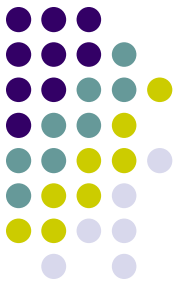




# Cost Recovery for satellite network filings

RADIOCOMMUNICATION BUREAU  
Mehtap Dufour  
mehtap.muluk@itu.int

# Implementation of cost recovery:

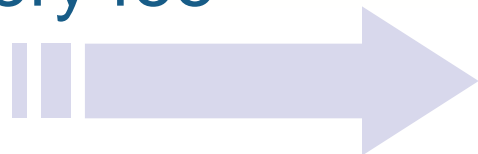


The ITU Council determines the cost recovery principles and fees for satellite network filings



Council Decision 482

The WRC determines regulation covering satellite network filings, including the penalty in the event of non-payment of cost recovery fee



Radio Regulations  
No.9.38.1 etc.

# Council Decision 482:



Established a schedule of processing charge that relates to the complexity and size of a filing

Complexity is modeled with categories

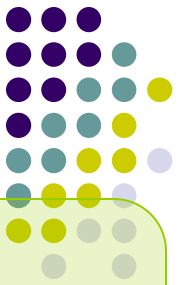
Size is modeled by units

6 months to make payment

One free entitlement a year for each member state

Created in Council 1999, modified in Council 2001, 2002, 2004 and 2005 (and 2008)

# What Filings are chargeable?



## 1/ API:

- \* API for NGSO not subject to coordination
- \* API for inter-satellite links of a GSO communicating with NGSO not subject to coordination

Filings

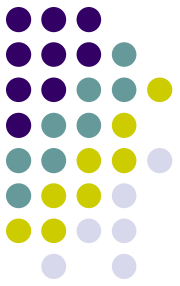
## 2/ Coordination Requests

## 3/ Plans:

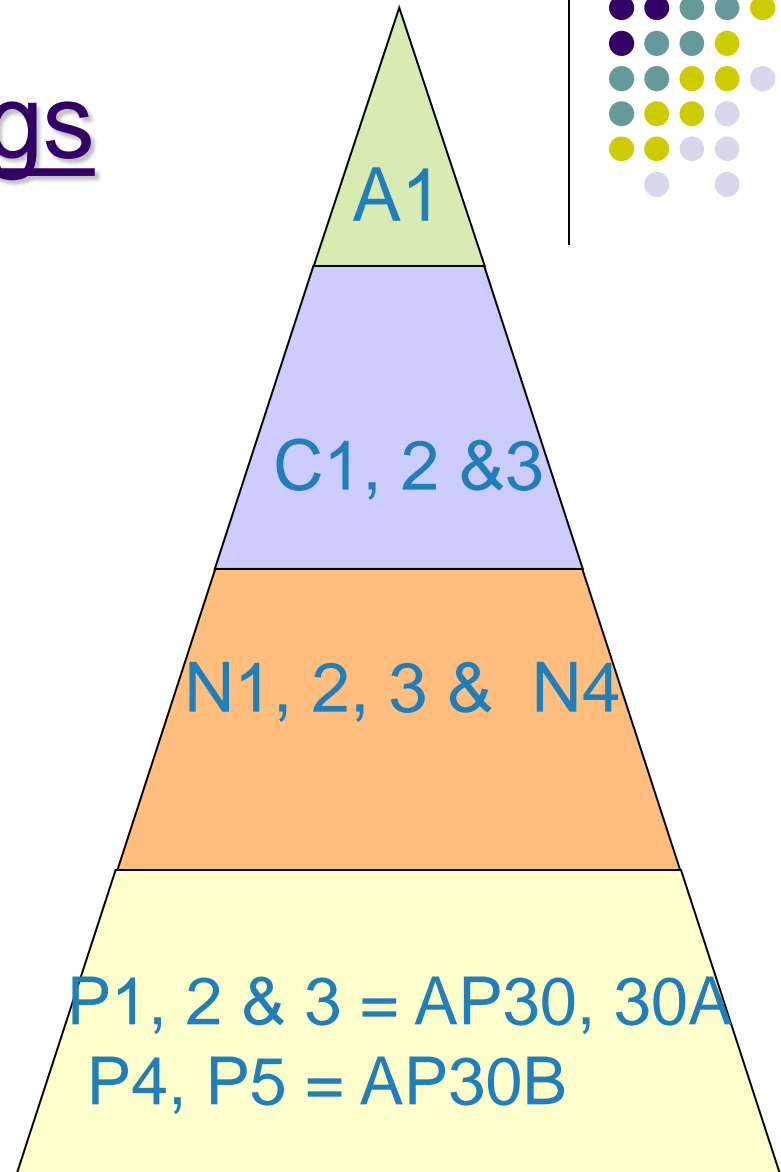
- \* Modifications of the Space Service Plans and Lists
- \* The use of guardbands
- \* Requests for implementation of the FSS plans

## 4/ Notification for recording in the MIFR

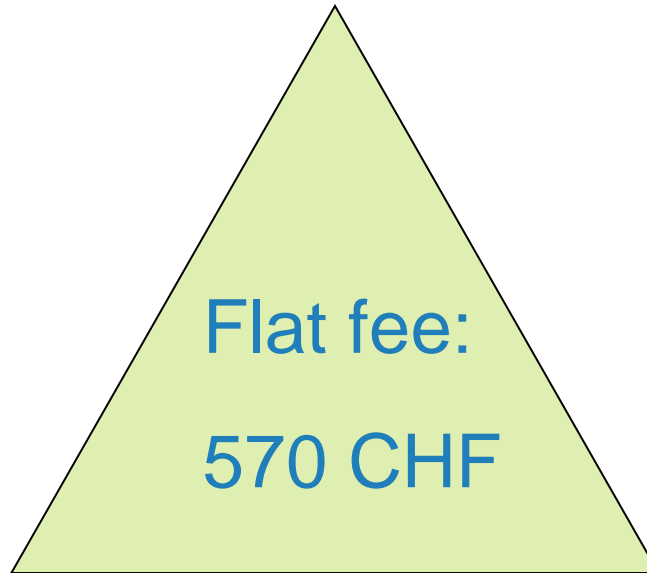
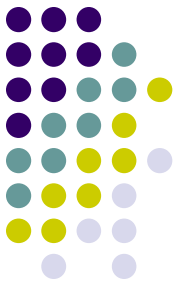
# Categorization of filings



