



World Radiocommunication Seminar 2016

Comments under No.9.52 (9.7) and 9.41

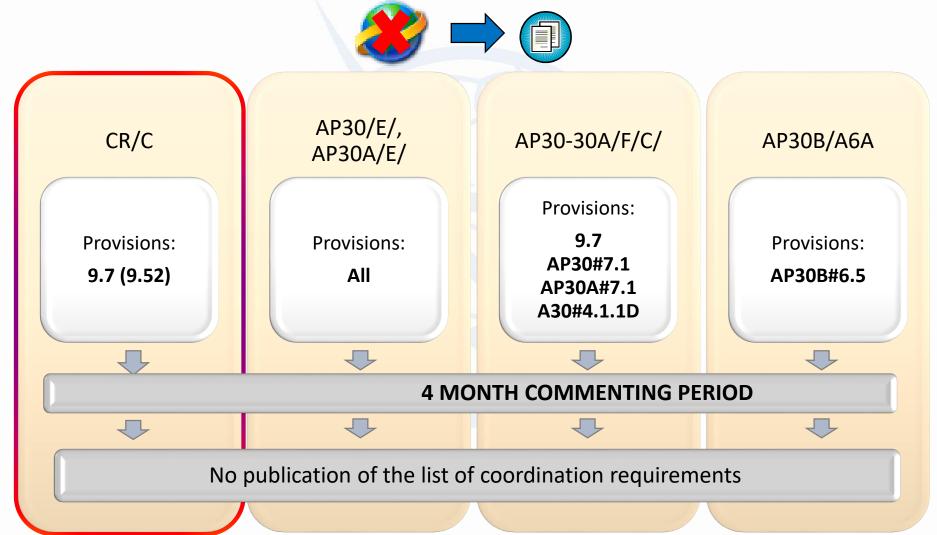
Timur Kadyrov

BR Space Services Department International Telecommunication Union



Publications subject to comments without SpaceCom

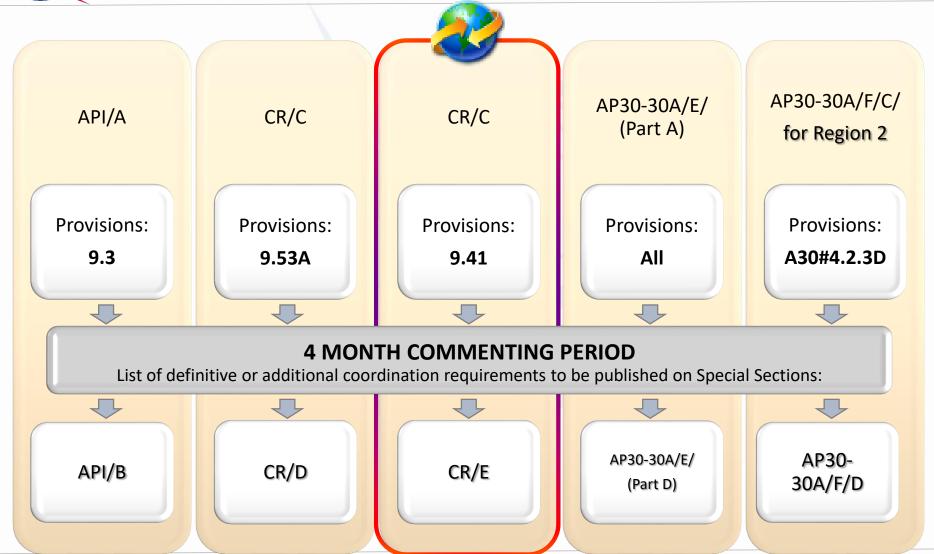






Publications subject to comments with SpaceCom







Commenting on CR/C



Actions of commenting administration

Special Section CR/C

Coordination provision(s)

9.11A (9.11 - 9.14) and 9.21

9.7

9.7A, 9.7B

Administration is already identified as affected and provides its disagreement

Administration wants to be added

Commenting period 4 month



Letter to responsible ADM and BR

9.53A SpaceCom 9.41 SpaceCom



Provision of No. 9.41



9.41 Following receipt of the BR IFIC referring to requests for coordination under Nos. 9.7 to 9.7B, an administration believing that it, or any of its satellite networks not identified under No. 9.36.2, should have been included in the request, or the initiating administration believing that an administration, or any of the satellite networks identified under No. 9.36.2 ... shall, within four months ... request that its name, or the name of any of its satellite networks not identified under No. 9.36.2, be included, or that the name of the identified administration, or any of its satellite networks identified under No. 9.36.2, be excluded, as appropriate. (WRC 12)



Coordination involving GSO networks



- Enables addition of networks/administrations in to the coordination process under Nos. 9.7, 9.7A, 9.7B
- For coordination process under No. 9.7 (9.7 |A|):
 - applicable in the frequency bands where coordination arc is applied
 - ΔT/T>6% criterion (method in Appendix 8)
 - Allows inclusion of the networks located beyond coordination arc
- Determined coordination requirements include:
 - List of <u>additional</u> ADMINISTRATIONS
 - List of <u>additional</u> NETWORKS (9.36.2)



Criteria of Applicability of No. 9.41 (Table 5-1 of Appendix 5 of RR)



TABLE 5-1 (Rev.WRC-15)

Technical conditions for coordination

(see Article 9)

Reference of Article 9	Case	Frequency bands (and Region) of the service for which coordination is sought	Threshold/condition	Calculation method	Remarks
No. 9.7 GSO/GSO	A station in a satellite network using the geostationary-satellite orbit (GSO), in any space radiocommunication service, in a frequency band and in a Region where this service is not subject to a Plan, in respect of any other satellite network using that orbit, in any space radiocommunication service in a frequency band and in a Region where this service is not subject to a Plan, with the exception of the coordination between earth stations operating in the opposite direction of transmission	1) 3 400-4 200 MHz 5 725-5 850 MHz (Region 1) and 5 850-6 725 MHz 7 025-7 075 MHz 2) 10.95-11.2 GHz 11.45-11.7 GHz 11.7-12.2 GHz (Region 2) 12.2-12.5 GHz (Region 3) 12.5-12.75 GHz (Regions 1 and 3) 12.7-12.75 GHz (Region 2) and 13.75-14.8 GHz	 i) Bandwidth overlap, and ii) any network in the fixed-satellite service (FSS) and any associated space operation functions (see No. 1.23) with a space station within an orbital arc of ±7° of the nominal orbital position of a proposed network in the FSS i) Bandwidth overlap, and ii) any network in the FSS or broadcasting-satellite service (BSS), not subject to a Plan, and any associated space operation functions (see No. 1.23) with a space station within an orbital arc of ±6° of the nominal orbital position of a proposed network in the FSS or BSS, not subject to a Plan iii) in the band 14.5-14.8 GHz any network in the space research service (SRS) or FSS not subject to a Plan and any associated space operation functions (see No. 1.23) with a space station within an orbital arc of ±6° of the nominal orbital position of a proposed network in the SRS or FSS not subject to a Plan 		With respect to the space services listed in the threshold/condition column in the frequency bands in 1), 2), $2bis$), 3), 4), 5), 6), 7) and 8), an administration may request, pursuant to No. 9.41, to be included in requests for coordination, indicating the networks for which the value of $\Delta T/T$ calculated by the method in § 2.2.1.2 and 3.2 of Appendix 8 exceeds 6%. When the Bureau, on request by an affected administration, studies this information pursuant to No. 9.42, the calculation method given in § 2.2.1.2 and 3.2 of Appendix 8 shall be used

	runctions (see No. 1.23) with a	
	space station within an orbital arc of	
	±8° of the nominal orbital position	
	of a proposed network in the FSS	

