

# Current DEVELOPMENTS

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**Hon Fai Ng**

Space Services Department



# SpaceWISC

Web Interface for Secure Communication



Resolution 908 (WRC-12) instructs

“

... implement a **secure paperless electronic approach** for the electronic submission and publication of API ... subject to coordination ...

Source: Resolution 908 (WRC-12), Sub-Section IB of Article 9 of Radio Regulations

# SpaceWISC

Web Interface for Secure Communication



Possible cancellation of API at WRC-15

In any case, BR is implementing secure paperless electronic approach to submit and publish API subject to coordination (Sub-Section IB) and comments under No. 9.5B

**Launch Schedule: 2014 Spring (Beta) Autumn [Implementation]**

Source: Resolution 908 (WRC-12), Sub-Section IB of Article 9 of Radio Regulations

[34] Annex 05 - WD towards draft CPM text on WRC-15 A17

[468] Annex 30 - WD - Draft CPM text on WRC-15 A17

# SpaceWISC

Web Interface for Secure Communication



## Features

- New web-based application for PC, Mac, Tablets
- No software installation, only a web browser needed
- TIES registered user login
- Capture, validate and submit API
- Comment under No. 9.5B
- API removal after 24 months if CR not received (No. 9.5D)

Source: Resolution 908 (WRC-12), Sub-Section IB of Article 9 of Radio Regulations

# SpaceWISC

Web Interface for Secure Communication



## Support

- Dedicated helpdesk (+41 22 730 6777)
- Email contact ([spacewisc@itu.int](mailto:spacewisc@itu.int))
- Support webpage ([www.itu.int/ITU-R/go/s-wisc](http://www.itu.int/ITU-R/go/s-wisc))
- Web forum
- User's guide
- FAQ
- Video tutorials

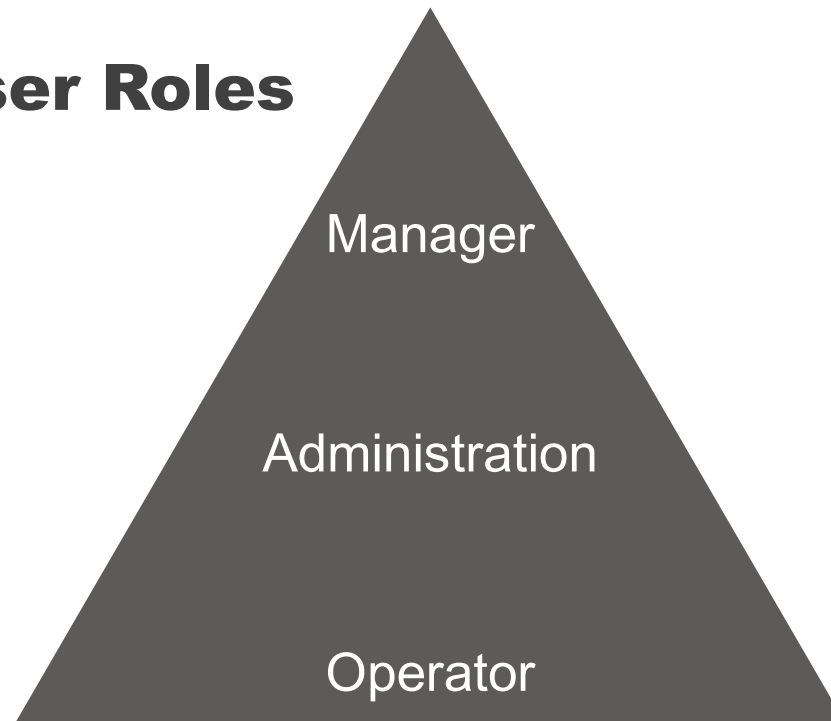
Source: Circular Letter CR/363 of 11.04.2014

# SpaceWISC

Web Interface for Secure Communication



## User Roles



Source: [Circular Letter on SpaceWISC]

# SpaceWISC


Web Interface for Secure Communication



Conditions   Roles	Manager	Administration	Operator
Register with BR	Y		
Manage accounts of Administration	Y		
Manage accounts of Operator	Y	Y	
TIES User Account	Y	Y	Y
Capture, Validate Notices	Y	Y	Y
Submit to	BR	BR	Administration

Source: [Circular Letter on SpaceWISC]

# https://extranet.itu.int/itu-r/spacewisc

 **International Telecommunication Union**

"You do not have the permissions required to access this Web site. Please contact the Web site administrator."

Security ( show explanation )

This is a public or shared computer  
 This is a private computer

**Warning:** By selecting this option you acknowledge that the computer complies with your organization's security policy.

Username:

