



# GE84PLN Exercices

*Bangaly Fodé TRAORE*





# Télécharger GE84PLN

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### BROADCASTING ONLINE



(Restricted to TIES users only)

Portal for broadcasting services:

- eQry** - Broadcasting database
- ePub** - Special Sections and MIFR publications
- eTools** - Broadcasting planning tools
- MyAdmin** - Portal for individual Administration providing information on broadcasting assignments and results of requested studies

### GE06CALC SOFTWARE



**GE06Calc** is an application designed to assist administrations in the calculations related to the GE06 Plan for sound and television broadcasting services. The application:

- Reads electronic notice files and performs unofficial conformity examinations with respect to the GE06 Plan, for notices needing to be examined for conformity under Article 4 or Article 5 of the RRC-06 agreement.
- Reads the compatibility analysis database file obtained from **eTools** (eBCD).
- It is recommended that the latest BRIFIC is installed so that characteristics of frequency assignments and

### DOWNLOAD

**GE06Calc:** [setup.exe \(1.3.9.1\)](#)

- [How to run GE06Calc with the BR IFIC DVD](#)

**GE84PLN:** [setup.exe \(1.6\)](#)

- TERRABASEBETA.MDB** \* containing broadcasting data from the latest BRIFIC \* Note: this database will no longer be available after December 31st 2014. The link to the BRIFIC should be made as described below under "How to run GE84PLN with the BR IFIC DVD". If there are any concerns, please contact [BRBCD@itu.int](mailto:BRBCD@itu.int)
- [How to run GE84PLN with the BR IFIC DVD](#)



# GE84PLN – Exercice 1

N°	PROGRAMME	TACHE
1	GE84PLN 1.6	<ol style="list-style-type: none"><li>1. Selectionner le fragment GE84</li><li>2. Selectionner l'Administration de Russie (RUS),</li><li>3. Selectionner une assignation enregistrée dans le Plan: SOCHI KRAS 106.1 MHz</li><li>4. Pour ce site, faire une recherche de fréquence entre 88.0 – 91.0 MHz</li></ol>



# Recherche de canaux disponibles

Information taken from BRFIC 2780 published on 14-10-2014 - Administration RUS

Electronic notices COORD **Calculate** Options Help Français Español

Fragment

- Run interference analysis
- Run analysis for other frequencies
- Find available channels**

Notices under treatment

Select assignment(s) then go to menu to choose desired action

Intent	Ass Freq	Site name	Longitude	Latitude	Svs	FRP (H)
RECORDED	103.1	SOCHI KRAS	039E4700			
RECORDED	104.8	SOCHI KRAS	039E4400			
RECORDED	106.1	SOCHI KRAS	039E4400			
RECORDED	99.9	SOCHI POS KRASNAYA PC	040E1200			

