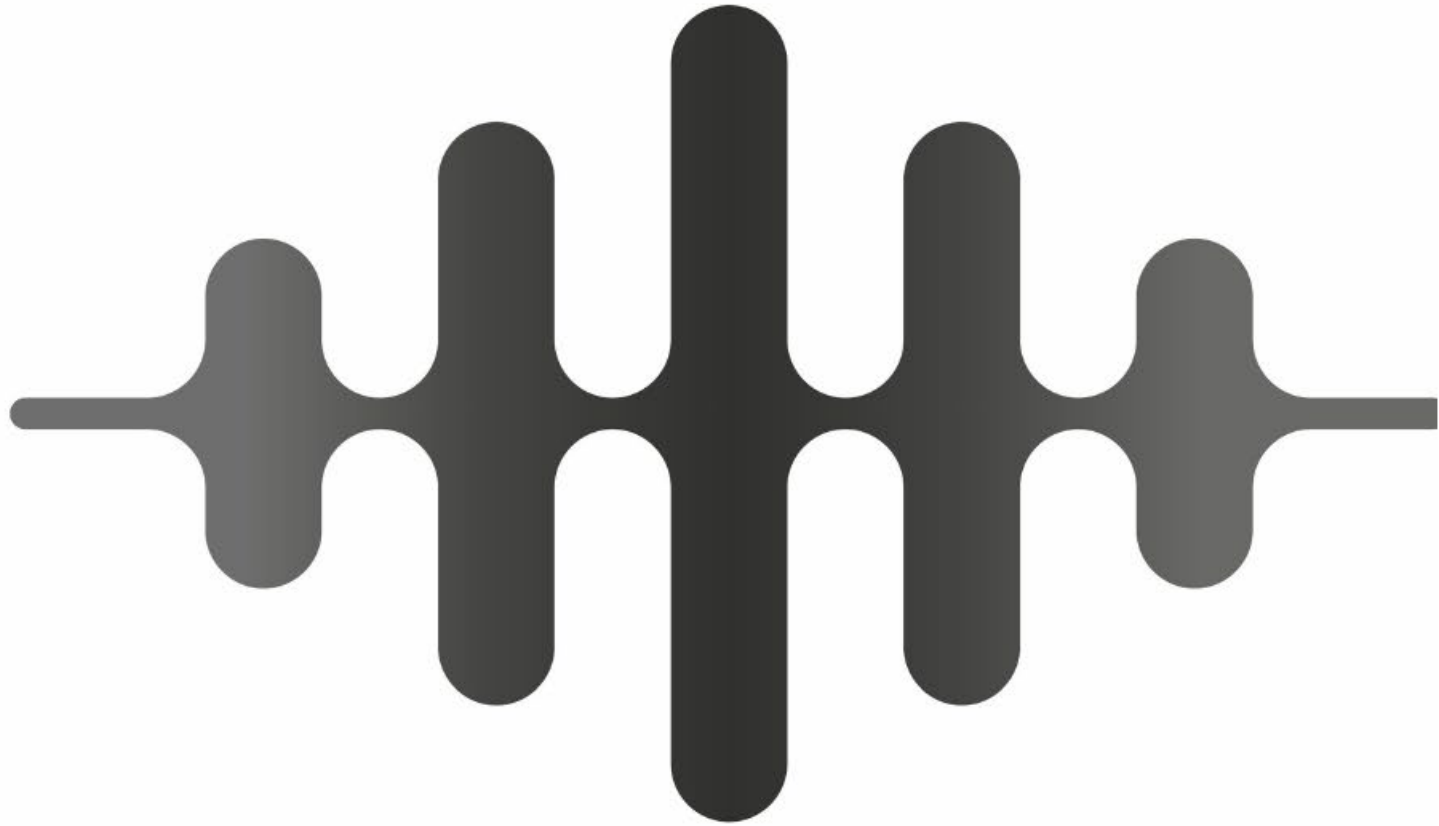
32ND ITU WORLD
RADIOCOMMUNICATION SEMINAR

ITUWRS GENEVA2026

7–11 December 2026
Geneva, Switzerland

itu.int/go/ITU-R/WRS-26
#ITUWRS



Organized by:

eFXM
Terrestrial (except Broadcasting) Web Tools

eQueryFXM | ePubFXM | MyAdminFXM | eToolsFXM

ITU World Radiocommunication Seminar

Fixed and Mobile Services Division
Radiocommunication Bureau
BR/TSD/FMD

7-11 December 2026, Geneva, Switzerland

Day 4 (10/12/2026)

Specific topics – English

1540-1700 (Room K)

eFXM
Terrestrial (except Broadcasting) Web Tools

eQueryFXM | ePubFXM | MyAdminFXM | eToolsFXM



Session objectives

Exploring model cases from consultation of BR database to regulatory analysis through eFXM web tools

Consult

Locate notices, assignments, allotments and Special Sections through **eQueryFXM** and **ePubFXM**.