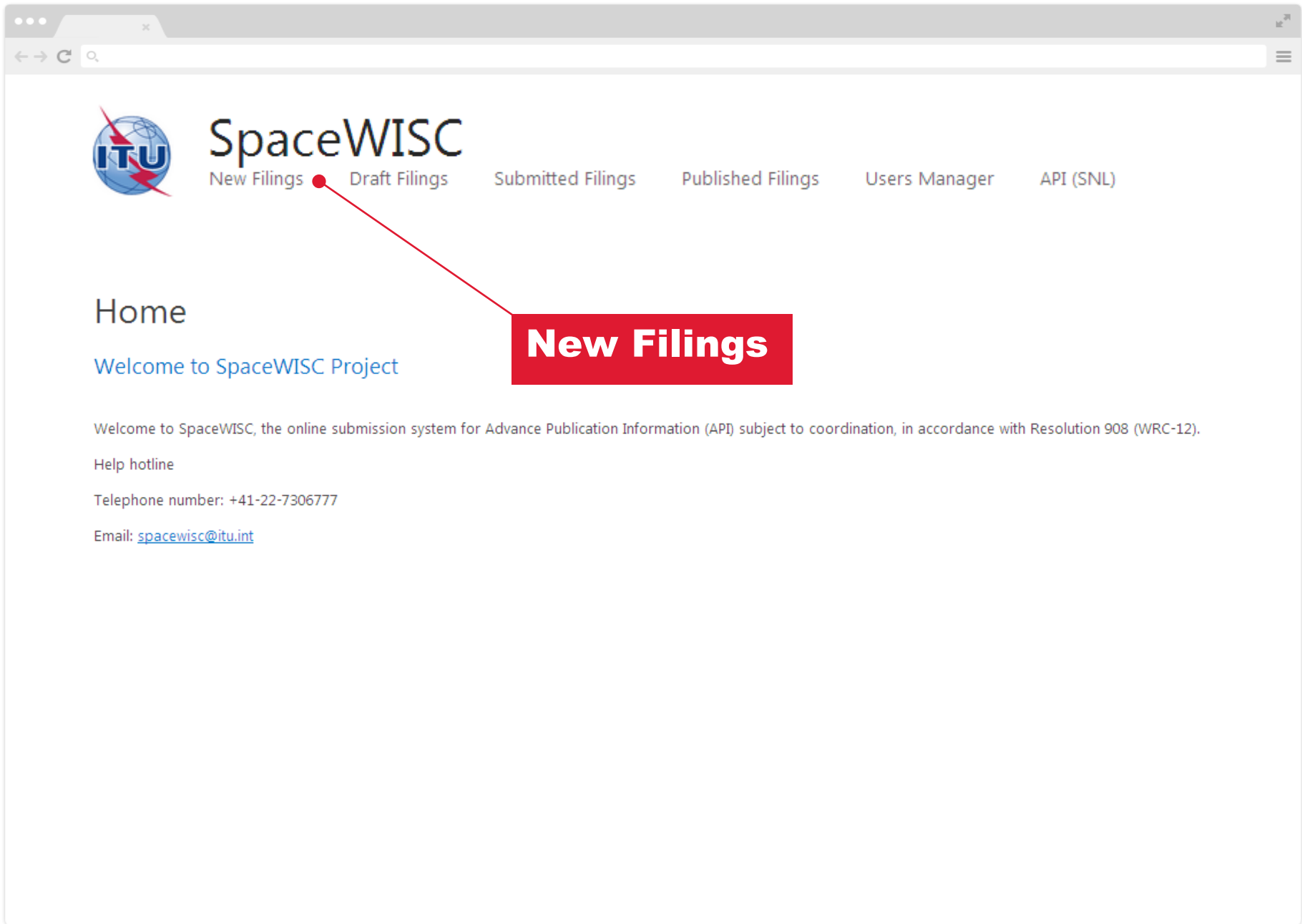
Password:

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**Login**

Operator or Administration or Manager





# SpaceWISC

New Filings Draft Filings Submitted Filings Published Filings Users Manager API (SNL)

## Home

Welcome to SpaceWISC Project

**New Filings**

Welcome to SpaceWISC, the online submission system for Advance Publication Information (API) subject to coordination, in accordance with Resolution 908 (WRC-12).

Help hotline

Telephone number: +41-22-7306777

Email: [spacewisc@itu.int](mailto:spacewisc@itu.int)



# SpaceWISC

New Filings

Draft Filings

Submitted Filings

Published Filings

Users Manager

API (SNL)

## New Filings

Capture API Online

API from MDB

### Upload MDB

Create API mdb file using SpaceCap

### Capture Online

Capture API directly on web interface



# SpaceWISC

New Filings

Draft Filings

Submitted Filings

Published Filings

Users Manager

API (SNL)

## API Capture



### NETWORK INFORMATION:

A1f1. Notifying Administration: **NOR**

A1a. Identity of the Satellite Network:  ? Ref

Notice intended for:

New

Notice Type:

Geostationary Satellite Network

Non-geostationary Satellite Network

A4a1. Nominal Orbital Longitude:

A1f2. Notice submitted on behalf of these administrations:

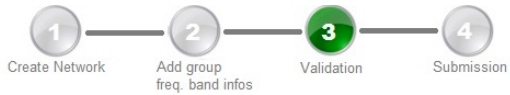
Select Administration code... ?

Add a Remark

Create Cancel

**Enter Info**  
Satellite Name,  
Longitude, GSO/NGSO

**Create**



**Validate**

Data Capture in progress

Before submitting to the Bureau, the API must be validated with no fatal errors

Validate Print Preview Complete

**NETWORK INFORMATION:**

Filing Reference: **NOR2014-14621**

A1f1. Notifying Administration: **NOR**

A1a. Identity of the Satellite Network:  ? Ref

Notice intended for:  New

Notice Type:  Geostationary Satellite Network  Non-geostationary Satellite Network

A4a1. Nominal Orbital Longitude:  88E

A1f2. Notice submitted on behalf of these administrations:  
 ?

Add a Remark

Save

**GROUP/FREQ BAND INFORMATION:**

Direction of transmission:  ?

A2b. Period of validity:

C1. Frequency From:  MHz  MHz

C11a. Service Area as list of Countries and geographical areas listed in Preface:  ?

or as a description:

C4a. Class of Station:  ?

C4b. Nature of Service:  ?

Add Cancel

**Enter Details**  
 Frequency range, class of station, period of validity, service area

View Group/Freq. band information

Grp ID	Dir	Freq From	Sym	Freq To	Sym	Prd of Validity	Service Area	stn_cls/nat_srv	stn_cls/nat_srv	stn_cls/nat_srv	stn_cls/nat_srv
21798	B	3400	M	4200	M	99	XVE	EC/CP			

Page 1 of 1 View 1 - 1 of 1



# SpaceWISC

New Filings

Draft Filings

Submitted Filings

Published Filings

API Capture



**Submit**

Operator to Administration

**Submit**

Administration to BR

Ready to submit

*Before submitting to the Bureau, the API must be validated with no fatal errors*

Validation completed: no error

Submit to BR

Validate

Print Preview

Complete

### NETWORK INFORMATION:

Filing Reference: **NOR2014-14621**

A1f1. Notifying Administration: **NOR**

A1a. Identity of the Satellite Network:



Ref

Notice intended for:

New

Notice Type:

Geostationary Satellite Network

Non-geostationary Satellite Network

A4a1. Nominal Orbital Longitude:  88E

A1f2. Notice submitted on behalf of these administrations:

Select Administration code...



