

Fixed-Satellite Service Plan (Appendix 30B)

Yvon Henri

Chief, Space Services Department
ITU Radiocommunication Bureau (BR)

San Jose, Costa Rica

30 October – 1 November 2012

FSS Plan in Appendix 30B

Adopted by **WARC ORB-88**

(World Administrative Radio Conference on the Use of the Geostationary-Satellite Orbit and the Planning of Space Services Utilizing It)

Modified by **WRC-07** (World Radio Conference)

- to improve its efficiency and
- reflect the development of technology

Objective:

to **guarantee** in practice, for all countries, **equitable access** to the geostationary-satellite orbit in the frequency bands of the fixed-satellite service covered by Appendix 30B

Frequency Bands of the FSS Plan

6 / 4 GHz (300 MHz)

6725 - 7025 MHz (up)

4500 - 4800 MHz (down)

13 / 10-11 GHz (500 MHz)

12.75 - 13.25 GHz (up)

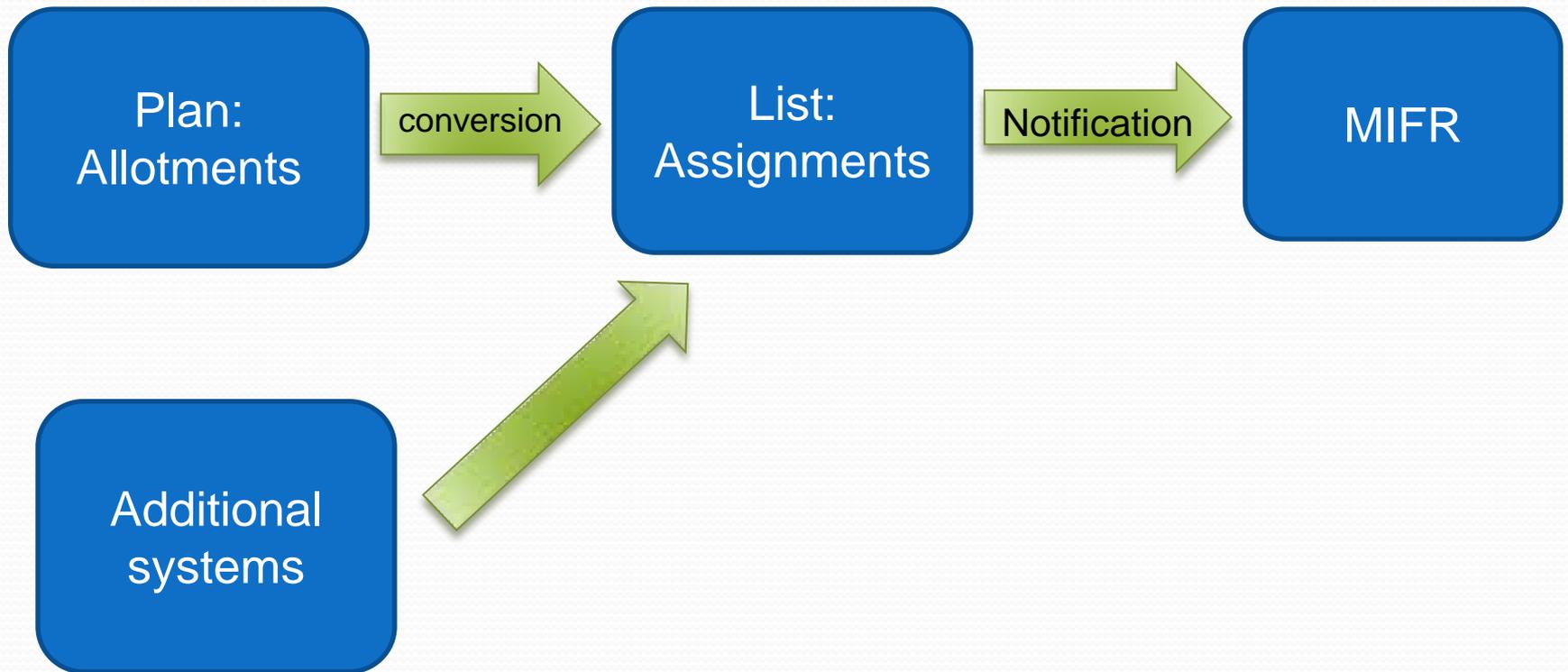
10.70 - 10.95 GHz (down)

