

Nairobi, 14 -15 February 2011

2nd Meeting of AFI Flight Plan Task Force - FPLT TF/2

Nairobi, 16 -18 February 2011

Amendment 1 to PANS-ATM, Doc 4444





SUMMARY

- 1 Overview
- 2 Transition period
- 3 Presentation of the New FPL Form
 - 4 -Actions started by ASECNA
 - 5- Recommendations





CONTENTS

-1-Overview





APIRG Recommendation 6/5 /RAN/AFI: Implementation of ICAO New Model Flight Plan Form

✓- Adoption of ATM Objective Performance by APIRG 17 - « *Transition to ICAO New model Flight Plan* », expressed in a performance frame form (PFF).





APIRG Recommendation 6/5 RAN/AFI: Implementation of ICAO New Model FPL Form

✓- APIRG/17 recalled that ICAO model FPL provisions will become applicable on

15 November 2012





ICAO State letter AN 13/2.1-09/9 – 6 February 2009

Subject → Guidance for implementation of FPL

6 Guidelines

Purpose → To support a coordinated global effort during the transition period so that a successful transition is achieved by the applicability date of 15 November 2012.





ICAO State letter AN 13/2.1-09/9 - 6 February 2009

These 6 guidelines have been developed to facilitate the use of both PRESENT and NEW FPL by airspace users and ANSPs' FDPS during the transition period.

<u>Action required</u> → Coordinate the transition to the new ICAO flight plan





-2-

Transition period





2 – Transition period

15 NOVEMBER 2012

From now on... until 15 November 2012 ANSPs must define a period called **Transition Period**

During the transition period, ANSPs systems must support both PRESENT and New FPL ...

After 15 November 2012, the PRESENT FPL process will not be used.





2 - Transition period

Now on ... - 15 November 2012

... it helps

Guideline 4

... ANSPs using PRESENT may misinterpret, and may reject FPL information that is filed more than 24 hours in advance of flight.





2 - Transition period

Now on... - 15 November 2012

... it helps

Guideline 5

To facilitate user decisions on whether to file PRESENT, NEW or a combination of PRESENT and NEW, ICAO will maintain a website listing each ANSP's ability to accept PRESENT or NEW.





2 - Transition period

Now on... - 15 Novembre 2012

... it helps

Guideline 6

ANSPs will use the *Table of Conversion* shown below, in order to have with all users, the same understanding on how the items of the NEW FPL are converted into the Present FPL.

During the transition period, it's not envisaged to convert elements of PRESENT to NEW FPL.





2 - Transition period

Now on... - 15 Novembre 2012

Table of Conversion

New

COM/NAV PRESENT

Items 10 & 18





NEW



New FPL		PRESENT FPL	
Item 10	Item 18	Item 10	Item 18
N		N	
S		VOL	
SF		S	
А		Z	NAV/GBAS
В		Z	NAV/LPV
С		С	
D		D	





New



New FPL		PRE	SENT FPL
Item 10	Item 18	Item 10	Item 18
E1		J	DAT/n
E2		J	DAT/n
E3		J	DAT/n
F		F	
G	NAV/nnnn	G	
Н		Н	
I			





New



New FPL		PRESENT FPL	
Item 10	Item 18	Item 10	Item 18
J1		J	DAT/V
J2		J	DAT/H
J3		J	DAT/V
J4		J	DAT/V
J5		J	DAT/S
J6		J	DAT/S
J7		J	DAT/S





New

COM/NAV Items 10 & 18

New FPL		PRESENT FPL	
Item 10	Item 18	Item 10	Item 18
K		K	
L		L	
M1		Z	COM/INMARSAT
M2		Z	COM/MTSAT
M3		Z	COM/IRIDIUM
0		0	
P1 – P9 are reserved			



New

WORKSHOP ON NEW FPL Table of Conversion



COM/NAV

PRESENT

Items 10 & 18

New FPL		PRESENT FPL	
Item 10	Item 18	Item 10	Item 18
R	PBN/nn	Z	NAV/nnnn
Т		Т	
U		U	
V		V	
W		W	
X		Х	
Υ		Υ	
Z	COM/NAV/DAT	Z	COM/NAV

