



700 MHz repository

700 MHz repository user's guide

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TABLE OF CONTENTS

0	Introduction	4
1	How to use the 700 MHz repository	5
1.1	Accessing the 700 MHz repository	5
1.2	Top menu.....	5
1.3	Log in / Log out	8
1.4	Importing data	8
1.4.1	Importing data using an excel file	8
1.4.1.1	Import Option 1: Replace all	9
1.4.1.2	Import Option 2: ADD / MODIFY	9
1.4.1.3	Errors occurred when importing data	9
1.4.1.4	Import successful.....	10
1.4.2	Importing data manually.....	11
1.5	Editing records	13
2	Further help	14

LIST OF ABBREVIATIONS

Abbreviation	Explanation (style: ECC Table Header red font)
CEPT	European Conference of Postal and Telecommunications Administrations
ECC	Electronic Communications Committee
RSPG	Radio Spectrum Policy Group

0 INTRODUCTION

In the context of the potential reallocation of the 700 MHz band, the Radio Spectrum Policy Group's (RSPG) report¹ indicates the need for bilateral and multilateral coordination, preferably managed by multi country coordination groups (such as WEDDIP).

This report also concludes that the coordination process would need to be monitored and reviewed by CEPT in order to ensure the consistency between the progresses of coordination in all involved countries.

In this respect, the ECO was tasked by the ECC to develop a 700 MHz band coordination information repository that would allow selected representatives from administrations and coordination groups to upload the information that they wish to make publicly available.

The European Communications Office cannot be held responsible for any incorrect information contained in the 700 MHz repository.

[1] ¹ RSPG report on *proposed spectrum coordination approach for broadcasting in the case of a reallocation of the 700 MHz band*. https://circabc.europa.eu/d/a/workspace/SpacesStore/614d3daf-76a0-402d-8133-77d2d3dd2518/RSPG13-524%20rev1%20Report_700MHz_reallocation_REV.pdf

1 HOW TO USE THE 700 MHZ REPOSITORY

1.1 ACCESSING THE 700 MHZ REPOSITORY

The 700 MHz repository can be accessed by clicking on this link:

<http://700mhz.cept.org/countries>

1.2 TOP MENU

On the main page the user finds the following menu (see Figure 1):

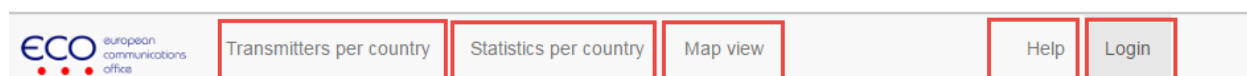


Figure 1 : Menu

On the **left** of the menu:

- the **ECO logo** redirects to the ECC page, section Tools and Services of the CEPT portal.

<http://www.cept.org/ecc/tools-and-services/ecc-700-mhz-coordination-information-repository>

- Clicking on **transmitters per country** displays the list of CEPT countries having submitted information to the repository. Under each country, it is possible to view information related to their transmitters and their coordination status. This view also shows an overview of the progress of coordination for each country.



Figure 2 : Transmitters per country

- The view **statistics per country** shows detailed statistics on the coordination process per country, according to the following 5 coordination status :
 1. In use, Licensed and existing rights
 2. Not in use, licensed and existing rights
 3. Not in use, not licensed and existing rights
 4. Requested
 5. Provisionally agreed

Coordination Status



Figure 3 : Coordination Status

- The **map view** gives access to the download of a Google Earth file, based on the information in the repository. This file can be opened in Google Earth and shows in a map all stations for which geographical coordinates are given, with their coordination status.