A DS



Coordination arc under No. 9.7



FREQUENCY BANDS

3 400-4 200 MHz

5 725-5 850 MHz (Region 1)

5 850-6 725 MHz

7 025-7 075 MHz

All regions: **10.95-11.2**, **11.45-11.7**,

13.75-14.5 GHz

Region 1: 12.5-12.75 GHz

Region 2: 11.7-12.2, 12.7-12.75 GHz

Region 3: 12.2-12.75 GHz

18.0 – 18.3 GHz (Region 2)

18.1 – 18.4 GHz (Regions 1 and 3)

13.4 - 13.65 GHz (Region 1)

14.5 – 14.8 GHz

21.4-22 GHz

Other bands above 17.3 GHz

APPLICABLE COORDINATION ARC

Any FSS / associated Space operation (SO) within +/- 7° of a proposed network in FSS

Any FSS or BSS / associates SO within +/- 6° of a proposed FSS or BSS network

Any FSS or MetSat / associated SO within +/- 8° of a FSS or MetSat network

Any **FSS or SRS** within **+/- 6°** of a **FSS or SRS** network

Any BSS / associated SO within +/- 12° of a BSS network 9.41 does not apply!

Any FSS / associated SO within +/- 8° of a FSS network
Any BSS / associated SO within +/- 16° of a BSS network
Any BSS / associated SO within +/- 16° of a FSS network
& vice-versa



Quick points for verifying whether assignments are subject to No. 9.41



- Fall in the bands where coordination arc applies, except 21.4-22 GHz
- Both assignments (proposed one and existing one) are subject to coordination arc (belong to FSS or BSS or MetSat in 18 GHz)
- Both assignments are co-directional (not in opposite direction of transmission)



Review the CR/C to determine whether we can submit the comments





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DONEAU DEO NAL	DIOCCIVINIONICATION	10	DIOCOMINIONICATIO	N DONLAG	TOTAL DE TABLOCOMOTTICACIONES	9 1.1.0.
RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		F-SAT-N3-36W		SECTION SPÉCIALE Nº SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	CR/C/3519	
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA				BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2771 / 10.06.2014	
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	F	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	36 W	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	113520290	
RENSEIGNEMENTS REÇUS P	AR LE BUREAU LE /	INFORMATION RECEIVED BY T	THE BUREAU ON / IN	FORMACIÓN RECIBIDA POR LA OFIC	CINA EL 24.12.2013	

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 subordonnée au type de coordination indiqué dans la colonne de gauche par un X dans la case pertinente.

RS33#2.1

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 № 9.30 del Reglamento de Radiocomunicaciones, se ha examinado de conformidad con los № 9.35 y 9.36 y se publica de conformidad con el № 9.38. Está sujeta al formulario de coordinación indicado en la columna de la izquierda con una X en la casilla correspondiente.

—			120101	da con una A en la casilla correspondiente.
Туре	e de coordination mentionné dans le Tableau I	/ Form of coordination referred to in Table I / Forma de coordination	nación mencionada en el cuadro I	
X X	9.7 9.7A 9.7B AP30#7.1 AP30A#7.1 RS539 RS33#3	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 Nºs 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.
Туре	e de coordination mentionné dans le Tableau II	/ Form of coordination referred to in Table II / Formulario de d	oordinación remitido al cuadro II	
X	9.11 9.11A 9.12 9.12A X 9.13 X 9.14 9.21/A 9.21/B 9.21/C	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'anojitueront	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 Nºs 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 Nº 9.52 dentro del plazo señalado, no está afectada y, en el caso de los Nºs 9.11 a 9.14 y RS33#2.1, se aplicarán las disposiciones de los Nºs 9.48 y 9.49

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

10.10.2014



Administration is already identified as affected under 9.7?



CR/C Publication Table:

Summary of coordination requirements

		Т	ableau I /Table I /Cuadro I /表一 /Таблица I / اجون	ال	
	Disposition / Provision / Disposición / 条款 /	Résumé des conditions régissant la coordination	Resumen de los requisitos de coordinación		
	الحكم / Положение	协调要求概述	موجز بمتطلبات التنسيق		
X	9.7	ARM, ARS/ARB, AUS, B, BUL, CAN, CHN, CLM, CTI/RAS S, SNG, TUR, UAE, UKR, USA	CYP, D, E, F/EUT, G, GRC, HOL, I, INS, ISR, J, KOR, LUX	K, MLA, MNG, NOR, NRU, PAK, PNG, QAT, RUS/IK, RUS,	
	9.7A				
	9.7B				
X	AP30#7.1	AND, B, BFA, CPV, E, G, GMB, GNB, GUI, IRL, ISL, ISR,	LBR, LUX, MTN, NGR, POR, SEN, SMR, SRL, TGO, UAE	, USA	
X	AP30A#7.1	B, CHN, CPV, E, G, GMB, GUI, HOL, IND, IRL, ISL, ISR,	KOR, LAO, LUX, PNG, RUS/IK, SEN, SMR, SRL, UAE, US	SA .	
	RS539				
	RS33#3				

- Administration of IRQ is not identified as affected, but the questions remain:
 - If there are assignments in the proposed networks subject to the coordination arc?
 - Are the networks of IRQ are affected?



