

29TH WORLD RADIOCOMMUNICATION SEMINAR

30 November - 11 December 2020

Online tools and electronic communication means for terrestrial services

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Broadcasting Service Division



www.itu.int/go/wrs-20

#ITUWRS

Agenda

- > Tools presentations
 - Integrated eTerrestrial platform
 - eBroadcasting platform for broadcasting services
 - eQuery, ePub, eTools, myAdmin
 - > eMIFR for all terrestrial services
 - > Future directions
- > Tool demonstrations
- **Exercise session**





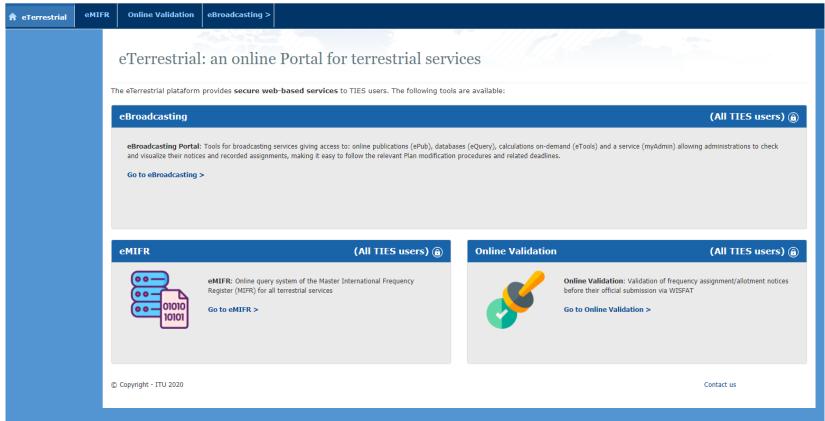
Integrated eTerrestrial platform



Committed to connecting the world

ريي 中文 Español Français Русский

YOU ARE HERE HOME > ITU-R > TERRESTRIAL SERVICES > E-TERRESTRIAL







eBroadcasting platform

Objectives

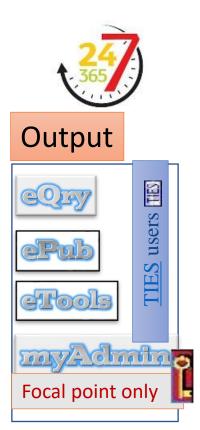
Bring the BR closer to Administrations with added-value services

- Up-to-date broadcasting data
- Special Section at publication date
- Calculation-on-demand
- Easily follow-up on plan modification procedures and related deadlines

Outcome

- Reduce workload on both BR and administrations
- Reduce the need for printed documents

not TIES users? Use user1 credential







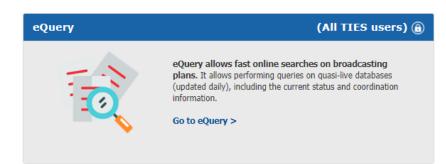


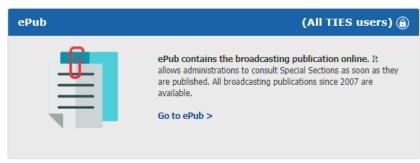
eBroadcasting platform

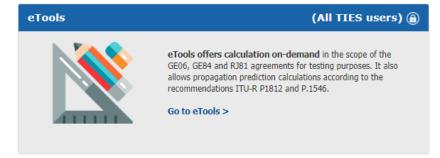
eBroadcasting: Broadcasting Online

eBroadcasting, an online platform for broadcasting services

The eBroadcasting platform provides **secure web-based services** related to terrestrial broadcasting to TIES users. The platform provides services to consult databases (**eQuery**), publications (**ePub**) and to perform calculations on-demand (**eTools**) in the scope of selected broadcasting agreements also and propagation prediction calculations. It provides also a portal (**myAdmin**) which allows administrations to check and visualize their notices and recorded assignments, making it easy to follow the relevant Plan modification procedures and related deadlines.







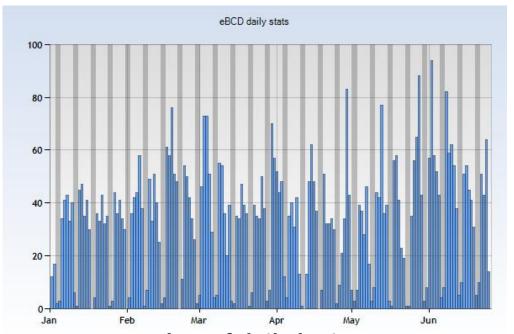


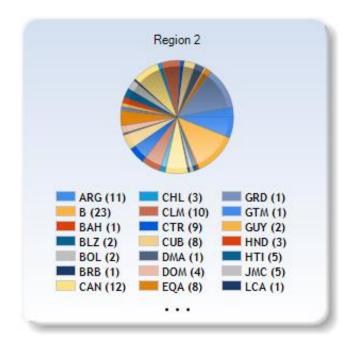
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eBroadcasting platform





Number of daily logins 2020





September 2020 statistics: 221 users, 91 Administrations







eQry

"Online search on Plans"

GE06 ST61 GE75 유 GE84 GE89 RJ81 위

Read-Only copy of BR Database (Updated daily)

Search by:

- Administration
- Geographic Area
- Frequency
- Administration Unique Identifier
- BR Identification number
- Status (Recorded/Published)
- Site/Allotment name

ePub

"Special Sections, the publication day!"

Database Snapshots at publication date

Search by:

- BR IFIC number
- Administration
 - My notifications
 - Notifications which affects me







Notice Generation

eTools

"On-demand test calculations"

2020 statistics

Around 2000 jobs run by **125 users** from **66 Administrations**

Calculation Type

GE06D Plan Modification

GE06D Compatibility Analyses (incl. ATU, ASMG)

GE84 Compatibility Analyses, GE84 Channel Search, GE84 Optimization



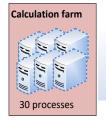
CA Compatibility Analyses

RJ81 Plan modification and what-if studies

ITU-R P.1812 v4 & P.1546 v5



Back-end infrastructure



ITU internal farm: 30 processes distributed in such a way to minimize waiting time.