NAIROBI 14-15/02/11

FPL WORKSHOP

Page - 18





2 - Transition period

Now on... - 15 Novembre 2012

Table of Conversion

<u>New</u>

SUR

PRESENT

Items 10 & 18





New



New FPL		PRE	SENT FPL
Item 10	Item 18	Item 10	Item 18
N		N	
А		Α	
С		С	
E		S	
Н		S	
I		I	
L		S	





New



New FPL		PRESENT FPL	
Item 10	Item 18	Item 10	Item 18
Р		Р	
S		S	
X		X	
B1			
B2			
U1			
U2			





New



New FPL		PRESENT FPL	
Item 10	Item 18	Item 10	Item 18
V1			
V2			
D1		D	
G1		D	





-3-

Presentation of the New FPL form



WORKSHOP ON NEW FPL 3 – Presentation of the New FPL form

The New FPL will bring changes in :

- Contents of Items 10, 15 and 18;
- ANSPs and airspace users systems;
- Contents of FPL messages;
- ✓ Details on Performance Based
 - Navigation (PBN);
- √Time limit to fulfill a FPL.



WORKSHOP ON NEW FPL 3 - Presentation of the New FPL form

The New FPL will bring changes in :

Gains of performance by highlighting aircraft capabilities ... in Items

10, 15 and 18



WORKSHOP ON NEW FPL 3 - Presentation of the New FPL form

FPL shall not be submitted more than

120 hours (5 days)

before the estimated off-block time of a flight...

FORMULAIRE ET RÉDACTION DU PLAN DE VOL DÉPOSÉ (FPL)/FLIGT PLAN

DO FLAN DE VOE DEFOSE (I FE)/I EIGI FLAN
PRIORITÉ/Priority DESTINATAIRE(S)/Addressee(s)
<= FF ⇒
HEURE DE DÉPÔT Filing time
EXPÉDITEUR/Originator
<u> </u>
IDENTIFICATION PRÉCISE OU(DES) DESTINATAIRE(S) ET/OU DE L'EXPÉDITEUR/Specific identification of adressee(s) and/or originator
3 TYPE DE MESSAGE/Message type 7 IDENTIFICATION DE L'AÉRONEF 8 RÈGLE DE VOL TYPE DE VOL
<= (FPL Aircraft identification Flight rules Type of flight
9 NOMBRE/Number TYPE D'AÉRONEF/Type of aircraft CAT. DE TURBULENCE DE SILLAGE 10 ÉQUIPEMENT/Equipement
Wake turbulance cat. / / / / / / / / / / / / / / / / / / /
13 AÉRODROME DE DÉPART/Departure aerodome HEURE/Time
15 VITESSE/Cruising speed NIVEAU/Level ROUTE/Road
15 VITESSE/Cruising speed NIVEAU/Level ROUTE/Road
16 AÉRODROME DE DESTINATION DURÉE TOTALE ESTIMÉE/Total cet AÉRODROMES DE DÉGAGEMENT/altn aerodromes
Destination aerodrome HR MIN. 1°/First 2°/2nd.
├──
18 RENSEIGNEMENTS DIVERS/Other information
16 NENSEIGNEWENTS DIVERS Office Information
)«:
,
RENSEIGNEMENTS COMPLÉMENTAIRES (A NE PAS TRANSMETTRE DANS LES MESSAGES DE PLAN DE VOL DÉPOSÉ)
Supplementary information (NOT TO BE TRANSMITTED IN FPL MESSAGES) 19 AUTONOMIE/Endurance RADIO ET BALISE D'URGENCE/Emergency radio
HR MIN. PERSONNES A BORD/Persons on board UHF VHF RBDA/clba
E/ , , , → P/ , , → B/ □ ▼
ÉQUIPEMENT DE SURVIE/Survival equipement GILETS DE SAUVETAGE/Jackets
POLAIRE DÉSERT MARITIME JUNGLE LAMPES FLUORES Polar Desert Maritime Jungle Light fluores UHF VHF
⇒S /P D M J ⇒J /L F U V
CANOTS/Dinghies NOMBRE CAPACITÉ COUVERTURE COULEUR
Number Capacity Cover Color
→ [D] /
COULEUR ET MARQUES DE L'AERONEF/Aicraft color and markings
A / L
REMARQUES/Remarks
→ N /
PILOTE COMMANDANT DE BORD/Pilot in command
C /
DÉPOSÉ PAR/Filed by
ESPACE RESERVE A DES FINS SUPPLEMENTAIRES/Space reserved for additional requirements
ı





