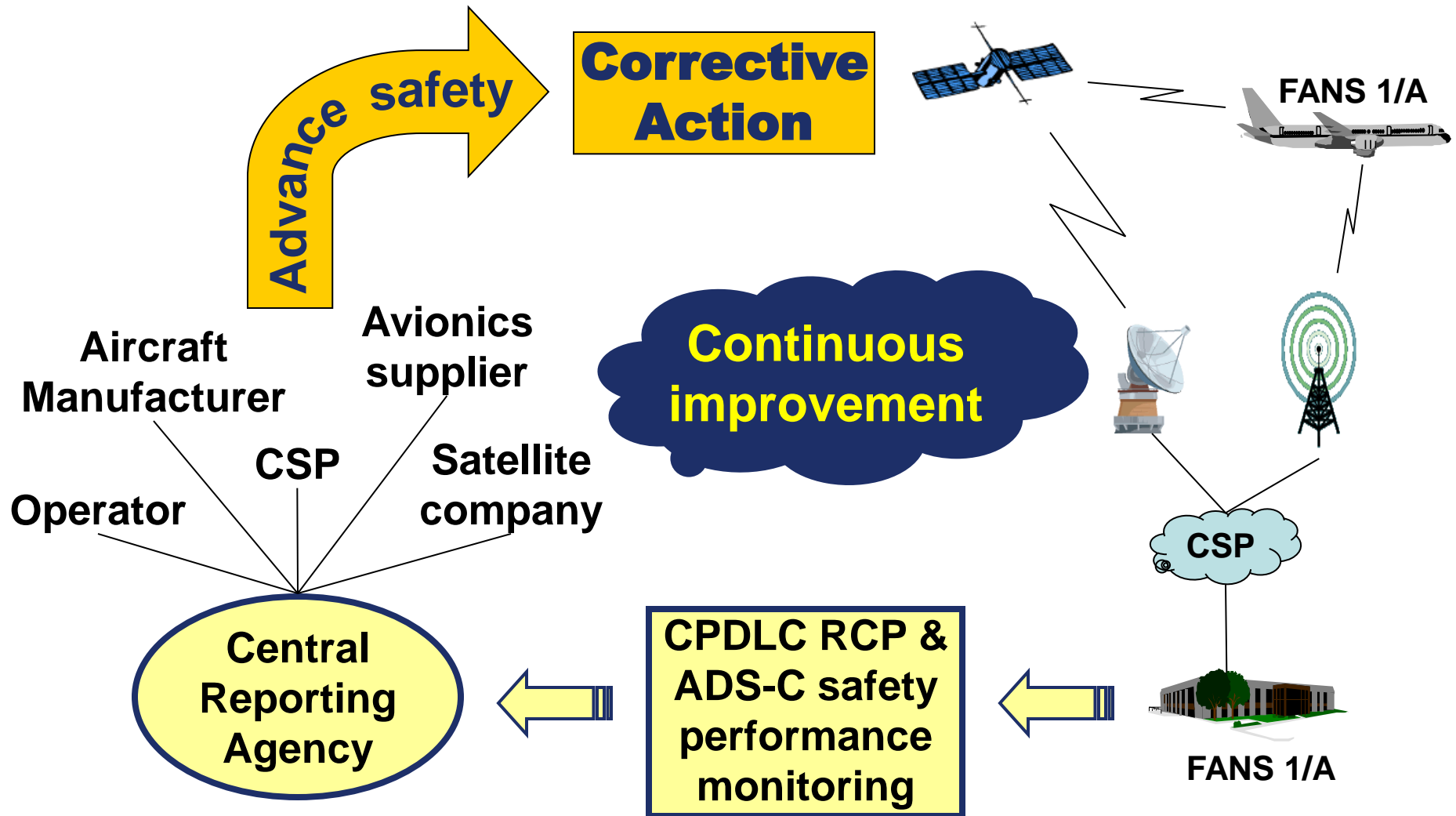 – They are using it! They want to use it!

GOLD contents – guidance material

- **Service provision**

- **Operator preparation and aircraft equipage**

- **Controller and flight crew procedures**

- **RCP and surveillance performance specifications**

- **Post-implementation monitoring and corrective action**

Post-implementation monitoring

Advance safety

Corrective Action

Continuous improvement

Aircraft Manufacturer

Avionics supplier

CSP

Operator

Satellite company

FANS 1/A

CSP

Central Reporting Agency

CPDLC RCP & ADS-C safety performance monitoring

FANS 1/A

GOLD implementation considerations

- **Examples**
  - Specific ANSP registration procedures for aircraft operators
  - Operational authorizations to use data link
  - Awareness of GOLD procedures
  - Proposals for Amendments to Regional Supplementary Procedures (SUPPs) and aeronautical charts
  - Post-implementation monitoring and corrective action
  - Position reporting requirements and ADS contract management
  - Items specific to any airspace user or Region

Candidates for GOLD amendments

- **Procedures**
    - Report severe and moderate turbulence (JCAB)
    - ADS-B in trail procedures (ITP) (Airbus, SC214/WG78)
    - ADS-C climb/descent procedures (CDP) (GOLD Editor)
    - Reroutes (NAT)
    - ADS-C out-of-conformance inquiries and instructions (NAT)
    - Revised estimated time of arrival (ETA) (Delta)
    - CPDLC use in airspace with VHF coverage (Delta)
    - Oceanic clearance (NAT, Portugal)
    - Departure clearance & other ACARS applications (AEEC DLUF)

Candidates for GOLD amendments

- **Post-implementation monitoring**

  - Clarify analysis of outages, notifications, and missing ADS-C reports (U.S., New Zealand)

- **Region specific**

  - Include focal points for CTA/FIR (Nav Canada)

  - AIDC capability (Operators)

  - DARP (Operators)

  - Add new CTA/FIRs as Regions become participants (GOLD Editor)

- **Expansion**

  - African-Indian Ocean (AFI) and South American (SAM) Regions (SAT/FIT)

  - European (EUR) Region (Maastricht UAC)

Follow-on activity

- **GOLD/3 - Ad Hoc Working Group agreed to assist Regions in managing amendments to the GOLD after its release**

- **Follow-on work**

  - Solicit proposals for amendments to the GOLD

  - Coordinate proposed amendments across the regions

  - Provide interpretation and further clarification to GOLD guidelines

  - Facilitate implementation of standardized data link operations, post-implementation monitoring, and corrective actions

  - Develop a proposal for ICAO on establishing a global configuration management process for the GOLD

Processing proposed amendments

- **All participating regions must accept any proposal for amendment**

- **Use processes and forum similar to change processes used prior to the First Edition**

  – Master comment matrix

  – Proposed amendment packages

  – Teleconferences/Web Ex sessions

  – Meetings will be arranged, as needed

Envisaged change cycle

- **GOLD editions – every two years**
  - APANPIRG – meets annually in September
  - NAT SPG – meets annually in June
  - …

- **GOLD amendments – when needed**
  - An amendment could be accepted as an individual package until such time that it is incorporated into a new edition of the GOLD

Summary

- **GOLD has been adopted by North Atlantic, Asia, and Pacific Regions and portions of the African-Indian Ocean (AFI) Region – 46 FIRs/CTAs**

- **Supersedes the FOM and NAT Data Link GM**

- **Plans for adoption within the entire AFI, South American and European Regions**

- **Jan 2011 – solicited updates to GOLD work program**

  - Address implementation considerations

  - Identify candidate proposals for amendment to the GOLD

- **Possible GOLD/4 meeting September 2011**