Follow up

Monitor coordination status and deadlines through **MyAdminFXM** for administration-dedicated portal. (Administration Only)

Calculate/Analysis

Preview the **eToolsFXM** demonstration for SS RR9.21 (PFD check for RR5.430A and RR5.434A)

Agenda

1. eTerrestrial and eFXM
2. eQueryFXM since Oct.2022
3. ePubFXM Aug.2023 (SS RR9.21), Oct.2023 (SS GE06L), Nov.2024 (cross reference with MIFR assignments)
4. MyAdminFXM since Dec.2025
5. **eToolsFXM (demo version)** **NEW**
6. Key takeaways and next steps

1. eTerrestrial and eFXM

Online portal for terrestrial services

eTerrestrial: online portal for terrestrial services

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

- Secure web-based services for **ITU TIES users**
- eMIFR, eValidation, WISFAT, eBroadcasting, ePropagation, eEffectiveAntennaHeight and **eFXM**
- **eFXM** covers fixed, mobile and other terrestrial services, except broadcasting

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 2026
  - **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
  - **eEffectiveAntennaHeight** : Calculate effective antenna heights (beta version)

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)
  - **ePubFXM** : to consult Special Sections related to FXM (RR9.21, GE06L)
  - **eToolsFXM** : to perform calculation on-demand in the scope of RR provisions as well as Regional agreements (demo version)
  - **MyAdminFXM** (administration only) : to visualize relevant notices and recorded assignments for an easy follow-up of FXM coordination and FXM plan modification procedures and related deadlines.

eFXM platform: four complementary services

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

eQueryFXM

Consult the BR database for FXM assignments and allotments (MIFR and Plans)

Available

ePubFXM

Consult Special Sections annexed to BR IFIC related to FXM (RR9.21, GE06L)

Available

MyAdminFXM * Administration only

Assists Administrations to follow-up RR 9.21 and GE06L coordination procedures in accordance with Special Sections.

Restricted access

eToolsFXM * Demo version

On-demand regulatory calculations for selected RR provisions and Regional Agreements

Demo version in 2026

2. eQueryFXM

Consult the daily read-only copy of the BR database
for FXM assignments and allotments (MIFR and Plans)