3 - Presentation of the New FPL form

* Item 10 : Equipment / Capabilities

Capabilities comprise following elements:

- ✓ presence of relevant serviceable equipment on board the aircraft;
- ✓ equipment and capabilities commensurate with flight crew qualifications; and
- ✓ where applicable, authorization from the appropriate authority

They're radio communication navigation and approach equipments and capabilities

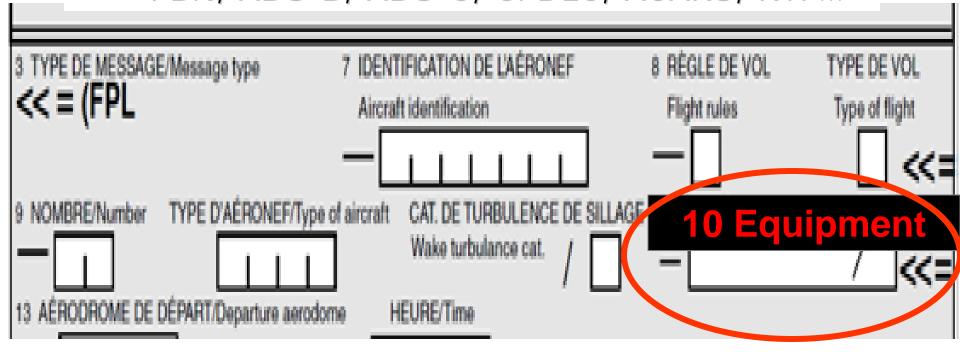
(COM/NAV/SUR).



3 - Presentation of the New FPL form

Item 10 : Equipment / Capabilities

Change of letters meaning related to ...
PBN, ADS-B, ADS-C, CPDLC, ACARS, RTF...





WORKSHOP ON NEW FPL 3 - Presentation of the New FPL form

* Item 10 : Equipment / Capabilities

New meaning of letters which describe the equipment and COM/NAV capabilities (COM/NAV)

Letter	Meaning	Letter	Meaning
A	Enhancement of GNSS + ABAS	M	Capabilities CPDLC ATN
E	DME-DME + IRU	R	Capabilities PBN
G	ABAS (GNSS) sans External Enhancement	W	Capabilities RVSM
J	Capabilities CPDLC FANS 1/A	X	Capabilities MNPS



3 - Presentation of the New FPL form

Item 10 : Equipment / Capabilities

Letter	Meaning	Letter	Meaning
N	if no surveillance equipment for the route to be flown is carried, or the equipment is unserviceable	SSR	Mode A et C
	SSR Mode	S	
E	Transponder — Mode S, identification, pressure extended squitter (ADS-	e-altitu	ide and



3 - Presentation of the New FPL form

Item 10 : Equipment / Capabilities

Letter	Meaning	
SSR Mode S		
Н	Transponder — Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability	
	Transponder — Mode S, including aircraft identification, but no pressure-altitude capability	



3 - Presentation of the New FPL form

Item 10 : Equipment / Capabilities

Letter	Meaning	
SSR Mode S		
L	Transponder — Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B) and enhanced surveillance capability	
X	Transponder — Mode S with <i>neither aircraft identification nor pressure-altitude capability</i>	



3 - Presentation of the New FPL form

Item 10 : Equipment / Capabilities

Letter	Meaning	
ADS-B		
B1	ADS-B with dedicated 1090 MHz ADS-B "out" capability	
B2	ADB-B with dedicated 1090 MHz ADS-B "out" and "in" capability	
U1	ADB-B with dedicated 1090 MHz ADS-B "out" and "in" capability ADS-B "out" capability using UAT	