Coverage contours now available!



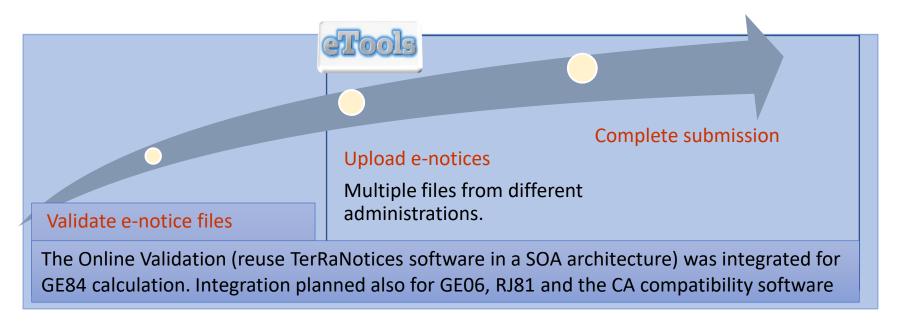




eTools: e-notice submission

GE06, RJ81, CA Compatibility

GE84





The ITU distributed processing infrastructure will treat your test submission and inform you at completion!

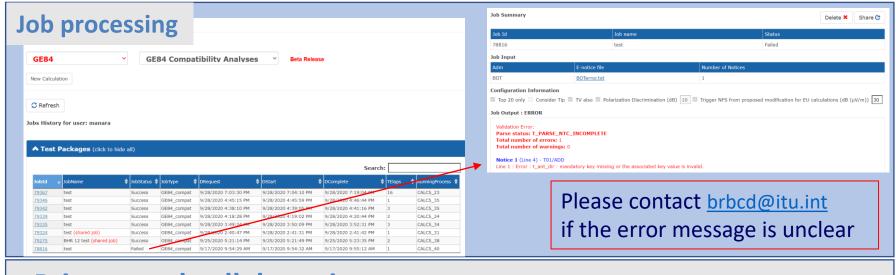


Check your E-mail account!





eTools: job processing, privacy and collaboration



Privacy and collaboration

Jobs (e-notice and results) are owned and visible ONLY by submitter...BUT...

... facilitate coordination!

...you can now share them with other eBCD registered users! (web2.0)



