Twenty Fifth Meeting of the
Informal South Pacific ATS Co-ordinating Group (ISPACG/25)

Eighteenth Meeting of the
FANS Interoperability Team (FIT/18)

Honolulu, Hawaii, USA, 22-23 March 2011

Agenda Item 6: Updates to the GOLD

GOLD Implementation and Amendments

Presented by Federal Aviation Administration

SUMMARY

This paper provides an update on GOLD implementation and amendments and invites the ISPACG to review and comment on the GOLD work program.

1   INTRODUCTION

1.1   In June 2010, the North Atlantic, Asia, Pacific and part of the African-Indian Ocean Regions adopted the First Edition of the Global Operational Data Link Document (GOLD).

1.2   The GOLD now supersedes both the Guidance Material for ATS Data Link Services in North Atlantic Airspace (NAT Data Link GM) and FANS 1/A Operations Manual (FOM).

1.3   The GOLD ad-hoc working group agreed to assist the ICAO Planning and Regional Implementation Groups (PIRGs) and the ICAO Secretariat in coordinating amendments to the GOLD among concerned PIRGs until such time that ICAO established a global configuration management process.

1.4   This paper provides an update on GOLD implementation and amendments, and invites the ISPACG FIT to review and comment on the GOLD work program.

2 DISCUSSION

2.1 The GOLD Ad Hoc Working Group will process amendments to the First Edition of the GOLD using processes and forum similar to change processes used prior to the First Edition. For example, the GOLD coordinator will continue to use a master comment matrix to track candidates for proposed amendments. The matrix will be distributed for coordination and comment via email. Teleconferences/WebEx sessions and meetings will be arranged, as needed.

2.2 Follow-on work for the GOLD Ad Hoc Working Group includes:

a) Soliciting proposals for amendments to the GOLD among participating regions and airspace users;

b) Coordinating proposed amendments across the regions;

c) Providing interpretation and further clarification to GOLD guidelines, as necessary;

d) Facilitating implementation of standardized data link operations, post-implementation monitoring, and corrective actions;

e) Developing a proposal for ICAO on establishing a global configuration management process for the GOLD.

2.3 It is envisaged that a new edition of the GOLD will be issued every two years. Amendments can be accepted as individual packages until such time that a new edition of the GOLD is issued.

2.4 In January 2011, the GOLD facilitator solicited proposals for amendments to the GOLD and proposed a GOLD/4 meeting in the August/September timeframe. The results of that solicitation are provided at Appendix A. Generally, participants could support a GOLD/4 meeting in Canada or the U.S. in September 2011.

3 ACTION BY THE MEETING

3.1 The meeting is invited to:

a) Note the information in this paper;

b) Review and comment on the GOLD work program provided at Appendix A;

c) Tentatively, support a GOLD/4 meeting in September 2011.

Appendix A. Proposals for GOLD amendments

Legend for Cat Column:

E   Editorial
R   Review
C   Confusing, clarification, erroneous information, inconsistency, or invalid argument
A   Additional material
S   Serious – resolution of comment requires special attention (includes regional difference with potential operational impact)

Legend for Status Column
[TBD]

Comments and contributions received from the following. Initials are used throughout the comment matrix.

Initials	Surname	First names	Representation	eMail
AK	KREBBER	Andreas	DFS	Andreas.Krebber@dfs.de
CCH	CASSIAU-HAURIE	Christophe	Airbus	Christophe.Cassiau-haurie@airbus.com
CD	DALTON	Chris	ICAO – ANB, ATM Section	Cdalton@icao.int
CF	FALK	Christine	FAA – Technical Center	Christine.falk@faa.gov
CG	GALLANT	Colin	Co-Chair – AEEC DLUF	colin.a.gallant@ba.com
CH	HELLING	Curt	Delta Air Lines (DAL)	HellingC@aol.com
CR	ROBERTS	Craig	Thales Australia	Craig.Roberts@thalesgroup.com.au
EN	NAHMADOV	Elkhan	ICAO – Paris (EUR/NAT Region)	enahmadov@paris.icao.int
GS	Sandell	Gordon	Boeing	gordon.r.sandell@boeing.com
JC	CONDIS	Jerome	Airbus	jerome.condis@airbus.com
JC1	CABRAL	Jose	Portugal – NAT CNSG	jcabral@nav.pt

