ITUWRS

GENEVA**2024**

2–6 December 2024
Geneva, Switzerland

eFXM

– Terrestrial (except Broadcasting) Web Tools – eQueryFXM / ePubFXM / MyAdminFXM

Day 4 (05/12/2024)

Specific topics for advanced – English

1540-1700

(Room K)

ITU World Radiocommunication Seminar

Fixed and Mobile Services Division

Radiocommunication Bureau

BR/TSD/FMD

2-6 December 2024, Geneva, Switzerland

eFXM
– Terrestrial (except Broadcasting) Web Tools –

eQueryFXM / ePubFXM / MyAdminFXM

Agenda

Background

eTerrestrial : online portal for terrestrial services

eFXM as a part of eTerrestrial portal for terrestrial (except broadcasting) services

Online tools under eFXM

Functions of eQueryFXM, ePubFXM, MyAdminFXM web tools

demonstrations

Future eFXM development plan

eTerrestrial – eFXM

eTerrestrial: Online portal for terrestrial services

eFXM: Online platform for terrestrial (except broadcasting) services under eTerrestrial portal

eTerrestrial   https://www.itu.int/ITU-R/eTerrestrial

- Online portal, which provides online tools for terrestrial services since 2006
- The following services are available as of December 2024
  - **eMIFR** : Online query system of the MIFR for all terrestrial services
  - **eValidation** : Validation of frequency notices before their official submission via WISFAT
  - **WISFAT** : Web Interface for Submission of Frequency Assignments/Allotments for Terrestrial Services
  - **eBroadcasting** : Online platform for broadcasting services
  - **eFXM(Fixed/Mobile)** : Online platform for terrestrial (except broadcasting) services
  - **ePropagation** : Online platform for propagation prediction calculations according to ITU-R recommendations

eTerrestrial – eFXM   https://www.itu.int/itu-r/eTerrestrial/efxm/

- Online platform, which provides online tools for terrestrial (except broadcasting) services
- Secure web-based tools for TIES authenticated users
  - **eQueryFXM** : to consult the BR database and visualize their administrations notices and recorded frequency assignments/allotments (both MIFR and Plan). available since October 2022
  - **ePubFXM** : to consult Special Sections related to FXM (RR9.21, GE06L). available since August 2023
  - **eToolsFXM** : to perform calculation on-demand for compatibility analysis purposes has not yet been available
  - **MyAdminFXM** (administration focal point only) : to visualize relevant notices and recorded assignments for an easy follow-up of FXM coordination and FXM plan modification procedures and related deadlines. BETA version

ITU > Radiocommunication > Terrestrial

ITU > Radiocommunication > Terrestrial > Fixed and Mobile Services

eQueryFXM

Online query of read-only daily copy of the BR database

Visualize notices and recorded frequency assignments/allotments (both MIFR and Plan)

eQueryFXM - main functions - https://www.itu.int/ITU-R/eTerrestrial/EQuery

1. **Menu Selection provides the options to choose MIFR, Plan and/or Common frequencies to consult**
   - MIFR assignments (recorded assignments, pending notices)
   - Plan assignments/allotments (GE06L, GE85M, GE85N, AP25, AP26 and AP27)
   - Common frequencies

2. **Query Type Selection provides the 3 types of views under "Statistics Query", which may be used in sharing and compatibility studies.**
   - General Query (default)
   - Statistics Query (3 views)
     - Class of Station Statistics
     - Technical Statistics
     - Technical Characteristics

3. **Search Criteria provides filter by administration, geographic area, notice type, class of station, frequency range, date of receipt, BR ID, adm ref ID, site name and radiocommuncation region.**

4. **Query Results provides list of FXM assignments/allotments meeting search criteria including detail assignment information.**

eQueryFXM (1)

Menu Selection provides the options to choose MIFR, Plan and/or Common frequencies to consult.

Query Type Selection provides 3 types of views under "Statistics Query", which may be used in sharing and compatibility studies.

eQueryFXM: Queries on FXM Plans and MIFR for specific purposes

eQueryFXM Readme

Menu Selection
- All (FXM) (*)
- All MIFR (FXM) (*)
- All PLAN (FXM) GE06L GE85M GE85N AP25 AP26 AP27
- Com Freq

(*) To provide specific queries of statistics of stations and technical characteristics related to FXM PLANs and MIFR.