Figure 4 : Map view

When the mouse is over the locations of the stations, it displays detailed information such as:



Figure 5: Details for stations

Furthermore, if uploaded as an attachment, channel maps can be displayed as follows:



Figure 6: Channel maps

On the **right** of the menu:

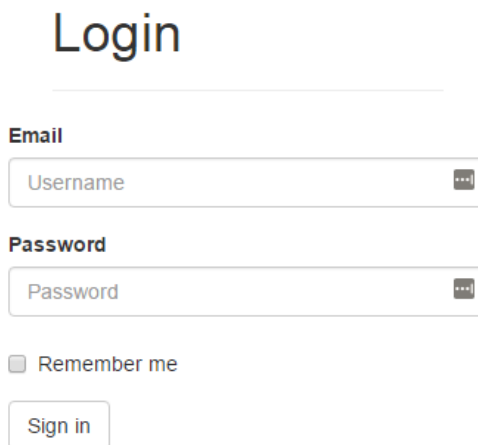
- The **Help button** redirects to go to this same page, where you can find information on how to use the repository.

<http://www.cept.org/ecc/tools-and-services/ecc-700-mhz-coordination-information-repository/help-for-users>

- The **Login button** will allow selected administration's and coordination organization's representatives to log in and upload information to the repository.

1.3 LOG IN / LOG OUT

Clicking on Login will display a window (see Figure 7) where the user can introduce an assigned e-mail and password in order to be able to edit records in the repository. **In order to obtain login information, please contact the ECO.**



The login form is titled "Login" in a large, dark font. Below the title, there are two input fields: "Email" and "Password". The "Email" field contains the placeholder text "Username". Below these fields is a checkbox labeled "Remember me". At the bottom of the form is a button labeled "Sign in".

Figure 7: Login

Alternatively, once the user has logged in, it is possible to log out by clicking on the log out area located at the exact same position as the log in area, i.e. on the rightmost side of the top menu (see Figure 8).

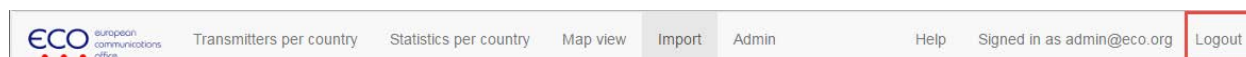


Figure 8 : Logout

1.4 IMPORTING DATA

Once signed in, the user has access to the main page of the repository, where it's possible to create new records for a country or a number of countries. A previous permission has to be granted by the relevant administration or administrations in order to grant access to modify records of these countries.

There are two options to upload information into the database:

- By importing data from an excel file complying with the template linked with the repository (see ANNEX 1:) or
- Manually.

1.4.1 Importing data using an excel file

In order to import data using the template excel file, the user needs to click on Import (see Figure 9) on the top left of the page:

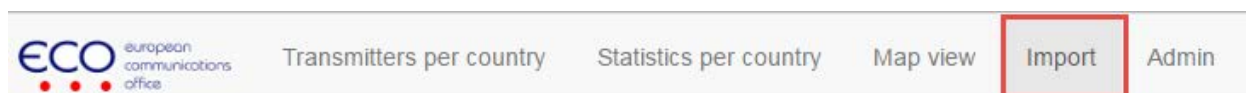


Figure 9: Menu - Import

The user will then be requested to select an excel file (see Figure 10) and optionally any other file as an **attachment** (e.g. channel maps according to the ITU "GT2-GA1" notice format) that should be uploaded as a complement.

The screenshot shows the 'Import' form with the following elements:

- Import** (header) and **Back** (button)
- Excel file:** **Choose File** button, **No file chosen** text. A red callout box labeled **Transmitters** points to this section.
- Attach file:** **Choose File** button, **No file chosen** text. A red callout box labeled **Channel maps** points to this section.
- Upload style:**
 - ☒ Option 1: REPLACE ALL
 - ☐ Option 2: ADD / MODIFY
- Submit** (button)
- Option 1: REPLACE ALL.**

When choosing this option, all entries in the repository for a given country will be replaced by the content of the excel
- Option 2: ADD/MODIFY.**

When choosing this option, the following will happen:

 - ADD:** if there are entries in the excel file which don't exist in the repository, they will be added.
 - MODIFY:** if there are entries in the repository with the same key fields as in the excel file (i.e. country code and transmitter ID) they will be modified with the information available in the excel file.
- Channel maps** (red callout box pointing to the bottom section)
- Channel maps** (red callout box pointing to the bottom section)

Channel maps can be generated by clicking on the tap "Map view" if an attachment following the ITU GT2-GA1 notice format is uploaded. Before uploading any channel map, Administrations should check the validity of their files using the tools made available by the UIT. There are two options. Please note that both of them require an ITU TIES account:

1. Online validation of terrestrial assignment/allotment notices: <https://www.itu.int/ITU-R/terrestrial/OnlineValidation/Login.aspx>
2. Using the software "TerRaNotices" available with the BR IFIC (Radiocommunication Bureau International Frequency Information Circular) software bundle: <https://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/FMTVNotices.aspx#GE06Notices>

More information about these formats is available here: <https://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/FMTVNotices.aspx#GE06Notices>

Figure 10: Import data

1.4.1.1 Import Option 1: Replace all

As explained directly in the import view (see Figure 10 above), this option **replaces** all existing entries for a given country by the new ones when the user uploads an excel file.

1.4.1.2 Import Option 2: ADD / MODIFY

This option **adds** new entries detected in the excel file that weren't previously in the repository, and **modifies** the ones that already exist in the repository by those in the excel file (see Figure 10 above).

1.4.1.3 Errors occurred when importing data

In the case that there is any error during the import, the number of errors will be displayed on the top of the page together with their cause and line in the excel file. The user is then asked to correct any error in the excel file in order to upload its content. No records can be imported unless all errors are resolved. Example of possible errors are mismatch between data formats, misspelling of CEPT country codes, DTT channels out of the range 21-48, etc.

1.4.1.4 Import successful

If the import is successful, a message will appear at the top of the page informing on the number of records that have been uploaded.

The imported data will then appear in the main page of the repository (see Figure 11)

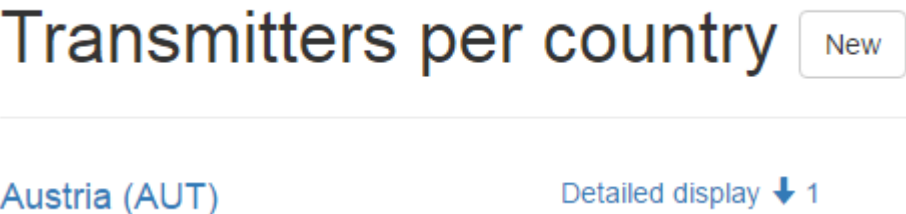


Figure 11: Transmitters per country

Following Figure 11, Clicking on the **country name** (e.g. Austria) will list the uploaded transmitters with their coordination status with the different neighbouring countries (see Figure 12)

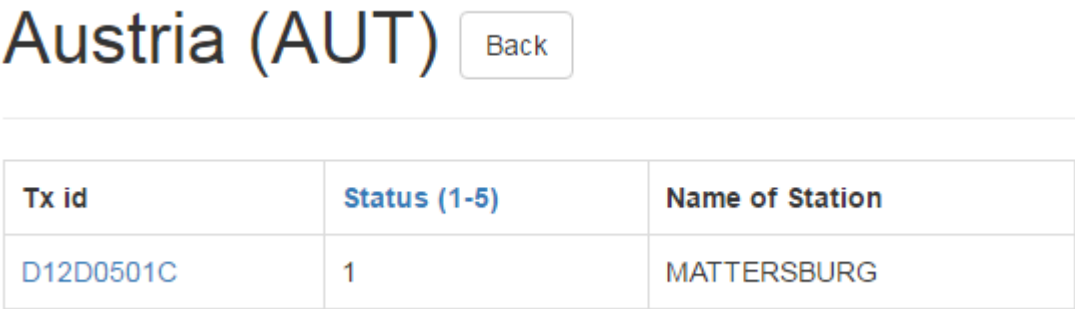


Figure 12: List of coordination information per country

Following Figure 11, clicking on **detailed display** and the arrow next to it, a list of the so-far uploaded transmitters for this country will appear (see Figure 13)