Add a Remark



# Email Notification

Operator submits to Administration  
Administration submits to BR



# SpaceWISC

[New Filings](#)[Draft Filings](#)[Submitted Filings](#)[Published Filings](#)[Users Manager](#)[API \(SNL\)](#)

## Submitted Filings

API_REF	ntc_id	sat_name	Status_API	ADM	Space WISC_User	BR_d_rcv	Edit API	Operation API
NOR2014-14423	15320	SATRFGBV45	Submitted to BR	NOR	itu_ersc\mahjoub	26.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14445	15342	AN2A	Submitted to BR	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14452	15349	HONFAI-1	Submitted to BR	NOR	itu_ersc\ng	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14453	15350	DT-1	Submitted to BR	NOR	itu_users\tham	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14455	15352	SSD-TESTIT	Published in BR IFIC	NOR	itu_users\peker	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14456	15353	DKRSAT	Submitted to BR	NOR	itu_users\ka	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14459	15356	TDT-TEST2	Submitted to BR	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14460	15357	TDK-TEST4	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14462	15359	TDK-TEST55	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14463	15360	TDK-TEST21	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14464	15361	TDK-TEST7	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14468	15365	TDK-TEST9	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14470	15367	NOR-PIO	Submitted to BR	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14472	15369	CHANGE-NAME	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14474	15371	ADM-NO-BACKLOG-PLS	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14477	15374	OPERATORSAT	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14480	15377	FREE-ENTITLEMENT	Published in BR IFIC	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14482	15379	I-LIKE-SATELLITE	Published in BR IFIC	NOR	itu_ersc\kimds	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>
NOR2014-14483	15380	LAST-ONE	Submitted to BR	NOR	itu_ersc\kadirov	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14496	15393	HONFAI-2	Submitted to BR	NOR	itu_ersc\ng	27.02.2014	<a href="#">View</a>	<a href="#">Withdraw request</a>
NOR2014-14500	15397	YNK-2	Suppress request	NOR	itu_users\karunaje	27.02.2014	<a href="#">View</a>	<a href="#">Waiting answer from BR</a>
NOR2014-14502	15398	HONFAI-3	Published in BR IFIC	NOR	itu_ersc\ng	27.02.2014	<a href="#">View</a>	<a href="#">Suppress request</a>



# SpaceWISC

[New Filings](#)[Draft Filings](#)[Submitted Filings](#)[Published Filings](#)[Users Manager](#)[API \(SNL\)](#)

## Published Filings

APC_REF	mtc_id	saCname	Status_API	ADM	BR_d_rev	Space WISC_User	View/Edit	Operation API
USA2014-11269	12167	SATUSA	Published in BR IFIC	USA	05.02.2014	itu_users\mahjoub	<a href="#">View</a>	<a href="#">Commented under 9.5B</a>
CAN2014-14730	15625	SATTESTCANOP	Published in BR IFIC	CAN	26.03.2014	itu_ersc\mahjoub	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
CAN2014-14732	15627	TESTSATSUI	Published in BR IFIC	CAN	26.03.2014	itu_ersc\mahjoub	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
CAN2014-14733	15628	CANSATTEST	Suppressed	CAN	26.03.2014	itu_ersc\mahjoub	<a href="#">View</a>	
SUI2014-14735	15630	TESTVIEW2	Published in BR IFIC	SUI	26.03.2014	itu_users\morets	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
CAN2014-14443	15340	USMB-SAT522	Published in BR IFIC	CAN	27.02.2014	itu_users\mahjoub	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
CAN2014-14753	15648	TESTSATITU	Published in BR IFIC	CAN	27.03.2014	itu_ersc\mahjoub	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
TUN2014-14758	15653	SATTUN4	Published in BR IFIC	TUN	28.03.2014	itu_ersc\wiscop	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
E2014-14446	15343	BACELONA-SATE-1	Published in BR IFIC	E	27.02.2014	itu_users\wangj	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
SNG2014-11304	12202	SUNSAT998	Published in BR IFIC	SNG	09.02.2014	itu_ersc\loo	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
TUN2014-14810	15705	TESTSATRFV123456	Published in BR IFIC	TUN	02.04.2014	itu_ersc\wiscadm	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>
TUN2014-14811	15706	SATTUN234	Published in BR IFIC	TUN	02.04.2014	itu_ersc\wiscadm	<a href="#">View</a>	<a href="#">Comments under 9.5B</a>





## **API list in BR IFIC**

Hyperlinked to PDF in Space Network List (SNL) webpage

# BR-SIS

BR Space Information System



## Existing BR software

- Different look and feel
- Could be more user friendly
- Different programming languages (VB6, VO, C++, .NET, Cobol)
- Redundant codes
- Time consuming to implement WRC decisions

# BR-SIS

BR Space Information System



## Redesign, rewrite, review

RAG-19 Phase 2

## Future BR software

- One point entry for notice processing, technical exam, query
- Same look and feel, user-friendly
- Code reusability
- New programming language

**Launch Schedule: 2015**

Source: Report of correspondence group on BR information systems - RAG12-1/5-E  
Annex 1of Report to 20<sup>th</sup> Meeting - RAG13-1/1-E

Home Switch Help

Set search criteria Favorites Clear SQL <<

Search

Quick AdHoc InDepth Vis a Vis

BR IFIC Standard Overlap

Notification Reason

**Non-Plan**

- Advance Publication
- Coordination
- Coordination (Earth station)

**Plan BSS/FSS**

- PLAN
- Pending
- List
- SOF Art. 2A

Notification  
 Due Diligence

Administrative Criteria

Notice Id.  Status

Admin.  Organisation

BR IFIC no.  Plan id.