3 - Presentation of the New FPL form

* Item 10 : Equipment / Capabilities

Letter	Meaning	
ADS-B		
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	



3 - Presentation of the New FPL form

Item 10 : Equipment / Capabilities

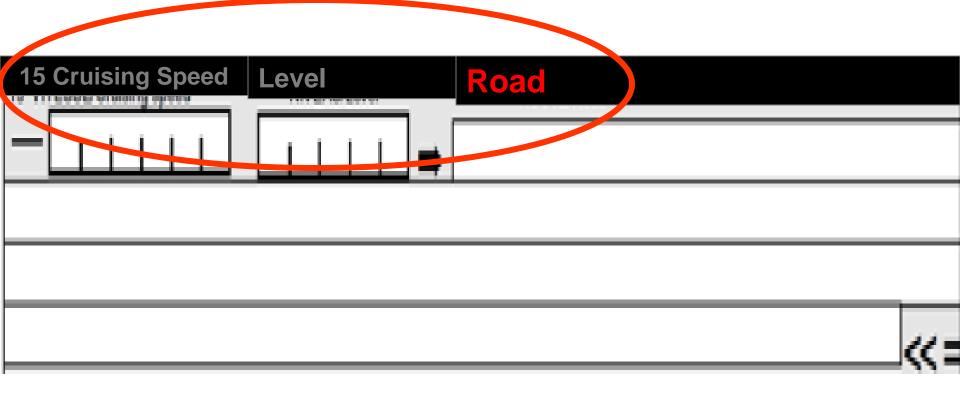
Letter	Meaning	
ADS-C		
D	ADS-C with FANS 1/A capabilities	
G	ADS-C with ATN capabilities	



3 - Presentation of the New FPL form

* Item 15: Route

Bearing and distance of significant points





3 - Presentation of the New FPL form

*Item 18: Other Information

- → Reason of STS
- > RNAV (PBN/) capabilities
- + RNP (PBN/) capabilities
- Date of depart (DOF/)
- Other changes...

18 Other information



RENSEIGNEMENTS COMPLÉMENTAIRES (A NE PAS TRANSMETTRE DANS LES MESSAGES DE PLAN DE VOL DÉPOSÉ)
Supplementary information (NOT TO BE TRANSMITTED IN FPL MESSAGES)



3 - Presentation of the New FPL form

* Item 18 : Other Information Reason for special handling (STS) by ATS

Letter		Meaning	Letter Meaning		
	STS/				
ALTRV		for altitude reservation			
ATFMX		for exemption from ATFM measures			
FFR		fire-fighting			
FLTCK		flight check for calibration of navaids			
HAZMAT		for a flight carrying hazardous material			



3 - Presentation of the New FPL form

* Item 18 : Other Information Reason for special handling (STS) by ATS

Letter		Meaning	Letter	Meaning
		STS/	•	
HEAD		flight with "Head of State" status		
HOSP		for a medical flight declared by medical authorities		
HUM		flight operating on a humanitarian mission;		
MARSA		flight for which a military entity assumes responsibility for separation of military aircraft		paration of



3 - Presentation of the New FPL form

* Item 18 : Other Information

Reason for special handling (STS) by ATS

Letter		Meaning	Letter	Meaning	
	STS/				
MEDEVAC		for a life critical medical emergency evacuation			
NONRVSM		non-RVSM capable flight intending to operate in RVSM airspace			
SAR		flight engaged i	n a sea mission	rch and rescue	
STATE		flight engaged in military, customs or police services			



NATROBI 14-15/02/11

WORKSHOP ON NEW FPL 3 - Presentation of the New FPL form

* Item 18: Other Information Indication of RNAV and/or RNP Capabilities

Letter	Meaning	Lette	er	Meaning		
	RNAV Specifications					
A1	RNP 10	C1	RI	IAV 2 tous capteurs		
B1	RNAV 5 tous capteurs permis	C2	RI	NAV 2 GNSS		
B2	RNAV 5 GNSS	C3	RI	NAV 2 DME/DME		
В3	RNAV 5 DME/DME	C4	RI	NAV 3 DME/DME/IRU		
B4	RANV 5 VOR/DME	D1	RA	NAV 1 tous capteurs		
B 5	RNAV 5 INS ou IRIS	D2	RN	NAV 1 GNSS		
В6	RNAV 5 LORAN C	D3	RI	NAV 1 DME/DME		
		D4	RI	NAV 1 DME/DME/IRU		



WORKSHOP ON NEW FPL 3 - Presentation of the New FPL form

* Item 18: Other Information Indication of RNAV and/or RNP Capabilities

Lett	er	Meaning		Letter	Meaning
	RNP Specifications				
L1	RN	P 4	04	RNP 1 / IRU	de base DME / DME
01	RNP 1 de base tous capteurs		S1	RNP AF	РСН
02	RNP 1 de base GNSS		T1	RNP A	R APCH avec RF
03	RNP 1 de base DME/DME		T2	RNP AF	R APCH sans RF