- By filing type
  - Advance Publication (A1)
  - Coordination Request (C1-C3)
  - Notifications (N1-N4)
  - Plans and their corresponding notifications (P1-P5)



# Fees for API (Art. 9 – Section IA)



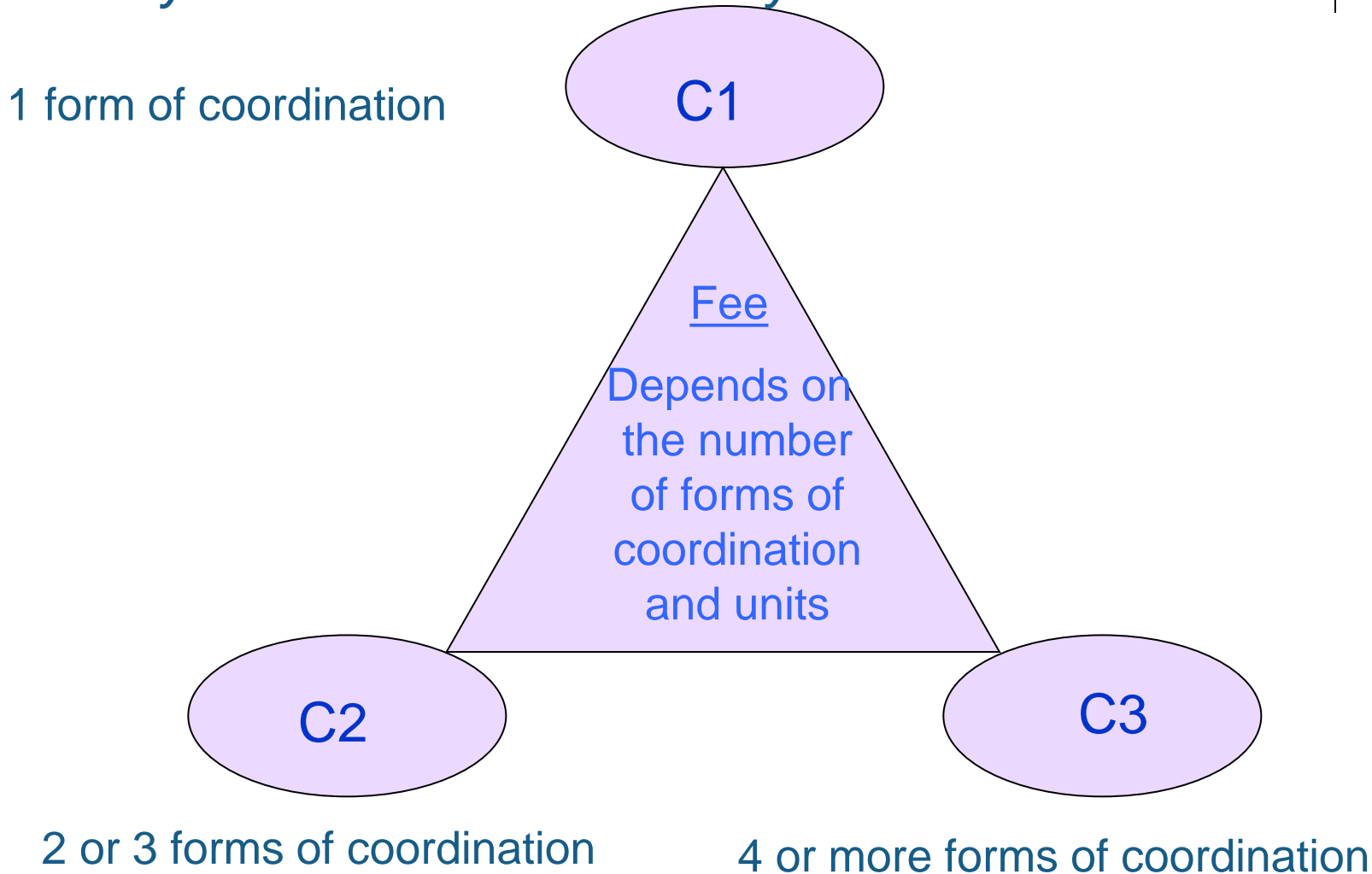
Inter-satellite links of a GSO communicating with NGSO not subject to coordination

API for NGSO not subject to coordination

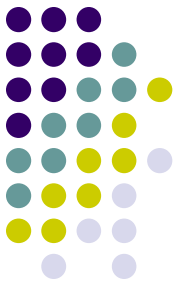
# Categorization of Coordination Requests (Art. 9 – Section II)



*By number of cost-recovery forms of coordination*



# What are forms of coordination?



Cost recovery form of coordination	RR forms of coordination
A	No. 9.7, RS33.3
B	AP30 7.1, AP30A 7.1
C	No. 9.11, RS33 2.1, RS539
D	Nos. 9.7B, 9.11A, 9.12, 9.12A, 9.13, 9.14
E	No. 9.7A
F	No. 9.21



# Example (Forms of Coordination):



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION  
RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES  
OFICINA DE RADIOCOMUNICACIONES

© I.T.U.

RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		<b>LUX-G6-12</b>		SECTION SPÉCIALE N° SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	<b>CR/C/2245</b>
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA		---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	<b>2632 / 11.11.2008</b>
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	<b>LUX</b>	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	<b>43.5 E</b>	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	<b>108520161</b>
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL					<b>18.06.2008</b>

Cette demande de coordination, reçue par le Bureau des radiocommunications en vertu du numéro 9.30 du Règlement des radiocommunications, a été examinée au titre des numéros 9.35 et 9.36 et est publiée conformément au numéro 9.38. Elle est au bordonnée au type de coordination indiqué dans la colonne de gauche par un X dans la case pertinente.

This request for coordination, received by the Radiocommunication Bureau pursuant to No. 9.30 of the Radio Regulations, has been examined under Nos. 9.35 and 9.36 and is published in accordance with No. 9.38. It is subject to the form of coordination indicated in the left-hand column by an X in the relevant box.

Esta solicitud de coordinación, recibida por la Oficina de Radiocomunicaciones de conformidad con el punto N° 9.30 del Reglamento de Radiocomunicaciones, se ha examinado de conformidad con los N° 9.35 y 9.36 y se publica de conformidad con el N° 9.38. Está sujeta al formulario de coordinación indicado en la columna de la izquierda con una X en la casilla correspondiente.

Type de coordination mentionné dans le Tableau I / Form of coordination referred to in Table I / Forma de coordinación mencionada en el cuadro I

<input checked="" type="checkbox"/>	9.7	Conformément aux numéros 9.50 à 9.52 du Règlement des radiocommunications, les Administrations identifiées dans le Tableau I ci-après sont priées de communiquer leur décision à l'Administration responsable et au Bureau avant la date limite indiquée ci-dessous.	In accordance with Nos. 9.50-9.52 of the Radio Regulations, the Administrations identified in Table I below are requested to communicate their decision to the Responsible administration and the Bureau by the deadline indicated below.	De conformidad con los N° 9.50-9.52 del Reglamento de Radiocomunicaciones, se solicita a las administraciones señaladas en el cuadro I a continuación que comuniquen su decisión a la administración responsable y a la Oficina antes del plazo indicado más abajo.
<input type="checkbox"/>	9.7A			
<input type="checkbox"/>	9.7B			
<input type="checkbox"/>	9.42			
<input checked="" type="checkbox"/>	AP30#7.1			
<input checked="" type="checkbox"/>	AP30A#7.1			
<input type="checkbox"/>	RS77			
<input type="checkbox"/>	RS84			
<input type="checkbox"/>	RS539			
<input type="checkbox"/>	RS33#3			

Type de coordination mentionné dans le Tableau II / Form of coordination referred to in Table II / Formulario de coordinación remitido al cuadro II

<input checked="" type="checkbox"/>	9.11	Les Administrations, énumérées ou non-énumérées dans le Tableau II ci-après, qui n'acceptent pas la demande de coordination au titre des numéros 9.11 à 9.14, 9.21 et RS33#2.1, sont priées de communiquer leurs observations à l'Administration responsable et au Bureau avant la date limite indiquée ci-dessous. Toute Administration qui ne réagira pas au titre du numéro 9.52 avant cette date limite sera considérée comme n'étant pas défavorablement influencée et, dans les cas couverts par les numéros 9.11 à 9.14 et RS33#2.1, les dispositions des numéros 9.48 et 9.49 s'appliqueront.	Administrations listed or not listed in Table II below, which do not agree to the request for coordination under Nos. 9.11 to 9.14, 9.21 and RS33#2.1 are requested to communicate their comments to the responsible administration and the Bureau by the deadline indicated below. Any administration not responding under No. 9.52 within this deadline shall be regarded as unaffected and, in the cases of Nos. 9.11 to 9.14 and RS33#2.1, the provisions of Nos. 9.48 and 9.49 shall apply.	Se invita a las administraciones, enumeradas o no en el cuadro II, que no estén de acuerdo con la solicitud de coordinación de conformidad con los N° 9.11 a 9.14, 9.21 y RS33#2.1 que comuniquen sus observaciones a la administración responsable y a la Oficina dentro del plazo indicado más abajo. Se considerará que toda administración que no responda de conformidad con el N° 9.52 dentro del plazo señalado, no está afectada y, en el caso de los N° 9.11 a 9.14 y RS33#2.1, se aplicarán las disposiciones de los N° 9.48 y 9.49.
<input checked="" type="checkbox"/>	9.11A			
<input type="checkbox"/>	9.12			
<input type="checkbox"/>	9.12A			
<input checked="" type="checkbox"/>	9.13			
<input checked="" type="checkbox"/>	9.14			
<input checked="" type="checkbox"/>	9.21A			
<input checked="" type="checkbox"/>	9.21B			
<input checked="" type="checkbox"/>	9.21C			
<input type="checkbox"/>	RS33#2.1			

DATE LIMITE POUR LA DÉCISION / EXPIRY DATE FOR DECISION / FECHA LÍMITE PARA LA DECISIÓN

**11.03.2009**

# Cost recovery summary in CR/C



SECTION SPECIALE / SPECIAL SECTION / SECCIÓN ESPECIAL / 特节 / СПЕЦИАЛЬНАЯ СЕКЦИЯ / القسم الخاص										CRC/2245	
A	A1a Sat. Network	LUX-G6-12	A1f1 Notifying adm.	LUX	A1f3 Inter. sat. org.		BR1 Date of receipt	18.06.2008	BR20/BR21 BR IFIC no./part	2632/	
	BR6a/BR6b Id. no.	108520161	BR3a/BR3b Provision reference	9.6	C		BR2 Adm. serial no.				