Satellite Criteria

Geostationary  Non-Geostationary

Satellite Name

Orbital Position

Earth/Radioastronomy Criteria

Specific  Typical  Radioastronomy

Station Name

Country

Longitude  Latitude

**SpaceQry**  
More user friendly interface

Task: Query data Database: M:\BR\_DATA\SPACE\IFIC\_DB\ifc2763.mdb

Home Switch Help

Set search criteria Favorites Clear SQL << Standard

Results: 52 rows found SQL Export/Print Detail of 90500682

ntc_id	ntc_type	adm_ref_id	prov	act_code	adm	ntwk_org	tgt_ntc_id	d_rcv	wic_part
90500682	G		11.2	M	LUX			04.09.2007	1
92520151	G		9.6	M	USA			28.04.2007	
105520373	G		9.6	M	CHN			03.12.2013	
107520044	G		9.6	M	S			16.06.2013	
107520191	G		9.6	M	KAZ			27.12.2013	
107520192	G		9.6	M	KAZ			30.12.2013	
107520263	G		9.6	M	ISR			21.11.2012	
108520121	G		9.6	M	G			03.05.2013	
111500122	G		11.2	M	KAZ			27.12.2013	1
111500125	G		11.2	M	KAZ			30.12.2013	1
111520128	G		9.6	M	CYP			11.04.2013	
112500145	G		11.2	M	CHN			03.12.2013	1
112520483	G		9.6	M	IRQ			17.12.2012	
113500115	G		11.2	A	HOL			18.06.2013	2
113500125	G		11.2	A	MLA			06.08.2013	3
113500134	G	A	11.2	A	CHN			13.08.2013	3
113500138	G		11.2	A	USA			22.08.2013	2
113500144	G		11.2	A	CHN			26.08.2013	2
113500180	G		11.2	A	IND			06.11.2013	1
113500191	G		11.2	A	IND			25.11.2013	1
113500197	G	E/2013/0024	11.2	A	E			16.12.2013	1
113512017	G		11.2	A	CHN			26.08.2013	3
113520062	G		9.6	A	QAT			27.03.2013	
113520065	G		9.6	A	QAT			27.03.2013	
113520094	G		9.6	A	INS			17.05.2013	
113520106	G		9.6	A	UAE			19.05.2013	
113520107	G		9.6	A	UAE			19.05.2013	
113520221	G		9.6	A	LUX			14.10.2013	
113520222	G		9.6	A	LUX			14.10.2013	
113520223	G		9.6	A	LUX			14.10.2013	
113520224	G		9.6	A	LUX			14.10.2013	
113520225	G		9.6	A	LUX			14.10.2013	
113520226	G		9.6	A	LUX			14.10.2013	
113520228	G		9.6	A	G			22.10.2013	
113520229	G		9.6	A	G			22.10.2013	
113520230	G		9.6	A	G			22.10.2013	
113523076	G		9.6	A	LUX			14.10.2013	
113523077	G		9.6	A	LUX			14.10.2013	
113523078	G		9.6	A	LUX			14.10.2013	
113523079	G		9.6	A	LUX			14.10.2013	
113523080	G		9.6	A	LUX			14.10.2013	
113523081	G		9.6	A	LUX			14.10.2013	
114500007	G		11.2	A	MEX			15.01.2014	1
114500008	G		11.2	A	RUS			13.01.2014	1
114500009	G		11.2	A	RUS			13.01.2014	1

Quick AdHoc InDepth Vis a Vis

BR IFIC Standard Overlap

Notification Reason

Non-Plan  
 Advance Publication  
 Coordination  
 Coordination (Earth station)

Plan BSS/FSS  
 PLAN  
 Pending  
 List  
 SOF Art. 2A

Notification  
 Due Diligence

Administrative Criteria  
 Notice Id.  Status   
 Admin.  Organisation   
 BR IFIC no.  Plan id.

Satellite Criteria  
 Geostationary  Non-Geostationary  
 Satellite Name   
 Orbital Position

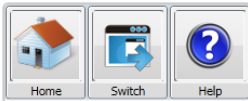
Earth/Radioastronomy Criteria  
 Specific  Typical  Radioastronomy  
 Station Name   
 Country   
 Longitude  Latitude

Task: Query data Database: M:\BR\_DATA\SPACE\IFIC\_DB\ifc2763.mdb

Description of column 'ntc\_id'

**SpaceQry**  
 Better use of space,  
 customizable columns





Set search criteria

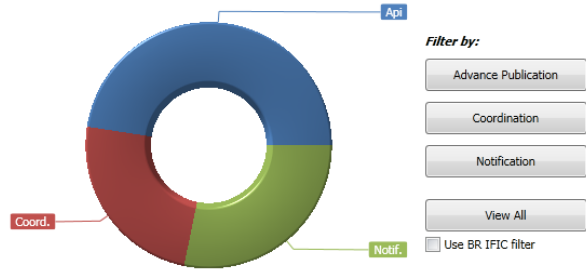


Quick AdHoc InDepth Vis a Vis  
BR IFIC Standard Overlap

- Global view
- Satellite / Nominal Longitude view
- List of my satellite networks

BR IFIC X

### Global view on IFIC2764.MDB



Results: 124 rows found

ntc_id	tgt_ntc_id	ntc_type	act_code	prov	st_cur	wic_no	wic_part	ntf_rsn	adm
90501108		G	M	11.2	50	2764	1	N	USA
97500253		G	M	11.2	50	2764	2	N	G
97500291		G	M	11.2	50	2764	2	N	G
98500067		G	A	RR1488	50	2764	2	N	USA
99500053		G	M	11.2	50	2764	1	N	USA
102500255		G	M	11.2	50	2764	2	N	B
102500351		G	M	11.2	50	2764	2	N	USA
103500020		G	M	11.2	50	2764	2	N	USA
105520107		G	M	9.6	50	2764		C	G
106520113		G	M	9.6	50	2764		C	D
107500633		G	M	11.2	50	2764	1	N	MLA
111520370		G	M	9.6	50	2764		C	KOR
111520371		G	M	9.6	50	2764		C	KOR
111520372		G	M	9.6	50	2764		C	KOR
111540734		G	M	9.1/IB	50	2764		A	PNG
112500002		N	A	11.2	50	2764	2	N	BEL
112500225		N	A	11.2	50	2764	2	N	E
112520180		G	M	9.6	50	2764		C	PNG
112541122		G	A	9.1/IB	50	2764		A	G
113500049		G	M	11.2	50	2764	2	N	CAN
113500072		G	A	11.2	50	2764	2	N	MEX
113500152		N	A	11.2	50	2764	2	N	USA
113500155		N	A	11.2	50	2764	2	N	PAK
113500156		N	A	11.2	50	2764	2	N	J
113500174		N	A	11.2	50	2764	2	N	RUS
113500185		N	A	11.2	20	2764	1	N	LTU
113500190		G	A	11.2	20	2764	1	N	USA
113500192		G	A	11.2	20	2764	1	N	IND

Task: Query data Database: M:\BR\_DATA\SPACE\IFIC\_DB\ific2764.mdb

# E-Learning

For Space Services



## **Self-paced online training programme**

- BR training material related to space activities
- Different modules based on user profile  
(general overview, regulatory, technical, etc.)
- Divided into Non-planned and Planned services
- PFD files in presentation format

**Launch Schedule: Summer 2014**





Committed to connecting the world

What would you like to search for?