Around **950 jobs** shared by **340** users from **90 Administrations**







GE84 Compatibility Analyses

Adm		E-notice	file						Num	ber of Not	ices					
вот		BOTemp	tycells.txt						1							
Configuration	Information															
_	Consider Tip	TV also	Polariza	tion Discriminati	ion (dB)	10 🛮 Tr	rigger NFS	from pro	posed mo	dification f	for EU cald	culations (dB	β (μV/m))	30		
	e validated by the	OnlineVal	idation p	rocess on 9/18	3/2020 1	0:54:00	АМ									
roposed Modific	cation	Admi	nistrations	s with which the	limits of	4.3.7.1/4.	3.7.2 are	exceeded						Eu ((dB(µV/m))
7.7MHz_BT 12		NMB	вот											76.2	26	
lect the propo	sed modification															
87.7MHz	BT 12			~												
84 Compatibilit	ty Analyses Descrint	tion														
84 Compatibilit	ty Analyses Descript	tion														
			From													
		terference	From													
Result Into			From										Search	h:		
Result Inte	erference To Int	terference Assigned			 Total	Cold Sea	Warm Sea	Super	ERP .	Azimuth _	Protection	NFS	EU Dof	Proposed	Current E <u>U</u>	EU
Result Inte		terference Assigned		Site Name 💠	Total Distance♥	Cold Sea Path (Km)	Warm Sea Path (Km)	Super refractivity Path (Km)	ERP (dBW) ♥	Azimuth (deg)	Protectio <u>n</u> Ratio (dB)	NFS (dB(µV/m))	EU Dof	Proposed	(dp/.x//-\)	k :
Result Interest Inter	erference To Int	Assigned		Site Name \$	Total Distance ♥	Path (Km)	Warm Sea Path (Km)	refractivity	ERP (dBW)	Azimuth (deg)		NFS (dB(μV/m)̄) 72.14	EU Dof	Proposed EU \$	(dp/.x//-\)	increase
Result Interest Inter	erference To Int	Assigned Frequence (MHz)	Polar 4		Distance♥	Path (Km)	Path (Km)	refractivity Path (Km)	(,	(9)	37	(dB(µV/m))	EU Ref (dB(μV/m))	Proposed EU ♦ (dB(µV/m)	(dB(µV/m)	increase (dB)
Result Interpretation Excel sign ID Adm 4002236 NMB 4004917 BOT	erference To Inf	Assigned Frequence (MHz)	Polar 4	MARIENTAL	Distance ▼ 262 335	Path (Km)	Path (Km)	refractivity Path (Km)	47	271	37 37	(dB(µV/m)) 72.14	EU Ref (dB(μV/m)) 72.28	Proposed EU ∳ (dB(µV/m)	(dB(μV/m)) 72.4	increase (dB)
Result Into	erference To Int Intent \$\\$ Stn Cls RECORDED BC RECORDED BC	Assigned Frequence (MHz) 87.7	Polar 4	MARIENTAL GHANZI	Distance ▼ 262 335	Path (Km)	Path (Km)	refractivity Path (Km) 0 0	47 47	271 21	37 37 25	(dB(μV/m)) 72.14 64.77	EU Ref (dB(μV/m)) 72.28 63	Proposed EU	72.4 63.18	increase (dB) 5.25 5.95
Result Interest of Excel sign ID Adm Adm A002236 NMB A004917 BOT A002194 NMB	erference To Int Intent \$ Stn Cls RECORDED BC RECORDED BC RECORDED BC RECORDED BC	Assigned Frequence (MHz) 87.7 87.7 87.6	Polar \$	MARIENTAL GHANZI KEETMANSHOOP	Distance ▼ 262 335 332	Path (Km) 0 0 0	Path (Km) 0 0 0	refractivity Path (Km) 0 0	47 47 47	271 21 225	37 37 25	(dB(μV/m)) 72.14 64.77 53.12	EU Ref (dB(µV/m)) 72.28 63 66.2	Proposed EU (dB(μV/m)) 77.65 69.13 67.66	72.4 63.18 66.27	increase (dB) 5.25 5.95 1.39
Result Interpretation	erference To Int Intent \$ Stn Cls RECORDED BC RECORDED BC RECORDED BC RECORDED BC RECORDED BC	Assigned Frequence (MHz) 87.7 87.7 87.6 87.6	Polar \$ H H H	MARIENTAL GHANZI KEETMANSHOOP NM 25	Distance ▼ 262 335 332 335	Path (Km) 0 0 0 0	Path (Km) 0 0 0 0	refractivity Path (Km) 0 0 0	47 47 47 47	271 21 225 313	37 37 25 25 37	(dB(μV/m)) 72.14 64.77 53.12 52.83	EU Ref (dB(μV/m)) 72.28 63 66.2 70.19	Proposed EU	72.4 63.18 66.27 84.48	5.25 5.95 1.39 0.04
Result Into Export to Excel sign ID 4002236 NMB 4004917 BOT 4002194 NMB 4002296 NMB 4004822 BOT 2003524 NMB	erference To Int Intent \$\\$ Stn Cls RECORDED BC RECORDED BC RECORDED BC RECORDED BC RECORDED BC RECORDED BC	**Assigned Frequence (MHz) 87.7 87.6 87.6 87.7	Polar † H H H H	MARIENTAL GHANZI KEETMANSHOOP NM 25 BT 15.1	262 335 332 335 518	Path (Km) 0 0 0 0 0 0	Path (Km) 0 0 0 0 0	refractivity Path (Km) 0 0 0 0	47 47 47 47 47	271 21 225 313 80	37 37 25 25 37 12	(dB(μV/m)) 72.14 64.77 53.12 52.83 48.04	EU Ref (dB(μV/m)) 72.28 63 66.2 70.19	Proposed EU ψ (dB(μV/m) 77.65 69.13 67.66 84.52 71.24	72.4 63.18 66.27 84.48 71	5.25 5.95 1.39 0.04 0.24
Result Into Export to Excel sign ID Adm 4002236 NMB 4004917 BOT 4002194 NMB 4002296 NMB 4004822 BOT 2003524 NMB 4002560 NMB	erference To Inf Intent \$ Stn Cls RECORDED BC	Assigned Frequenc (MHz) 37.7 87.6 87.6 87.7 87.6	Polar 4 H H H H	MARIENTAL GHANZI KEETMANSHOOP NM 25 BT 15.1 GOBABIS	262 335 332 335 518 276	Path (Km) 0 0 0 0 0 0	Path (Km) 0 0 0 0 0 0	refractivity Path (Km) 0 0 0 0 0	47 47 47 47 47 47	271 21 225 313 80 322	37 37 25 25 37 12	(dB(μV/m)) 72.14 64.77 53.12 52.83 48.04 45.7	EU Ref (dB(μV/m)) 72.28 63 66.2 70.19 71 91.58	Proposed EU (dB(μV/m)) 77.65 69.13 67.66 84.52 71.24 91.58	72.4 63.18 66.27 84.48 71 91.58	5.25 5.95 1.39 0.04 0.24
Result Interpretation	erference To Inf Intent \$\\$\\$ Stn Cls RECORDED BC	Assigned Frequenc (MHz) 87.7 87.6 87.6 87.6 88	Polar 4 H H H H H	MARIENTAL GHANZI KEETMANSHOOP NM 25 BT 15.1 GOBABIS NM 71	262 335 332 335 518 276	Path (Km) 0 0 0 0 0 0 0 0	Path (Km) 0 0 0 0 0 0 0 0	refractivity Path (Km) 0 0 0 0 0 0 0	47 47 47 47 47 47 47	271 21 225 313 80 322 270	37 37 25 25 37 12	(dB(μV/m)) 72.14 64.77 53.12 52.83 48.04 45.7 43.66	EU Ref (dB(μV/m)) 72.28 63 66.2 70.19 71 91.58 62.33	Proposed EU (dB(μV/m)) 77.65 69.13 67.66 84.52 71.24 91.58 62.91	72.4 63.18 66.27 84.48 71 91.58 62.33	5.25 5.95 1.39 0.04 0.24 0 0.58
Result Into Export to Excel sign ID Adm 4002236 NMB 4004917 BOT 4002194 NMB 4004929 NMB 4004922 BOT 2003524 NMB 4002560 NMB 4000411 AFS 4000416 NMB	erference To Inf Intent \$\\$\\$ Stn Cls RECORDED BC	Assigned Frequenc (MHz) 37.7 37.6 37.6 37.6 88 37.8	Polar 4 H H H H H	MARIENTAL GHANZI KEETMANSHOOP NM 25 BT 15.1 GOBABIS NM 71 AUGRABIES	Distance 262 335 332 335 518 276 127 452	Path (Km) 0 0 0 0 0 0 0 0 0 0	Path (Km) 0 0 0 0 0 0 0 0 0 0 0	refractivity Path (Km) 0 0 0 0 0 0 0 0	47 47 47 47 47 47 47 47	271 21 225 313 80 322 270	37 37 25 25 37 12 -7 25 37	(dB(μV/m)) 72.14 64.77 53.12 52.83 48.04 45.7 43.66 41.98	EU Ref (dB(µV/m)) 72.28 63 66.2 70.19 71 91.58 62.33 68.09	Proposed EU (dB(µV/m) 77.65 69.13 67.66 84.52 71.24 91.58 62.91 68.26	72.4 63.18 66.27 84.48 71 91.58 62.33 68.11	5.25 5.95 1.39 0.04 0.24 0 0.58
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((E)) ITUWRS ONLINE2020

More during GE84 presentation!