B1a Beam designation	B2 Emi-Rcp	BR8 Action code	BR7a Group id.	BR9 Action code	13A Conformity with RR	C3a Assigned freq. band	BR47 Frequency band (MHz)		BR15 Provision reference	BR53 Nb of freq.	C4a Class of station	BR54 Nb of emiss.	BR55 Nb of units
TUHR	E		108627556		A-----	77000	235	- 312	9.21,9.7	1	EI	2	2
			108627557		A-----	7000	315	- 322	9.21,9.7	1	EI	2	2
			108627558		A-----	64500	335.4	- 399.9	9.13,9.21,9.7	1	EI	2	2
TV1R	E		108627559		A-----	2000000	37500	- 42500	9.7	2	EC	1	2
			108627560		A-----	1000000	39500	- 40500	9.7	1	EC	1	1
			108627561		A-----	1000000	39500	- 40500	9.7	1	EI	1	1
			108627562		A-----	1000000	41000	- 42000	9.7	1	EV	1	1
TV2R	E		108627563		A-----	2000000	37500	- 42500	9.7	2	EC	1	2
			108627564		A-----	1000000	39500	- 40500	9.7	1	EC	1	1
			108627565		A-----	1000000	39500	- 40500	9.7	1	EI	1	1
			108627566		A-----	2000000	40500	- 42500	9.7	1	EV	1	1
TVR	E		108627757		A-----	30000	2170	- 2200	9.13,9.14,9.7	1	EI	6	6
TX1R	E		108627567		A-----	125000	7250	- 7375	9.7	1	EC	1	1
			108627568		A-----	125000	7250	- 7375	9.7	1	EC	1	1
			108627569		A-----	125000	7250	- 7375	9.7	1	EC	1	1
			108627570		A-----	375000	7375	- 7750	9.7	1	EC	1	1
			108627571		A-----	375000	7375	- 7750	9.7	1	EC	1	1
			108627572		A-----	375000	7375	- 7750	9.7	1	EC	1	1
			108627573		A-----	125000	7250	- 7375	9.21,9.7	1	EI	1	1
			108627574		A-----	125000	7250	- 7375	9.21,9.7	1	EI	1	1
			108627575		A-----	125000	7250	- 7375	9.21,9.7	1	EI	1	1

BR57 Category	C3
BR56 Total number of units	398

# What are Units?



- Units =

the number of frequency assignments

x

number of classes of station

x

number of emissions

summed up for all frequency assignment groups

- Only applicable for categories C1, C2, C3, N1, N2, N3
- For these categories, flat fee applies for units > 100

# Example (units):

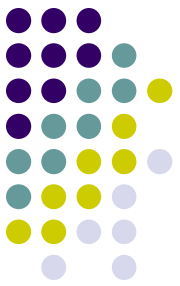


**Nb. of Freq x Class of station x Nb. of emiss. = Number of units**

SECTION SPECIALE / SPECIAL SECTION / SECCIÓN ESPECIAL / 特节 / СПЕЦИАЛЬНАЯ СЕКЦИЯ / القسم الخاص										CR/C/2222
A	A1a Sat. Network	SWANSAT-3A	A1f1 Notifying adm.	NRU	A1f3 Inter. sat. org.		BR1 Date of receipt	15.05.2008	BR20/BR21 BR IFIC no./part	2629/
	BR6a/BR6b Id. no.	108520131	BR3a/BR3b Provision reference	9.6	C	BR2 Adm. serial no.				

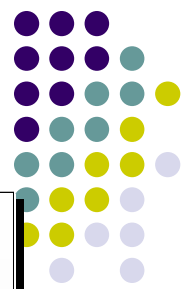
B1a Beam designation	B2 Emi-Rcp	BR8 Action code	BR7a Group id.	BR9 Action code	13A Conformity with RR	C3a Assigned freq. band	BR47 Frequency band (MHz)		BR15 Provision reference	BR53 Nb of freq.	C4a Class of station	BR54 Nb of emiss.	BR55 Nb of units
			108617349		A-----	3000000	71000	- 74000	9.7	1	EC	3	3
			108617350		A-----	3000000	71000	- 74000	9.7	1	EC	3	3
			108617351		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617352		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617353		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617354		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
			108617355		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
			108617356		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
WD2	E		108617357		A-----	3000000	71000	- 76000	9.7	2	EC	3	6
			108617358		A-----	3000000	71000	- 76000	9.7	2	EC	3	6
			108617359		A-----	3000000	71000	- 76000	9.7	2	EC	3	6
			108617360		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617361		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617362		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617363		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
			108617364		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
			108617365		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
WD3	E		108617378		A-----	3000000	71000	- 76000	9.7	2	EC	3	6
			108617379		A-----	3000000	71000	- 76000	9.7	2	EC	3	6
			108617380		A-----	3000000	71000	- 76000	9.7	2	EC	3	6
			108617381		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617382		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617383		A-----	3000000	71000	- 74000	9.7	1	EI	3	3
			108617384		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
			108617385		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6
			108617386		A-----	2000000	74000	- 76000	9.7	1	EB, EV	3	6