- ITU
  - General Secretariat
  - Radiocommunication
  - Standardization
  - Development
  - ITU Telecom
  - Membership
- About
  - Events
  - Databases & Services
  - Publications
  - Space
  - Terrestrial
  - Study Groups
  - Regional Presence
  - Join ITU-R

## Space services - E-learning center

YOU ARE HERE HOME > ITU-R > SPACE SERVICES > E-LEARNING CENTER

SHARE

This portion of the ITU Radiocommunication Bureau (BR) website aims to facilitate access to information about the space-related activities of the BR, including certain aspects of the Radio Regulations, satellite network and associated earth station filings, use of the different programs comprising the BR software suite and its related databases and libraries, as well as practices and procedures of the Space Services Department (SSD).

Accessing the particular information most relevant to you is achieved by identifying the category of user that most closely corresponds to your involvement with satellite networks in relation to the BR. Alternatively, you can choose to view all the available material, and select whichever elements you think are most likely to contain the information you are looking for.

The information available is largely in the form of slideshow presentations. Additional and updated information will be available regularly.

SSD are generally divided into those relating to "Planned Services" and "Non-planned Services". For more information about these two types of services, please see the [FAQ page](#). The primary legal framework applied to these services is provided by the Radio Regulations and the complementary Rules of Procedure. For more information regarding these instruments, please see the [regulatory publications page](#).

Information can be found using the Quick Links box on the right. The search box on the top of the page may also be used to find information about a specific space-related topic. SSD welcomes user [feedback](#) about this e-learning website.

### SPACE SERVICES LIBRARY

search

### QUICK LINKS

- ITU-R Study Groups
- ITU-R Recommendations
- BR space software
- Space Plans databases
- BR IFIC (Space services)
- FAQ

### TRENDY TOPICS

- Interference to Space Services
- Radiomonitoring
- Amateur Satellite Service
- Remote Sensing
- Small Satellites

### CHOOSE YOUR CUSTOMIZED TRAINING

Please select your appropriate user category

Administration/Operator notifying a satellite network

Please select a type of service

NOT Subject to a PLAN

See details

Start the training

**User Category**  
Determines materials presented, level of detail

**Plan or Non-Plan**

**Start Training**

# Training - Satellite network / Not subject to a plan

YOU ARE HERE HOME > ITU-R > SPACE SERVICES > E-LEARNING CENTER > TRAINING - SATELLITE NETWORK / NOT SUBJECT TO A PLAN

SHARE    

- Oriented to engineers from Administration/Operator notifying a satellite network.

Provide information about the procedures to effect coordination and to notify a satellite network to the ITU in frequency bands and services not subject to a plan. Includes information on the BR software tools required to create, validate and submit a satellite network filing relating to non-planned frequencies and services.

The information presented in this course is typically a person who works in the administration or government of an ITU Member State or for a satellite operator in an ITU Member State.

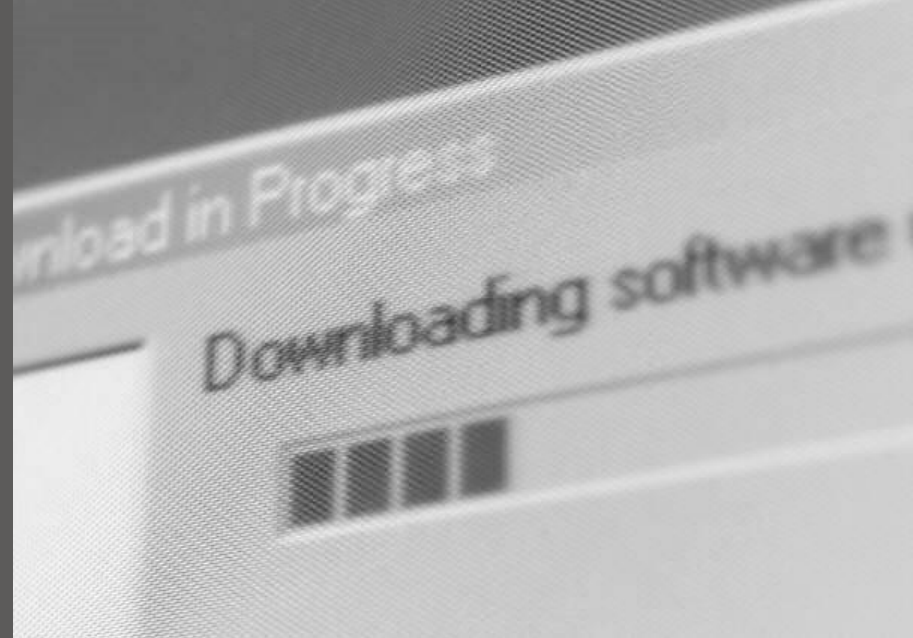
## PROGRAM OF THE TRAINING (ITU-SSD-N001)

	Subject - Procedure	See and download the associated software	How to
1 -	Non-planned space services (Coordination and Notification procedure)		
1.1 -	Advance publication information (API)	SpaceCap, SpaceVal, SpaceCom for API/B	Submit an API to ITU? Submit comment from Affected Administrations to API?
1.2 -	Coordination and analysis of GSO satellite networks	GIMS, SpaceCap, SpaceVal, SpaceQuery, GIBC-AP8-PFD-AP30, SNS online, SNL online	Know about Space BRIFIC? Know about BR space software? Know about BR space databases? Know about SNS and SNL online? Know about GIMS? Capture and validate a Coordination Request? Know if my filing is receivable?
1.3 -	Carrier to interference (C/I ratio) calculations		
1.4 -	Submission of comments to Coordination Requests (CR/C) under No. 9.52	SpaceCom for CR/D	
1.5 -	Requesting inclusion in coordination under No. 9.41	SpaceCom for CR/E	
1.6 -	Broadcasting satellite service in 21.4 - 22 GHz band in regions 1&3		
1.7 -	Technical and regulatory examination of Coordination Requests		