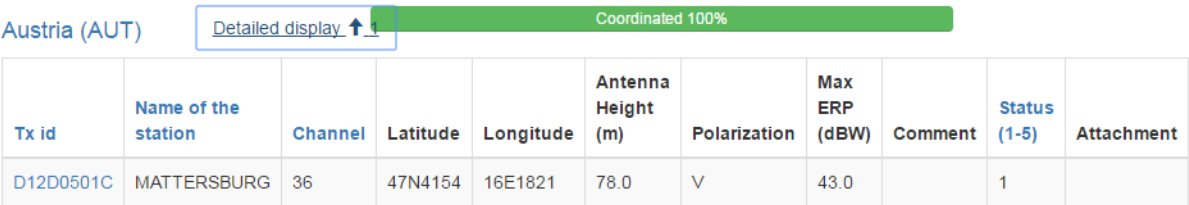


Figure 13: List of transmitters per country².

² Information contained in this figure is used for illustration purposes only

1.4.2 Importing data manually

In case that the user wishes to upload records manually, it is possible to do so by clicking on New next to the header Transmitter per country (see Figure 14).



Austria (AUT)

Detailed display ↓ 1

Figure 14: New transmitters per country

When clicking in New, a window will appear where the user can insert manually the relevant data for a given transmitter (see Figure 15).

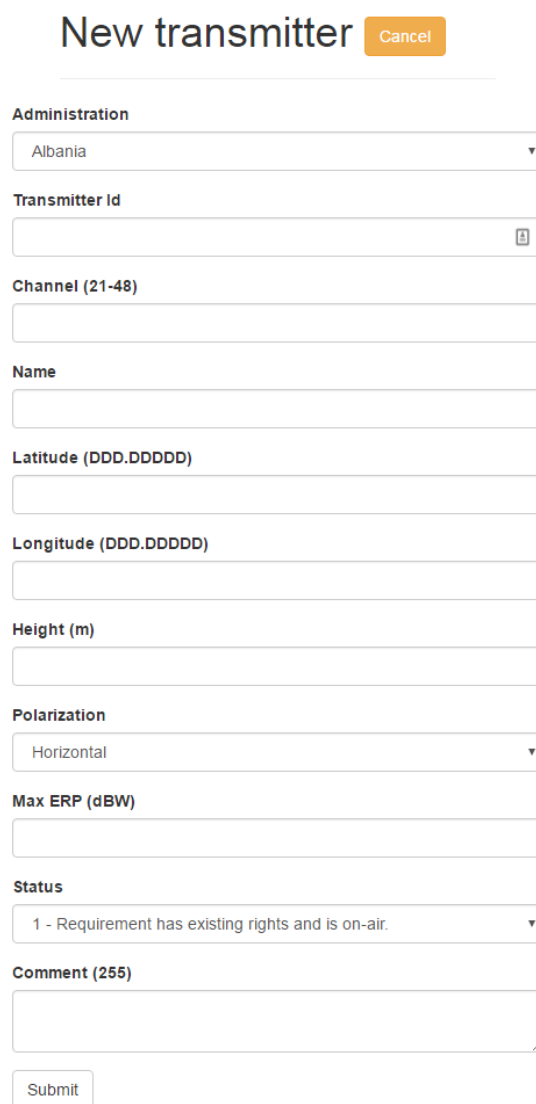
The image shows a form titled 'New transmitter' with a 'Cancel' button in the top right corner. The form contains several input fields and dropdown menus. The fields are: 'Administration' (a dropdown menu with 'Albania' selected), 'Transmitter Id' (a text input field with a small icon on the right), 'Channel (21-48)' (a text input field), 'Name' (a text input field), 'Latitude (DDD.DDDDD)' (a text input field), 'Longitude (DDD.DDDDD)' (a text input field), 'Height (m)' (a text input field), 'Polarization' (a dropdown menu with 'Horizontal' selected), 'Max ERP (dBW)' (a text input field), 'Status' (a dropdown menu with '1 - Requirement has existing rights and is on-air.' selected), and 'Comment (255)' (a text input field with a small icon on the right). At the bottom of the form is a 'Submit' button.