11.20 - 11.45 GHz (down)

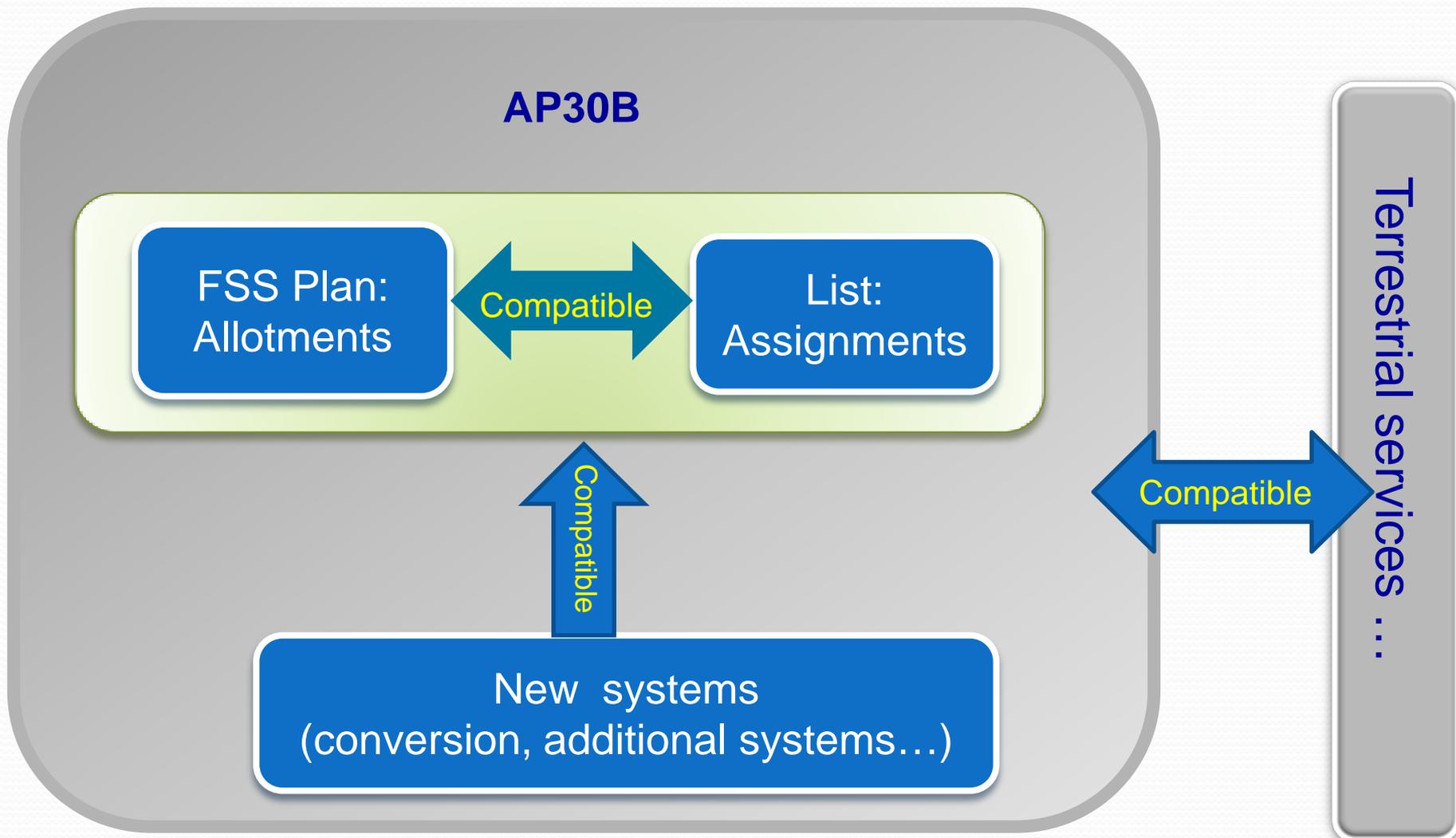
Elements of the FSS Allotment PLAN

- **Nominal orbital position**
- **Frequency:**
 - bandwidth of 800MHz × 2 (uplink and downlink)
- **Service area:**
 - national coverage
- **Technical characteristics:**
 - power levels, ellipse parameters, and other standard characteristics...
 - (described in Article 10 and Annex 1 of AP30B)