BR57 Category		C1
BR56 Total number of units		369

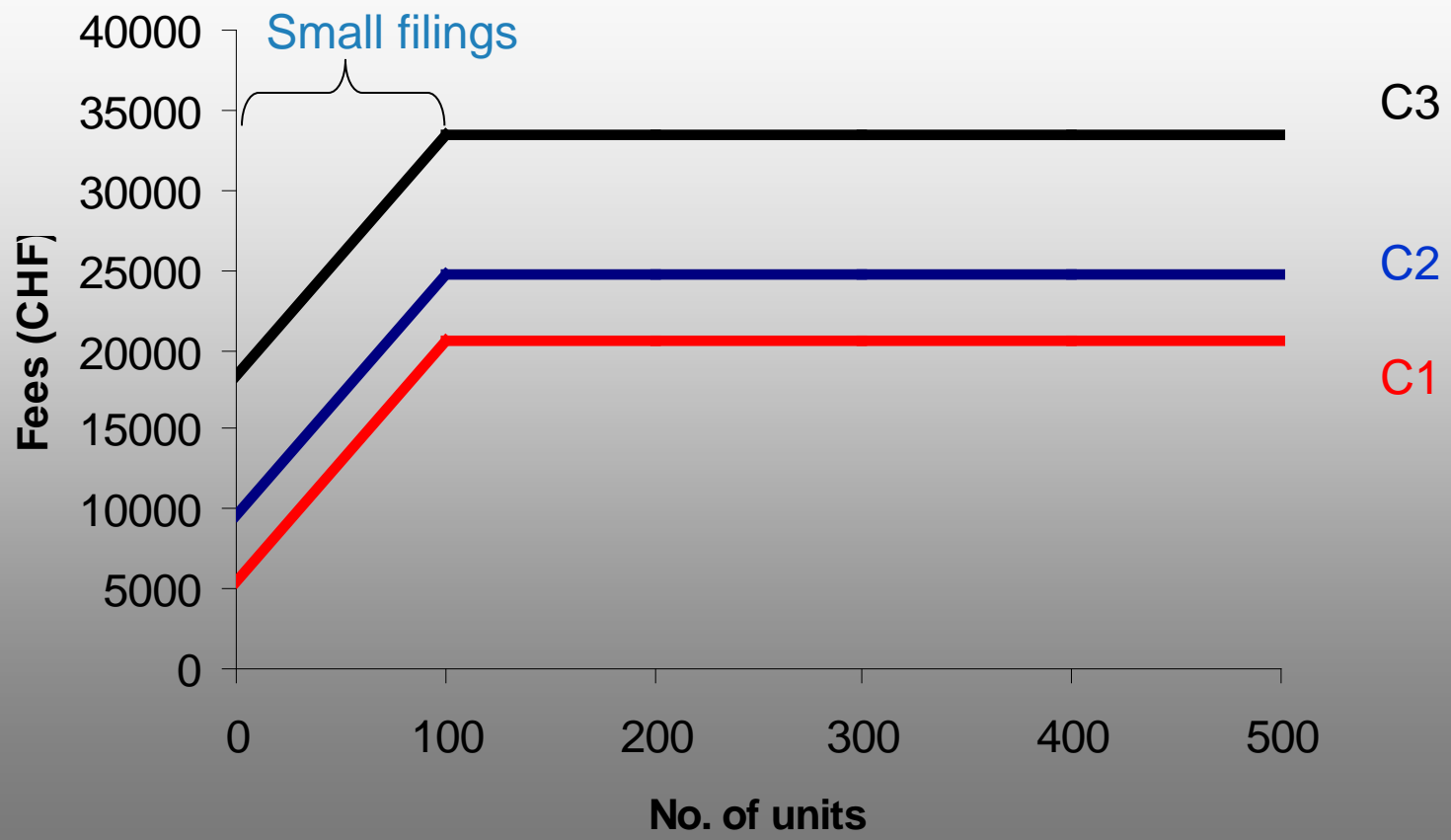


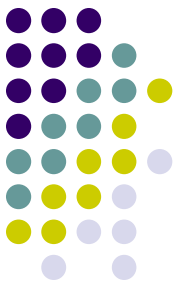
# Fees for Coordination Requests

Category	Number of costrec forms of coordination	Fees (CHF)
C1	1	5 560 + 150 x Units (max 20 560)
C2	2 or 3	9 620 + 150 x Units (max 24 620)
C3	4 or more	18 467+ 150 x Units (max 33 467)