3 - Presentation of the New FPL form

* Item 18 : Other Information
DAT

Lett	ter	Meaning	
	DAT: transmission par DL/CPDLC		
F	FIS	S using datalink via VHF	
Н	СР	DLC using datalink via HF	
S	СР	DLC using datalink via satellite	
V	СР	DLC using datalink via VHF	



WORKSHOP ON NEW FPL 3 – Presentation of the New FPL form

* Item 18 : Other Information
SUR

Lett	etter Meaning			
SI	SUR : Applications / Possibilités SUR			
A	TIS-B			
В	ADS-B Air-Air « ADS-B embarked »			



3 - Presentation of the New FPL form

* Item 18 : Other Information Divers

Letter	Meaning	
DLE	Delay or holding on route	
ALTN	Alternate aerodrome at destination	
RALT	Alternate aerodrome on route	
TALT	Alternate aerodrome at take-off	
RIF	RIF Details on the route to the new aerodome destination	





-4 —

Actions started by ASECNA



WORKSHOP ON NEW FPL 5 – Actions started by ASECNA Operational system updating



★ - Definition of a Transition Period :

17 Novembre 2011 – 15 Novembre 2012. (cf. Guidance Line 2)

During Transition Period ASECNA systems will accept both the New and PRESENT FPL processes



WORKSHOP ON NEW FPL 5 – Actions started by ASECNA Operational system updating



★ - Publication of a AIP at AIRAC date of
17 November 2011

★ - to update the system software in order to take into account both the New and the PRESENT FPL until 15 November 2012

★ - to update AMHS/X400 protocol and Socket protocol for need of interface of FDPS system with AFTN/AMS



WORKSHOP ON NEW FPL 5 – Actions started by ASECNA Operational system updating



★ - Introduction of a module "ICAO New FPL" into ATCOs OJT at EAMAC.

★ - Migration on IP of SITA FANS 1/A Service

★ - November 2010 : Seminary at Nouakchott / Sensitization of personel in charge of ATS in our 17 ATS centres.

★ - Planned workshop for Local ATS Executive from ATS centres.



WORKSHOP ON NEW FPL 5 – Actions started by ASECNA Sensitization and Training



- ★ Conception of « exercises » on the simulators of the ATS centres.
- ★ Implementation of a program of Air Traffic Controllers "competencies control".
- → Planned Workshops for Executive Local Control, AIS, Notam Bureau and Telecom.





Arrangements to ensure that the changes from the PRESENT to the new ICAO FPL form occur in a timely and seamless manner and with no loss of service

Ongoing Action in cooperation with ASECNA's States Members





Capabilities of local systems are fully adaptable to the changes envisaged in the new FPL form.

Ongoing Project with Thales ATM to update the local systems





Ability of FDPS's to parse information correctly to guarantee that misinterpretation of data does not occur...

Ongoing Project with Thales ATM to update the local systems





Analysis and comparison of PRESENT and New data values...

- √ TORs given to Thales
- ✓ Content of sensitization and training campaign





Any State having published specific requirements) which are now addressed by the amendment should withdraw those ...

✓ - No ASECNA's States Members has published a specific requirements





Establishment of requirements in sufficient time to ensure that aircraft operators and flight plan service providers, after 15 November 2012, use only the new flight plan indications...

✓ - Publication of SUP AIP sufficient time before applicability date (cf Road Map)



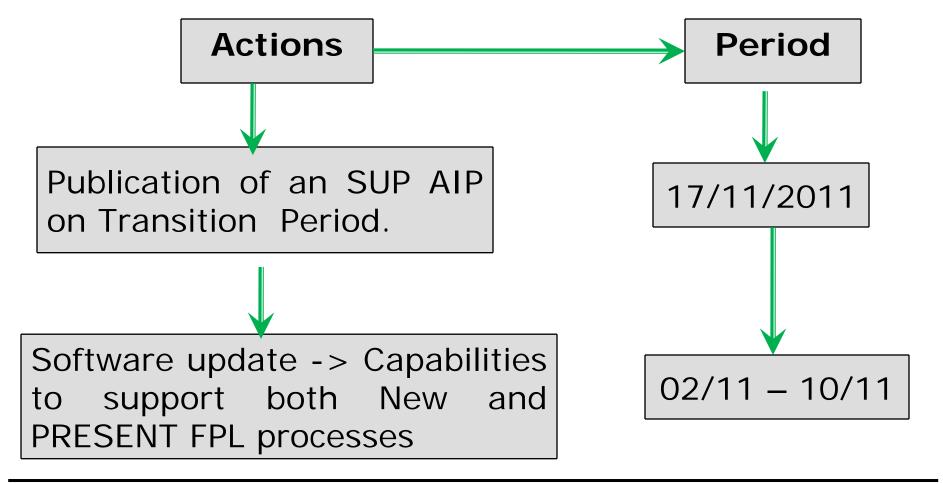


inform on the implementation status to the ICAO regional offices on an ongoing basis ...