Appendix 30B procedure



COMPATIBILITY analysis



Appendix 30B (I)

Article 1	Objective of the provisions and associated Plan
Article 2	Definitions
Article 3	Frequency bands
Article 4	Execution of the provisions and associated Plan
Article 5	(SUP – WRC-07)
Article 6	Procedures for the conversion of an allotment into an assignment, for the introduction of an additional system or for the modification of an assignment in the List
Article 7	Procedure for the addition of a new allotment to the Plan for a new Member State of the Union
Article 8	Procedure for notification and recording in the Master Register
Article 9	General provisions
Article 10	FSS Plan
Article 11	Period of validity of the provisions and associated Plan

Appendix 30B (II)

Annex 1	Parameters used for FSS allotment Plan
Annex 2	(SUP – WRC-07)
Annex 3	PFD Limits
Annex 4	Criteria for determining whether an allotment or an assignment is considered to be affected



PFD limits for both
uplink and downlink



Single entry (uplink &
downlink) and
aggregate C/I

Article 7 – New Allotment

New ITU Member States can obtain a national allotment

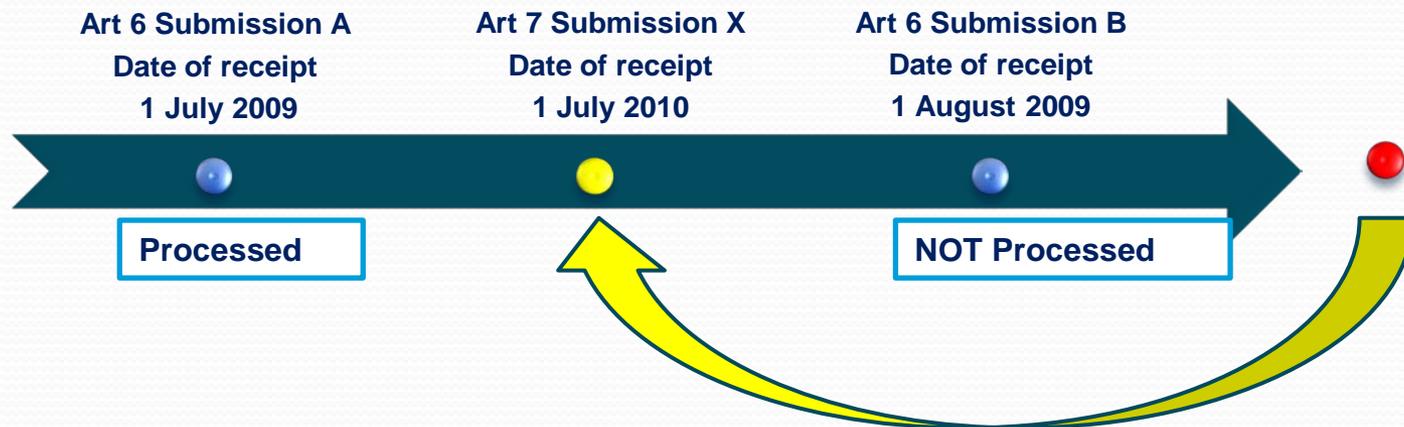
Required information:

- Geographical coordinates of 20 test points (max.)
- Height above sea of each test point
- Any special requirement

The Bureau identifies and proposes orbital locations with associated technical parameters