eQueryFXM: main functions

1. Select data

MIFR assignments and pending notices

Plan assignments and allotments

Common frequencies

2. Choose a view

General Query

Class of Station Statistics

Technical Statistics

Technical Characteristics

3. Apply criteria

Administration

Geographic Area

Notice Type

Frequency Range

Date of Receipt

Class of Station

Region

4. Consult results

Open assignment details

Search result tables

Export or print results

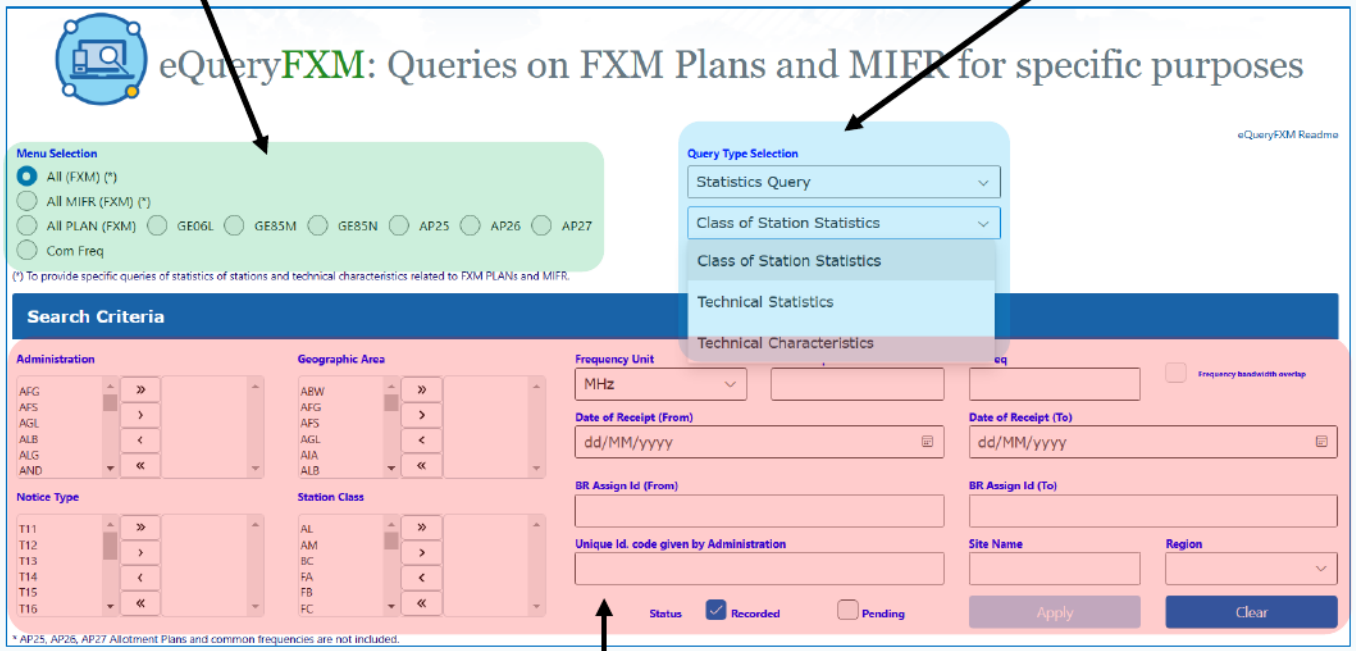
eQueryFXM: query workflow

eQueryFXM

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

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.



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 demonstration

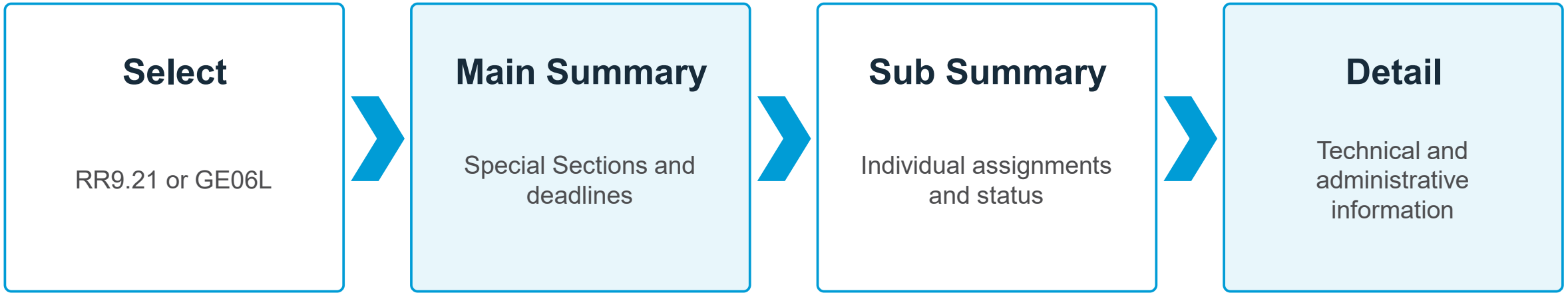
Suggested live sequence

1. Select “All FXM”
2. Enter a frequency range
3. Run General Query
4. Open a BR ID record
5. Switch to a statistics view
6. Export selected results

3. ePubFXM

Consult Special Sections RR9.21 and GE06L, coordination status and cross references to MIFR assignments