## Fees for category C1, C2 and C3 filing





# Notifications (under Art 11)

## Conditions

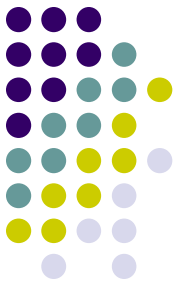
Date of receipt: on or after 1/1/2006

API date of receipt after 19/10/2002

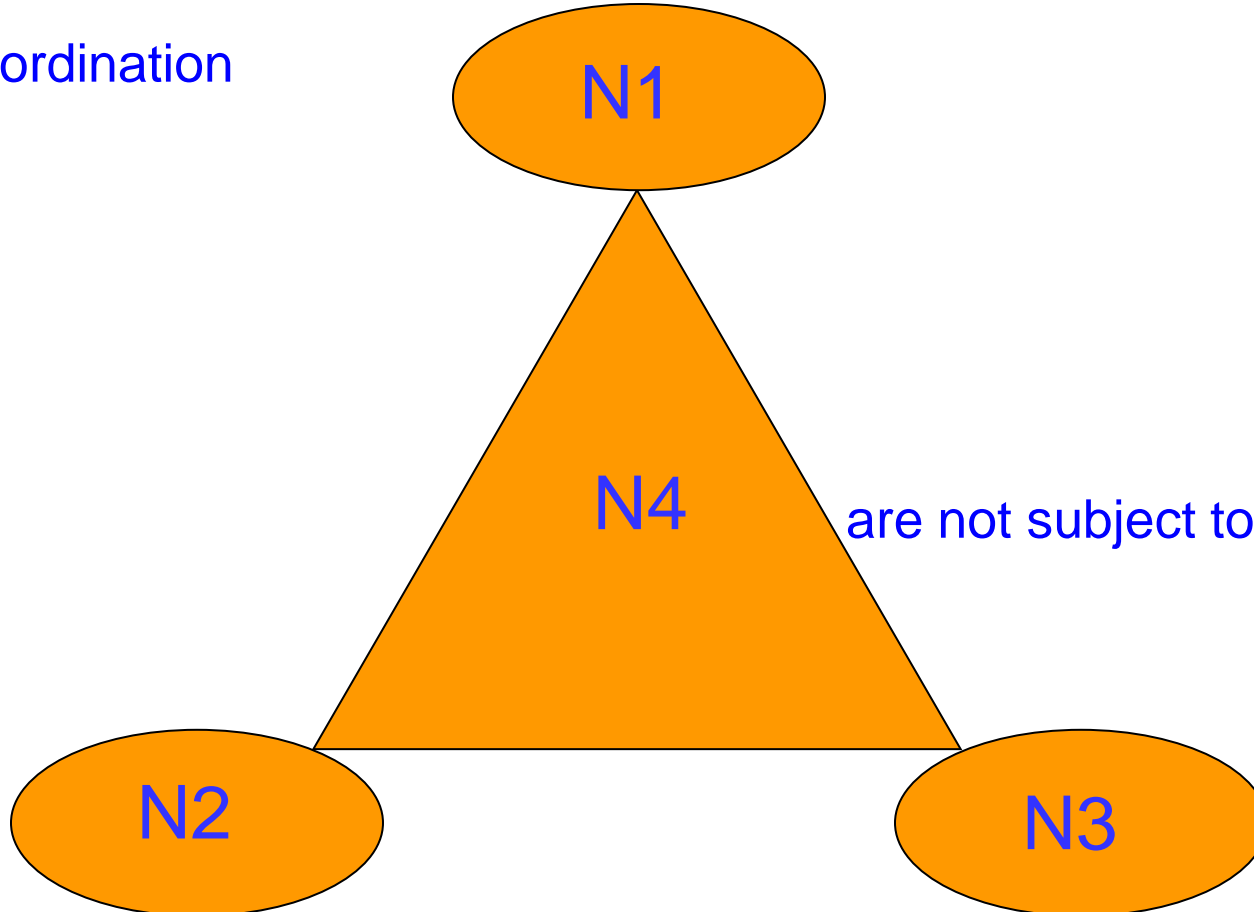
For N1, N2, N3 only:

If procedure under No. **11.32A** is requested, invoice will be issued for 100% of the fee.  
Otherwise, only 70% of the fee will be invoiced, and 30% will be invoiced if and when No. **11.32A** is requested by the Administration.