Article 7 – New Allotment

Processing ahead of pending submissions for Article 6



In case of incompatibility, Article 6 procedure applies

Article 6 – entry into the List

8 years **Regulatory period** from receipt of Article 6 submission

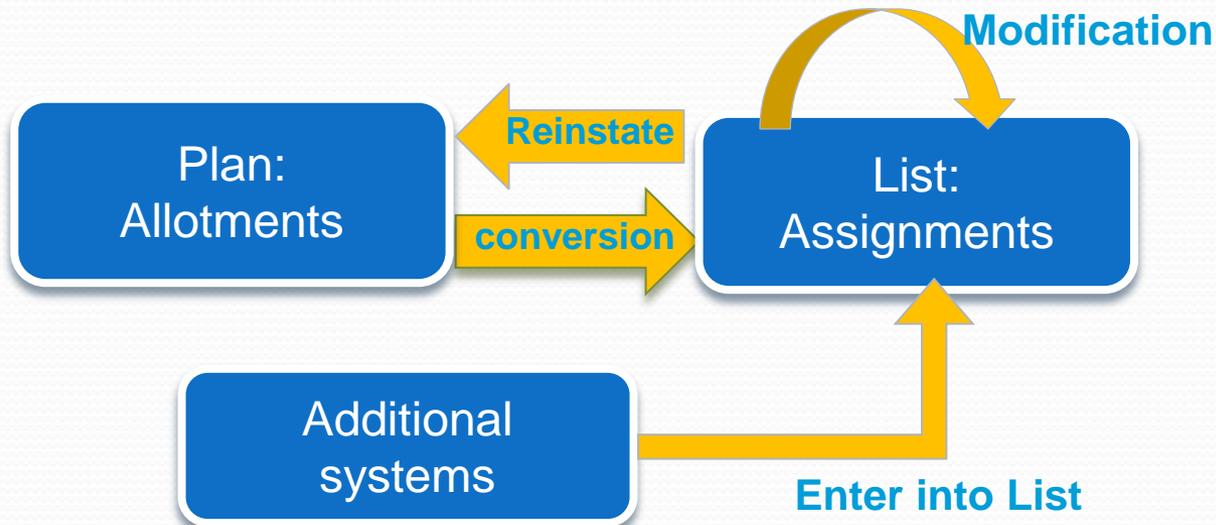
- to complete Article 6 procedure to be included in the List
- to bring into use assignments (confirmation through notification procedure within 30 days)
- to submit due diligence information (Res.49)
- can be extended to max. **3 years** in case of launch failure (WRC-12)