Select frequencies

Use Ctrl-click or Shift-click to select multiple frequencies

- 90.4
- 90.5
- 90.6
- 90.7
- 90.8
- 90.9
- 91.0
- 91.1
- 91.2

OK Cancel



# Trouver plus canal approprié

## Channel Availability Analysis - GE84

Information taken from BRIFIC 2780 published on 14-10-2014

Administration RUS

Site name SOCHI KRAS 039E4400 43N3600

System 4 Polarisation V

Assign Freq (MHz)	Max Nuisance Field	Interfering sources (Ctry/Freq/Dist/Nuisance field)
88.0	64 dBu	LAZAREVSKOE KRAS(RUS/87.9MHz/ 47km/64dBu),ERZINCAN(TUR/88.0MHz/ 414km/57dBu),GELENDZHIK KRAS(RUS/88.0MHz/ 169km/58dBu)
88.1	52 dBu	
88.2	67 dBu	LAZAREVSKOE(RUS/88.3MHz/ 47km/67dBu)
88.3	79 dBu	KRASNODAR(RUS/88.3MHz/ 173km/63dBu),LAZAREVSKOE(RUS/88.3MHz/ 47km/79dBu)
88.4	67 dBu	LAZAREVSKOE(RUS/88.3MHz/ 47km/67dBu),HOPA(TUR/88.4MHz/ 323km/59dBu)
88.5	56 dBu	KERCH(UKR/88.5MHz/ 320km/56dBu)
88.6	56 dBu	KRASNODAR(RUS/88.7MHz/ 168km/56dBu)
88.7	68 dBu	KRASNODAR(RUS/88.7MHz/ 168km/68dBu),TRABZON(TUR/88.8MHz/ 293km/60dBu)
88.8	72 dBu	KRASNODAR(RUS/88.7MHz/ 168km/56dBu),TRABZON(TUR/88.8MHz/ 293km/72dBu)
88.9	61 dBu	TRABZON(TUR/88.8MHz/ 293km/60dBu),FEODOSIIA(UKR/88.9MHz/ 385km/61dBu)
89.0	58 dBu	GORYACHII KLYUCH KRAS(RUS/89.0MHz/ 122km/58dBu)
89.1	58 dBu	GELENDZHIK KRAS(RUS/89.1MHz/ 169km/58dBu)
89.2	63 dBu	SINOP(TUR/89.2MHz/ 426km/63dBu)
89.3	51 dBu	
89.4	55 dBu	
89.5	56 dBu	KAR
89.6	56 dBu	SHCH
89.7	46 dBu	
89.8	50 dBu	
89.9	62 dBu	GORYACHII KLYUCH KRAS(RUS/89.9MHz/ 122km/62dBu),TIKHORETSK KRAS(RUS/89.9MHz/ 252km/59dBu)

← Le champ brouilleur maximum donne une indication du champ utile (Eu) au site. L'analyse complète implique aussi le calcul de brouillage causé (s'il est très élevé, la fréquence est inutilisable).



## GE84PLN – *Exercice 2*

N°	PROGRAMME	TACHE
2	GE84PLN 1.6	<ol style="list-style-type: none"><li data-bbox="846 534 1769 886">1. Créer une nouvelle notice pour l'ajout d'une assignation en choisissant la fréquence qui a la plus faible force du champs brouilleur</li><li data-bbox="846 991 1696 1048">2. Lancer un calcul de brouillage</li></ol>



# Générer une notice électronique

T01 - VHF Sound Broadcasting Station

T01

Save Changes  
Save As a New Notice  
New  
Close

ST61 Plan  Master Register  Notification for  Add  Mod **T01**

Administrative

Adm Adm ID Callsign Station ID

RUS

For modifications: Identification of the assignment to be modified

Adm ID OR Assgn Freq (MHz) Longitude Latitude

89.7 039 44 00 E 43 36 00 N

Site characteristics

Transmitting antenna site name Geog Area Longitude Latitude Attitude asl (m)

SOCHI KRAS897 RUS 039 44 00 E 43 36 00 N 83

Emission characteristics

Assgn Freq (MHz) BW (kHz) Tran Sys Polar ERP H (dBW) ERP V (dBW)

89.7 300 4 V

Antenna characteristics

Directivity Height above ground level (m) Maximum effective antenna height (m)

D 100 233

Article 11 (RR) only

Operating agency Address code Regular hours of operation (UTC) Date of bringing into use

Coordination successfully completed with the following administrations

GE84PLN 1.6

New notice saved successfully

OK

If you wish to use data from an existing assignment or notice, click on Retrieve data from BRIFIC.



GE84PLN 1.6 - Information taken from BRIFIC 2780 published on 14-10-2014 - Administration RUS

le Create electronic notices COORD **Calculate** Options Help Français Español

Adm Fragment

RUS

GE84

- Run interference analysis
- Run analysis for other frequencies
- Find available channels

Notices under treatment

Your own test notices

Click to select assignment(s) then go to menu to choose desired action

	Notice	Intent	Ass Freq	Site name	Longitude	Latitude	Sys	ERP (H)	ERP (V)	Pol	AD	Assign ID
▶	T01	MODIFY	89.7	SOCHI KRAS897	039E4400	43N3600	4		36	V	D	