Checking with CR/C



CR/C Publication Table:

I. Coordination requirements at group level

Admini		tifiées au titre d 欢识别的主管部		7 par :					d under No. рованные с	9.7 by : огласно п. 9.7:		Admii		identificadas ة وفقاً للرقم 9.	•	•
B1a	B2	BR7a	GHz		Delta T/T		:	Delta T/T	:	Delta	T/T	Arc de	coordinatior	Coordinat	ion Arc	Arco de
Beam designation	Emi-Rcp	Group id.			Delta T/T		:	Дельта Т/Т	г	Т/Т	دلتا	ŧ	办调弧	Дуга коорд	цинации	coordinació قوس التنسيق
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		113738204	42	HOL	LUX	NOR	s		1			Е	ISR	LUX	MLA	UAE
ISR	R	113738198	1	ARS/ARB ISR	B J	CAN KOR	CHN LUX	CYP ML	G	HOL	INS					
		113738199	- 1	RUS ARS/ARB	B	TUR	UAE	CY	Indic	ates tha	it affe	cted	assig	nmen	ts are	•
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		113738200	1	ARS/ARB J	B KOR TUR	CAN LUX UAE	CHN MLA	CY NOR	PAK		RUS					
31R	E	113738083	12	5	IUK	UAL			A			CHN	E	G	HOL	I
												ISR UAE	LUX USA	PNG	RUS	SNG
		113738084	12						<u> </u>			CHN	E	G PNG	HOL RUS	I SNG
				Indi	cates	tnat	: atte	ctea	assıg	nments	are	UAE	USA	FNG	ROD	SNG
		113738085	12	NOT	subj	ect t	o CA					CHN ISR UAE	E LUX USA	G PNG	HOL RUS	I SNG
		113738086	12	ı								CHN	E	G	HOL	I
												ISR	LUX	PNG	RUS	SNG
		113738087	12									UAE	USA E	G	HOL	I
		113730007										ISR	LUX	FNG	RUS	SNG
			In	dicate	es th	at·						UAE	USA			
		113738088	•••	aicat	cs till	ut.						CHN	E	G PNG	HOL RUS	SN
			1.	Pro	nose	d ass	ignm	ent i	s sub	ject to (CA	UAE	→ tsA	FNG	ROD	51
		113738089			•		_					CHN	1	G	HOL	I
			2.	Affe	ected	assi	gnm	ents a	are su	ıbject to	CA	ISR UAE	L X USA	PNG	RUS	S) d
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				l								UAE	USA			SNG



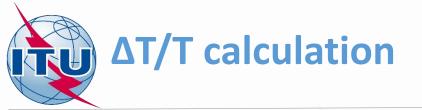
Applicability of different criteria



- Proposed assignment would not serve a basis for including additional network under No. 9.41 in situations where*:
 - This assignment is operating in service and in frequency band for which coordination arc does not apply
 - This assignment is operating in service and in frequency band for which coordination arc applies, however, there are other services could be operating in this band (such as MSS) for which coordination arc does not apply or services operating in opposite direction.

In this case $\Delta T/T$ criteria is already used to establish coordination requirements under No. 9.41

*In exceptional cases of the potential mistake in CR/C publication, if administration finds that any of its satellite networks not identified under No. **9.36.2** by the Bureau using $\Delta T/T$ criteria, should have been included in the CR/C, it may still request its inclusion under No. 9.41.





- Appendix 8 method is used calculate ΔT/T
- Example calculations are provided in any electronic format (text files, Excel/Word documents etc.)
- GIBC AP8 could be used to obtain the results

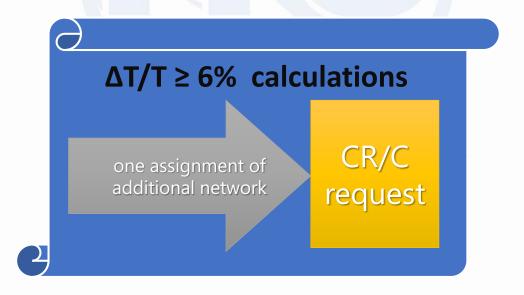


ΔT/T calculation when requesting inclusion



Rule of procedure:

"...an administration wishing to be added in a coordination request under 9.41 to provide $\Delta T/T \ge 6\%$ calculations for only **one pair** of assignments for each satellite network to be further considered in the coordination process"



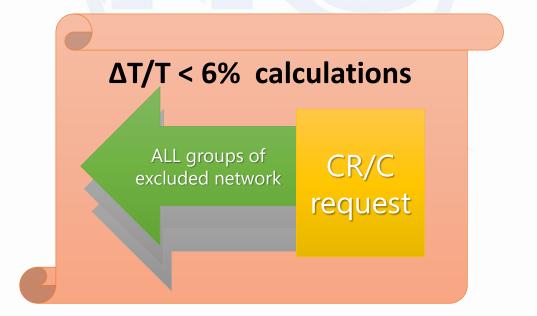


ΔT/T calculation when requesting exclusion



Rule of procedure:

"The same information, i.e. $\Delta T/T > 6\%$ calculations for <u>all groups</u> of assignments of involved satellite networks, shall be submitted by an administration believing that an administration or any of its satellite networks identified under No. 9.36.2 should not have been included under No. 9.36 in the coordination request of its own satellite network"





Technical reason for inclusion/exclusion under 9.7A and 9.7B



- These provisions are covering coordination between GSO Earth Stations and non-geostationary satellite networks
- Addition/exclusion under No. 9.41 is based on:
 - Before only using frequency overlap
 - With EPFD Validation Software verification of Equivalent Power Flux Densities levels produced by Non-GSOs





CR/E Special Section is the publication containing an information on the status of the comments submitted under No. 9.41







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RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		JUPITER-1C		SECTION SPÉCIALE Nº SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	CR/E/629
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA				BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2771 / 10.06.2014
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	CYP	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	55.5 E	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	113520196

x	9.41/9.7	La présente Section spéciale est publiée conformément au numéro 9.42 du Règlement des radiocommunications, en ce qui concerne la demande de coordination publiée dans la Section spéciale CR/C citée en référence au	This Special Section is published in accordance with No. 9.42 of the Radio Regulations, in respect of the request for coordination published in the CR/C Special Section referenced at the bottom of this page.
	9.41/9.7A	bas de cette page. 2. Les administrations qui ont soumis des observations au titre du numéro.9.41 dans les quatre mois qui ont suivi la publication des	Administrations that have submitted comments under No.9.41 within four months of the date of publication of the mentioned CR/C Special Sections, with respect to
	9.41/9.7B	Sections spéciales susmentionnées, en ce qui concerne la forme de la coordination indiquée dans la colonne de gauche par un X dans la case appropriée, sont énumérées dans le Tableau 1 ci après.	the form of coordination indicated in the left-hand column by an X in the relevant box, are listed in Table-I, below.

Esta Sección Especial se publica de conformidad con el número 9.42 del Reglamento de Radiocomunicaciones al respecto de la solicitud de coordinación publicada en la Sección Especial CR/C indicada al final de esta página.

Las Administraciones que han presentado comentarios con arreglo al número 9.41 en el plazo de cuatro meses a partir de la fecha de publicación de la mencionada Sección Especial CR/C, con respecto al formulario de coordinación indicado en la columna izquierda introduciendo una X en la casilla correspondiente, se indican en el Cuadro-I, que aparece más adelante.