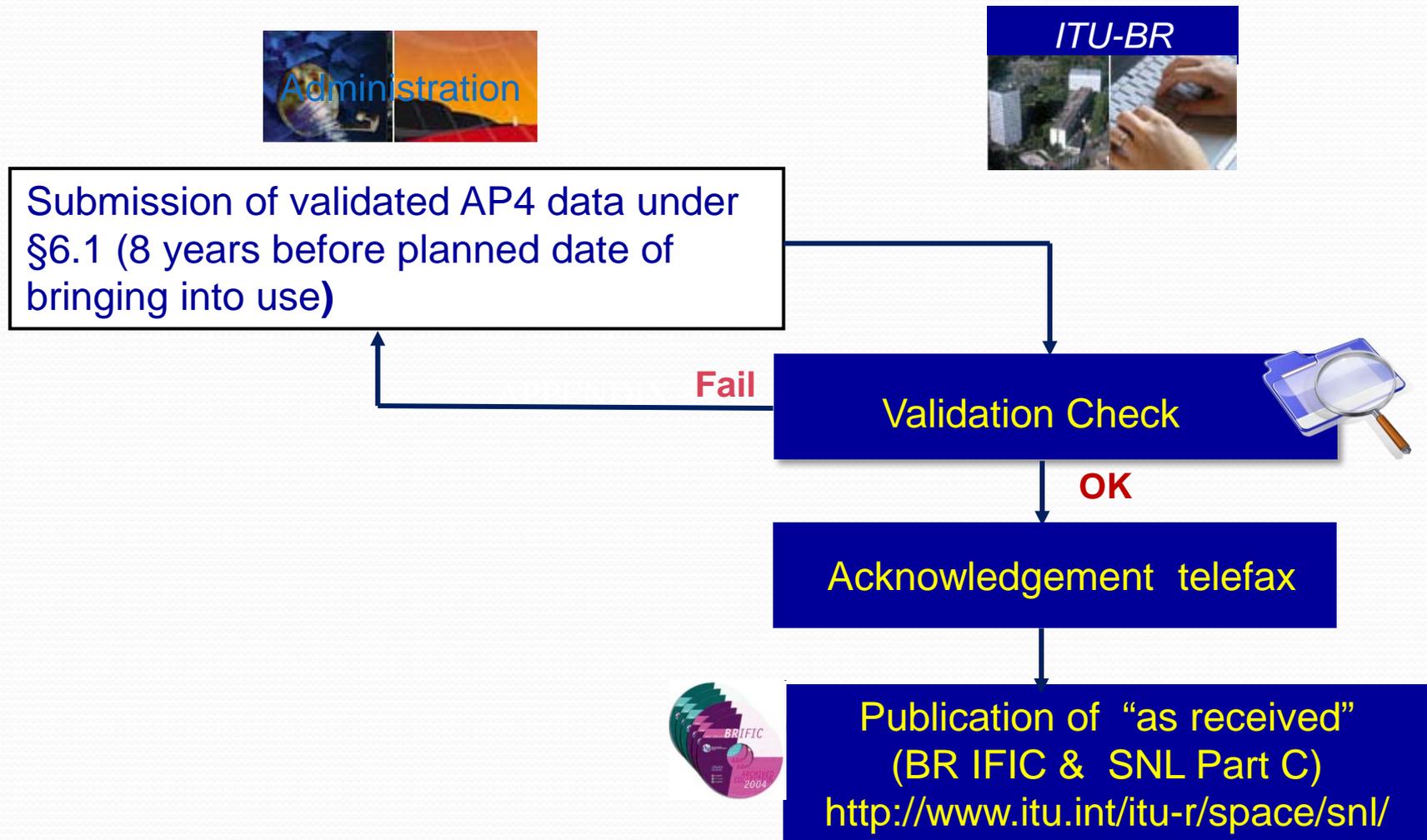
Article 6 – entry into the List

Procedure applicable for :

- Conversion of an allotment into an assignment
- Introduction of an additional system
- Modification of an assignment in the List
-



Processing of Article 6 Submissions (1)



Processing of Article 6 Submissions (2)



Completeness examination and telefax

Reply must be sent within 30 days (receivability RoP)

Regulatory/technical Examinations (§6.3, §6.5)



Unfavorable assignments return to notifying Administration

Publication of AP30B/A6A Special Section (satellite network characteristics and potentially affected administrations)



Processing of Article 6 Submissions (3)



ITU-BR



Administrations should examine each BR IFIC to see if their assignments are affected and respond within 4 months



Affected administrations that do not comment within the 4 month period are deemed to have NOT agreed

Notifying administration can request assistance of the BR to receive replies from affected administrations

The BR sends reminders to the affected administration which has not replied

No response from Affected administrations to the BR's reminders is considered as agreement

Processing of Article 6 Submissions (4)



Submission of validated AP4 data under §6.17 (final characteristics) with required agreements