# Categorization of Notifications



1 form of coordination

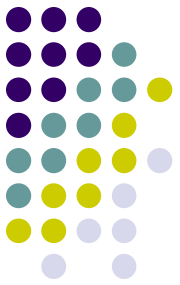


are not subject to coordination

2 or 3 forms of coordination

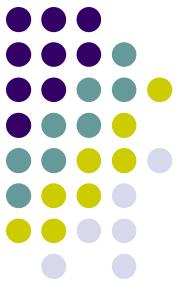
4 or more forms of coordination



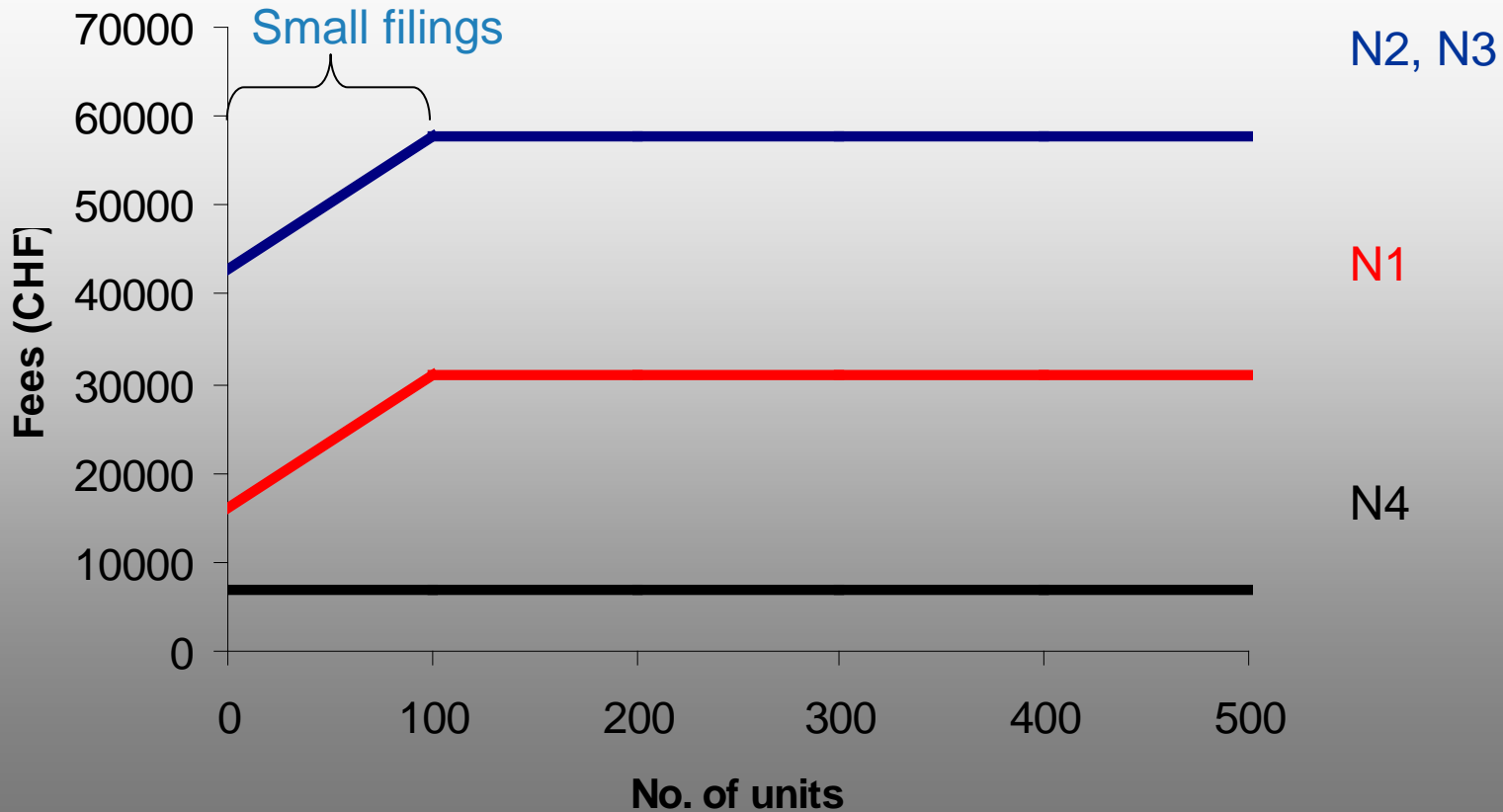


# Fees for Notification (Art 11)

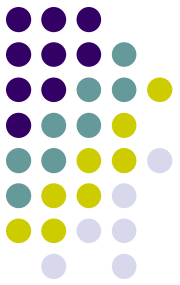
Category	Number of costrec forms of coordination	Fees (CHF)
N1	1	15 910 + 150 x Units (max 30 910)
N2	2 or 3	42 920 + 150 x Units (max 57 920)
N3	4 or more	42 920+ 150 x Units (max 57 920)
N4	-	7 030



## Fees for category N1, N2, N3 and N4 filing



# Categorization of Plans



Art. 4 & 5 of AP30/30A

P1, P2

Flat fee for  
each category

P3

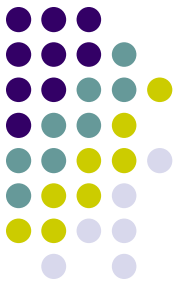
Art. 2A of AP30/30A

P4, P5

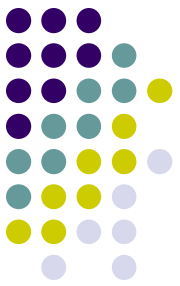
Art. 6 & 8 of AP30B

# Fees for Plans (AP30/30A/30B)

– Flat fee for each category:



Category	Description	Flat fee (CHF)
P1	AP30/E, AP30A/E, AP30-30E/ (Part A or Part B) - Part B chargeable only if that Part A received after 7/11/98	28 870
P2	Notification under Article 5 of AP30/30A - Notification chargeable only if Part A received on or after 19/10/2002	11 550
P3	Coordination request under Article 2A of AP30/30A	12 000
P4	Procedures under Article 6 of AP30B (submission under 6.17 chargeable only if the submission under 6.1 received before 17 Nov 07)	40 560 (25 350 if received from 17.11.2007)
P5	Notification under Article 8 of AP30B - Notification chargeable only if requests for implementation for FSS plan received on or after 19/10/2002	32 450 (20 280 if received from 17.11.2007)



## Upfront Stage:

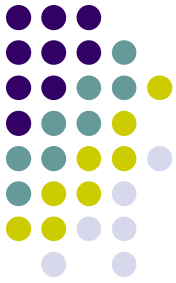
Upon receipt of filing, the BR establish receivability Invoice will be issued based on the category and units of the filing at that time (see SpaceCap).

## Invoicing process:

## Publication Stage (IFIC):

Following the detailed examination of the notice, if the category or units of the filing is found to be any different, any excess fee (or refund) will be issued after the publication of the notice.

# SpaceCap:



SpaceCapture V6 System

File Edit Tools Template Window Help

CR/NOTIF API RAST PLAN RS49

SpaceCap

Start Page

Notice Explorer

Open Notice

New Notice

Search

### Notice Explorer - AP4/II and AP4/III

Notice id. Type Adm./Org. Orb. Pos. Station name Date rcv. Count=1

List of notices

#### Cost Recovery Analysis

##### Cost Recovery Details for Notice 1 NEWSAT 1A

Beam Name	Emi Rcp	Act Code	Group Id	Act Code	Freq Min	Freq Max	Freq Count	Emiss Count	StrCls	Provn	Units
RV	R		1		13752.00000	13988.00000	6	6	EC	9.7	36
			2		13752.00000	13988.00000	6	2	EC	9.7	12
			3		13752.00000	13988.00000	6	3	EC	9.7	18
			4		13752.00000	13988.00000	6	5	EC	9.7	30
			5		13752.00000	13988.00000	6	3	EC	9.7	18
			6		13752.00000	13988.00000	6	2	EC	9.7	12
			7		13752.00000	13988.00000	6	5	EC	9.7	30
			8		13752.00000	13988.00000	6	2	EC	9.7	12
			9		13752.00000	13988.00000	6	2	EC	9.7	12
			10		13752.00000	13988.00000	6	2	EC	9.7	12
RH			11		13762.00000	13988.00000	6	6	EC	9.7	36
			12		13772.00000	14008.00000	6	2	EC	9.7	12
			13		13772.00000	14008.00000	6	3	EC	9.7	18
			14		13772.00000	14008.00000	6	5	EC	9.7	30
			15		13772.00000	14008.00000	6	3	EC	9.7	18
			16		13772.00000	14008.00000	6	2	EC	9.7	12
			17		13772.00000	14008.00000	6	5	EC	9.7	30
			18		13772.00000	14008.00000	6	2	EC	9.7	12
			19		13772.00000	14008.00000	6	2	EC	9.7	12