Figure 15: Manual upload of records.

Please note that **Transmitter Id** is a compulsory field.

Once the user has submitted the relevant information for a given transmitter by clicking on Submit (see bottom of Figure 15), it is then possible to add the countries with which this transmitter coordinates. For this, a new window will appear (see Figure 16). This window shows the information about the transmitter that was submitted in the previous step, as well as the possibility to add coordination information with a neighbouring country. It is possible also to add an attachment with information relevant to this specific transmitter.

Successfully created new transmitter.

Transmitter_ID - Albania

Versions
Edit

Name of the station	
Channel	21
Latitude	
Longitude	
Height (m)	
Polarization	H
Max ERP (dBW)	
Status	1 - Requirement has existing rights and is on-air.
Comment	

Coordinations

Add

Attachment

Download	Upload
No file attached.	<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid #ccc; padding: 2px 5px; background-color: #f0f0f0;">Choose File</div> <div style="margin: 0 5px;">No file chosen</div> <div style="background-color: #17a2b8; color: white; padding: 2px 5px; border-radius: 3px; margin-left: 10px;">Submit</div> </div>

Delete transmitter?

Delete

Figure 16: Add coordination information to a transmitter

When clicking on Add next to Coordinations, a new window will appear where the user can select a neighbouring country where it is possible to edit the current status of the coordination process (see Figure 17).

Add coordination for ' Transmitter_ID '

Cancel

Country	Greece
Status	Requested
<div style="border: 1px solid #ccc; padding: 5px 10px; background-color: #f0f0f0;">Submit</div>	

Figure 17: Add coordination information for a given transmitter

Once this information submitted, it will appear in an updated version (Figure 18) of the previous window (Figure 17), with the selected country and the coordination status:

Figure 18: Coordination status

It is possible to remove information on the coordination status for this specific transmitter by clicking on the blue cross next to the country name.

Furthermore, it is possible to delete all information for a given transmitter by clicking on 'Delete transmitter?' (see bottom of Figure 16).

1.5 EDITING RECORDS

Once information on a transmitter has been uploaded (by importing an excel file or manually), it is possible to edit this information manually. To do that, the user should click on Edit, next to the Transmitter_ID (see Figure 19)

Figure 19: Editing a transmitter

This window (Figure 19) is similar to Figure 16, and therefore everything explained in section 1.4.2 also applies here.

2 FURTHER HELP

For further help or for requesting access to the repository (login and password), please contact the ECO:

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ANNEX 1: EXCEL FILE TEMPLATE

The excel file template for the 700 MHz repository can be downloaded here:



700 MHz repository
template.xlsx

Please note that, in order to be able to import data in the 700 MHz repository, **only ONE spreadsheet must be present in the excel file.**

The excel file template is simply a table containing different fields that need to be filled in order to populate the 700 MHz repository (see Table 1, Table 2 and Table 3).

Adm	Tx Id	Name of the station	Channel	Latitude	Longitude

Table 1: Excel file template (part 1 of 3)

Antenna height(m)	Polarization	Max ERP (dBW)	Comment	Status

Table 2: Excel file template (part 2 of 3)

Coordination required in event of a change/requirement							
G	IRL	F	LUX	D	HOL	BEL	SUI

Table 3: Excel file template (part 3 of 3)

In Table 1, there are two compulsory fields:

- **Adm: COMPULSORY FIELD.** CEPT country code³ for the relevant administration (see Figure 20)
- **Tx Id: COMPULSORY FIELD.** Transmitter Identification (unique identification per country. There cannot be two transmitters with the same identification in the same country).