ePubFXM: from Special Section publication to assignment detail

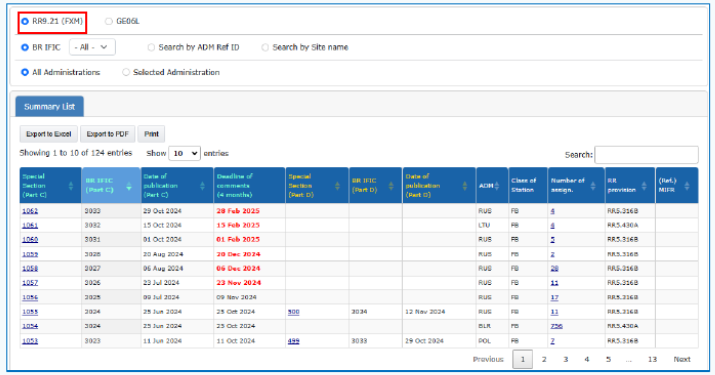


ePubFXM: RR9.21 and GE06L views

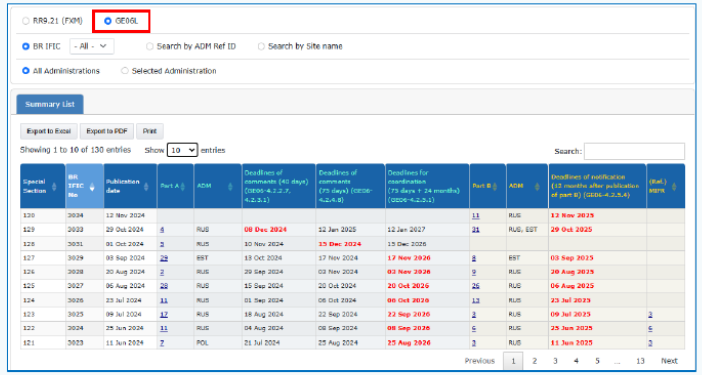
- Filter by BR IFIC, administration, ADM Ref ID or site name
- See publication dates and active deadlines
- Link Part C to Part D for RR9.21, or Part A to Part B for GE06L
- Follow the reference to the corresponding MIFR assignment

ePubFXM **Main Summary page** https://www.itu.int/itu-r/eTerrestrial/efxm/epub

Main Summary page (RR9.21)



Main Summary page (GE06L)



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)
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

4. MyAdminFXM

Assists Administrations to follow-up RR 9.21 and GE06L coordination procedures in accordance with Special Sections.

MyAdminFXM: designed for administration focal points
(Administration Only)