**Training Material**  
Link to PDF files

# ISO FILE

BR IFIC Web Download

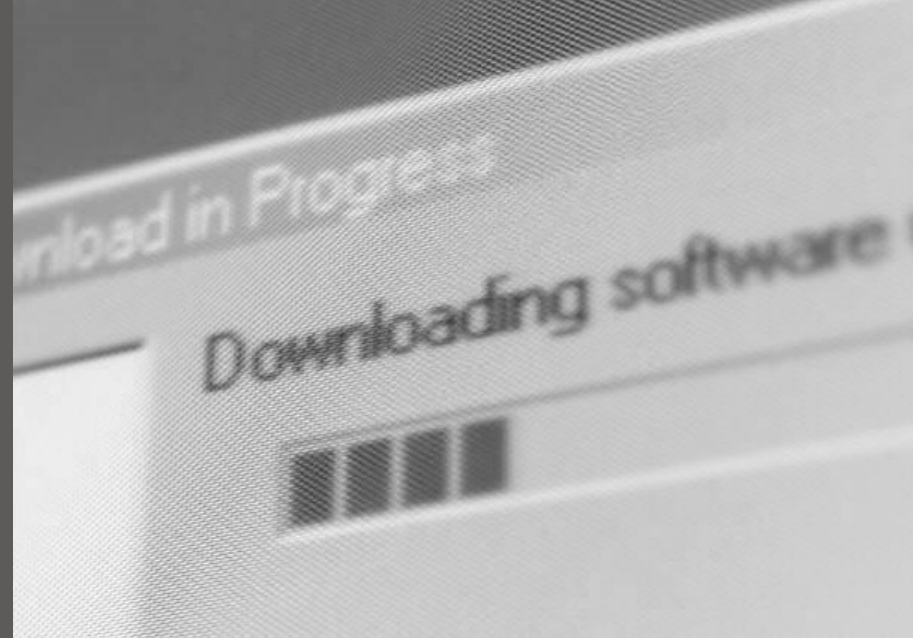


## **BR IFIC Web Download**

- BR IFIC DVDs published from 2013
- Complementary **not** complimentary
- For Administrations and paid subscribers of DVD

# ISO FILE

BR IFIC Web Download



## Procedure

- One time registration with sales@itu.int
- Go to ITU Electronic Bookshop webpage
- Login and download zipped ISO file (1GB)
- Unzipped file (3+GB)
- Mount as a drive (WinCDEmu) or burn to DVD

**Launch Schedule: Now**

## BR International Frequency Information Circular (BR IFIC) - Space Service

BR IFIC Space Services is a service publication now on DVD-ROM and published every two weeks by the Radiocommunication Bureau in accordance with provision Nos. 20.1 to 20.6 and No. 20.15 of the Radio Regulations. It contains information on the frequency assignments to space stations, earth stations or radioastronomy stations submitted by Administrations to the Radiocommunication Bureau for recording in the Master International Frequency Register, as well as those that are submitted under the relevant provisions of the Radio Regulations or which are subject to the Appendices 30, 30A and 30B Plans. The information published corresponds to the recorded assignments as well as the notifications still being processed. Each edition published in 2012 will contain the SRS database, which was formerly sold only separately, now available only with the BR IFIC - Space Service DVD.

### Related links

- [BR IFIC \(Space Services\)](#)



Edition of 2014 **New!** [Publication Notice with Order Form](#)

BR IFIC Space Services is a service publication published every two weeks by the Radiocommunication Bureau in accordance with provision Nos. 20.1-20.6 and No. 20.15 of the Radio Regulations. It contains information on the frequency assignments to space stations, Earth stations or radioastronomy stations submitted by administrations to the Radiocommunication Bureau for recording in the Master International Frequency Register, as well as those that are submitted under the relevant provisions of the Radio Regulations or that are subject to the Appendices 30, 30A and 30B Plans. The information published corresponds to the recorded assignments as well as the notifications still being processed. The SRS database formerly sold separately is now available only in this DVD-ROM. The BR IFIC (Terrestrial Services) DVD-ROM is published at the same time (please see Publication Notice No. 282-14). For additional support and information, please see the BR support page at: <http://www.itu.int/ITU-R/go/space-brific/en>

Available in



Other editions: [Edition of 2013](#)





**Select Folder**



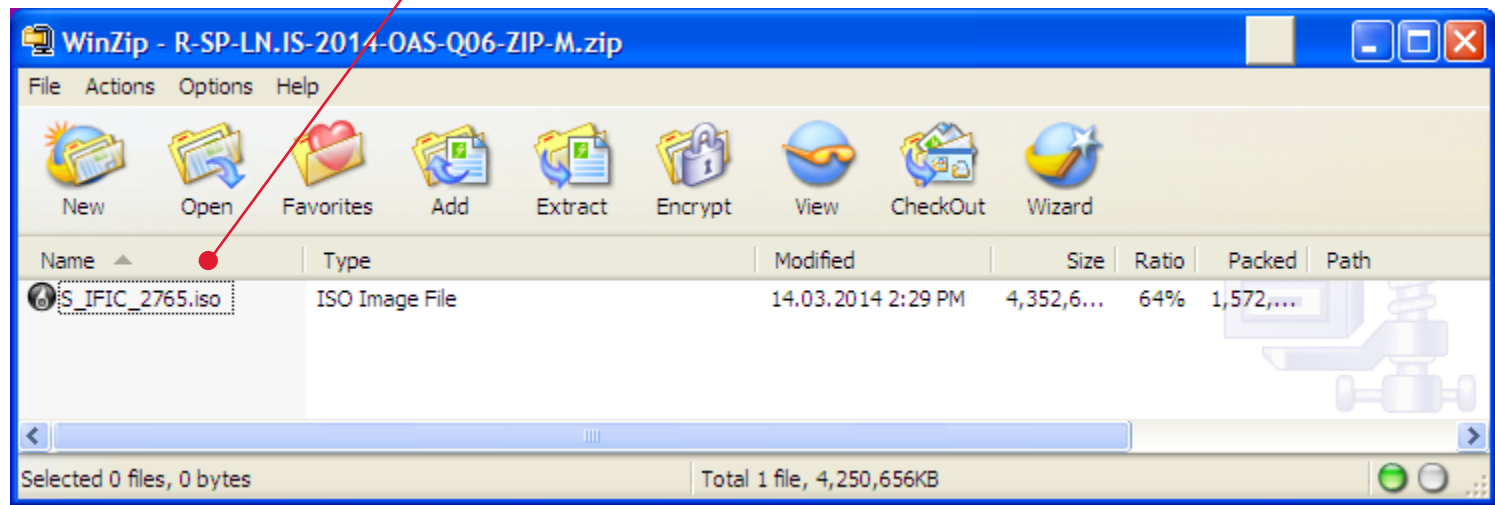
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username and password