Validation Check 

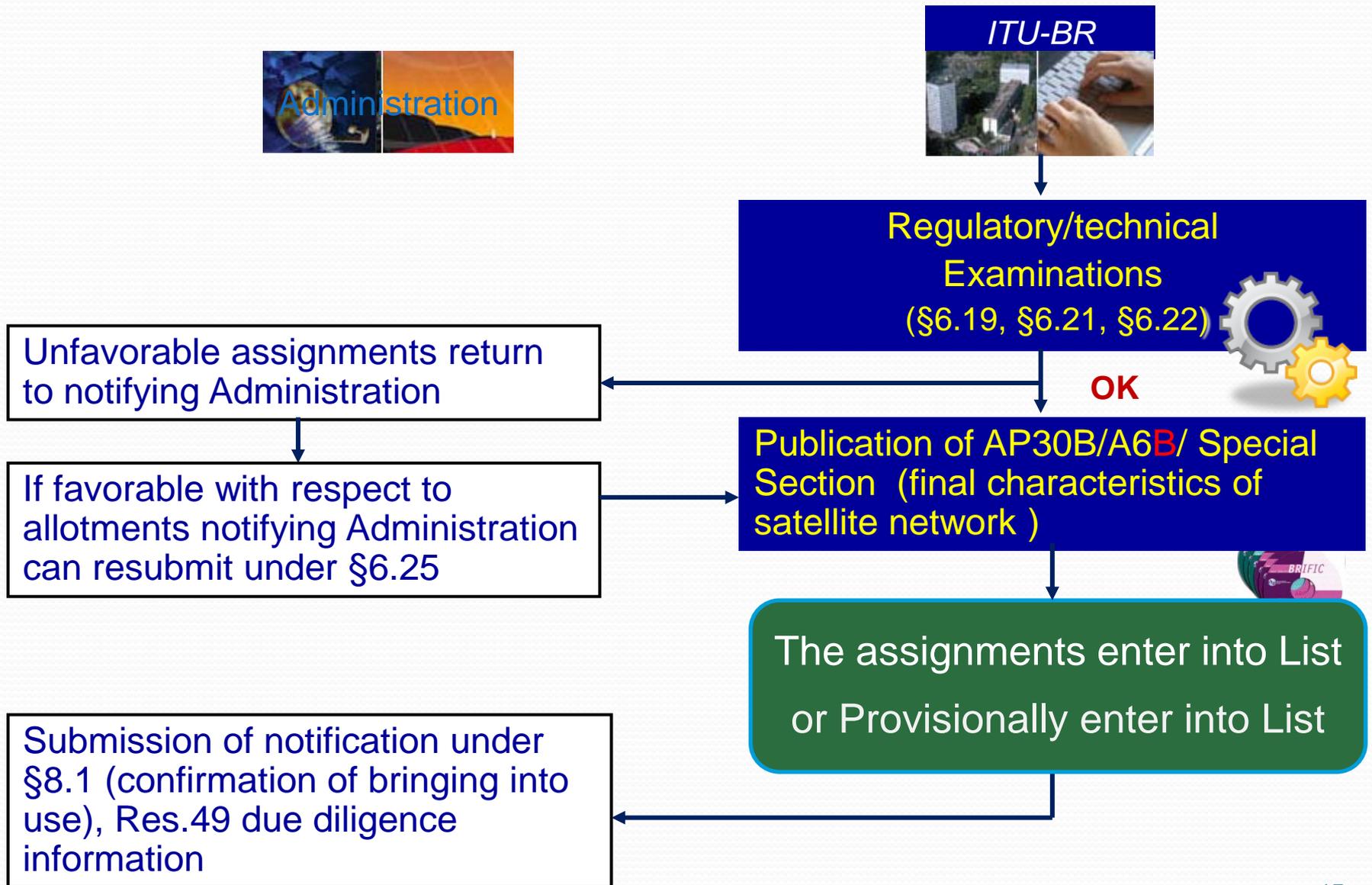
Fail

OK

Completeness examination and telefax

Reply must be sent within 30 days (receivability RoP)

Processing of Article 6 Submissions (5)



Article 8 – Notification of assignments

Art.6 procedure successful



**submitting notification
under Art. 8**

- Final characteristics for List assignments to be recorded in MIFR (not taken into account in subsequent technical examinations under Articles 6, 7 and 8)
- Confirmation of the date of bringing into use (30 days WRC-12)
- If not submitted then cancellation of Article 6 submission

Processing of Article 8 Submissions (1)



Submission of validated Appendix 4 data (characteristics (to be) brought into use(BIU)) not earlier than 3 years before BIU but not later than 8 years after submission under §6.1

Fail

Validation Check

OK

Acknowledgement telefax

Completeness examination

Reply must be sent within 30 days (receivability RoP)

Processing of Article 8 Submissions (2)



Publication of Part IS of BR IFIC that contains the characteristics (to be) brought into use