## Summary Results - GE84 Compatibility Analysis

### Administration RUS

Assign ID	Adm	Intent	Assign Freq (MHz)	Site Name	Longitude	Latitude	ERP-H (dBW)	ERP-V (dBW)	Pol	ND/D	Eusable dBuV/m
-	RUS	MODIFY	89.7	SOCHI KRAS897	039E4400	43N3600	-	36	V	D	<u>58.77</u>



# Analyse détaillée

## SOCHI KRAS897 89.7MHz - Compatibility Analysis

### 1. Wanted emission

Assign ID	Adm	Intent	Assign Freq (MHz)	Site Name	Longitude	Latitude	ERP-H (dBW)	ERP-V (dBW)	Pol	ND/D	Eu(dBuV/m)
-	RUS	MODIFY	89.7	SOCHI KRAS897	039E4400	43N3600	-	36	V	D	58.77

### 2. Interference to other emissions

Assign ID	Adm	Intent	Assign Freq (MHz)	Pol	Site Name	Distances	ERP (dBW)	Azim	PR (dB)	Nuisance FS (dBuV/m)	Eu Ref (dBuV/m)	Eu (dBuV/m)
111099235	UKR	REC	89.7	V	SIMFEROPOL	472(T),336(Z3)	33	290	37	52.90	75.69	n/c
113279713	RUS	REC	89.7	V	SALSK ROST	350(T)	36	23	37	48.30	67.37	67.80
107083065	RUS	REC	89.7	V	PORT KATON ROST	372(T),9(Z3)	36	348	37	46.70	48.00	75.84
109082472	UKR	REC	89.6	V	SHCHOLKINE	371(T),170(Z3)	34	304	25	44.30	68.34	n/c
112178877	RUS	REC	89.9	V	GORIACHII KLIUCH KRAS	122(T)	36	336	7	43.80	59.68	71.82
113028293	RUS	REC	89.5	V	GORIACHII KLIUCH KRAS	126(T)	36	339	7	43.20	67.34	n/c



# Brouillage Causé

Assign ID	Adm	Intent	Assign Freq (MHz)	Pol	Site Name
111099235	UKR	REC	89.7	V	SIMFEROPOL
113279713	RUS	REC	89.7	V	SALSK ROST
107083065	RUS	REC	89.7	V	PORT KATON ROST
109082472	UKR	REC	89.6	V	SHCHOLKINE
112178877	RUS	REC	89.9	V	GORIACHII KLIUCH KRAS
113028293	RUS	REC	89.5	V	GORIACHII KLIUCH KRAS

Distances
472(T),336(Z3)
350(T)
372(T),9(Z3)
371(T),170(Z3)
122(T)
126(T)

ERP (dBW)	Azim	PR (dB)	Nuisance FS (dBuV/m)	Eu Ref (dBuV/m)	Eu (dBuV/m)
33	290	37	52.90	75.69	n/c
36	23	37	48.30	67.37	67.80
36	348	37	46.70	48.00	75.84
34	304	25	44.30	68.34	n/c
36	336	7	43.80	59.68	71.82
36	339	7	43.20	67.34	n/c

↑ Habituellement vous n'avez pas à vous inquiéter du brouillage causé aux stations de votre propre Administration.

Selon 4.3.7.1 de ↑ l'Accord vous devrez vérifier qu'aucune station d'autres Administrations n'augmente le champ Eu de 0.5 dB ou plus.



## Distances

472(T),336(Z3)

350(T)

372(T),9(Z3)

371(T),170(Z3)

122(T)

126(T)

← Additionner tous les segments pour obtenir la distance totale site à site.