ITEM DETAIL	ARTICLE	PRICE	CART	DOWNLOAD For subscribers
MULTILINGUAL   2764 - 04.03.2014 (ISO copy)	38675	600 CHF	ADD	
 2764 - 04.03.2014 (SHA-1 Checksum)		Free of charge	DOWNLOAD	
  2763 - 18.02.2014 (ISO copy)	38674	600 CHF	ADD	
 2763 - 18.02.2014 (SHA-1 Checksum)		Free of charge	DOWNLOAD	

**ISO File**  
Unzip to local drive





WinCDEmu is an open-source CD/DVD/BD emulator - a tool that allows you to mount optical disc images by simply clicking on them in Windows Explorer. If you have downloaded an ISO image and want to use it without burning it to a blank disc, WinCDEmu is the easiest way to do it.

#### Features:

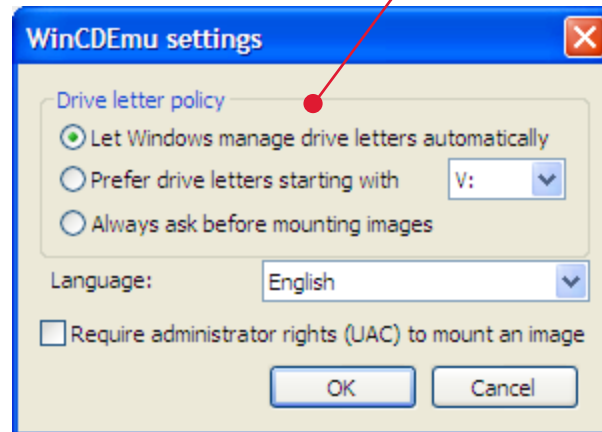
- One-click mounting of **ISO, CUE, NRG, MDS/MDF, CCD, IMG** images.
- Supports unlimited amount of virtual drives.
- Runs on 32-bit and 64-bit Windows versions from XP to Windows 7.
- Allows creating ISO images through a context menu in Explorer.
- Small installer size - less than 1MB!
- Does not require rebooting after installation.
- A special [portable version](#) is available.
- [Translated](#) to more than 20 languages.
- Does not occupy drive letters when not used.
- Supports data, DVD-video and BD-video images.
- WinCDEmu is free for any kind of use - it is licensed under LGPL





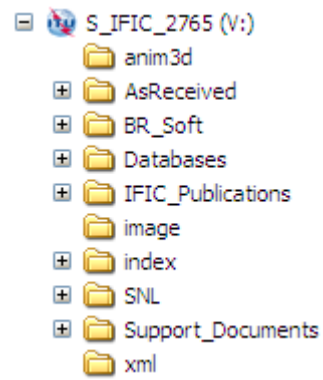
## WinCDEmu

Follow set up  
process



## ISO File

Right click on file in Windows Explorer  
“Select drive letter & mount”



# GIMS

Capturing contours



## **Current GIMS**

- Need a digitizer to capture contours

## **Future GIMS**

- Capture contours with a mouse
- Create contour or service area by clicking on map
- Modify contour by dragging its points