Initials	Surname	First names	Representation	eMail
JFB	BOUSQUIE	Jean-Francois	Airbus	Jean-francois.Bousquie@airbus.com
JW	WIESNER	Janet	Co-Chair – AEEC DLUF	Janet.Wiesner@coair.com
ND	DWYER	Noel	NAV CANADA – (New NAT POC)	Noel.Dwyer@navcanada.ca
PR	RADFORD	Paul	Airways New Zealand – ISPACG POC	Paul.Radford@airways.co.nz
RS	STARK	Rich	Delta Air Lines (DAL)	naked@mindspring.com
SM	MARAFA	Sadou	ICAO – Dakar Regional Office (AFI)	SMarafa@dakar.icao.int
TBD	BREWER-DOUGHERTY	Theresa	FAA – Technical Center	Theresa.brewer@faa.gov
TK	KRAFT	Tom	FAA	tom.kraft@faa.gov
VA	ANDRE	Véronique	Altran Sud Ouest	veronique.andre@altran.com
VG	GERRY	Vincent	FAA – New York	Vincent.Gerry@faa.gov
WB	BRONDSEMA	Wim	Eurocontrol	Willem.BRONDSEMA@eurocontrol.int

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
0_General	V1-0001	EN, AK, WB (EUR)	**Comment**: CPDLC in European Region – GOLD adoption **Suggested Change**: Region to review for acceptability and propose amendments, as necessary.	R, A	5-Jan-11-TK – See attached files beginning with <comment number> for status. 10-Jan-11-WB - For the 1st GOLD change proposal, as a result of OPLINKP-	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
					task 6 and EANPG52 outcome, a EU small team has been formed to kick-off the review of GOLD-Procs (chapter 4,5) and its merge with the LINK2K+ Oper Guidance material. First mtg is planned on 18th Jan11. Once this work has got more mature at end 1Q11, we'll get in touch with Paul and you in prep of the OPLINKP#2 mtg in May11. 12-Feb-11-TK - 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, and report to EANPG/53 (Nov 2011)	
0_General	V1-0002	TK (SAM)	**Comment**: CPDLC/ADS-C in South American Region – GOLD adoption **Suggested Change**: Region to review for	R	5-Jan-11-TK – Need to contact Lima office for adoption.	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			acceptability and propose amendments, as necessary.			
0_General	V1-0003	SM, CD (AFI)	**Comment**: CPDLC/ADS-C in African Indian Ocean Region – GOLD adoption **Suggested Change**: Region to review for acceptability and propose amendments, as necessary.	R	5-Jan-11-TK – See attached files beginning with <comment number> for status.	
2.2 (?) 2.x (new) 3.3 (?) 3.x (new) 4 (?) 5 (?) Apx E	V1-0004	JC1 (NAT, Portugal)	**Comment**: Oceanic clearance delivery using ACARS ATS or FANS 1/A data link applications **Suggested Change**: Consider new material.	A	5-Jan-11-TK – I recall this came up at NAT CNSG or FIG meeting.	
2.2.3.11.2	V1-0021	RS, CH (DAL)	**Comment**: CDA procedure should be globally standardized. **Suggested Change**: Discuss/adopt global standard for CDA .	C		
2.2.4.1.4 & 5.1.3.1	V1-0022	RS, CH (DAL)	**Comment**: Clarification of voice versus CPDLC use **Suggested Change**: Discuss/adopt global standard for guidance and procedures.	C		
2.2.5.5.1 d)	V1-0023	RS, CH (DAL)	**Comment**: Clarify that ETA updates will not be sent by aircraft with an ADS-C connection	A		

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			Suggested Change: Add text after semi-colon; flight crews are not required to send revised ETAs.			
2.x (new) 3.3 (?) 3.x (new) 4 (?) 5 (?) Apx E	V1-0005	JW, CG (DLUF)	**Comment**: Departure clearance and other ACARS ATS applications