GE84Opt



	results fo	r assigr	nable requi	iremer	its from I	ИМВ													
lect req	uirement:																		
FLEX-AR	IAMSVLEI	(019°50)'00"E-28°0	8'00"S) System 4	4 Polari	zation H		~										
84 Optim	ization Des	cription																	
									_										
Summary	[FLEX-AR	IAMSVLE	I (019°50'00	"E-28°	08'00"S) S	ystem 4	Polarizat	ion H]											
≜ Dataila	-646																		
r ⊔etails	or the requi	rement u	nder consider	ation															
Show	top 5 inter	ferers i	n the summ	ary 🔾	Show top	5 affec	ted in th	ne sun	nmary										
	Top five in	terferers																	
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LEX	66	AFS	ADD	ВС	FLEX	н	AUGRABI	ES		73	0	0	0	47	310.9		45	101.16	
	70	450	400	BC	FLEX	Н	NOENIEP				0	0							
		AFS	ADD	50	FLEX	н	NOENIEP	UI		76	U	•	0	47	216.8		45	97.01	
	248		ADD	BC	FLEX	Н	UR	UI		144	0	0	0	47 47	216.8 118.8		45 37	97.01 89.81	
								UI											
	248	NMB	ADD	BC	FLEX	н	UR			144	0	0	0	47	118.8		37	89.81	
Excel	248 213	NMB NMB	ADD ADD	BC BC	FLEX FLEX	H H	UR NM 5			144 115	0	0	0	47 47	118.8		37 37	89.81 89.61	
Excel	248 213 62	NMB NMB AFS	ADD ADD ADD	BC BC BC	FLEX FLEX FLEX	H H	UR NM 5			144 115	0	0	0	47 47	118.8		37 37	89.81 89.61	
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requenc <mark>i</mark> MHz)	248 213 52 Max NFS Generated (dB(µV/m))	NMB NMB AFS Max NFS Received (dB(µV/m	ADD ADD ADD Top five in	BC BC BC Adm.	FLEX FLEX FLEX Intent	H H Class	UR NM 5 HOUMOEI	Pol.		144 115	0 0 0	0 0 0	0 0 0	47 47 47 47 Sup. Refr.	118.8 141.1 357.6	Azim.	37 37 37 37 Prot. Ra	89.81 89.61 88.14	Coord.
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requency MHz)	248 213 52 Max NFS Generated (dB(µV/m))	NMB NMB AFS Max NFS Received (dB(µV/m	ADD ADD Top five it \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	BC BC BC Adm. NMB AFS AFS AFS	FLEX FLEX FLEX FLEX Intent RECORDED RECORDED RECORDED	H H H H Class BC BC BC BC	UR NM 5 HOUMOEI Freq. 87.6 87.8 87.6	Pol. H H	KEETMANSHOOP AUGRABIES GARIES	144 115 119	Dist. 241 73 296	0 0 0 0 Cold Sea 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	47 47 47 Sup. Refr. 0 0	118.8 141.1 357.6 ERP 47 47 37	Azim. 136.1 310.9 35.4	37 37 37 Prot. Ra 37 7 37	89.81 89.61 88.14 NFS 74.23 68.69 60.92	Coord.
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Frequen <mark>c</mark> (MHz) <u>87.6</u>	248 213 52 Max NFS Generated (dB(µV/m)) 74.23	NMB NMB AFS Max NFS Received (dB(μV/m 74.23	ADD ADD Top five it Assign ID 084002194 084000279 084000363 084000255	BC BC BC BC Adm. NMB AFS AFS AFS AFS	FLEX FLEX FLEX FLEX Intent RECORDED RECORDED RECORDED RECORDED RECORDED RECORDED RECORDED	H H H H H S S S S S S S S S S S S S S S	Freq. 87.6 87.7 87.6	Pol. H H H H	KEETMANSHOOP AUGRABIES GARIES PRIESKA BEAUFORT WEST	144 115 119	Dist. 241 73 296 321 525	Cold Sea 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	47 47 47 47 Sup. Refr. 0 0 0 0	118.8 141.1 357.6 ERP 47 47 47 47	Azim. 136.1 310.9 35.4 301.8 330.1	37 37 37 37 Prot. Ra 37 7 37 25 37	89.81 89.61 88.14 Itio NFS 74.23 68.69 60.92 54.8 47.92	Coord.
	248 213 52 Max NFS Generated (dB(µV/m)) 74.23	NMB NMB AFS Max NFS Received (dB(μV/m 74.23	ADD ADD ASSIGN ID 084002194 084000219 084000255 084000411	BC BC BC Adm. NMB AFS AFS AFS AFS AFS	FLEX FLEX FLEX FLEX Intent RECORDED RECORDED RECORDED RECORDED RECORDED RECORDED RECORDED RECORDED RECORDED	H H H H H H H H H H H H H H H H H H H	Freq. 87.6 87.8 87.6 87.8 87.6 87.8	Pol. H H H H	KEETMANSHOOP AUGRABIES GARIES PRIESKA BEAUFORT WEST AUGRABIES	144 115 119	Dist. 241 73 296 321 525 73	Cold Sea 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	47 47 47 47 Sup. Refr. 0 0 0 0	118.8 141.1 357.6 ERP 47 47 47 47 47	Azim. 136.1 310.9 35.4 301.8 330.1 310.9	37 37 37 Prot. Ra 37 7 37 25 37 33 33	89.81 89.61 88.14 tio NFS 74.23 68.69 60.92 54.8 47.92 89.16	Coord.