**Launch Schedule: Summer 2014**

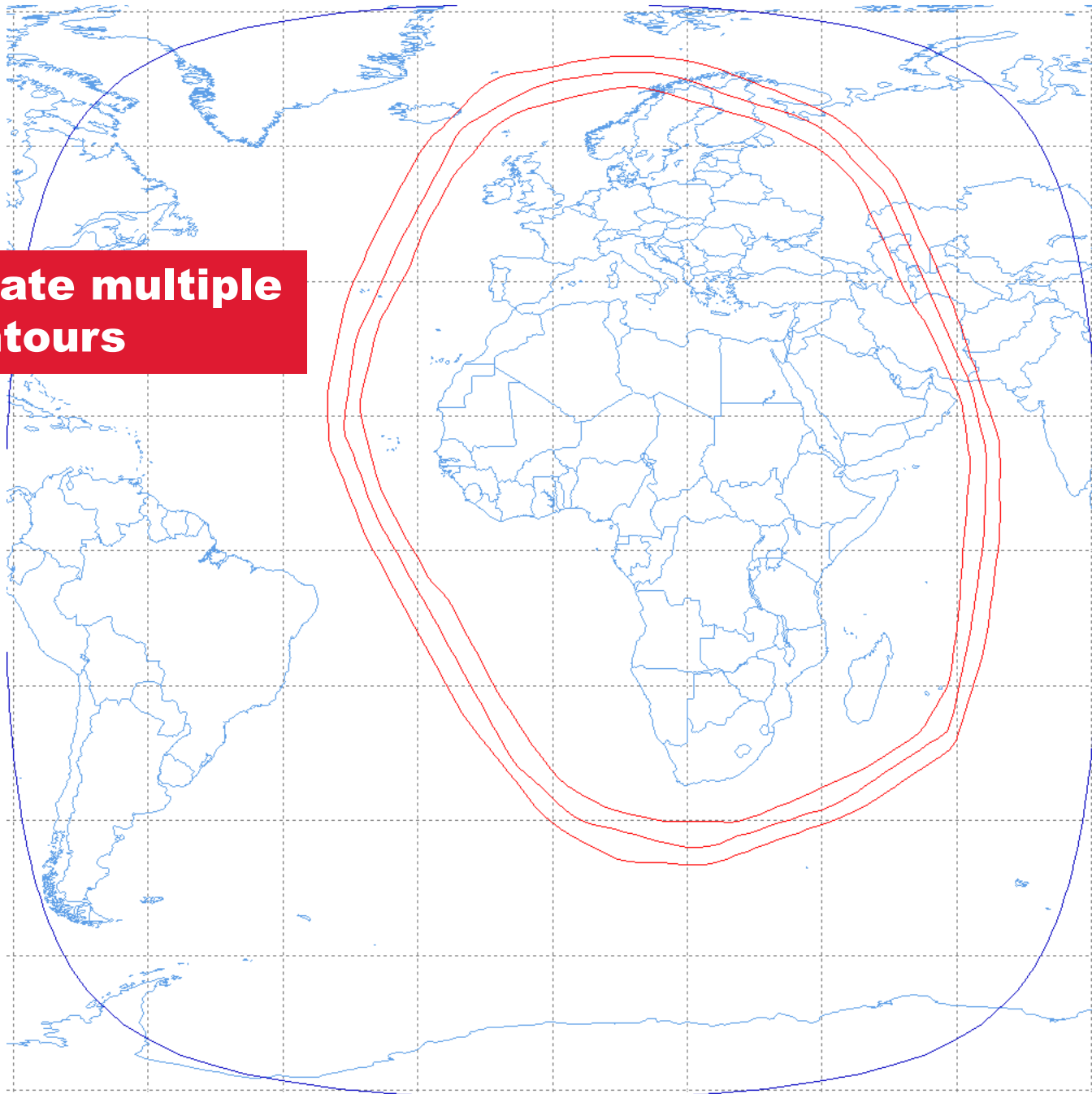








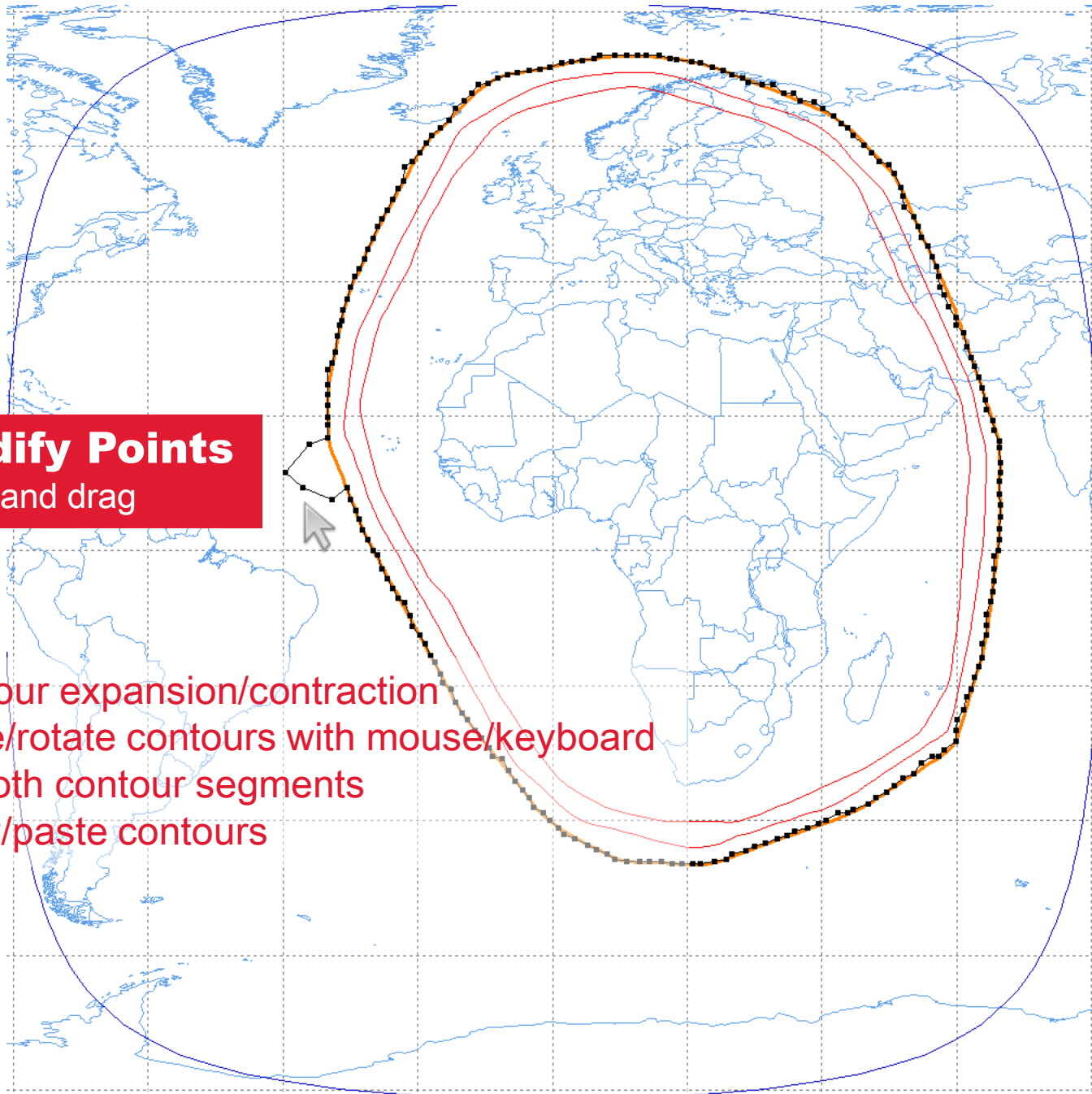
**Create multiple contours**





**Create service area**





**Modify Points**  
Click and drag

- Contour expansion/contraction
- Move/rotate contours with mouse/keyboard
- Smooth contour segments
- Copy/paste contours

# WRS-14

World Radiocommunication Seminar



## Seminar

- WRS-14 to be held in Geneva, Switzerland
- Seminars and workshop sessions

Planned: 8 – 12 December 2014

# Current DEVELOPMENTS

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**Hon Fai Ng**

Space Services Department