Suggested Change: Consider new material. | A | 5-Jan-11-TK – I recall this came up at DLUF meeting Feb 2010 in San Diego. | |
| 3.1.1.2.b) 4.4.1.6 5.6.3.4 5.6.4 Apx E | V1-0006 | RS, VG (DAL, NAT) | **Comment**: Clarification on revised estimated time of arrival (ETA)

Suggested Change: Review current language and propose amendments to clarify intent. Attempt to globally harmonize procedures. May also require proposal to amend regional supplementary procedures in the NAT, and possibly elsewhere. | C | 5-Jan-11-TK – See attached files beginning with <comment number> for status. | |
| 4, 5 | V1-0007 | RS (DAL) | **Comment**: Clarification on use of CPDLC in airspace with VHF coverage

Suggested Change: Clarify. Propose to use CPDLC throughout the flight, where CPDLC has been designated the primary means of communication. | C | 5-Jan-11-TK – See attached files beginning with <comment number> for status. | |
| 4, 5, Apx | V1-0008 | TK | **Comment**: Use of CPDLC to report severe and | A | 5-Jan-11-TK – See attached files | |

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
A		(JCAB)	moderate turbulence **Suggested Change**: Consider new material.		beginning with <comment number> for status.	
4, Apx A	V1-0009 (formerly V50-689, V50-690, V50-691)	ND (NAT)	**Comment**: Use of CPDLC for out-of-conformance inquiries and instructions **Suggested Change**: Consider new standardized free text messages in Appendix A and guidance in Chapter 4 on procedures for their use.	A	5-Jan-11-TK – See attached files beginning with <comment number> for status.	
4.2.1.2 a)	V1-0024	RS, CH (DAL)	**Comment**: "reasonable time period" not defined. **Suggested Change**: Add (e.g. 10 minutes) for consistency.	A		
4.2.1.6	V1-0043	RS, CH	**Comment:** Add new section requiring ATSUs to forward all accepted route change uplinks to AOC.	A		
4.2.2.2 See 5.4.2.3 also	V1-0025	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Insert - *Note: A UM3 (ROGER) should be sent in response to DM67k (REVISED ETA)..*	A		
4.2.3.1 See existing note & 5.3.3	V1-0026	RS, CH (DAL)	**Comment**: Add further caution for issuing conditional vertical clearances because of the inherent risk for misinterpretation/execution.. **Suggested Change**: Add - *Note – Due to risk*	A		

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			associated with conditional clearances (i.e., misinterpretation and subsequent improper execution) the controller should keep conditional clearances to a minimum and reduce the time between delivery and required execution as much as possible.			
4.4.2.1 See 5.5.1.2 also	V1-0027	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Insert - *Note: In airspace where ADS-C periodic reporting is used, DM67k (REVISED ETA) not required.*	A		
4.7.3.1	V1-0044	CR (Thales Australia)	**Comment**: The purpose of the required coordination may be misunderstood due to the current wording – the use of "they" may be misinterpreted. **Suggested Change**: Change the wording as follows: 4.7.3.1 When an ATSU not having control responsibility for the aircraft receives an indication of an ADS-C emergency, coordination should be initiated to confirm that the controlling authority received the emergency report (see paragraph 3.1.2.3.2 for related information).	C		
4.7.5	V1-0016	TK, PR	**Comment**: Guidance on reporting aircraft	A	5-Jan-11-TK – See attached files	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
5.8.4		(ISPACG)	SATCOM equipment failures and appropriate action for controller in reduced separation environments. **Suggested Change**: Consider procedures for crew to advise ATC that aircraft is no longer eligible for reduced separations when aircraft equipment fails, e.g., SATCOM failure on HFDL aircraft. Consider performance-based approach and language that both crew and controller understand and know how to react to the failure.		beginning with <comment number> for status.	
5 (?)	V1-0020	WB (Euro-control)	**Comment**: Dual stack AC implementations allow for seamless transfer btwn ATN and FANS at the boundary of OCR/ CONTINENTAL airspace. **Suggested Change**: Text on FC awareness to be developed as part of FC procs? during transfer, e.g. a) change of latency time; b) Grey out of msgs on HMI; c) Change of primary means of comms; d) Change of Oper timers;	A		
5,2.3.6	V1-0032	RS, CH (DAL)	**Comment**: Grammar. **Suggested Change**: Change (an) prior to "FIR"	E		