Query Type Selection

Statistics Query

Class of Station Statistics

Class of Station Statistics

Technical Statistics

Technical Characteristics

Search Criteria

Administration
AFG
AFS
AGL
ALB
ALG
AND

Geographic Area
ABW
AFG
AFS
AGL
AIA
ALB

Frequency Unit
MHz

Frequency bandwidth overlap

Date of Receipt (From)
dd/MM/yyyy

Date of Receipt (To)
dd/MM/yyyy

Notice Type
T11
T12
T13
T14
T15
T16

Station Class
AL
AM
BC
FA
FB
FC

BR Assign Id (From)

BR Assign Id (To)

Unique Id. code given by Administration

Site Name

Region

Status ☑ Recorded ☐ Pending

Apply   Clear

* AP25, AP26, AP27 Allotment Plans and common frequencies are not included.

Search Criteria provides filter by administration, geographic area, notice type, class of station, frequency range, date of receipt, BR ID, adm ref ID, site name and radiocommuncation region.

eQueryFXM (2)

Query Results provides list of FXM assignments/allotments meeting search criteria including detail assignment information.

eQueryFXM
demonstrations

ePubFXM
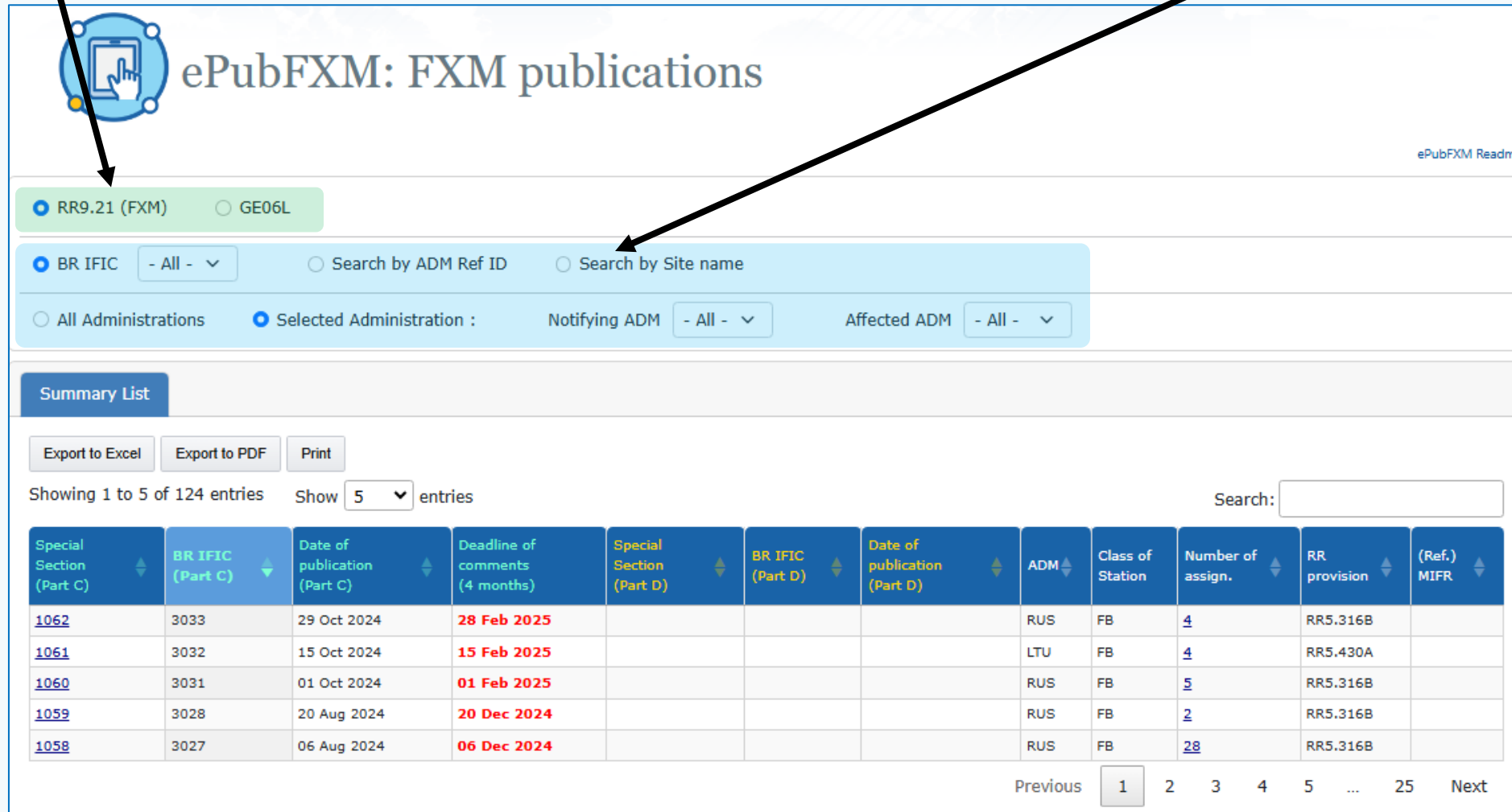
consult Special Sections annexed to BR IFIC related to FXM (RR9.21, GE06L) as well as information of recorded MIFR assignments following the completion of coordination procedure