Latest updates

Important deadlines within 14 days

Latest BR IFIC publications

Relevant BR outgoing correspondence

RR9.21 and GE06L

Statistical lists

Coordination status

Deadlines and responses

Detailed assignment views

MIFR

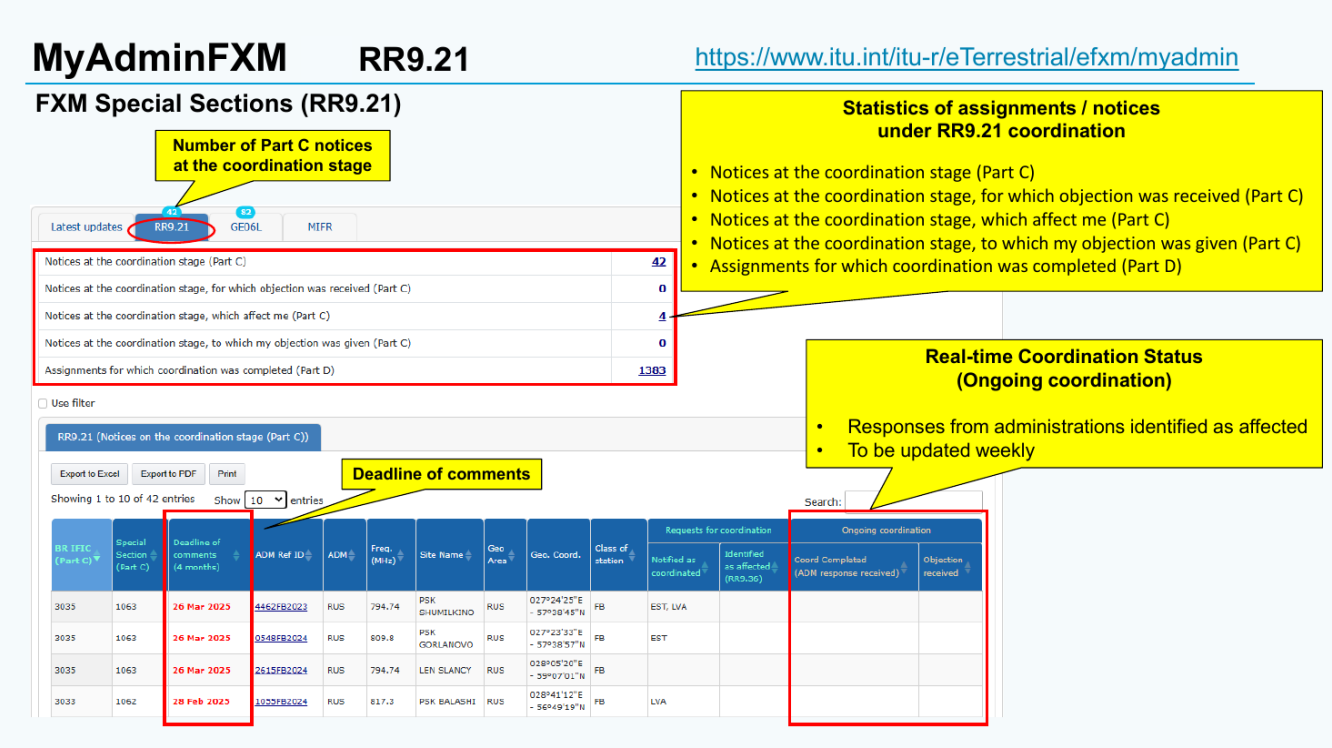
Total recorded assignments

Notices in the latest BR IFIC

Filters for listing tables

MyAdminFXM: Virtual office for ITU BR FXM focal points
(Administration Only)

- Latest updates for important deadlines (within 14 days)
- RR9.21 or GE06L tabs to follow up notices at the coordination stage
- Apply filters by frequency, Special Section, station class or notice type
- Open detailed records to verify status and relevant dates



5. eToolsFXM (demo version)

On-demand regulatory calculations for selected RR provisions and Regional Agreements

- SS RR9.21 calculations related to RR5.430A and RR5.434A (UI demo)

What is new for WRS-26?

eToolsFXM demonstration menu

SS RR 9.21 → RR 5.430A / RR 5.434A PFD check (Demo)

- On-demand calculation support for selected regulatory checks
- **Demo version**: scope, inputs and outputs remain subject to final confirmation
- Designed to complement, not replace, the regulatory procedure and BR examination

RR 9.21 (RR 5.430A and RR 5.434A)
Evaluate the mobile, except aeronautical mobile, service on a primary basis in Region 1 under **RR 9.21** of the frequency bands **3 400–3 600 MHz** (RR 5.430A) and **3 600–3 800 MHz** to protect FS and FSS. Coordination under RR 9.21 is required if the power flux-density (pfd) calculated using Rec. ITU-R P.452 exceed:

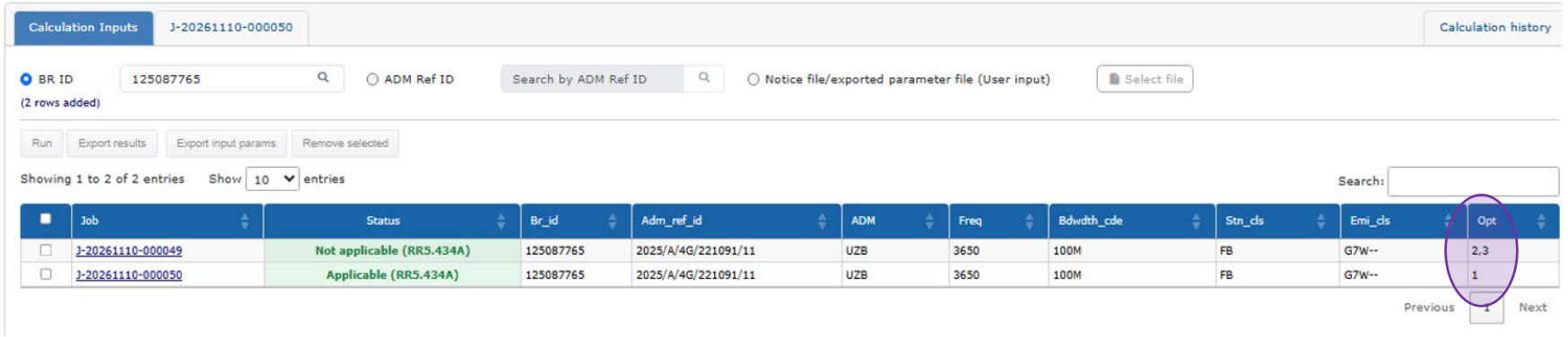
$$-154.5\ \mathrm{dB}\left(\mathrm{W}/(\mathrm{m}^2 \cdot 4\ \mathrm{kHz})\right)$$

for more than 20% of the time produced at 3 m above ground level at the border of the territory of any other administration.

