International Civil Aviation Organization

The Fifth Meeting of the Asia/Pacific ICAO Flight Plan and ATS Messages Implementation Task Force (FPL&AM/TF/5)

Manila, Philippines, 8 – 9 November 2011

Agenda Item 4:   Asia/Pacific implementation strategies and aspects

FPL 2012 QUARTERLY QUESTIONNAIRE

(Presented by the Secretariat)

SUMMARY

This paper presents the latest results from the quarterly questionnaire that seeks to keep the FITS website information up-to-date, and raise awareness of potential implementation issues associated with the testing transition phases as early as possible.

This paper relates to –

Strategic Objectives:
   A: **Safety** – *Enhance global civil aviation safety*
   C: ***Environmental Protection and Sustainable Development of Air Transport*** – *Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Global Plan Initiatives:
GPI-12 Functional integration of ground systems with airborne systems

1.   INTRODUCTION

1.1   The ICAO Flight Plan Implementation Tracking System (FITS) located at http://www2.icao.int/en/FITS/Pages/home.aspx is expected to be a vital source of information for regulators, Air Navigation Service Providers (ANSPs), airlines, and others involved in the testing and implementation process for Amendment 1 to PANS ATM (Doc 4444)

2.   DISCUSSION

2.1   During the FPL & AM TF/4 and Seminar it become apparent that there was a need to supplement the information available on the FITS, and also to provide support to enhanced FITS functionality through regular, updated information.

2.2   It was therefore recommended that a questionnaire be completed by the FPL 2012 Points of Contact every quarter, by:

- 1 July 2011;
- 1 October 2011;
- 1 January 2012;
- 1 April 2012; and if required,
- 1 July 2012.

2.3   The latest results from the Questionnaire are appended as an **Attachment** to this paper. A State Letter T3/10.1.20 – AP077/11 (ATM) dated 7 June 2011 regarding the questionnaire was sent to all administrations, and a reminder message AP-ATM0243 dated 25 July was sent to administrations with a Flight Information Region (FIR). Eighteen (18) administrations did not provide a response to the July or October questionnaires:

- Afghanistan;
- Bangladesh;
- Bhutan (no FIR);
- China;
- Cook Islands (no FIR);
- Kiribati (no FIR);
- Marshall Islands (no FIR);
- Micronesia (no FIR);
- Myanmar;
- Nauru;
- Niue (no FIR);
- Palau (no FIR);
- Papua New Guinea;
- Samoa (no FIR);
- Solomon Islands;
- Timor Leste (no FIR);
- Tonga (no FIR); and
- Vanuatu (no FIR).

2.4   The focus of the FITS website, and thus the Task Force, should be on administrations that are responsible for FIRs. In this case, there were seven (7) such administrations that did not respond. Those administrations responsible for an FIR with a non-respondent State within the FIR should coordinate and assist to ensure that such States provide a response.

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a)   note the information in this paper;

b)   discuss the Questionnaire responses; and

c)   discuss the issue of administrations that have not provided information in response to the questionnaire.

…………………………….

Appendix A: APAC FPL 2012 Software Questionnaire

Flight Information region (s)

1. Has a FPL 2012 cost and resource capability assessment been conducted?

2. Has the FPL 2012 Safety Assessment commenced? a) If yes, what Safety Assessment step has been reached?

3. What other major changes to the ATM system are also being made?

4. Which agency is developing the FPL 2012 software?

5. What stage is the software development?

6. If a software vendor is contracted, advise which vendor?

7. Is your State using a front end converter? a) If yes, when is the converter going to be replaced by a FPL 2012 compliant FDPS?