ePubFXM – main functions - https://www.itu.int/itu-r/eTerrestrial/efxm/epub

1. **Selection of Special Sections (SS):** **RR9.21(FXM) or GE06L**

2. **Selection Menu provides selection of BR IFIC number, ADM Ref ID and site name. Notifying ADM and Affected ADM can be also specified by "Selected Administration" menu.**

3. **Main Summary page provides the list of SS with the following information.**
   - SS numbers (Part A and B for GE06L, Part C and D for RR9.21) and dates of publications
   - Deadlines (e.g. deadlines of comments, deadlines for coordination)
   - Notifying Administrations, Class of station (RR9.21), RR provisions (RR9.21)
   - Number of assignments under each SS
   - Number of recorded MIFR assignments notified after the completion of coordination

4. **Sub Summary page provides the list of individual assignments under the selected Special Section number with the following information.**
   - Links to Part A and Part B numbers (for GE06L) or Part C and Part D numbers (for RR9.21) in one row.
   - Coordination status (e.g. Identified as affected, results of coordination)
   - Corresponding recorded MIFR assignment notified after the completion of coordination

5. **Detail assignment page provides the detail assignment information from the link of ADM Ref ID.**

ePubFXM (1) Selection of Special Sections https://www.itu.int/itu-r/eTerrestrial/efxm/epub

Selection of Special Sections (SS): RR9.21(FXM) or GE06L

Selection Menu provides selection of BR IFIC number, ADM Ref ID and site name. Notifying ADM and Affected ADM can be also specified by "Selected Administration" menu.

ePubFXM: FXM publications

ePubFXM Readme

○ RR9.21 (FXM)   ○ GE06L

● BR IFIC   - All -   ○ Search by ADM Ref ID   ○ Search by Site name

○ All Administrations   ● Selected Administration :   Notifying ADM - All -   Affected ADM - All -

Summary List

Export to Excel   Export to PDF   Print

Showing 1 to 5 of 124 entries   Show 5 entries   Search:

Special Section (Part C)	BR IFIC (Part C)	Date of publication (Part C)	Deadline of comments (4 months)	Special Section (Part D)	BR IFIC (Part D)	Date of publication (Part D)	ADM	Class of Station	Number of assign.	RR provision	(Ref.) MIFR
1062	3033	29 Oct 2024	28 Feb 2025				RUS	FB	4	RR5.316B	
1061	3032	15 Oct 2024	15 Feb 2025				LTU	FB	4	RR5.430A	
1060	3031	01 Oct 2024	01 Feb 2025				RUS	FB	5	RR5.316B	
1059	3028	20 Aug 2024	20 Dec 2024				RUS	FB	2	RR5.316B	
1058	3027	06 Aug 2024	06 Dec 2024				RUS	FB	28	RR5.316B	