✓ - Ongoing action
[New FPL focal point]

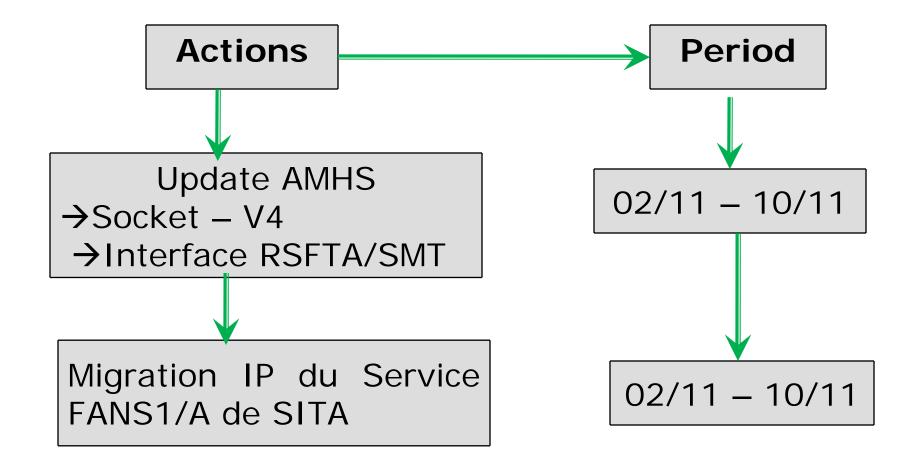
















The introduction of this feature allows ASECNA ATS Centres systems compatible with the new Flight plan ICAO items, which will be applicable on November 15th, 2012. .

Objective of the software evolution :

- ✓- adaptation of the ICAO new model flight plan form with the needs of aircrafts endowed with advanced COM/NAV/SUR capabilities,
- √- with the evolution of ATM automated systems specifications...





... while taking into account :

√- the compatibility with the systems already implemented (EUROCAT-X including FDPS and FDR) as well as...

✓- the aspects relative to human factors, to training, to costs and to transition ".





With the ongoing project to the ICAO 2012 FPL, various improvements will be available:

- 1. Description of the embarked equipment into FPL Items 10 and 18;
- 2. FPL shall not be submitted more than 120 hours before the estimated off-block time with requirement to precise DOF in Item 18.
- 3. Change of contents of some indicators and addition of new indicators of the Item 18.





- 4. EUROCAT system can exchange information with correspondents who will have already made or not the transition.
- 5. This will allow ASECNA ATS centres to manage the transition with a maximum of flexibility, with each of neighbouring ATS centres.
- 6. At the end of the transition period, a simple click will allow to deactivate completely the PRESENT FPL in EUROCAT system...and activate the New FPL...