³ <http://www.cept.org/cept/cept-country-codes>

CEPT Country Codes

	Country	Code		Country	Code		Country	Code		Country	Code
1	Albania	ALB	13	Estonia	EST	25	Lithuania	LTU	37	Russian Federation	RUS
2	Andorra	AND	14	Finland	FIN	26	Luxembourg	LUX	38	San Marino	SMR
3	Austria	AUT	15	France	F	27	Former Yugoslav Republic of Macedonia (FYROM)	MKD	39	Serbia	SRB
4	Azerbaijan	AZE	16	Georgia	GEO	28	Malta	MLT	40	Slovak Republic	SVK
5	Belarus	BLR	17	Germany	D	29	Moldova	MDA	41	Slovenia	SVN
6	Belgium	BEL	18	Greece	GRC	30	Monaco	MCO	42	Spain	E
7	Bosnia and Herzegovina	BIH	19	Hungary	HNG	31	Montenegro	MNE	43	Sweden	S
8	Bulgaria	BUL	20	Iceland	ISL	32	Netherlands	HOL	44	Switzerland	SUI
9	Croatia	HRV	21	Ireland	IRL	33	Norway	NOR	45	Turkey	TUR
10	Cyprus	CYP	22	Italy	I	34	Poland	POL	46	Ukraine	UKR
11	Czech Republic	CZE	23	Latvia	LVA	35	Portugal	POR	47	United Kingdom	G
12	Denmark	DNK	24	Liechtenstein	LIE	36	Romania	ROU	48	Vatican City	CVA

Figure 20: CEPT country codes

The remaining fields (see Table 2) correspond to characteristics of the relevant transmitter. They are all optional:

- **Name of the station:** name of the transmitting station
- **Channel:** Transmitting channel (21 to 48). It is not possible to insert channels outside this range.
- **Latitude:** Latitude coordinate of the transmitter in decimal degree format (+/- DDD.DDDDD) or in DMS (Degrees, Minutes, Seconds) format DMS : DDNMMSS or DDSMMSS, DDWMMSS or DDEMMSS
- **Longitude:** Longitude coordinate of the transmitter in decimal degree format (+/- DDD.DDDDD) or in DMS (Degrees, Minutes, Seconds) format DMS : DDNMMSS or DDSMMSS, DDWMMSS or DDEMMSS
- **Antenna height (m):** Antenna height of the transmitter above the ground level (a.g.l).
- **Polarization:** Antenna polarization of the transmitter. Only three possible options:
 - H for Horizontal polarization
 - V for Vertical polarization
 - M for Mixed polarization
- **Max ERP (dBW):** Maximum Effective Radiated Power (in dBW) of the transmitter
- **Comment:** Optional field for comments
- **Status:** Status of coordination (see Table 4). Only values in the range 1 - 5 are allowed

Status	
Value	Meaning
1	Requirement has existing rights, and is on-air
2	Requirement has rights, is licensed, but is not on-air
3	Requirement has rights, but is not licensed
4	New Requirement in coordination with neighbours
5	New Requirement which has been provisionally agreed with relevant neighbours

Table 4 : Coordination Status

In Table 3, under the field **Coordination required in event of a change/requirement**, the status of coordination with each country may be added. This has to correspond to three possible values (or left blank) (see Table 5).

Coordination required in event of a change/requirement	
Value	Meaning
RQ	requested
PA	provisional agreement
NR	not relevant

Table 5: Coordination required in event of a change/requirement

The list of countries in Table 3 can be modified or extended in the subsequent columns of the excel file up to a maximum of 48 (the existing 48 CEPT countries). Please note that duplication of country codes in the columns of the excel file is not allowed. In a similar fashion, it is not allowed to introduce coordination information with the same country that is providing data (e.g. Country A cannot introduce data relative to coordination with the same country A).