Previous 1 2 3 4 5 ... 25 Next

ePubFXM (2) Main Summary page

Main Summary page (RR9.21)

Special Section (Part C)	BR IFIC (Part C)	Date of publication (Part C)	Deadline of comments (4 months)	Special Section (Part D)	BR IFIC (Part D)	Date of publication (Part D)	ADM	Class of Station	Number of assign.	RR provision	(Ref.) MIFR
1062	3033	29 Oct 2024	28 Feb 2025				RUS	FB	4	RR5.316B	
1061	3032	15 Oct 2024	15 Feb 2025				LTU	FB	4	RR5.430A	
1060	3031	01 Oct 2024	01 Feb 2025				RUS	FB	5	RR5.316B	
1059	3028	20 Aug 2024	20 Dec 2024				RUS	FB	2	RR5.316B	
1058	3027	06 Aug 2024	06 Dec 2024				RUS	FB	28	RR5.316B	
1057	3026	23 Jul 2024	23 Nov 2024				RUS	FB	11	RR5.316B	
1056	3025	09 Jul 2024	09 Nov 2024				RUS	FB	17	RR5.316B	
1055	3024	25 Jun 2024	25 Oct 2024	500	3034	12 Nov 2024	RUS	FB	11	RR5.316B	
1054	3024	25 Jun 2024	25 Oct 2024				BLR	FB	756	RR5.430A	
1053	3023	11 Jun 2024	11 Oct 2024	499	3033	29 Oct 2024	POL	FB	7	RR5.316B	

Main Summary page (RR9.21)
The list of Special Sections (SS) with the following information.
- SS numbers (Part C, D) and dates of publications
- Deadline of comments (4 months)
- Notifying Administration
- Class of station
- RR provisions
- Number of assignments
- Number of recorded MIFR assignments notified after the completion of coordination ((Ref.) MIFR)

Main Summary page (GE06L)

Special Section	BR IFIC No	Publication date	Part A	ADM	Deadlines of comments (40 days) (GE06-4.2.2.7, 4.2.3.1)	Deadlines of comments (75 days) (GE06-4.2.4.8)	Deadlines for coordination (75 days + 24 months) (GE06-4.2.5.1)	Part B	ADM	Deadlines of notification (12 months after publication of part B) (GE06-4.2.5.4)	(Ref.) MIFR
130	3034	12 Nov 2024						11	RUS	12 Nov 2025	
129	3033	29 Oct 2024	4	RUS	08 Dec 2024	12 Jan 2025	12 Jan 2027	31	RUS, EST	29 Oct 2025	
128	3031	01 Oct 2024	5	RUS	10 Nov 2024	15 Dec 2024	15 Dec 2026				
127	3029	03 Sep 2024	29	EST	13 Oct 2024	17 Nov 2024	17 Nov 2026	8	EST	03 Sep 2025	
126	3028	20 Aug 2024	2	RUS	29 Sep 2024	03 Nov 2024	03 Nov 2026	9	RUS	20 Aug 2025	
125	3027	06 Aug 2024	28	RUS	15 Sep 2024	20 Oct 2024	20 Oct 2026	26	RUS	06 Aug 2025	
124	3026	23 Jul 2024	11	RUS	01 Sep 2024	06 Oct 2024	06 Oct 2026	13	RUS	23 Jul 2025	
123	3025	09 Jul 2024	17	RUS	18 Aug 2024	22 Sep 2024	22 Sep 2026	3	RUS	09 Jul 2025	3
122	3024	25 Jun 2024	11	RUS	04 Aug 2024	08 Sep 2024	08 Sep 2026	6	RUS	25 Jun 2025	6
121	3023	11 Jun 2024	7	POL	21 Jul 2024	25 Aug 2024	25 Aug 2026	3	RUS	11 Jun 2025	3

Main Summary page (GE06L)
The list of Special Sections with the following information.
- SS numbers (Part A, B) and dates of publications
- Deadline of comments (40 days, 75 days)
- Deadline for coordination (75 days + 24 months)
- Deadline of notification (12 months after publication of Part B)
- Notifying Administration
- Number of assignments
- Number of recorded MIFR assignments notified after the completion of coordination

ePubFXM (3) Sub Summary page

Sub Summary page

The list of individual assignments under the selected Special Section number with the following information.