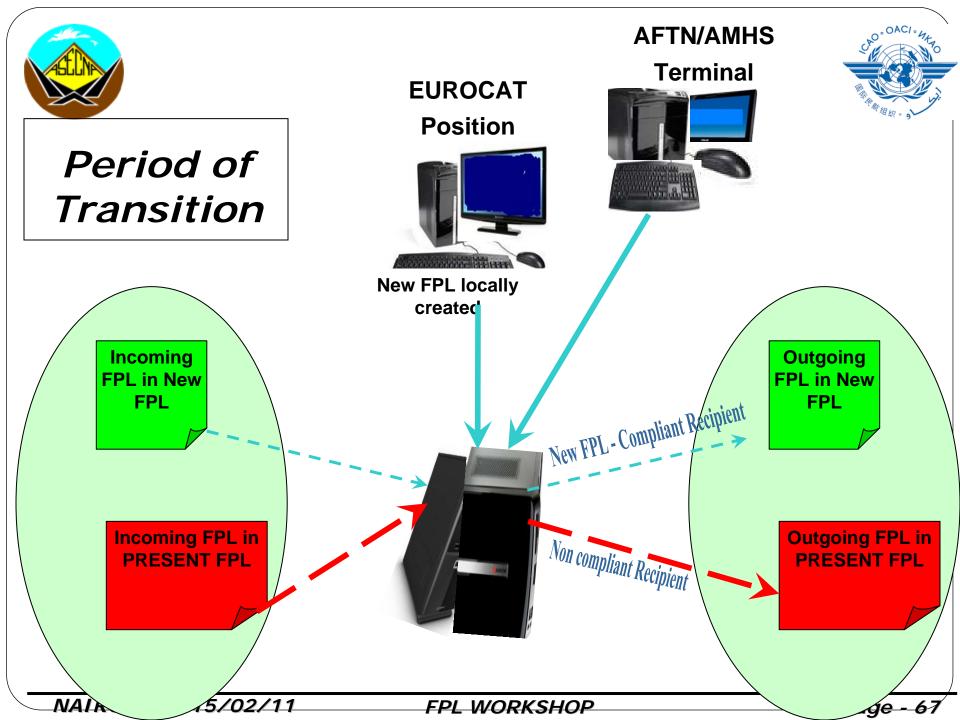


- 7. The evolution will be applied to 6 EUROCAT-X centres: *Antananarivo Ndjamena* Dakar *Niamey Abidjan Brazzaville* ...
- 8. and also to Backup systems, Contingencies and Simulators...
- 9. This evolution follows upon the announcement of SITA announces to give up *X25 format* for data link and replace it by IP Ethernet...
- 10. Two Routers will be implemented as interface with ASECNA network and the EUOCAT-X...





- 11.The evolution will be applied to the 6 EUROCAT-X centres: *Antananarivo Ndjamena* Dakar *Niamey Abidjan Brazzaville* ...
- 12.Connexion AIDC/OLDI point to point via AIDC /OLDI will be implemented during the implementation of the others evolutions of EUROCAT-X..
- 13.ASECNA will ensure that the availability of link with neighbouring ATS centres, then that *right human resources* are in place to make the considered changes





WORKSHOP ON NEW FPL 4 – Actions started by ASECNA



Updating EUROCAT System - SITA on IP

FPL received in PRESENT format is transmitted in PRESENT format as there is no conversion to NEW format. For FPL received in NEW format or locally created, output format is defined according to recipient capabilities:

a)-FPL distributed in NEW format for a recipent supporting the NEW format



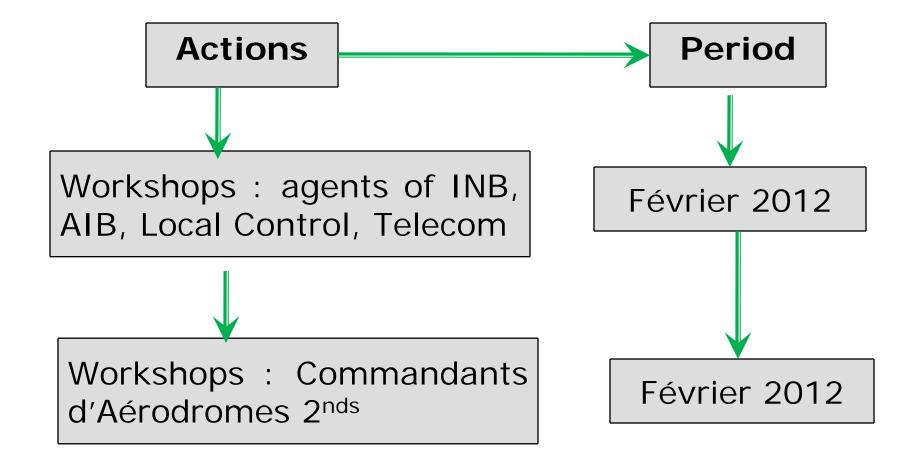


b)-FPL converted to PRESENT format and distributed in PRESENT format for a recipient not supporting the NEW format.

When a recipient updates its system to support NEW FPL format, configuration is updated to define that this recepient supports the NEW FPL format.