8. When will the internal testing commence and when is it expected to be completed?

9. When will testing be able to be conducted with other ANSPs?

10. When will testing start with airlines/operators?

Updated 01 November 2011

	Q1 Cost & Resource	Q2 Safety Assessment	Q2a Step	Q3 Major Changes	Q4 Software Agency	Q5 Software Stage	Q6 Software Vendor	Q7 Frontend Converter	Q7a Converter Time	Q8 Internal Testing	Q9 ANSP External Test	Q10 External User Test	Comments
Afghanistan • Kabul FIR													
Australia • YBBB Brisbane • YMMM Melbourne	Yes Business case has been agreed and Project work has commenced.	Yes A determination from the Regulator (CASA) has been made that a Safety Case is required	Work on a Safety Plan has commenced	Several systems require change and some will be decommissioned prior to the planned cutover	Airservices Australia (Australia's ANSP) and the Department of Defence are overseeing development of software by contractors.	Initial discussions and development of scope prior to contract finalisation.	Thales, Sensis/Nav Canada, Comsoft and Raytheon will be.	We are considering a converter to handle FPLs and associated messages into some systems.	Our FDPS will be compliant from July 2012. Internal FDPS not affecting other FIRs will continue as today and utilise the converter until replacement. This converter will be disabled after transition and once legacy systems are incorporated into our next generation Flight Plan management systems.	Internal testing is likely to commence in the 3rd quarter 2011 with our CADAS system and in 1st quarter 2012 for the balance of our ATM systems. It will be complete just prior to the commencement of transition in July 2012.	We are likely to be able to test some components late 2011 and most components in early 2012.	Testing planned to start in 1st Quarter of 2012.	Australia
Bangladesh													
Bhutan													
Brunei Darussalam													
Cambodia • Phnom Penh FIR	Yes	Yes	Will be started in Oct 2011	Expand RDP and FDP	Thales	Done by supplier	Thales	No	-	Oct 2011 – Jan 2012	Jan 2012	Jan 2012	Cambodia
China													
Hong Kong, China • Hong Kong FIR	Yes	Yes	Safety implications were identified, mitigated and documented	Front End Processors (FEP) system is developed to handle PRESENT/NEW FPL&AM message format conversion for existing ATM systems	In-house	System testing/ acceptance in progress	In-house	Yes	End of 2013	Q3/2011 – commence testing Q4/2011 – complete testing. FEP system will be ready by 1 Jan 2012 in compliance with Phase 1 of APAC 3-phase transition strategy.	1 Apr 2012 In compliance with Phase 2 of APAC transition strategy	1 Jul 2012 In compliance with Phase 3 of APAC transition strategy	Hong Kong, China

Macao, China	Yes	Yes	Analysis have been performed to trigger a software upgrade which has been completed in Dec 2010	The internal ATC (RDP/FDP) system needs to be upgraded regarding the FPL 2012. The ATC system is under quotation stage with the ATC system supplier.	ComSoft	Completed	ComSoft	No The supplier ComSoft can provide such converter but not purchased. If situation evolves as necessary, it can trigger the purchasing process	N/A	System module upgrade completed and successfully tested in Dec 2010	Subject to readiness of other ANSPs and further coordination for arrangement of Tests	N/A Airlines/Operators are using the same system	Macao, China
Cook Islands													
DPR Korea • Pyongyang FIR	Yes FPL 2012 cost and resource capability assessment has been conduct	Yes	The safety assessment for Present and Now mixed environment operations is undergoing.	No other major changes to the ATM system.	Aviation Technology Development Institution of GACA	The task force team has been organized and is developing the software.	No contract Collaboration with China ATMB	No		The internal testing will commence from 3 January 2012 and it is expected to be completed on 31 March 2012.	From 1 April 2012 testing will be available to be conducted with other ANSPs.	From 1 April 2012 testing will start with airlines/ operators.	General Administration of Civil Aviation
Fiji	In Progress A Cost Benefit Analysis (CBA) is currently being carried out	Yes	Initial stage Identification of Risks involved with the two options available	To be determined This will be determined after the Safety Assessment has been completed	To be determined Dependent on the Safety Assessment and CBA outcome	To be advised Vendors approached have already begun development of the software	To be advised	To be advised	To be advised	01 Jan – 31 Mar 2012 Fiji will endeavor to meet the Asia/Pacific FPL2012	01 Apr – 30 Jun 2012 Fiji will endeavor to meet the Asia/Pacific FPL2012	01 Jul – 15 Nov 2012 Fiji will endeavor to meet the Asia/Pacific FPL2012	Civil Aviation Authority of Fiji
France (French Polynesia) • NTTT	No	Not commenced We plan to conduct a safety assessment during the transition period	N/A	Briefing Office system We got a system named "ATALIS" dedicated to our briefing office to fulfil FPL. The system interface will be impacted to authorize legacy and new FPL	THALES Thales is provided DTI the same release than Mexico	Needs and Specifications state Thales and Egis Avia	Yes Thales and Agis Avia	No Our system will be upgraded according the ICAO 4444 specifications	N/A	March 2012 Tahiti is going to receive the ICAO 4444 release in march to begin internal testing and training	May 2012	May 2012	France
India • Delhi FIR • Mumbai FIR • Kolkata FIR • Chennai FIR	Yes	No		Delhi & Mumbai is switching over to Raytheon automation system - Auto Track –III; Chennai is switching over to new ATS automation system sourced from Raytheon	It is being developed in-house for AFTN message switch.	Software changes have been completed in the frontend as well as backend system of AMSS to accept and process new ICAO FPL and ATS Messages The application will be deployed at message switches at other airports in India shortly.	Raytheon, Selex, Indra, for ATM Automation system and Comsoft for AMHS.	No	N/A	Internal testing of AFTN (AMSS) system has been conducted between Delhi and Varanasi successfully.	TBN	TBN	
Indonesia • Jakarta FIR	Cost has been finished and capability assessment is still on-going	On-going	On-going	Upgrading ADPS and ATC System using converter (short term)	Local vendor converter (short term)	On-going (tender) converter (short-term)	ELSA Comfort converter (short-term)	Yes (short-term)	Des 2013 new JATMS long-term	Jan to March 2012	April to June 2012	On Jul to Sep 2012	Indonesia
• Ujung Pandang FIR	No, it hasn't It will be conducted by the end of this year (2011)	No, it hasn't. It will be commence on 1st quarter 2012		Upgrade on ATC and AIS System	•For converter by in-house developer •For System by vendor	Technical trial (for converter)	•Thales •Atalis •Nova ATM System	Yes, it is	Temporary, during transition until end 2012	commence on 1st quarter 2012	Will be conducted on 2nd quarter 2012	On 1st July 2012 (pub. by AIC)	Indonesia
Japan • Fukuoka FIR	Yes	Yes	On-going	None	JCAB	On-going	NEC	Converter function is going to be installed to the front end system	On 15th November 2012	On 1st January 2012. To be completed on 31st March	On 1st April 2012	On 1st July 2012	Japan Civil Aviation Bureau (JCAB)