- Links to Part A and Part B numbers (for GE06L) or Part C and Part D numbers (for RR9.21) in one row.
- Coordination status (e.g. Identified as affected, results of coordination)
- Corresponding recorded MIFR assignment notified after the completion of coordination

ADM Ref ID	ADM	Freq. (MHz)	Site Name	Geo Area	Geo. Coord.	Class of station	Special Section (Part C)	Requests for coordination		Special Section (Part D)	Results of coordination			(Ref.) BR ID (MIFR)
								Notified as coordinated	Identified as affected (RR9.36)		Coord Completed	Objection received	Regarded as unaffected (RR9.52C)	
3043FB2023	RUS	794.74	PSK NASVA	RUS	030°09'01"E - 56°35'16"N	FB	1042	BLR, LVA		488				124079114
3042FB2023	RUS	794.74	PSK OPOCHKA	RUS	028°41'38"E - 56°42'18"N	FB	1042	BLR, EST, LVA	BLR	488	BLR			124079113
2088FB2023	RUS	794.74	KLN POLESSK	RUS	021°06'18"E - 54°51'55"N	FB	1042	LTU, LVA, POL, S		488				124079107

ePubFXM (4) detail assignment page

Detail assignment page provides the detail assignment information from the link of ADM Ref ID in Sub Summary page.

SS RR9.21 (detail assignment page)

SS GE06L (detail assignment page)

ePubFXM
demonstrations

MyAdminFXM (BETA version)

For administration focal point only
visualize notices and recorded assignments relevant to administrations and facilitate administrations to follow the RR9.21 and GE06L coordination procedures in accordance with Special Sections

MyAdminFXM – main functions -   https://www.itu.int/itu-r/eTerrestrial/efxm/myadmin

> MyAdminFXM is BETA Version as of today.
> If you are administration focal point, please contact brfmd@itu.int for MyAdminFXM testing.

1. **Administration focal point only**
   Access is restricted to administration focal points. After login, administration focal points are directed to a dedicated page customized to their respective administration.

2. **Latest updates page** provides information of important deadlines (within 14 days), the latest BR IFIC (Terrestrial) publication (SS RR9.21, SS GE06L, MIFR) and BR Outgoing Correspondence related to currently ongoing coordination.

3. **RR9.21 page** provides a comprehensive statistical list of assignments and notices under RR9.21 coordination as well as the detail information of each assignment or notice with real-time coordination status (to be updated weekly) and associated deadlines.

4. **GE06L page** provides a comprehensive statistical list of assignments and notices under GE06L coordination as well as the detail information of each assignment or notice with real-time coordination status and associated deadlines.

5. **MIFR page** provides the number of recorded assignments and the MIFR notices published at Part 1/2/3/ at the latest BR IFIC publication.

MyAdminFXM (1) Latest updates

☐ Important deadlines

Special Sections	Important deadlines (within 14 days)
RR9.21 Part C	• 4 months limit for comments (RR Nos.9.52 or 9.52C)
GE06L Part A	• 40 days limit for comments (GE06L-4.2.2.7 or 4.2.3.1) • 75 days limit for comments (GE06L-4.2.4.8) • 24 months and 75 days limit for coordination (GE06-4.2.5.1)
GE06L Part B	• 12 months limit for Art.5 notification (GE06-4.2.5.4)

☐ Notices at the latest BR IFIC

- ▪ SS RR9.21 Part C, D
- ▪ SS GE06L Part A, B
- ▪ MIFR Part 1, 2, 3

☐ BR Outgoing Correspondence

SS	GE06L or RR9.21
SS number	SS number whose coordination is currently ongoing
Correspondence	A brief description of the main subject of the correspondence
Date of Letter	The date the correspondence was sent
View of Letter	A link to the PDF file of the correspondence

MyAdminFXM (2) RR9.21

FXM Special Sections (RR9.21)