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			to (a).			
5.2.1.5 Figure 5-1 (affects 5.2.5.1 also)	V1-0028	RS, CH (DAL)	**Comment**: En Route Chart example incomplete. **Suggested Change**: Modify Figure 5-1 to show examples of ADS ONLY and FIR sectorization. Until enroute charts are updated, complying with 5.2.5.1.will remain impossible (see example attached)	A	13-Feb-11-TK – See attached files beginning with <comment number> for status.	
5.2.1.7	V1-0029	RS, CH (DAL)	**Comment**: Additional clarification by adding example message text for LOGON failure. [See 2.2.2.4b) for reference] **Suggested Change**: Insert the following after "unsuccessful",(i.e. a REJECTED message)	C		
5.2.1.8	V1-0030	RS, CH (DAL)	**Comment**: Clarification of connection type. **Suggested Change**: Change first few words of sentence to "Each time a CPDLC connection is established"	C		
5.2.2.1 Table 5-2	V1-0031	RS, CH (DAL)	**Comment**: Information incomplete. **Suggested Change**: Add - Reykjavik - No earlier than 15 minutes prior to the FIR boundary and add also to Appendix E, Table E-1, "Data Link Services by FIR",	A		
5.2.3.7	V1-0033	RS, CH	**Comment**: Grammar.	E		

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
		(DAL)	**Suggested Change**: Change (comma) prior to "the ATSU" to (semi-colon).			
5.2.3.8 b)	V1-0034	RS, CH (DAL)	**Comment**: Additional clarification and consistency. **Suggested Change**: Insert (manual) prior to "logon with the next ATSU".	C		
5.3.1.2	V1-0035	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Add - *Note: Not all aircraft have CPDLC message printing capability.*	A		
5.3.1.5	V1-0036	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Add to Note - (i.*e, Cancel/Clear current message to allow display of subsequent message/s.*)	A		
5.3.3.2	V1-0037	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Add to beginning of first sentence – Although controllers will attempt to minimize the use of conditional clearances and reduce the time between delivery and execution,	A		
5.3.5.1	V1-0038	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Add after last sentence: ATSUs will forward all accepted route change	A		