AFS

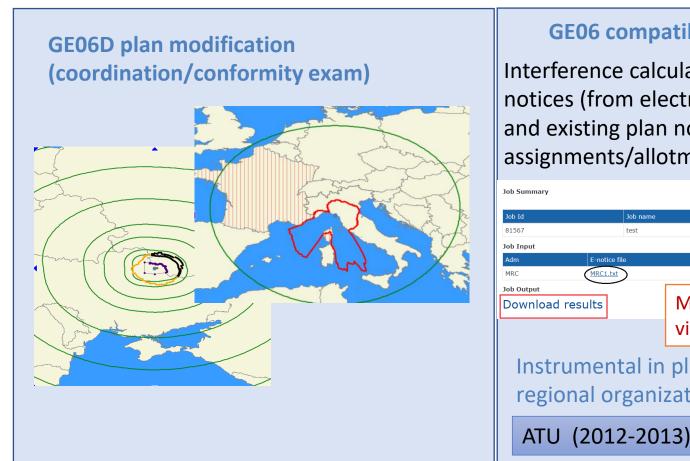
NMB

177

<u>73</u>



eTools: GE06D calculations



GE06 compatibility analyses

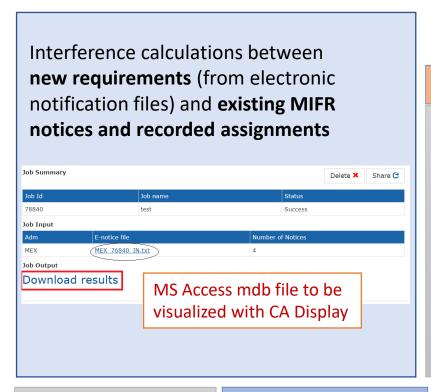
Interference calculations between new notices (from electronic notification files) and existing plan notices and recorded assignments/allotments







eTools: CA Compatibility calculations



COMTELCA

- ➤ Based on the EBU software developed for the RRC06 planning
- Main changes
 - Propagation model ITU-R P.1546-5 (refractive index correction) vs ITU-R P.1546-2 (propagation zones)
 - Protection ratios for all digital standards (vs. DVB-T only)

CA Display manual

CA compat manual







eTools: RJ81 plan modification and what-if studies

Tools Disclaimer The processing system is curren	cessing system is currently ONLINE (28 processes available)							Plan Modification						Following CITEL reque (2014-2015)			
lease select the calculation type	e								• W	/hat-	if stu	udies	5				
RJ81	v	RJ81 Wha	at-if stud	lies		~			• W	/hat-	if stu	udies	cor	ıfigu	rable	e End	om
ob Input																	
Adm	E-not	ice file								Nu	mber of N	otices					
ARG	ARG	2Notices 56	5 57.txt							2							
ob Output																	
Proposed Modification	on		Adminis	strations v	with inco	npatibilities	;										
570kHz_BUENOS AI	IRES		CHL AR	G URG													
560kHz_TARTAGAL			ARG B I	PRG													
Select the propose	d modification	1		Se	lect the	affected p	rotected	station									
All		~			All			~									
Result sw_50	%_A sw_E	C gw_[) gw_	N ov.	_D 0	ov_N											
Export to Excel													Se	arch:			
ID Assigned (kHz) C	Station Name	Class of Station	BR Serial Number Affected	Frequency Assigned Affected (kHz)	Country		Class of Station Affected	RJ81 List Affected	Time of Operation	Azimuth [♦] (deg)	Distance (km)	♦ Symbol	Protected Value (mV/m)	NFS (mV/m)	NFS or EU before (mV/m)	EU after [◆] (mV/m)	Note
2 570 A	ARG BUENO AIRES	В	081000471	570	CHL	SANTIAGO 12	А	А	N	140	123	Υ	0.68	0.73	1	1.24	
2 570 A	ARG BUENO	В	081000471	570	CHL	SANTIAGO 12	A	A	N	160	146	Υ	0.63	0.71	0.94	1.18	
	BUENO	5 _				SANTIAGO											





eTools: ITU-R P series calculations

P.1812-4(07-15)

Propagation prediction using terrain profile (deterministic model)

- 30 MHz 3 GHz
- > 0.25 km 3000 km
- > 1% < time < 50%
- > 1% < locations < 99%
- Rx and Tx hgt agl <= 3km</p>

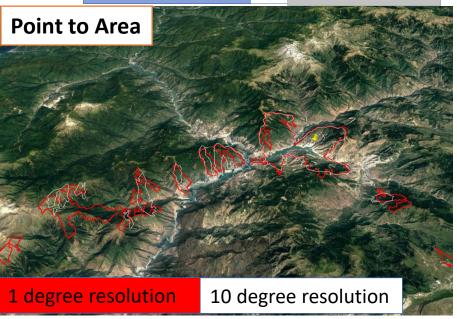
SRTM3 terrain database 3 arc-sec resol. (90 m) Planned to move to 1 arc-sec (30m) in 2019



Coverage contours now available!



Beta Release!



More during Propagation presentation!





eTools: ITU-R P series calculations

P.1546-5(09-13)

Propagation prediction (empirical model)

- > 30 MHz 3 GHz
- > 1 km 1000 km
- > 1% < time < 50%
- > 1% < locations < 99%
- > TX eff hgt <= 3km

Terrain database can be used (clearance angle correction) to improve accuracy

Point to Area



More during Propagation presentation!







Focal point only

"My own office for broadcasting services @ ITU: opening ~24/7"

CR 408: Restricted access to focal point only since November 2016 for myAdmin and e-mail notification services.

254 focal points TIES account from 96 administration

AGL ALG ARM ARS AUS AUT AZE BDI BEL BEN BFA BHR BIH BLR BOL BUL CHN CME COG CPV CTI CVA CYP CZE D DJI DNK E EGY EST F FIN G GAB GEO GHA GNE HNG HRV I IND INS IRL IRN J JOR KAZ KGZ KIR KOR LBY LTU LUX LVA MAU MCO MDA MDG MKD MLA MLI MLT MNE MRC MTN NOR NZL OMA PAK PHL POL POR PSE QAT ROU RUS S SDN SEY SNG SRB SSD SUI SVK SVN SYR TGO TUN TUR TZA UAE UGA UKR UZB VTN ZMB ZWE

If focal point not notified → BR will use official email addresses for notification services (BUT no myAdmin access then ⑤) brbcd@itu.int







myAdmin MailBox: Latest Special Sections

Focal point only

Adm (ITU) MailBox GE06D GE84 GE89 ST61 GE75 MIFR



Latest Special Sections annex to the latest BR IFIC (2935) on date 8 Dec 2020

Your proposed plan modifications to be published (Internal site ONLY)

Plan	Special Section	PubPart	Number of Notices
GE84	295	А	6

Adm (ITU) MailBox GE06D GE84 GE75 MIFR



Latest Special Sections annex to the latest BR IFIC (2935) on date 8 Dec 2020

Plan modifications affecting your administration to be published (Internal site ONLY)