RÉFÉRENCE DE LA SECTION SPÉCIALE (BR IFIC / DATE) SPECIAL SECTION REFERENCE (BR IFIC / DATE) REFERENCIA DE LA SECCIÓN ESPECIAL (BR IFIC / FECHA)

CR/C/3437 (BR IFIC 2760 / 07.01.2014)





Tableau I /Table I /Cuadro I /表一/ Таблица I / I الجدول I

	position / Provision / Disposición / 条款 /	Administrations incluses dans le processus de coordination.	Administration included in the coordination process	Administraciones incluidas en el procedimiento de coordinación
	الحكم / Положение	协调过程中包括的主管部门	Администрации, включенные в процесс координации	الإدارات التي تشملها عملية التنسيق
X	9.41 / 9.7	EGY, G, PAK, RUS, UAE, USA		
	9.41 / 9.7A			
	9.41 / 9.7B			





OBSERVATIONS DU BUREAU DES	RADIOCOMMUNICATION BUREAU	OBSERVACIONES DE LA OFICINA DE
RADIOCOMMUNICATIONS	<u>COMMENTS</u>	<u>RADIOCOMUNICACIONES</u>
Relatives aux dispositions	Relating to provisions	Relativas a las disposiciones
- La disposition 9.7 s'applique à toutes les assignations de fréquence.	- Provision 9.7 applies to all frequency assignments.	- La disposición 9.7 se aplica a todas las asignaciones de frecuencia.
La/les administration(s) suivante(s) a/ont soumis une demande en vue de son/leur inclusion dans le processus de coordination au titre du numéro 9.41.	The following administration(s) submitted request for inclusion in the coordination request under No.9.41.	Las siguientes administraciones presentaron solicitud de inclusión en la petición de coordinación con arreglo al número 9.41 .
	EGY, G, PAK, RUS, UAE, USA	
Les observations de la/des administration(s) suivante(s) ne sont pas valables pour le/les réseau(x) indiqué(s) ci-après étant donné que n'y figuraient pas les calculs de ΔT/T.	The comments from the following Administration(s) are not valid for the network(s) indicated below since it did not include $\Delta T/T$ calculations.	The state of the s
Les observations de la/des administration(s) suivante(s) concernant le/les réseau(x) indiqué(s) ci-après ne sont pas valables étant donné que ce/ces réseau(x) n'existe(nt) plus ou que ΔT/T est inférieur à 6%:	The comments from the following administration(s) are not valid for the network(s) indicated below since this/these network(s) no longer exist(s) or $\Delta T/T < 6\%$:	Los comentarios de las siguientes administraciones no son válidos para las redes indicadas a continuación ya que esas redes ya no existen o $\Delta T/T < 6\%$:





- I. Nécessité d'une coordination au niveau du groupe I. Coordination requirements at group level 一、需要在组的层次进行的协调
 - І. Потребности в координации на уровне группы
- I. Requisitos de coordinación a nivel de grupo متطلبات التنسيق على مستوى المحموعة

		ées au titre du l .7款识别的主管		/9.7 par :				lentified under No. 9 ифицированные со		identificadas según N.° 9.41/9.7 por : الإدارات الح ددة وفقاً للرقم 9/41.9
B1a Beam designation	B2 Emi-Rcp	BR7a Group id.	GHz			lta T/T lta T/T			Delta T/T Дельта T/T	Delta T/T t/ד دلتا
CU	R	113682446		EGY		PAK	UAE			
		113682447		EGY		PAK	UAE			
		113682448	5			PAK	UAE			
KAAU	R	113682449	27	EGY	G	UAE				
		113682450	27							
		113682451	27	EGY		UAE				
		113682452	27	EGY	G	UAE				
		113682464	27							
		113682465	27							
		113682466	27							
		113682467	27							
		113691858	28	EGY		UAE				
		113691859	29	EGY		UAE				
		113691860	27	EGY		UAE				
		113691861	28	EGY		UAE				
		113691862	29	EGY		UAE				
		113691863	28	EGY		UAE				
		113691864	29	EGY		UAE				
		113691865	28	EGY		UAE				
		113691866	29	EGY	G	UAE				
KABU	R	113682453	24	UAE						
KAMU	R	113682454	30	EGY		USA				
		113682455	30	EGY		USA				
		113682456	30	EGY		USA				
		113682457	30	EGY		USA				
KUU1	R	113682458	13			UAE				
		113682459	13	EGY		UAE				
		113682460	13	EGY		UAE				
KUU2	R	113682461	14	EGY		UAE				
		113682462	14	EGY		UAE				
		113682463	14	EGY		UAE				
CD	E	113682426	3			PAK	RUS	UAE		
		113682427	3	EGY		PAK	RUS	UAE		
KAAD	E	113682428		EGY	UAE					
		113682429	17	EGY	UAE					
		113682430	17	EGY	UAE					
KACD	E	113682431	17	EGY		UAE	USA			
		113682432	17	EGY		UAE				
		113682433	17	EGY	G	UAE				

CR/E/629





II. Liste des réseaux à satellite

II. List of satellite networks

II. Lista de redes de satélite

قائمة بالشبكات الساتلية

二、卫星网络清单 II. Список спутниковых сетей

Liste des réseaux à satellite pour lesquels Delta T/T est supérieur à 6% mais qui ne sont PAS dans l'arc de coordination (au titre du N° 9.7)

List of satellite networks for which Delta T/T > 6% but are NOT within the coordination arc (under No. 9.7)

Lista de redes de satélites para las cuales ΔT/T > 6% pero NO se encuentran dentro del arco de coordinación (según N.° 9.7)

Delta T/T > 6%但并不属于协调弧范围的卫星网络清单(依据 9.7)

Перечень спутниковых сетей, для которых Delta T/T > 6%, однако HE находится в пределах координационной дуги (согласно № 9.7)

قائمة الشبكات الساتلية التي تكون فيها النسبة > 6% ΔT/T ولكنها ليست ضمن قوس التنسيق (بموجب الرقم 7.9)