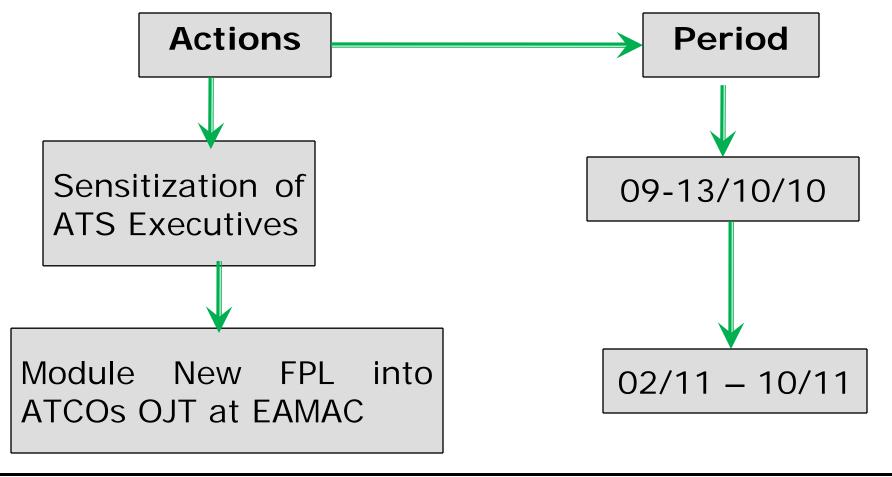






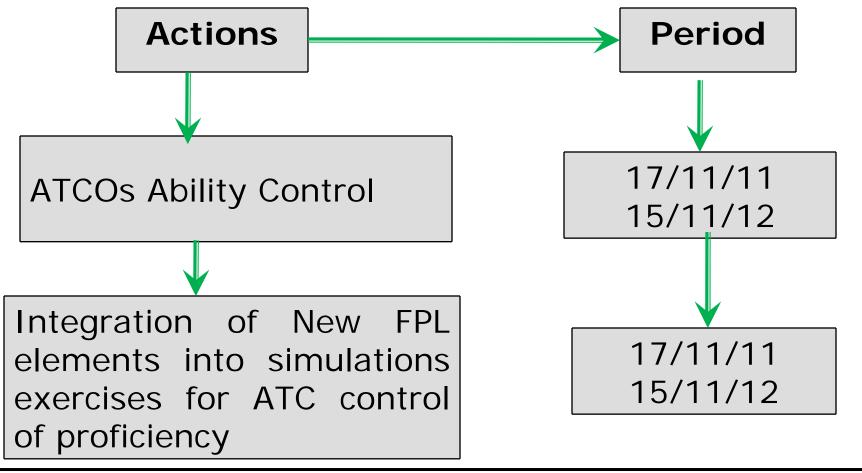














WORKSHOP ON NEW FPL 4 – Actions started by ASECNA



- 5 -

Recommendations





5 - Recommendations

- All staff and users involved in FPL management must be trained before the application date.
- 2. Each ANSP has to update it's FDPS and its AFTN to fit with the New FPL...
- 3. Each ANSP must keep both PRESENT and NEW FPL until 15 November 2012.





5 - Recommendations

- 4. ANSPs who plan to implement the NEW FPL should take into account that others ANSPs may not be able to use it...
- 5. So use of the NEW may be restricted in its application if the flight still involves ANSPs who have not yet transitioned...
- 6. Coordination between neighbouring ANSPs for adoption of a check list for an harmonised NEW FPL process during the transition period as expressed by RAN/AFI.





5 - Recommendations

During the transition period and after an ANSP has advised that it can accept the NEW,

- 7. ... the determination to file NEW or PRESENT with that ANSP will be the choice of airspace user...
- 8. ... ANSPs who has transitioned must be able to accept both New and Present.



WORKSHOP ON NEW FPL References



- ✓ ICAO State Letter 2009/9 Guidance for implementation of FPL information to support Amendment 1 of PANS-ATM, DOC 4444).
- ✓ ICAO State Letter 2008/50 Approval of Amendment 1 to the PANS-ATM (25/06/2008).
- ✓ ASECNA Project of EUROCAT-X system Harmonisation.





Thank you for attention













- Amadou Malal GUEYE
- ASECNA HQ
- Direction of Technical Operations
- ATS Training and Qualifications
- Office Phone: +221 33 869 5668
- Office Fax: +221 33 820 75 94
- Mobile phone: +221 77 321 33 62
- Addressee : BP 3144 Dakar
- eMail : gueyeama@asecna.org
 - amagueye@gmail.com
- Site web: www.asecna.aero