Plan	Special Section	PubPart	Number of Notices
GE84	295	A	2







myAdmin MailBox: Output correspondence

Focal point only







Focal point only

Plans and MIFR dashboard



MyAdmin: Virtual ITU broadcasting office (open 24/7)

	MailBox	GE06D	GE84	ST61	RJ81
Recorded Ass	ignments				12200
Notices under	treatment				190
Notices under	treatment read	dy for Part B			1
Notices under	r treatment rece	eiving objection			113
Notices under	treatment whi	ch affect me			214
Notices under	treatment whi	ch affect me I o	bjected to		<u>75</u>
Comments re	ceived in the la	st period (30 da	ys)		17
	signments that n the coordinati	cannot be proce	essed because t	the respective	36

Export to Excel	Export to PDF	Google Earth	Gener	ate e-notices	(Export to SGML) Print		
Adm Id			Intent	♦ PE	\$ Site/Allot Name		Coord Completed
RUS1604030633BT	120006930	RUS	ADD	3	KANDALAKSHA MURM	22	FIN S
RUS1604030638BT	120006932	RUS	ADD	3	ZARECHENSK MURM	22	FIN S
RUS1604030642BT	120006933	RUS	ADD	3	ZELENOBORSKII MURM	22	FIN S
RUS1604030643BT	120006931	RUS	ADD	3	POLIARNYE ZORI MURM	22	FIN S
RUS1604030645BT	120006934	RUS	ADD	3	KANDALAKSHA MURM	23	FIN S
RUS1604030655BT	120006935	RUS	ADD	3	POLIARNYE ZORI MURM	23	FIN S
RUS1604030662BT	120006936	RUS	ADD	3	ZARECHENSK MURM	23	FIN S
RUS1604030663BT	120006937	RUS	ADD	3	ZELENOBORSKII MURM	23	FIN S
RUS1604030666BT	120006938	RUS	ADD	3	KANDALAKSHA MURM	24	FIN S
RUS1604030674BT	120006939	RUS	ADD	3	POLIARNYE ZORI MURM	24	FIN S
RUS1604030683BT	120006940	RUS	ADD	3	ZARECHENSK MURM	24	FIN S
RUS1604030684BT	120006941	RUS	ADD	3	ZELENOBORSKII MURM	24	FIN S
RUS1604030730BT	120006942	RUS	ADD	3	KANDALAKSHA MURM	29	FIN S
RUS1604030742BT	120006943	RUS	ADD	3	POLIARNYE ZORI MURM	29	FIN S
RUS1604030747BT	120006944	RUS	ADD	3	ZARECHENSK MURM	29	FIN S
RUS1604030748BT	120006945	RUS	ADD	3	ZELENOBORSKII MURM	29	FIN S
RUS1604030802BT	120006946	RUS	ADD	3	KANDALAKSHA MURM	34	FIN S
RUS1604030803BT	120006947	RUS	ADD	3	POLIARNYE ZORI MURM	34	FIN S
RUS1604030804BT	120006948	RUS	ADD	3	ZARECHENSK MURM	34	FIN S
RUS1604030805BT	120006949	RUS	ADD	3	ZELENOBORSKII MURM	34	FIN S
RUS1604030806BT	120006950	RUS	ADD	3	KANDALAKSHA MURM	35	FIN S
RUS1604030815BT	120006951	RUS	ADD	3	POLIARNYE ZORI MURM	35	FIN S
RUS1604030820BT	120006952	RUS	ADD	3	ZARECHENSK MURM	35	FIN S
RUS1604030821BT	120006953	RUS	ADD	3	ZELENOBORSKII MURM	35	FIN S
RUS1604030854BT	120006954	RUS	ADD	3	KANDALAKSHA MURM	39	FIN S
RUS1604030858BT	120006955	RUS	ADD	3	POLIARNYE ZORI MURM	39	FIN S
RUS1604030860BT	120006956	RUS	ADD	3	ZARECHENSK MURM	39	FIN S
RUS1604030861BT	120006957	RUS	ADD	3	ZELENOBORSKII MURM	39	FIN S
RUS1604030873BT	120006958	RUS	ADD	3	KANDALAKSHA MURM	41	FIN S
RUS1604030879BT	120006959	RUS	ADD	3	POLIARNYE ZORI MURM	41	FIN S
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RUS1604030887BT	120006961	RUS	ADD	3	ZELENOBORSKII MURM	41	FIN S
RUS1604030912BT	120006962	RUS	ADD	3	KANDALAKSHA MURM	47	FIN S
RUS1604030916BT	120006963	RUS	ADD	3	POLIARNYE ZORI MURM	47	FIN S
RUS1604030920BT	120006964	RUS	ADD	3	ZARECHENSK MURM	47	FIN S
RUS1604030921BT	120006965	RUS	ADD	3	ZELENOBORSKII MURM	47	FIN S





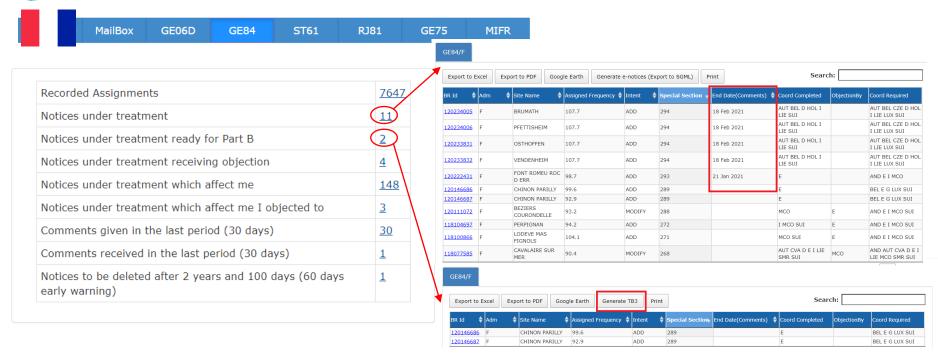


Focal point only

Plans and MIFR dashboard



MyAdmin: Virtual ITU broadcasting office (open 24/7)