Control Box

Clone

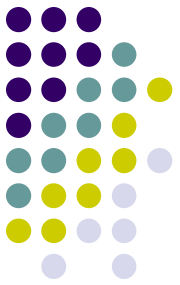
MASTER DB SMS

Show

Export

Delete

# SpaceCap:



## **Cost Recovery Analysis (Dec 482 C2005)**

Analysis run at: 15:27:46 on 06.10.2008

Notice id: 1

Satellite Network: SWANSAT-3A

Services: EB,EC,ED,EI,EK,ER,ES,ET,EV

Provisions: 9.11,9.7

**Category: C2**

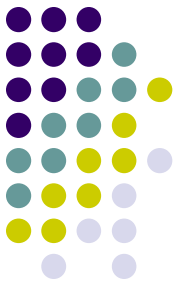
Cost Recovery Units: 369

## **Estimate of Cost Recovery Fee**

Flat Fee: CHF 24'620 (Category C2)

Total Fee: = CHF 24'620

Please note that this is an estimation.



# Address field on the invoice:

- Invoice will be issued to the Administration.
- Address: Only if an Administration request for it in writing, the invoice can be issued directly to the operator, with a copy to the Administration.

Invoice form with a header icon and a checkbox. The text To: ADM is displayed in blue.

Invoice form with a header icon and a checkbox. The text To: Operator and Copy to: ADM is displayed in blue.





**UNION INTERNATIONALE DES TELECOMMUNICATIONS  
INTERNATIONAL TELECOMMUNICATION UNION  
UNIÓN INTERNACIONAL DE TELECOMUNICACIONES**



Place des Nations | Telephone | National (022) 730 51 11 | Tg. BURINTERNA GENEVE | TELEFAX | TELETEX  
CH 1211 Genève 20 | International +41 22 730 51 11 | Télex: 421 000 UIT CH | +41 22 733 72 56 | 228 4815 100=uit

**INVOICE** ORIGINAL

Invoice Number 100220172/2008

Invoice Date 29.05.2008

Reference USAPL560

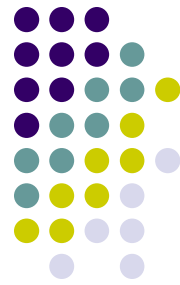
Customer number 60648

To:  
William P. Welty, Ph.D.  
Manager  
Leading Edge Technologies  
c/o SWANSat Holdings, LLC  
13111 Downey Avenue  
Paramount, CA 90723-2412  
United States of America

Copy to:  
Ministry of Health, Sport,  
Telecommunications and Transport  
Nauru  
Republic of Nauru

Specific  
Address

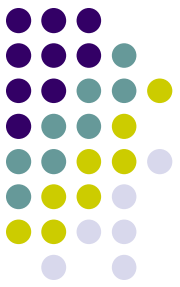
S/No	Description	Swiss Francs
1	<p>Satellite Network Filings Processing Charge for:</p> <p>Space Station : <b>SWANSAT-3A</b></p> <p>Date of Receipt : 15.05.2008</p> <p>Responsible Administration : NRU</p> <p>Administration's reference : Fax dated 15.05.2008</p> <p>No. of Units : 369</p> <p>Category : C2</p> <p>Type : Coordination</p> <p><u>Breakdown of charges</u></p> <p>Flat fee : 24,620.00</p> <p>Total : <u>24,620.00</u></p> <p>Due date for payment: <b>29.11.2008</b></p> <p><b>Please quote invoice number 100220172/2008 with payment.</b></p> <p><b>Note that any additional charges will be invoiced after the publication of the above notice.</b></p> <p><i>For the payment status for this invoice, please contact Mr. A. Ba, Finance Department e-mail: <a href="mailto:alassane.ba@itu.int">alassane.ba@itu.int</a> telephone: +41 22 730 5253</i></p>	<p><b>24,620.00</b></p>





# Cancellation of a filing due to non-payment

- WRC-2003
  - No.9.2B.1, 9.38.1 etc.
    - The Bureau shall send a reminder 60 days before the due date for payment
    - If payment is not received by the due date (which is 6 months from the date of the invoice), the Bureau shall cancel the publication
- WRC-2007
  - Extended to all notifications and some additional sections of Appendix 30B
    - If notifications received and or after 1<sup>st</sup> December 2006
    - If payment is not received by 15 May 2008, the filings will be cancelled



# Withdrawal or suppression of a filing by the Administration

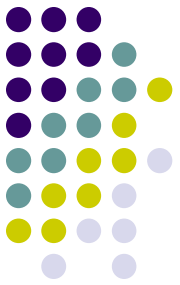
Upon submission of a filing, an Administration can withdraw a filing within 15 days with no charge

Condition:



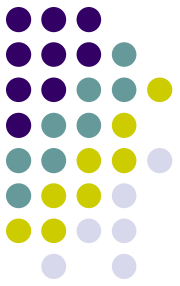
After that, the filing is chargeable even if it was withdrawn before its publication

# Annual Free Entitlement



Each Member state shall be entitled to the publication of special sections for one satellite network **each year** without charge

# Nomination of Free Entitlement:

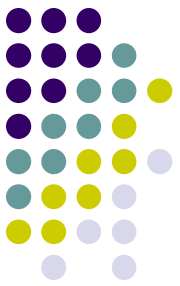


## Conditions:

To be made by the **member state** in its role as the notifying administration

Should correspond to the **year of receipt** of the filing

To be made **by the end of the period for payment of the invoice**



# References

- Council Decision 482 (modified C2005)
- Council Decision 482 (modified C2008)
- BR Circular letter CR/245
- BR web site
  - <http://www.itu.int/ITU-R/space/costrec>