Kiribati													
Lao PDR • VLVT-Vientiane	On-going	Plan in October 2011		Not yet	Looking	Looking	Looking	On-going study		April 2012	May-Jun 2012	July 2012	Lao PDR
Malaysia • Kuala Lumpur FIR • Kota Kinabalu FIR	Yes	No Expect to be completed by Dec 2011	N/A	FDPS upgrade To make it compliant	TBN	N/A	N/A	No	N/A FDPS Upgrade	Jan-31Mar2012	1Apr-30Jun2012	1Jul-15Nov2012	Department of Civil Aviation, Malaysia
Maldives • Malé	On-going	No	N/A	FDPS upgrade to make it compliant	Looking	N/A	No	No	N/A	Mid 2012	Third Quarter 2012	TBN	Maldives
Marshall Islands													
Micronesia													
Mongolia • ZMUB ARO of ZMUB AD	Mongolia is planning to increase route charge due to difficulties in finding financial resources	No	-	None	Avitech – AG of Germany	Will be finished by October 2011	Avitech - AG	Yes	Sept 2012	The internal testing will commence on 01 January 2012 and expected to be completed on 31 March 2012	Testing will be conducted from 01 April 2012	Testing with airlines/ operators will be conducted from 01 July 2012 to September 2012	CAA of Mongolia
• ZMUB ATM of Ulaanbaatar ACC	Mongolia is planning to increase route charge due to difficulties in finding financial resources	No	-	None	Indra of Spain	Has received commercial proposal from India	Indra	Not determined	-	Indra is able to provide the software 6 months after signing the contract. Therefore, the internal testing and testing with other ANSPs will commence in May or June 2012 simultaneously.	Indra is able to provide the software 6 months after signing the contract. Therefore, the internal testing and testing with other ANSPs will commence in May or June 2012 simultaneously	Testing with airlines/operators will be conducted from 01 July 2012 to September 2012	
Myanmar													
Nauru													
Nepal	Yes	None Not required due to non automated system		Yes	No	AMHS solution provider selection in progress	None Nepal does not have FDP, AIDB system	N/A		March 2012	May 2012	May 2012 In coordination with Indian FIR	Civil Aviation Authority of Nepal
New Zealand • NZZC • NZZO	No	No	N/A	N/A	Airways NZ In-house	NZZC Requirements have been written and software task being sized. NZZO Requirements completed and software design and coding commenced.	N/A	No	N/A	NZZC Internal testing to commence 1APR2012 and expected to be completed by 30JUN2012 NZZO Internal testing to 31MAR2012	NZZC-N/A NZZO-1APR2012	NZZC 1JUL2012 NZZO 1JUL2012	New Zealand
Niue (NZ)													
Pakistan • Karachi FIR • Lahore FIR	Yes	No Expected in October 2011			M/s COM soft & M/s Indra M/s COM soft has upgraded the system software for AMHS M/S Indra is being coordinated for the upgrade of ATM.	AMHS was updated in March, 2011	M/s Indra For software upgrade of ATM	No	-	Sept 2011-Dec 2011 For testing of AMHS software	As per ICAO regional testing plan, which is awaited.	- 1. Airline / Operators using PCAA software of AMHS are already compliant. 2. Airlines using any other country / Company software /equipment are to be coordinated for upgrade. 3. Testing may be started in Oct. 2011.	Pakistan Civil Aviation Authority