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			clearances to AOC so flight planning systems can be update and allow flight crews to uplink current route and wind information directly into the FMS.			
5.4.1.5 a)	V1-0039	RS, CH (DAL)	**Comment**: "reasonable time period" not defined. **Suggested Change**: Add (e.g. 5 minutes) for consistency.	A		
5.4.2.3 See 4.2.2.2 also	V1-0040	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Insert - *Note: If a free text message REVISED ETA is sent, expect the controller to reply with ROGER.*	A		
5.5.1.2 See 4.4.2.1	V1-0041	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Insert - *Note: In airspace where ADS-C periodic reporting is used, revised ETAs are not required.*	A		
5.6.1.2	V1-0042	RS, CH (DAL)	**Comment**: Additional information. **Suggested Change**: Insert - *Note: Differences in entry format requirements for various aircraft/FMS types underscores the importance for flight crews to use the proper LAT/LON convention.*	A		
6	V1-0010	JC	**Comment**: Use of CPDLC for automatic	A	5-Jan-11-TK – See attached files	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
		(SC-214, WG-78)	dependent surveillance – broadcast (ADS-B) in trail procedures (ITP) **Suggested Change**: Consider new procedures for Chapter 6.		beginning with <comment number> for status. 19-Jan-11-JFB – coordinated with JC. Support proposals	
6	V1-0011	ND (NAT)	**Comment**: Use of CPDLC for reroutes **Suggested Change**: Consider new procedures for Chapter 6.	A	5-Jan-11-TK – See attached files beginning with <comment number> for status.	
Apx A, A.4	V1-0012 (formerly V50-787)	JC, VA (Airbus, Altran)	_**Comment**_: Guidance on pre-formatting standardized free text messages. There is no pre-formatting requirement for Free Text. _**Suggested Change**_: It would be highly beneficial to have indication about pre-formatting requirements for Free Text, both for ground systems and for avionics systems. Of course, this should be considered (as for message wording in bold) as a preferred solution to be considered for new systems.	A	5-Jan-11-TK – See attached files beginning with <comment number> for status. 19-Jan-11-JFB – Coordinated with JC+VA. Support their proposals	
Apx D	V1-0013	CF, TBD, PR (US, NZ)	**Comment**: Appendix D updates to clarify analysis of outages, notifications, and missing ADS-C reports **Suggested Change**: On the PARC CWG forefront, I'd like to suggest we start looking at	C	5-Jan-11-TK – Potential for Appendix D guidance material and maybe, Chapter 3, on provisions of communication services, particularly when new system components are added, e.g., Iridium.	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			guidelines to define notification procedures for outages, degraded performance, and maintenance to include maybe standard on providing notification and integration of end-to-end components, e.g., Iridium, Inmarsat, HFDL, ARINC and SITA networks, etc. I get the Inmarsat ones from ARINC and SITA, but nothing on Iridium. If a go, could probably use some ANSP input, particularly on definitions of different reports and what they should look like.			
Apx D	V1-0017	TK (US)	**Comment**: As we implement and use reroute message elements, UM79, UM80 and UM83, more frequently, RCP data could potentially become unnecessarily skewed. These messages may take more time to respond, but are not typical of an intervention message. **Suggested Change**: Suggest to revise guidance material in Apx D to remove message elements UM79, UM80 and UM83 from RCP measurements.	C	5-Jan-11-TK – This change was proposed in previous discussions, but never incorporated into the guidance material. If agreed, the amendment should be relatively simple to incorporate.	
Apx D, D.3.1.5 (new para)	V1-0019	CR (Thales Australia)	**Comment**: The CPDLC message use statistics have been a useful resource and were of great interest to the SC214/WG78 sub-group meeting in September. However, the information on collecting the statistics was not carried into the GOLD for the first edition, and the information	A		

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			is currently only being provided by a single ANSP. **Suggested Change**: Add the information on collecting and providing the data to Appendix D. (CR willing to accept Action Item for first draft of new paragraph, but on leave until beginning of Feb 2011).			
Apx E, E.1 Table E-1	V1-0014 (formerly V50-966)	ND (NAT)	**Comment**: Appendix E updates to include focal points for CTA/FIR, AIDC capability, DARP, and to add new CTA/FIRs as Regions become participants (GOLD editor). Deferred from initial release. Unclear what sort of Point Of Contact is intended in the Region-State Info Form, but there is no equivalent column in table E-1. **Suggested Change**: Include a <u>Problem Reporting</u> Contact column in the table, and identify the requirement likewise in the form.	A	5-Jan-11-TK – Open comment on GOLD, First Edition.	
Apx E, E.1 Table E-1 6.1.1.2	V1-0015 (formerly V50-598)	JFB, CCH (Airbus)	**Comment**: Deferred from initial release. **Suggested Change**: Table E.1 should contain the AIDC capability. It will help operators to identify areas where they can apply DARP.	A	5-Jan-11-TK – Open comment on GOLD, First Edition. 11-Jan-11-JFB – Suggest that table E1 identifies FIRs where DARP and TA are available	

Paragraph reference	Comment Number	Comment Author	Description of comment and proposed resolution	Cat	Resolution Status	Status
			Or for a common understanding, Table E.1 should identified FIRs where DARP and TA are operable.			
Apx F	V1-0018	GS	**Comment**: By the way, I believe at lest one or two of the Appendix F items (specifics of how airplanes operate) need some minor changes. Hopefully by telling you that, one of us will remember at the appropriate time, and I'll actually get the changes to you! **Suggested Change**:	C	12-Jan-TK – Included as a reminder.	
Z_Next Comment	V1-0045		**Comment**: **Suggested Change**:			

-END-