A1f1 Notifying	A1f3 Inter, sat.	A1a Sat. Network	A4a1 Orbital long.	BR3b Category of	BR25 A/T	BR6a ld. no.	BR26 Causing	BR27 Receiving
adm.	org.	Oat. Network	Orbital long.	notif.	Α1	id. 110.	interference	interference
EGY		NAVISAT-11A	28.25 E	C	A	109520317	C	R
		NAVISAT-12A	35.5 E	C	A	109520318	C	R
		NAVISAT-14A	44 E	C	A	109520319	C	R
		NAVISAT-2A	21 E	C	A	109520315	C	R
		NAVISAT-7A	1 E	C	A	110520449	C	
		NAVISAT-9A	14 E	С	A	109520316	C	R
G		INMARSAT GSO-2H	65 E	C	A	97520331	C	R
		INMARSAT GSO-2H	65 E	N	A	106500143	C	R
		INMARSAT GSO-2N	64 E	C	A	102520123	C	R
		INMARSAT GSO-2N	64 E	N	A	109500230	C	R
		INMARSAT-2 IOR 1	64.5 E	C	A	90500545	C	R
		INMARSAT-2 IOR 1	64.5 E	N	A	92500070	C	R
		INMARSAT-3 IOR-1	64 E	C	A	90998014	C	R
		INMARSAT-3 IOR-1	64 E	N	A	96500418	C	R
		INMARSAT-4A 64E	64 E	C	A	107520299	C	R
		UKSAT-21	67 E	C	A	111520037	C	R
PAK		PAKSAT-1	38 E	C	A	95520324	C	R
		PAKSAT-1	38 E	N	A	106500372	C	R
		PAKSAT-1R	38 E	C	A	104520327	C	R
		PAKSAT-1R	38 E	N	A	110500363	C	R
		PAKSAT-1R1	38 E	C	A	109520006	C	
		PAKSAT-1R1	38 E	N	A	111500072	C	
RUS		RSS-VSD-71E	71 E	C	A	111520516		R
UAE		EMARSAT-1F	44 E	C	A	96520083	C	R
		EMARSAT-1F	44 E	N	A	106500419	C	R
		EMARSAT-1F/M	44 E	С	A	102520004	C	R
		EMARSAT-1F/M	44 E	N	A	110500260	C	R
		EMARSAT-4F	44 E	С	A	105520117	C	R
		EMARSAT-4F	44 E	N	A	111500142	C	R
		EMARSAT-4S	98.5 E	C	A	104520007	C	
		EMARSAT-4S	98.5 E	N	A	108501071	C	
		EMARSAT-7F	44 E	C	A	109520157	C	R

CR/E/629





1

CR/C Publication

2

Administrations have 4 months to submit comments prepared using **SpaceCom**

3

Examination by the Bureau

4

CR/E Publication





Request Received within 4 months	Coordination Arc Applies (or correction of CR/C is requested)	DT/T Sample Provided	DT/T > 6%	Action
N	-	-	-	Not include
Y	N	-	-	Not include
Y	Y	N	-	Not include
Y	Y	Y	N	Not include
Y	Y	Y	Y	Include



- Assists administrations and BR in the management of the comments on CR/C
- Main instrument IFIC, containing CR/C Special Section







CR/C





CR/E









SpaceCom Comments on CR/C for the publication of CR/E







Locate SpaceCom 9.41 exercise files on handout USB stick:

[USB drive]:\Space_Workshops_(14-16-Dec)\11-SpaceCom\03 CRC 9.41\

Locate demo IFIC data required for exercises on handout USB stick:

[USB drive]:\Space_Workshops_(14-16-Dec)\11-SpaceCom\03 CRC 9.41\

Install SpaceCom v8

From BR IFIC (Space Services) DVD-ROM or USB stick:

[USB drive]:\BRIFIC-2834\Space\BR_Soft_v8_beta\SpaceCom\Setup.exe or

http://www.itu.int/ITU-R/go/space-software-capture-system-for-comments-on-special-sections/en

Install SpaceCom DEMO

[USB drive]:\Space_Workshops_(14-16-Dec)\11-SpaceCom\06 SpaceCom Demo Application\Install_SpaceComDemo.exe

or

http://www.itu.int/ITU-R/go/space-software-capture-system-for-comments-on-special-sections/en



An example of technical examination using GIBC



Sibc SNS V7 - Graphical Interface for Batch Calculations — 🗆 💢
Appendix 30B Appendix 30 30A EPFD Power Control Tools / Options Appendix 8 PFD (terrestrial serv.) PFD (space serv.) Appendix 7
Network: 116520120 1
Examination Data
Ap8 Case I/II: Case I&II ▼ Findings Level: Group ▼
☐ Use Polarization Output Level: Level 1 ▼
- Existing
✓ Check Against Existing Administration ID: EGY
Transaction ID: Sat. Network Symbol:
- Date
□ <u>D</u> ate <u>Year</u> - Month - Day 1990 - 01 - 01 -
Files Path
C:\BR_TEX_RESULTS\AP8\116520120
<u>Open Folder</u>
<u>E</u> XIT Help



ΔT/T calculation results



- By default, are stored in the folder:
 - C:\BR_TEX_RESULTS\AP8\[ntc_id]\[timestamp]
 - Where [ntc_id] network number
- Two files:
 - APP8_OPT.LST
 - NTW_OPT.LST



ΔT/T calculation results



NTW_OPT.LST the list of networks for information only which could be included under No. 9.41

```
EGY; EGJAN3A; 2.00W; A; C;114.520080;C;R; EGY; NAVISAT-7A; 1.00E; A; C;110.52449; ;R;
```

'C' – causing
This network is
causing interference

'R' – receiving
This network is
receiving interference

Other symbols:

'A' – network is located within coordination arc



ΔT/T calculation results



AP8_OPT.LST contains calculation results which could be used for submitting comments under 9.41

EXI UP-LINK IS	S AFFECTED		OPTIONAL EXAMINA	TION	DT/TS =	10.23 %
I S IND GS	SAT-NS (83E)	83.00E 0.10 0.10	14.020000 G	40000 K 12.05.16	C116.520120/1	16.677803/0001
KRR	EC EC M	34.00 DB				
57K0G7	W 15.60 D	BW -31.10 DBW/HZ	-31.95 DBW/HZ (T	OT. BW) 2D:12.05.16		
E S EGY NA	AVISAT-11A 2	8.25E 0.05 0.05	14.250000 G	500000 K 15.12.09	C109.520317/1	09.680035/0001
KU1R	EC EC M	33.00 DB	33.00 DB	725 K	DT/TS =	10.23 %
36M0G7W 39.50 DBW -36.00 DB		BW -36.00 DBW/HZ	-36.06 DBW/HZ (T	OT. BW) 2D:15.12.09		
I E IND	TYPICAL-KU0.75	0	28E3926 05N2513	REC-580-6	38.90 DB	-5.30 DB



Exercise No. 1 adding networks under No. 9.41



Task:

take a role of ADM of EGY and prepare SpaceCom comments file for submission to BR.

Your analysis shows that two networks **GIBSAT-G14-2** and **GSAT-NS(83E)** which are outside coordination arc of **EGY** networks are exceeding dT/T>6%.