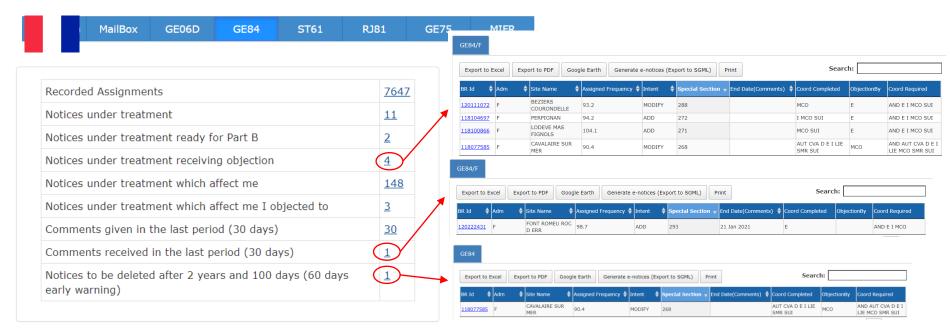


Focal point only

Plans and MIFR dashboard



MyAdmin: Virtual ITU broadcasting office (open 24/7)



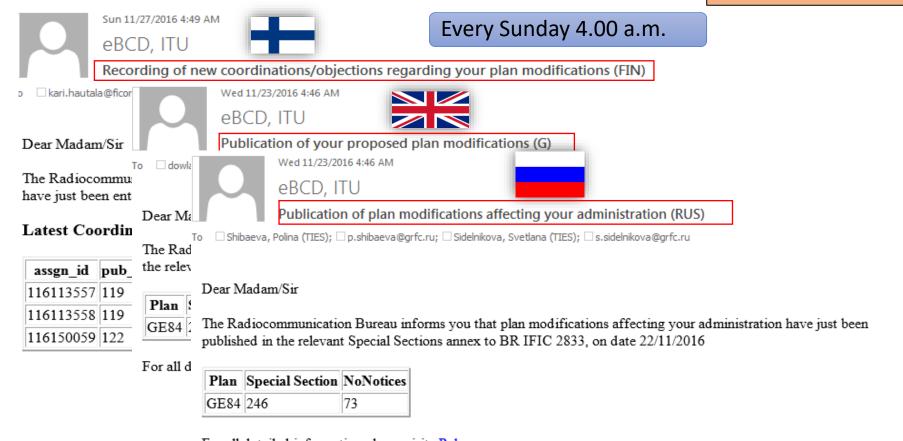


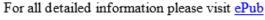




eBroadcasting: E-mail notification services

Focal point only

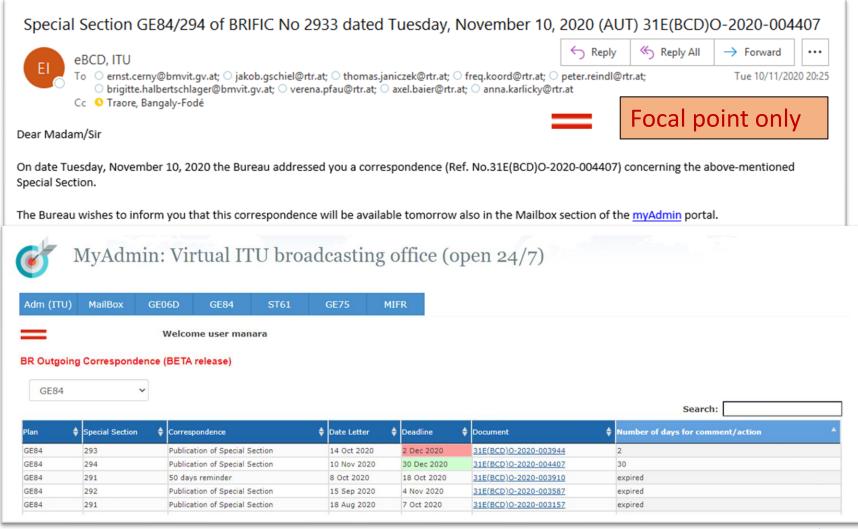






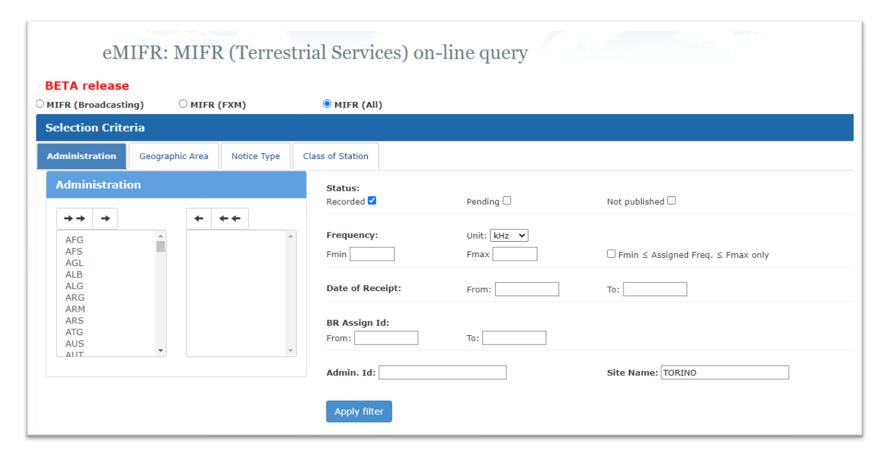


eBroadcasting: E-mail notification services



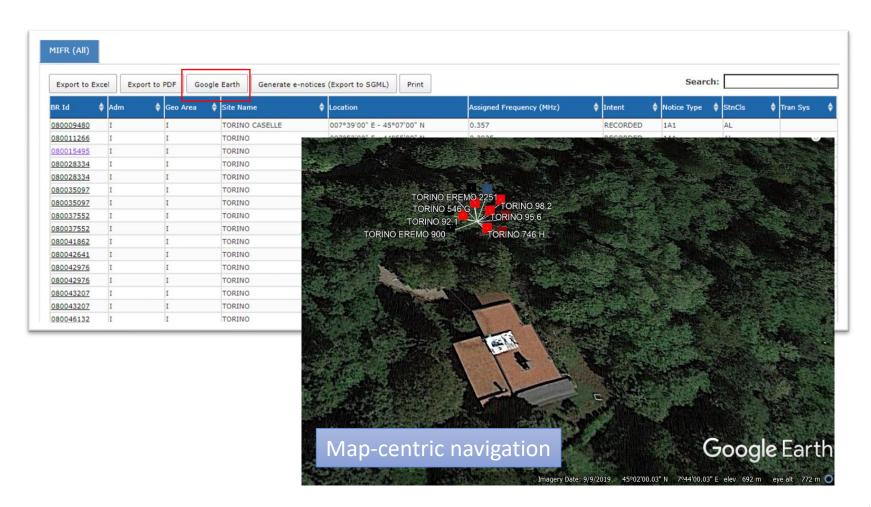






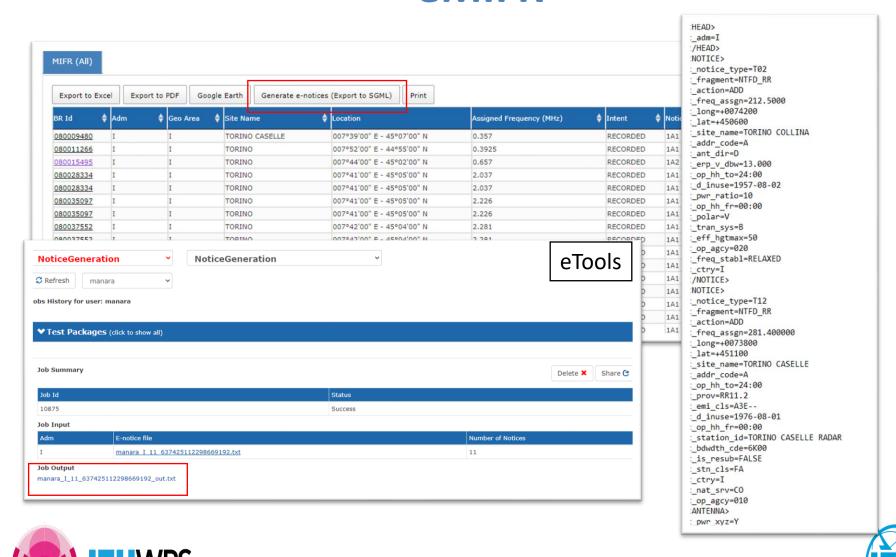


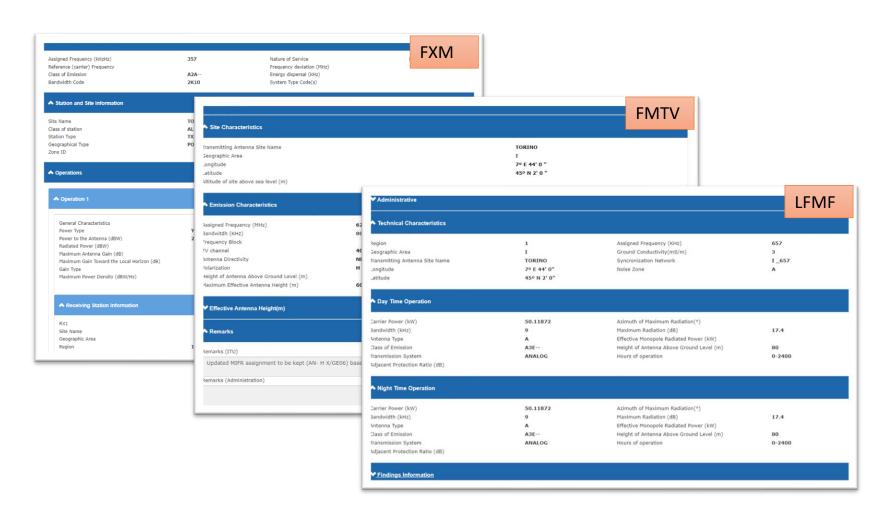
















Thank you!

ITU - Radiocommunication Bureau

Questions to brmail@itu.int or brbcd@itu.int





Tool demonstration and Exercise session

Login to the eTerrestrial platform.

If you do not have a TIES account use the generic account

<u>username</u>: user1 <u>password</u>: user1

Explore the available tools (myAdmin restricted access to focal point only) by navigating amongst them





Exercise n. 1: eQry

- 1. Set selection criteria for plans published notices or recorded assignments for your administration
- 2. Retrieve the data
- 3. Browse through summary information and notice/assignment details
- 4. Export the information to Excel
- 5. View the data in Google Earth.







Exercise n. 2: ePub

- 1. Consult data concerning Special Sections of a plan of your choice
 - Browse affected/notifying administrations
 - Browse through summary information and notice/assignment details
- 2. Select your Administration
 - For the Plan of your choice, find the Special Sections which included your modifications or notifications affecting your administrations
- 3. In case you are a Focal Point, verify that you received the email notification informing of new publications







Exercise n. 3: eTools

- 1. Read the Disclaimer to make sure you understand scope and limitations of the tool
- 2. Look at the Documentation link pointing to documents concerning the various calculations provided and browse through few documents of interest to you
- 3. Submit a Propagation P1812P2P or P1546 calculation
- 4. Display the results when the calculation completes (an e-mail will be sent to your ties e-mail account)
- 5. Share the job with one or more of your neighbors. Verify that your neighbors can access your test data.
- 6. Delete a job if you are not more interested in it.







Focal point only

Exercise n. 4: myAdmin

- a. Are you a focal point? If you are involved with plan modification procedure you should definitely be a focal point!
- b. Verify that you have access to myAdmin
- c. Look at your MailBox
 - a. Is there any BR outgoing correspondence?
 - Get familiar with the information provided. Click on the Document link and open the pdf file.
 - ii. Do you have any item in red? What does it mean?
- d. Verify if you received email notifications concerning coordination data, new Special Sections and new documents concerning your latest publications (since 15 September 2016).