Number of Part C notices at the coordination stage

Statistics of assignments / notices under RR9.21 coordination

- Notices at the coordination stage (Part C)
- Notices at the coordination stage, for which objection was received (Part C)
- Notices at the coordination stage, which affect me (Part C)
- Notices at the coordination stage, to which my objection was given (Part C)
- Assignments for which coordination was completed (Part D)

Latest updates	RR9.21 (42)	GE06L (82)	MIFR

Notices at the coordination stage (Part C)	**42**
Notices at the coordination stage, for which objection was received (Part C)	**0**
Notices at the coordination stage, which affect me (Part C)	**4**
Notices at the coordination stage, to which my objection was given (Part C)	**0**
Assignments for which coordination was completed (Part D)	**1383**

☐ Use filter

Real-time Coordination Status (Ongoing coordination)

- Responses from administrations identified as affected
- To be updated weekly

RR9.21 (Notices on the coordination stage (Part C))

Export to Excel Export to PDF Print

Deadline of comments

Showing 1 to 10 of 42 entries   Show [10] entries   Search: [   ]

BR IFIC (Part C)	Special Section (Part C)	Deadline of comments (4 months)	ADM Ref ID	ADM	Freq. (MHz)	Site Name	Geo Area	Geo. Coord.	Class of station	Requests for coordination — Notified as coordinated	Requests for coordination — Identified as affected (RR9.36)	Ongoing coordination — Coord Completed (ADM response received)	Ongoing coordination — Objection received
3035	1063	**26 Mar 2025**	4462FB2023	RUS	794.74	PSK SHUMILKINO	RUS	027°24'25"E - 57°38'45"N	FB	EST, LVA			
3035	1063	**26 Mar 2025**	0548FB2024	RUS	809.8	PSK GORLANOVO	RUS	027°23'33"E - 57°38'57"N	FB	EST			
3035	1063	**26 Mar 2025**	2615FB2024	RUS	794.74	LEN SLANCY	RUS	028°05'20"E - 59°07'01"N	FB				
3033	1062	**28 Feb 2025**	1055FB2024	RUS	817.3	PSK BALASHI	RUS	028°41'12"E - 56°49'19"N	FB	LVA			

FXM Special Sections (GE06L)

Number of Part A notices at the coordination stage

Statistics of assignments / notices Under GE06L coordination

- Notices at the coordination stage (Part A)
- Notices at the coordination stage, for which objection was received (Part A) Notices on the coordination stage, which affect me (Part A)
- Notices at the coordination stage, to which my objection was given (Part A) Notices that shall lapse within 90 days if no information about required agreements is sent to BR (GE06-4.2.5.1) (Part A)
- Assignments for which coordination was completed (Part B)
- Assignments in the List that shall lapse if not notified for recording in MIFR within 12 months after publication of Part B (GE06-4.2.5.4) (Part B)

Latest updates	RR9.21 **42**	GE06L **82**	MIFR

Notices at the coordination stage (Part A)	
Notices at the coordination stage, for which objection was received (Part A)	
Notices at the coordination stage, which affect me (Part A)	
Notices at the coordination stage, to which my objection was given (Part A)	**7667**
Notices that shall lapse within 90 days if no information about required agreements is sent to BR (GE06-4.2.5.1) (Part A)	**1**
Assignments for which coordination was completed (Part B)	**156**
Assignments in the List that shall lapse if not notified for recording in MIFR within 12 months after publication of Part B (GE06-4.2.5.4) (Part B)	**78**

☐ Use filter

GE06L (Notices on the coordination stage (Part A))

Deadlines of comments Deadlines for coordination

Real-time Coordination Status (Ongoing coordination)