For example calculations see the files:

[USB drive]:\Space_Workshops_(14-16-Dec)\11-SpaceCom\03 CRC 9.41\GIBSAT-G14-2.pdf [USB drive]:\Space_Workshops_(14-16-Dec)\11-SpaceCom\03 CRC 9.41\GSAT-NS_83E.pdf

- 1. Open SpaceCom demo software. Go to c:\Br_soft\SpaceCom_v8\ and run SpaceComDemo.exe
- 2. Press Start and then click 9.41 Request
- Select administration code EGY.
- 4. Select "Potentially affected administration (commenting on CR/C)"
- 5. In 'Comment':
 - Input BR IFIC number: 2836
 - Open the BR IFIC database from folder:

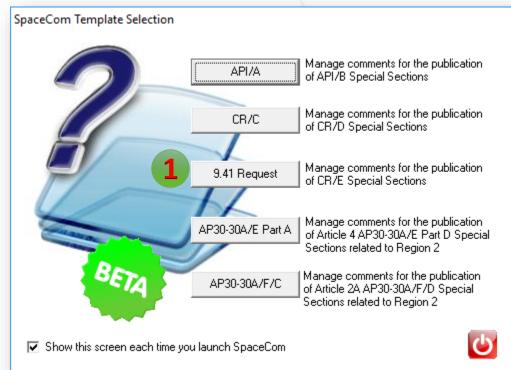
[USB drive]:\Space_Workshops_(14-16-Dec)\11-SpaceCom\05 IFIC_Data\ific2836.mdb

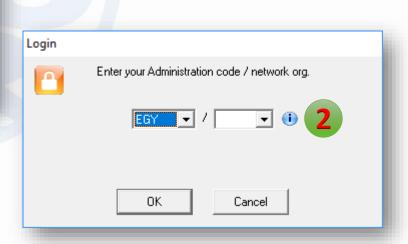
- Input your comments correspondingly.
- Check "comments completed" for the rest CR/Cs.
- 6. In 'Validate/Send':
 - enter BR IFIC 2836
 - enter the comments file location c:\SpaceCom_Comments_Demo\CRE_comments\IFIC27836\AffADM\CRE-IFIC2836_EGY.mdb
 - Enter the attachments with calculations



Capture of the comments









Capture of the comments



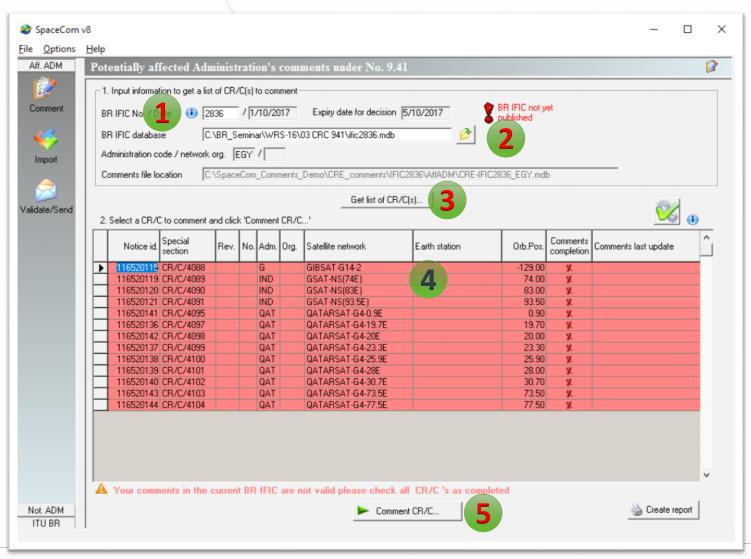
Who are you? Potentially affected Administration (Commenting on a CR/C) Operator Notifying Administration (Commenting on an CR/C)	
Pursuant to No. 9.41, any administration that is of the view that it should have been included in the request for coordination shall, within 4 months of the date of publication of the BR IFIC, request that its name be included and inform the notifying administration and the Bureau accordingly; in so doing, it shall provide a list of the satellite networks for which it is requesting coordination, along with the technical reasons. A copy of the comments is to be sent by e-mail to the Bureau at the following address: brmail@itu.int.	
Next	U

Potentially affected administration wishes its name to be included in coordination process



Selecting CR/C to comment







Addition of the networks



⊗ SpaceCom	v8						_ 🗆	×		
<u>F</u> ile <u>O</u> ptions	<u>H</u> elp									
Aff. ADM	Potentially affected Administration's comments under No. 9.41									
	CR/C information—Comments NOT									
Comment	Provision	Special Section			atellite network	Orb. pos.	completed			
	9.7 A ; 9.7A F ; 9.7B F	CR/C/4088	G	G	IBSAT-G14-2	-129.00				
Import	Enter your comments by filling the relevant boxes									
	Satellite name	Delta T/T or Other calc.	9.7 [A]	9.7A [F]		Adm. comments				
Validate/Send	*	- 1								
	E II . II	Delta T/T or	0.70.151					$\neg \sqcup$		
	Earth station name	Other calc.	9.7B F		Adm.	comments				
	*			Do	not include th	he calculat	tion resul [.]	ts		
	into the remarks. Attachments could									
				IIICC			iits could	DE		
					reter	red there				
	Remark:				2 ^	has to b	/T or other calcula re attached to the otherwise the requested!			
	2. Click 'Check Comments completed' when you have finished with all your entries									
Not. ADM	Select a new CR/C	Save	√ Ch	eck Comm	ents completed 3		Create repo	ort		
ITU BR								37		



Addition of the networks

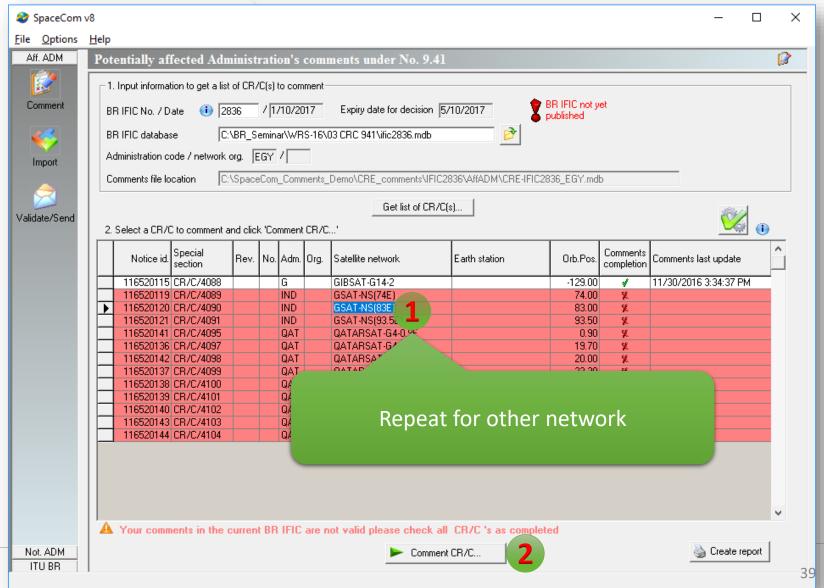


SpaceCom v8 − □ X												
<u>F</u> ile <u>O</u> ptions <u>H</u> elp												
Aff. ADM	Potentially affected Administration's comments under No. 9.41											
	CR/C information Comments											
Comment	Provision	Special Section	Adm./ntwk. org.	Satellite network	Orb. pos. completed 🔽							
Comment	9.7 A ; 9.7A F ; 9.7B F	CR/C/4088	G	GIBSAT-G14-2	- 129.00 11/30/2016							
Import	1. Enter your comments by filling the relevant boxes											
	Satellite name	Delta T/T or Other calc.	9.7 [A] 9.7A [F]	Adı	n. comments							
Validate/Send	EGJAN1A	▼ ▽			s to be added							
	NAVISAT-11A	▼		wani	s to be added							
	*	•										
	Earth station name	Delta T/T or Other calc.	9.7B F	Adm. com	ments							
	*											
	Remark:											
	Trendik.			^	Delta T/T or other calculation has to be attached to the							
				V	request, otherwise the request will be rejected!							
	2 Clieb Charle Comments consoleted when you have finished with all your public.											
	Click 'Check Comments completed' when you have finished with all your entries											
	Select a new CR/C	Save	✓ Check Com	ments completed	Create report							
Not. ADM ITU BR												