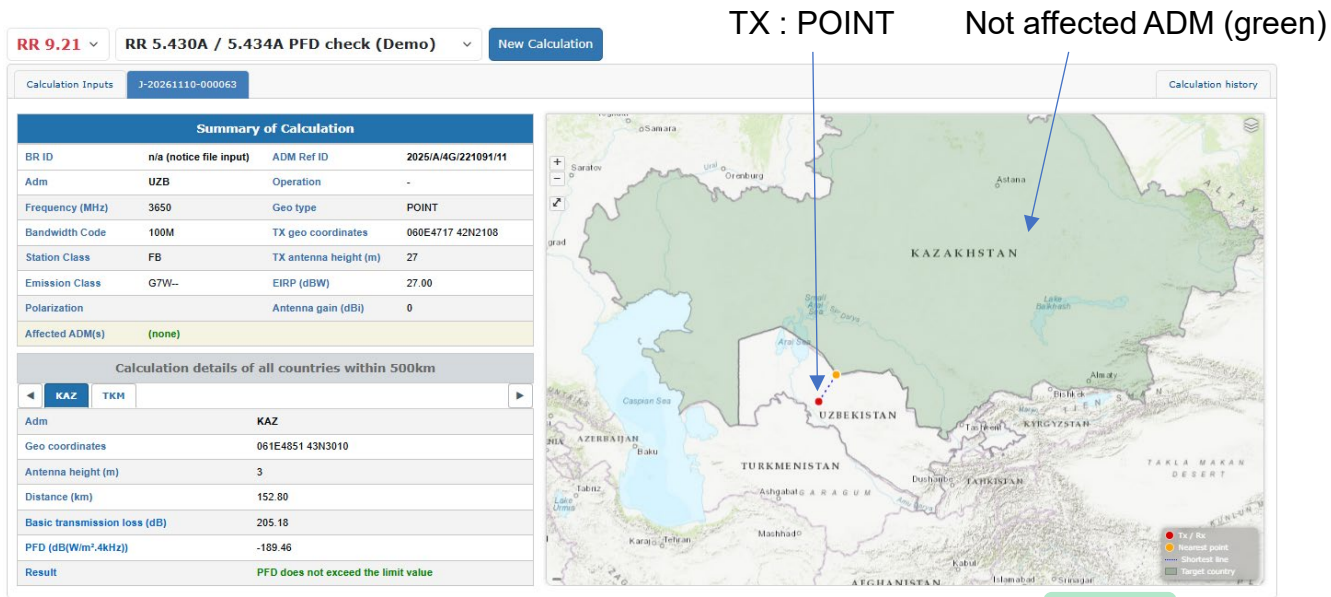
DEMO

eToolsFXM: proposed user journey

Input methods : BR ID, ADM Ref ID or Notice file



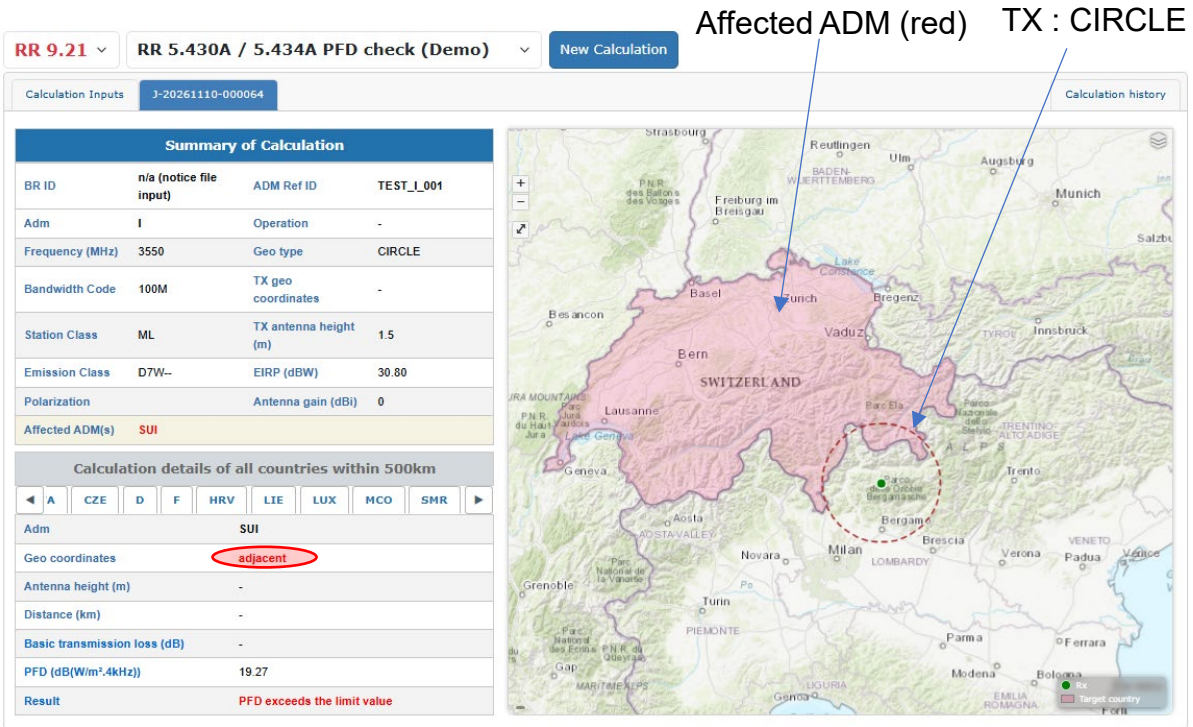
Calculation result 1:
transmitting station is a **POINT**, calculation path is drawn on the map.



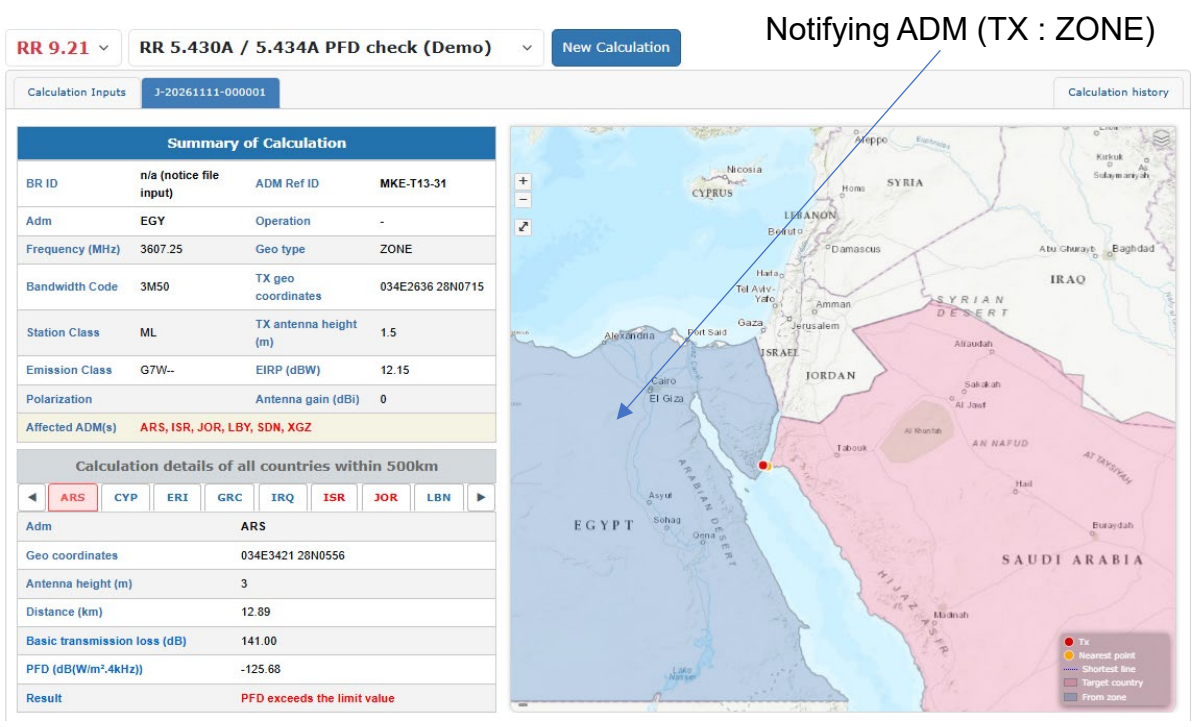
Demo

eToolsFXM: proposed user journey

Calculation result 2:
transmitting station is a **CIRCLE**, its outline is drawn on the map.