Palau													
Papua New Guinea													
Philippines • Manila	No	No	N/A	None yet Once the Czech system for the New Manila ACC is commissioned, its FDPS will be upgraded.	None yet	No Information CS-Soft of the Czech Republic claims to have a converter	No	No	No	No date yet	As soon as any State requests it Declare if on-line or off-line testing	No date yet	Civil Aviation Authority of the Philippines
Republic of Korea • Incheon FIR	Cost and resource capability assessment has been conducted by maintenance or management services agencies	Not yet. Safety assessment is going to be commenced right after finishing the system development.	-	There is no major changes to the ATM system in Incheon FIR except for expending FDPS, which needs to be upgraded or equipped with converters.	KOCA decided to use a convertor for Incheon ACC system and a local company is developing related system. And, one of the ATM systems (Incheon ARTS) was being provided by Thales and discussions for an upgrade is in progress.	KOCA began developing the Converter from April 29, 2011 and it will be finished by December 20, 2012,	1.Local IT company with Incheon ACC 2.Thales with Incheon APP ATM system	Yes. In Incheon ACC FDPS use converter.	Current ATS system will be equipped with converters at the front and back of the Flight Data Processor and the converters will be installed by Dec 22, 2012.	KOCA planning to begin internal testing from April 1, 2012 and hope to be completed by June 30, 2012.	The test with other ANSPs will be commenced from July 1, 2012.	The test with airlines/operators will be also commenced from July 1, 2012	Office of Civil Aviation, MLTM Republic of Korea
Samoa													
Singapore • Singapore FIR	Yes	No	N/A	New ATM System which can accept and process NEW FPL will be installed Our new AIM System can receive and transmit both PRESENT and NEW FPL	Thales	In development for the new ATM system	N/A	Yes For the existing ATM system	By end of Year 2014	Between January and March 2012	Between April and June 2012	Between July and November 2012	
Solomon Islands													
Sri Lanka • VCCC	Yes	No New Flight Plan format Flight Plans filed at AIS/BIA shall be checked whether they are accepted without any cause of reject or denial of service. This checking has to be done with the countries who has already adapted to new flight plan format.	-	1) Existing ATM System (ACC) will be replaced with a new ATM system fully compatible with new FPL by April 2012. 2) ATM system (Approach Control) will be upgraded to be compatible with new FPL, AIDC and with independent Servers for Recording by the end of July 2012. New AMHS/AFTN system compliant with FPL 2012 will be commissioned in Jan 2012.	Selex Sistemi Integrati of Italy	Proposal expected by Dec 2011	N/A	No	-	Feb – Aug 2012	Aug 2012	July 2012	VCCC