Selecting CR/C to comment

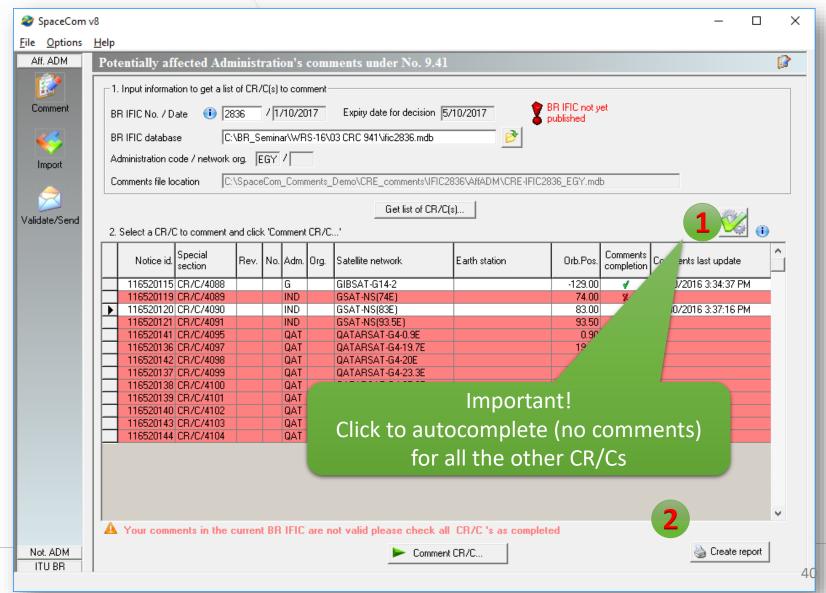






Finishing commenting

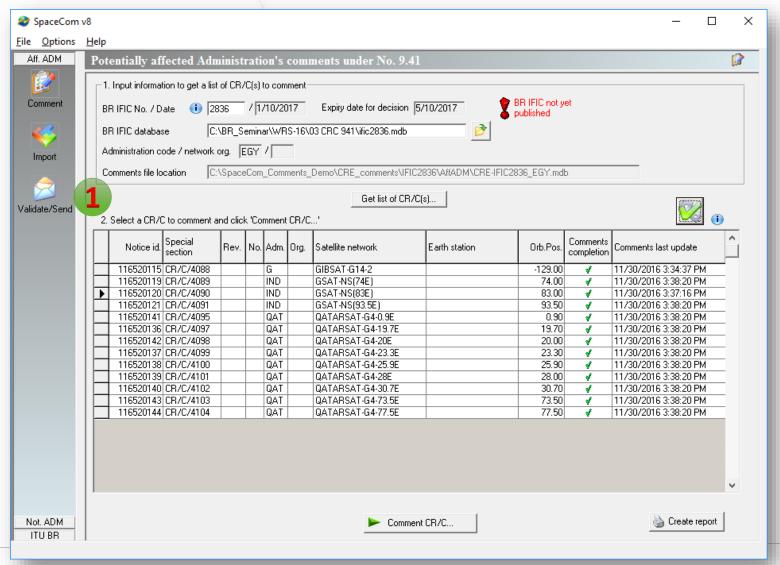






Now we can validate

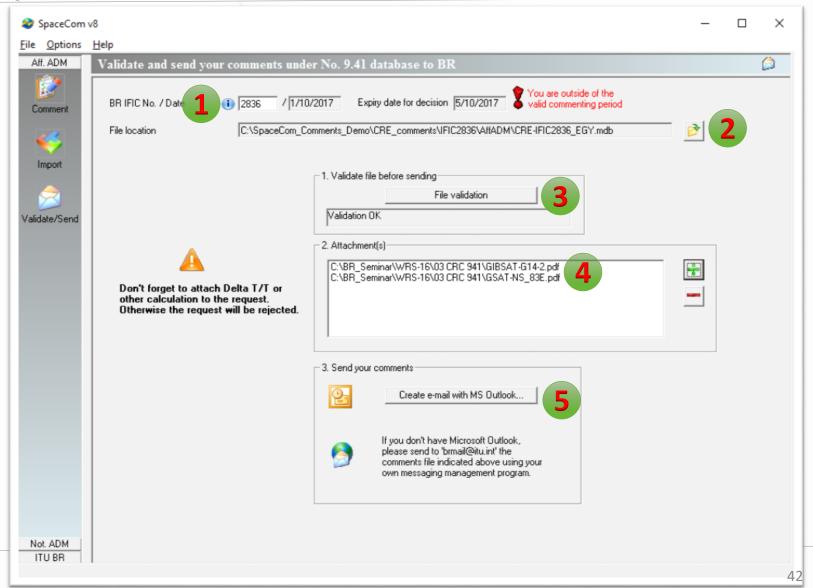






...validate...







Exercise No. 2 coordination under No. 9.7A and 9.7B



This exercise is created using fictitious network with aim of demonstrating possible comments capture.

Task:

Take a role of ADM of G (for 9.7B commenting) and CAN (for 9.7A commenting) and prepare SpaceComcomments file for submission to BR.