Regulatory/technical examination



Favourable

Unfavourable

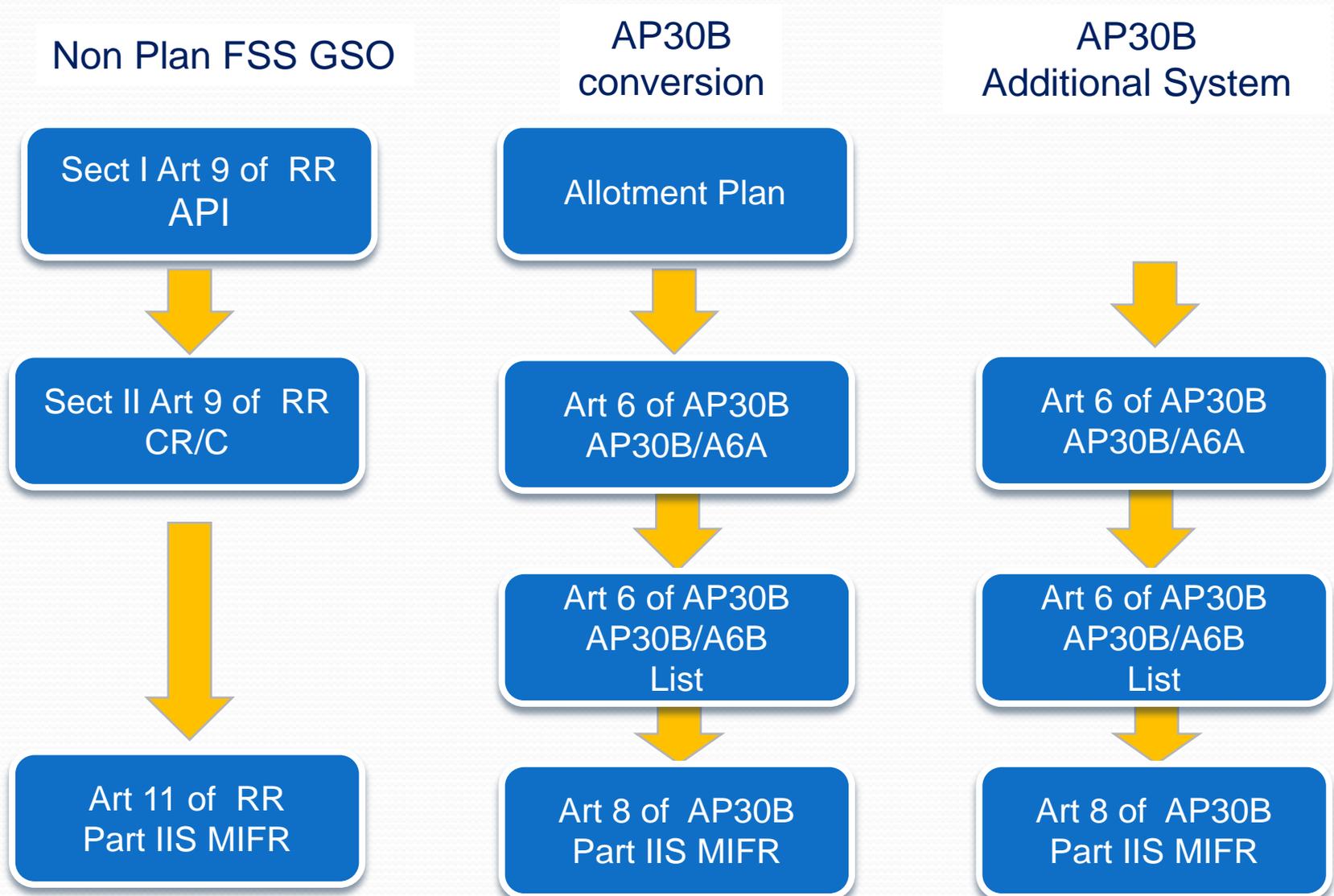
Publication of Part IIS
Record in MIFR
<http://www.itu.int/sns/>



Publication of Part IIS
Record in MIFR
<http://www.itu.int/sns/>



AP30B and Non Plan procedures



AP30B and Non Plan procedures

	Non Plan FSS GSO	-Additional System, or -Conversion with modification	Conversion without modification
Regulatory Period	7 years	8 years	8 years
Res. 49	Yes	Yes	Yes
API	Yes	NA	NA
Coordination Publication	CR/C	A6A	A6A
Inclusion in the List	NA	A6B	A6B
Notification	Yes	Yes but not for protection	Yes but not for protection
Service Area	Any	Any with agreement	National
To be compatible with	Previously filed	Allotment, List, previously filed	Already compatible
Identification	Both direction Single entry	One direction Single entry and aggregate	One direction Single entry and aggregate
No comment within 4 months after publication	Assistance No.9.46	Assistance §6.13	NA

Useful Website Addresses

For more information

<http://www.itu.int/en/ITU-R/space/plans/Pages/AP30B.aspx>

Latest AP30B database with Plan, List and MIFR

<http://www.itu.int/ITU-R/go/space-plans/en>

General information relating to space plan services

<http://www.itu.int/ITU-R/space/snl/index.html>

SNL On-Line; list of published networks, networks in the backlog

Fixed-Satellite Service Plan (Appendix 30B)

Merci!

San Jose, Costa Rica
30 October – 1 November 2012