## Zones de Propagation selon le Chapitre 2, No 2.1.1

- T (Terre / Land)
- Z2 (Cold Sea)
- Z3 (Warm Sea)
- Z4 (Superrefraction)

<b>ERP (dBW)</b>	<b>Azim</b>	<b>PR (dB)</b>
33	290	37
36	23	37
36	348	37
34	304	25
36	336	7
36	339	7
36	309	7
36	311	7

**PAR à l'azimut donné**

**Rapport de Protection issu des Tableaux 2.1 à 2.3 de l'Annexe 2 de l'Accord.**

**RP depend de:**

- **Écart entre les fréquences**
- **Système de transmission**
- **Brouillage constant/troposphérique.**



<b>Nuisance FS (dBuV/m)</b>	<b>Eu Ref (dBuV/m)</b>	<b>Eu (dBuV/m)</b>
52.90	75.69	n/c
48.30	67.37	67.80
46.70	48.00	75.84
44.30	68.34	n/c
43.80	59.68	71.82
43.20	67.34	n/c
41.30	n/a	74.90

NFS = Fs reçu + RP

Eu Ref\* : Eu calculée au moment de l'entrée de l'assignation dans le Plan

n/c : Eu n'est pas calculée (n/c) pour le cas où le champ brouilleur (Nuisance FS) est de 10dB inférieur à Eu Ref Ref (valeur sélectionnée par l'utilisateur)

\* n/a signifie que Eu Ref n'existe pas pour la modifications en traitement – Non encore ENREGISTRÉE

<b>Eu Ref (dBuV/m)</b>	<b>Eu (dBuV/m)</b>
75.69	n/c
67.37	67.80
48.00	75.84
68.34	n/c
59.68	71.82
67.34	n/c
n/a	74.90

← Diff > 0.5 dB; si c'est une station d'une autre Administration, celle-ci peut s'objecter selon 4.3.7.1



# Autre exemple: résultats de l'analyse d'interference du même site à

## SOCHI KRAS 88.1MHz - Compatibility Analysis

### 1. Wanted emission

Assign ID	Adm	Intent	Assign Freq (MHz)	Site Name	Longitude	Latitude	ERP-H (dBW)	ERP-V (dBW)	Pol	ND/D	Eu (dBuV/m)
-	RUS	ADD	88.1	SOCHI KRAS	039E4400	43N3600	-	36	V	D	64.56

### 2. Interference to other emissions

Assign ID	Adm	Intent	Assign Freq (MHz)	Pol	Site Name	Distances	ERP (dBW)	Azim	PR (dB)	Nuisance FS (dBuV/m)	Eu Ref (dBuV/m)	Eu (dBuV/m)
106051055	RUS	REC	88.1	V	GORIACHII KLIUCH	122(T)	36	338	37	73.80	73.63	85.51
112007911	RUS	REC	88.1	V	SLAVYANSK NA KUBANI KRAS	226(T)	36	326	37	62.50	80.25	n/c
107067128	RUS	REC	87.9	V	LAZAREVSKOE KRAS	48(T)	36	318	7	62.30	68.71	76.14
106000298	RUS	REC	88.3	V	LAZAREVSKOE	48(T)	36	318	7	62.30	72.06	77.78
112188888	RUS	REC	88.0	V	GELENDZHIK KRAS	169(T),26(Z3)	36	311	25	59.90	82.16	n/c
109061901	RUS	REC	88.1	V	KORENOVSK KRAS	209(T)	36	355	37	59.60	76.71	n/c
110004617	RUS	REC	88.2	V	BELORECHENSK KRAS	130(T)	36	5	25	53.10	70.97	n/c
108101879	RUS	REC	88.0	V	KURGANINSK KRAS	161(T)	36	25	25	49.80	78.52	n/c
114090338	RUS	ADD	88.0	V	TIKHORETSK KRAS	251(T)	36	8	25	46.40	n/a	77.09
112026494	UKR	REC	88.2	V	ALUSHTA	442(T),372(Z3)	34	287	25	46.20	79.41	n/c
107122807	RUS	REC	88.0	V	PIATIGORSK STAVR	272(T)	36	78	25	43.70	57.29	n/c
108119607	UKR	REC	88.0	V	SIMFEROPOL	472(T),336(Z3)	33	290	25	40.90	87.00	n/c
106051058	RUS	REC	88.4	V	GEORGIEVSKOE KRAS	73(T)	36	329	-7	36.00	71.97	n/c
111067794	UKR	REC	88.2	V	KRASNOHVARDIISKE	480(T),287(Z3)	33	298	25	37.90	77.77	n/c
100014334	RUS	REC	88.3	V	KRASNODAR	173(T)	36	341	7	37.00	59.36	n/c
108055023	RUS	REC	88.1	V	GUKHOI CHECH	481(T)	36	99	37	36.40	56.08	n/c
111018781	RUS	REC	88.0	V	SALSK ROST	352(T)	36	23	25	36.10	77.47	n/c
110113946	UKR	REC	88.1	V	KHERSON	652(T),289(Z3)	34	304	37	35.60	89.04	n/c
114090339	RUS	ADD	88.3	V	ANAPA KRAS	242(T),44(Z3)	36	308	7	34.50	n/a	76.80
110090787	UKR	REC	88.0	V	NOVOAZOVSK	412(T),33(Z3)	36	342	25	33.00	92.33	n/c
108025252	RUS	REC	88.1	V	KAMENSK SHAKHTINSKII ROST	525(T)	36	4	37	32.40	67.86	n/c
105203907	RUS	REC	88.2	V	ROSTOV NA DONU	402(T)	36	359	25	31.40	73.27	n/c
111010658	RUS	REC	88.1	V	CHECHCHEL YUKH CHECH	545(T)	36	95	37	30.50	81.85	n/c
109102843	UKR	REC	88.1	V	DNIPROPETROVSK	649(T),148(Z3)	36	328	37	30.10	76.31	n/c
112116270	RUS	REC	88.0	V	ALI IURT ING	417(T)	36	95	25	30.10	67.45	n/c
084005043	TUR	REC	88.2	H	AGRI	475(T),251(Z3)	36	150	25	29.40	64.57	n/c
084005213	TUR	REC	88.0	H	ERZINCAN	415(T),292(Z3)	26	187	25	27.30	64.51	n/c