Thailand • Bangkok FIR	Yes We have already conducted both cost and capability assessment on the front-end system. Consequently, assessment on en-user systems (ATM Systems) has been planned.	In progress Partial assessment has been conducted on the front-end system. Consequently, assessment on end-user systems (ATM Systems has been planned)		Major changes have been made to the Flight Data Management System (Front-end system) and the Bay of Bengal Cooperative ATM System (BOBCAT). In addition technical refreshed on ATM systems within AEROTHAI has been planned for.	1.Front end-internally developed. 2.ATM System – to be determined.	1.Front end-under development. 2.ATM System – to be determined.	1.Front end-internally development. 2.ATM System – to be determined.	Yes	The FPL 2012 compliant Front-end system is planned to be implemented by Q1 2012. Replacement/upgrades of other end-user systems are to be determined.	Planning in progress	Planning in progress	Planning in progress	DCA Thailand
Timor Leste													
Tonga													
Vanuatu													
Viet Nam • Hanoi FIR • HoChiMinh FIR	This assessment has started and will be completed in November 2011	This assessment has commenced. The step will be updated in the next quarter.	Major changes are as ATM Eurocat-X at Southern ATS Company, Automated AIS System (Gia Lam, Hanoi), Flight Data Management System at ATC Coordination Centre (Gia Lam, Ha Noi); FDP System at Northern ATS Company is being changed by new system.	ATM Eurocat-X at Southern ATS Company: Thales. Automated AIS System (Gia Lam, Ha Noi): Comsoft. Flight Data Management System at ATC Coordination Centre (Gia Lam, Ha Noi): Hoang Thanh Company (Vietnam). RDP/FDP System at Northern ATS Company: Selex	At present, VATM is on-going in negotiation with the companies providing equipment. The stage will be defined in the next Quarter.	It is expected the following vendors: Thales, Consoft, Selex and Hoang Thanh	Yes, the systems will use converter. This will be replaced by 2013 subject to the Post-implementation assessment.	The internal testing would be planned in a period from 01 January till 31 March 2012. The detailed timing will be subject to the working results with the companies providing equipment.	The testing conducting with other ANSPs would be planned in a period from 01 April till 30 June 2012. The detailed timing will be subject o the working results with the companies providing equipment.	The testing with airlines/operators will start conducting with other ANSPs would be planned in a period from 01 July till 15 November 2012 in accordance with ICAO schedule.			
USA[1] • Oakland Oceanic (KZAK), New York Oceanic (KZWY) and Anchorage Oceanic (PAZN)	Yes	Yes (preliminary) All APAC region interfaces are with the Ocean 21 system used for these FIRs			FAA (via contractor)	Development is compete	Lockheed Martin	Not for this system		It is complete.	April 2012 Some early test opportunities might be available	Early to mid 2012	USA
• 20 Domestic U.S. FIRs (KZAB, KZAU, KZBW, KZDC, KZDV, KZFW, KZHU, KZID, KZJX, KZKC, KZLA, KZLC, KZMA, ZKME, ZKMP, KZNY, KZOA, KZOB, KZSE, KZTL)	Yes	No. Planning to start soon. Attempting to coordinate Safety Assessment across all affected systems.		Replacement of entire ATM System. Current Host and URET systems and new ERAM system will both have to be modified.	FAA (via contractor)	Preliminary Engineering complete S/W development starting July 2011	Lockheed Martin	Not for these systems, although see Remarks. Host and URET systems will accept and pass NEW content flight plans but controllers will view PRESENT content.	When ERAM deployment is complete, Host and URET systems will be gone. Currently projected for 2014 time frame.	Host- Feb 2012 thru April 2012 ERAM- June 201 thru Aug 2012	Host- April 2012, ERAM- August 2012 Note: These systems do not interface to any systems in the APAC region.	Host- July 2012, ERAM- Sept. 2012	USA
• Anchorage domestic ARTCC (PAZA) Uses FDP-2000 Flight Data Processing system	Yes	No		None	FAA	Currently in Engineering Expect S/W start in August 2011		No		Early 2012	Early to Mid 2012 Note: PAZA does not interface to any APAC FIRs	Mid 2012	USA
• Oakland Oceanic FIR (Honolulu Control Facility and Guam CERAP) Uses Offshore Flight Data Processing System (OFDPS)	Yes	No		None	FAA	Engineering to start in October 2011 Expect S/W start in January 2012		No		May 2012	N/A (no external interfaces)	August 2012	USA

---

[1] Includes American Samoa, Guam, Johnston, Kingman, Midway, Mariana, Palmyra, Wake

France[2]													

[2] Includes French Polynesia, New Caledonia, Wallis and Futuna Islands