- 1. Open SpaceCom demo software, press Start and then click 9.41
- 2. Select administration code **G for 9.7B comments and CAN for 9.7A comments**.
- 3. Select "Potentially affected administration (commenting on CR/C)"
- 4. In 'Comment':
 - Input BR IFIC number: 2836
 - Connect to the BR IFIC database from folder:

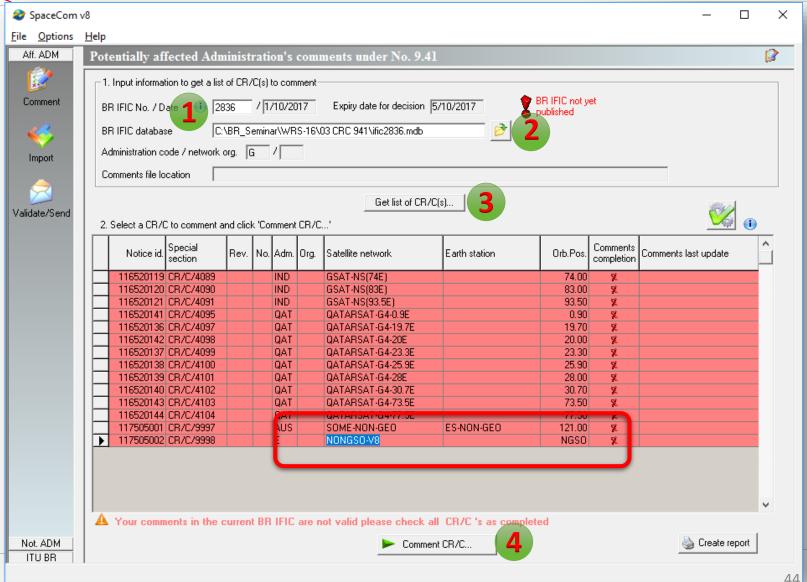
[USB drive]:\Space_Workshops_(14-16-Dec)\11-SpaceCom\05 IFIC_Data\ific2836.mdb

- Input your comments correspondingly.
- Check "comments completed" for the rest CR/Cs.
- 6. In 'Validate/Send':
 - enter BR IFIC 2836
 - enter the comments file location: for 9.7B c:\SpaceCom_Comments_Demo\CRE_comments\IFIC2836\AffADM\CRE-IFIC2836_G.mdb for 9.7A c:\SpaceCom_Comments_Demo\CRE_comments\IFIC2836\AffADM\CRE-IFIC2836_CAN.mdb
 - Enter the attachments with calculations



Case of coordination under 9.7B

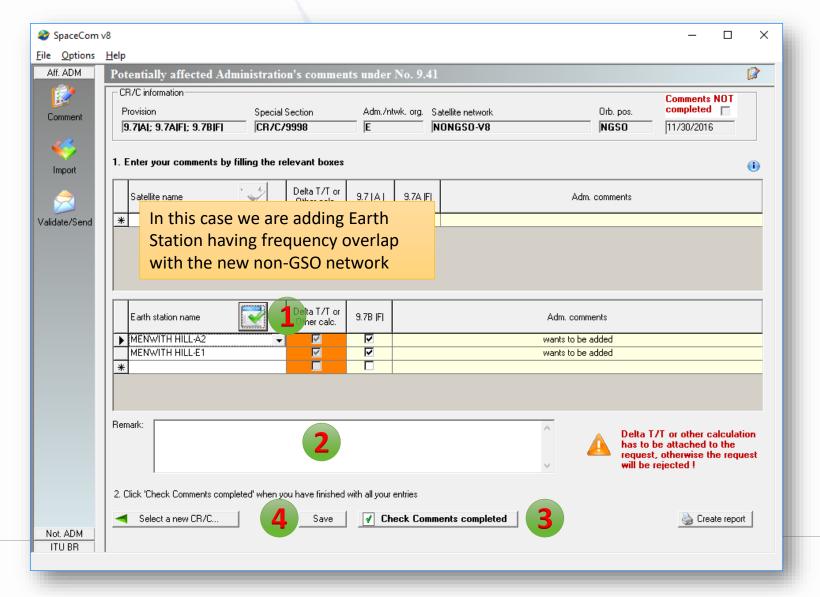






Addition of potentially affected Earth Stations under 9.7B



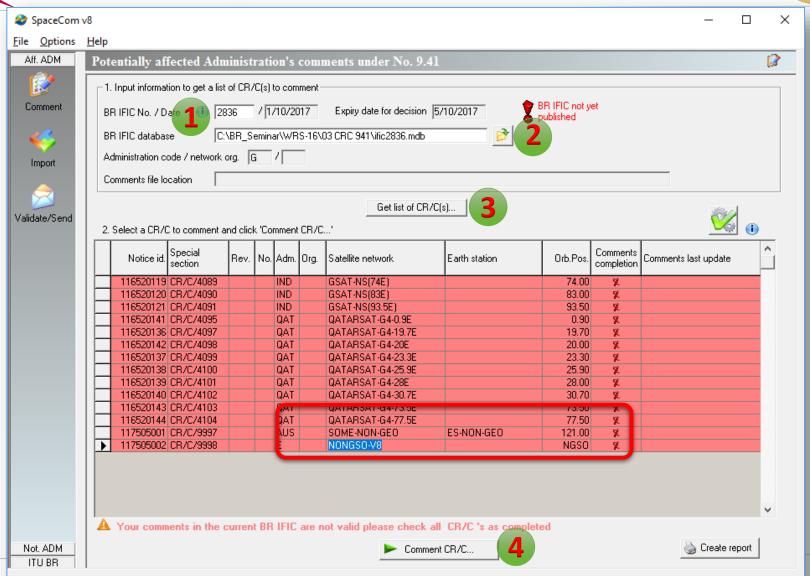




Case of coordination under 9.7A



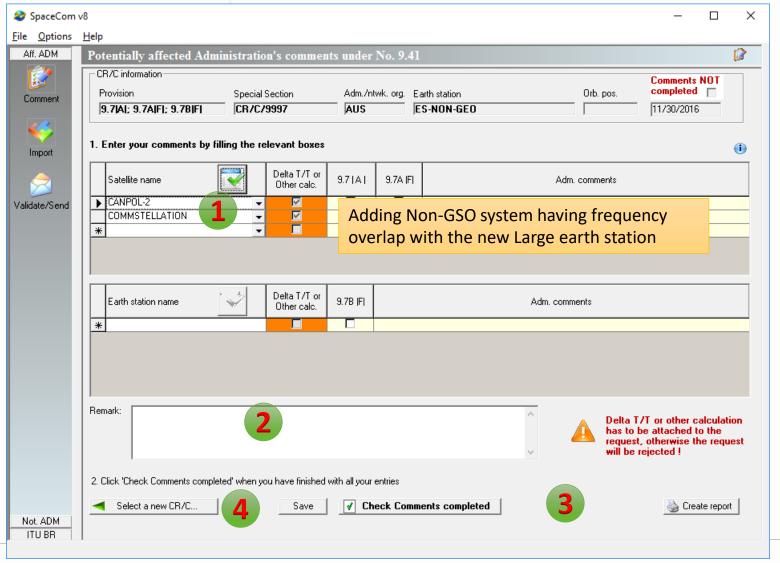
46

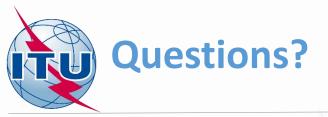




Addition of potentially affected Non-GSO system under 9.7A









Accompanying document Document WRS16/14 - Application of No. 9.41

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