### 3. Interference from other emissions

Assign ID	Adm	Intent	Assign Freq (MHz)	Pol	Site name	Distances	ERP (dBW)	Azim	PR (dB)	Nuisance FS (dBuV/m)
109061901	RUS	REC	88.1	V	KORENOVSK KRAS	209(T)	25	174	37	51.90
106051055	RUS	REC	88.1	V	GORIACHII KLIUCH	122(T)	24	158	37	51.60
106000298	RUS	REC	88.3	V	LAZAREVSKOE	48(T)	24	137	7	46.30
112188888	RUS	REC	88.0	V	GELENDZHIK KRAS	169(T),26(Z3)	20	130	25	46.00
107067128	RUS	REC	87.9	V	LAZAREVSKOE KRAS	48(T)	24	137	7	44.90



Nuisance FS (dBμV/m)	Eu Ref (dBμV/m)	Eu (dBμV/m)
73.80	73.63	85.51
62.30	80.23	n/a
62.30	68.71	76.14
62.30	72.06	77.78
59.90	82.16	n/a
59.60	76.71	n/a
53.10	70.97	n/a
49.80	78.52	n/a
48.40	n/a	77.09
46.20	79.41	n/a
43.78	83.58	n/a

↑ NFS > 54 dB(μV/m), si c'est une station d'une autre Administration, celle-ci peut s'objecter selon 4.3.7.1



# Brouillage reçu

## 3. Interference from other emissions

Assign ID	Adm	Intent	Assign Freq (MHz)	Pol	Site name	Distances	ERP (dBW)	Azim	PR (dB)	Nuisance FS dbuV/m
111099235	UKR	REC	89.7	V	SIMFEROPOL	472(T),336(Z3)	35	107	37	51.00
107083065	RUS	REC	89.7	V	PORT KATON ROST	372(T),9(Z3)	34	167	37	45.50

Distances, PAR RP  
& NFS:  
Même définition  
que  
précédemment

Distances	ERP (dBW)	Azim	PR (dB)	Nuisance FS dbuV/m
472(T),336(Z3)	35	107	37	51.00
372(T),9(Z3)	34	167	37	45.50

Calcul de l'intensité du champ utilisable ↑  
par la méthode de multiplication simplifiée décrite  
au Chapitre 4.



*Merci de votre aimable attention*

*[bangaly-fode.traore@itu.int](mailto:bangaly-fode.traore@itu.int)*