- Responses from administrations identified as affected

Export to Excel | Export to PDF | Print

Showing 11 to 20 of 80 entries   Show 10 entries   Search: _____

BR IFIC (Part A)	Special Section (Part A)	Deadlines of comments (40 days) (GE06-4.2.2.7, 4.2.3.1)	Deadlines of comments (75 days) (GE06-4.2.4.8)	Deadlines for coordination (75 days + 24 months) (GE06-4.2.5.1)	ADM Ref ID	BR ID	ADM	Freq. (MHz)	Site Name	Geo Area	Class of station	Requests for coordination Notified as coordinated	Identified as affected (GE06-4.2.2.2)	(Ref.) SS RR9.21 (Part C|D)	Ongoing coordination Coord Completed (ADM response received)	Objection Received
3028	126	29 Sep 2024	03 Nov 2024	03 Nov 2026	4094FB2023	124021659	RUS	794.74	KLN SLAVINSK	RUS	FB	POL	LTU, LVA, POL	C1059	LTU, LVA	
3027	125	15 Sep 2024	20 Oct 2024	20 Oct 2026	4084_1FB2023	123119684	RUS	794.74	KLN ZNAMENSK	RUS	FB	LTU	LTU, LVA, POL	C1058	LTU, LVA, POL	
3027	125	15 Sep 2024	20 Oct 2024	20 Oct 2026	2176FB2023	124018716	RUS	794.74	KALIN OZERKI	RUS	FB	LVA, POL	LTU, LVA, POL	C1058	LTU, LVA, POL	
3027	125	15 Sep 2024	20 Oct 2024	20 Oct 2026	2179FB2023	124018717	RUS	794.74	KALIN PRIGORODNOE	RUS	FB	LVA, POL	LTU, LVA, POL	C1058	LTU, LVA, POL	

MyAdminFXM (4) MIFR

MIFR assignments/notices

**Filter for listing table
(applicable to RR9.21, GE06L and MIFR)**

**Total number of recorded MIFR assignments
Administration's MIFR notices published at the latest BR IFIC**

Latest updates	RR9.21 (42)	GE06L (82)	MIFR

Recorded Assignments	455547
Notices at the latest BR IFIC 3035 published on 26 Nov 2024	
- In Part 1	**167**
- In Part 2	**163**
- In Part 3	**0**

☐ Use filter

Selection Criteria

Frequency (MHz) | To

Date of Receipt | To
dd/mm/yyyy | dd/mm/yyyy

BR Assign Id | To

Unique Id. code given by Administration

Site Name

Station Class
Select...

Notice Type
Select...

✔ Apply Filter | ⟳ Reset Filter

MIFR (Part 1)

Export to Excel | Export to PDF | Print

Showing 1 to 25 of 167 entries   Show 25 entries

BR ID	ADM Ref ID	ADM	Geo Area	Region	Site Name	Geo. Coord.	Freq. (MHz)	Bw. Code	Intent	Notice Type	Class of station	Class Of Emis.	Receipt Date
124093780	09071 FX 2024	RUS	RUS	1	P KHLEBOROB UL NOVAYA TR	81°42'58"E - 52°00'12"N	21952	112M	ADD	T11	FX	D7W--	11 Nov 2024
124093779	09278 FX 2024	RUS	RUS	1	G RUBTSOVSK UL ALTAYSKAYA V RA	81°13'42"E - 51°32'07"N	39130	56M0	ADD	T11	FX	D7W--	11 Nov 2024
124093778	09277 FX 2024	RUS	RUS	1	G RUBTSOVSK UL KALININA V RAYO	81°13'20"E - 51°31'39"N	37870	56M0	ADD	T11	FX	D7W--	11 Nov 2024
124093777	09290 FX 2024	RUS	RUS	1	G ASTRAKHAN UL RYBINSKAYA 15	48°05'53"E - 46°22'01"N	38570	56M0	ADD	T11	FX	D7W--	11 Nov 2024

MyAdminFXM
demonstrations

Future eFXM development plan

Next steps after WRS-24

Future eFXM development plan

Enhancement of eQueryFXM, ePubFXM and MyAdminFXM functions

Map visualization of assignments

Visualization of coordination calculation results

Other enhancements

Development of eToolsFXM

study, analysis and identification of tools

Tool development and implementation on eToolsFXM

Thank you very much for your attention!

followed by the session of
use case scenarios and exercises of ePubFXM and MyAdminFXM

ITU – Radiocommunication Bureau
Questions to brfmd@itu.int