Calculation result 3:
transmitting station's geo type is a **ZONE** (whole administration),
the notifying administration is also shaded.



eToolsFXM: live demonstration

1. Open the eToolsFXM menu
2. Choose RR9.21 > RR5.430A/RR5.434A PFD check
3. Select or retrieve a representative case
4. Review automatically populated parameters
5. Run the calculation
6. Explain the result and limitations
7. Export or save the output, if available

6. Key takeaways

One platform, four tools, one connected workflow

Key takeaways and future work

Find

eQueryFXM provides structured consultation of MIFR, Plans and common frequencies.

Understand and follow

ePubFXM connects Special Sections and MIFR records. MyAdminFXM supports administration-specific monitoring.

FUTURE WORK

Further enhance MyAdminFXM to improve administration-specific follow-up and usability.

Calculate/Analyze

eToolsFXM introduces an on-demand demonstration for RR9.21-related checks under RR5.430A and RR5.434A.

FUTURE WORK

Enhance eToolsFXM and progressively expand the range of available calculation menus.

Thank you

Questions and discussion

ITU Radiocommunication Bureau
Fixed and Mobile Services Division
brfmd@itu.int

Exercise session

Hands-on use of eQueryFXM, ePubFXM, MyAdminFXM and eToolsFXM

Exercise preparation

Access and working arrangements

Sign in

- Open the eTerrestrial portal and sign in with an authorized TIES account.
- For eToolsFXM and MyAdminFXM, use the exercise account provided during the meeting.

Open eFXM

- Confirm access to eQueryFXM, ePubFXM and the exercise environment for eToolsFXM and MyAdminFXM.

Work safely

- Use only the specified exercise cases.
- Do not enter confidential or production-sensitive information in the demonstration environment.

Exercise 1: eQueryFXM

Retrieve and inspect FXM records

Task A: General Query

- Select All MIFR (FXM). Set a manageable frequency range.
- Retrieve recorded assignments and pending notices.
- Open one BR ID record.

Task B: Statistics

- Reuse the same criteria. Switch to Class of Station Statistics.
- Review Technical Statistics or Technical Characteristics.

Task C: Export / Print

- Use text search in the results table.
- Export selected results to Excel or PDF.
- Confirm that query parameters are included.

Exercise 2: ePubFXM

Follow an RR9.21 publication from summary to detail

1. **Select RR9.21**
2. **Filter the Main Summary**
3. **Open a Part C or Part D entry**
4. **Review the Sub Summary**
5. **Open the assignment detail**
6. **Follow the MIFR reference, if available**

Exercise 3: ePubFXM

Cross-reference GE06L, RR9.21 and MIFR

- Select GE06L and locate the exercise assignment using the Special Section number or ADM Ref ID.
- Open the Sub Summary and detail assignment page.
- Check whether the assignment includes a reference to an RR9.21 publication.
- Follow the available link to the related RR9.21 record or MIFR assignment.
- Identify where the latest assignment information and historical records are available.

Exercise 4: MyAdminFXM

Review administration-specific latest updates

Important deadlines

Open Latest updates and display notices with deadlines within 14 days. Identify the procedure and action date.

Latest publications

Review the latest BR IFIC entries for RR9.21, GE06L and MIFR. Open one relevant record.

Correspondence

BR outgoing correspondence open and identify the related Special Section and procedure.

Exercise 5: MyAdminFXM

Apply procedure-specific selection criteria

RR9.21

Enable Use filter and narrow the list by frequency, Special Section number, site name, station class or notice type.

GE06L

Find notices at the coordination stage that affect the selected administration and review associated deadlines.

MIFR

Display notices published in Parts 1, 2 and 3 of the latest BR IFIC and open one detail record.

Exercise 6: eToolsFXM

Start a demonstration calculation

- Open eToolsFXM and confirm that the service is marked as a demonstration or beta version.
- Select RR9.21 and the RR5.430A / RR5.434A PFD check.
- Confirm that the Beta database source is selected for the exercise.
- Start a new calculation and identify the available input methods: BR ID, ADM Ref ID or Input file.

Result status

Identify whether the case is shown as applicable under RR5.430A or RR5.434A and note the calculation job identifier.

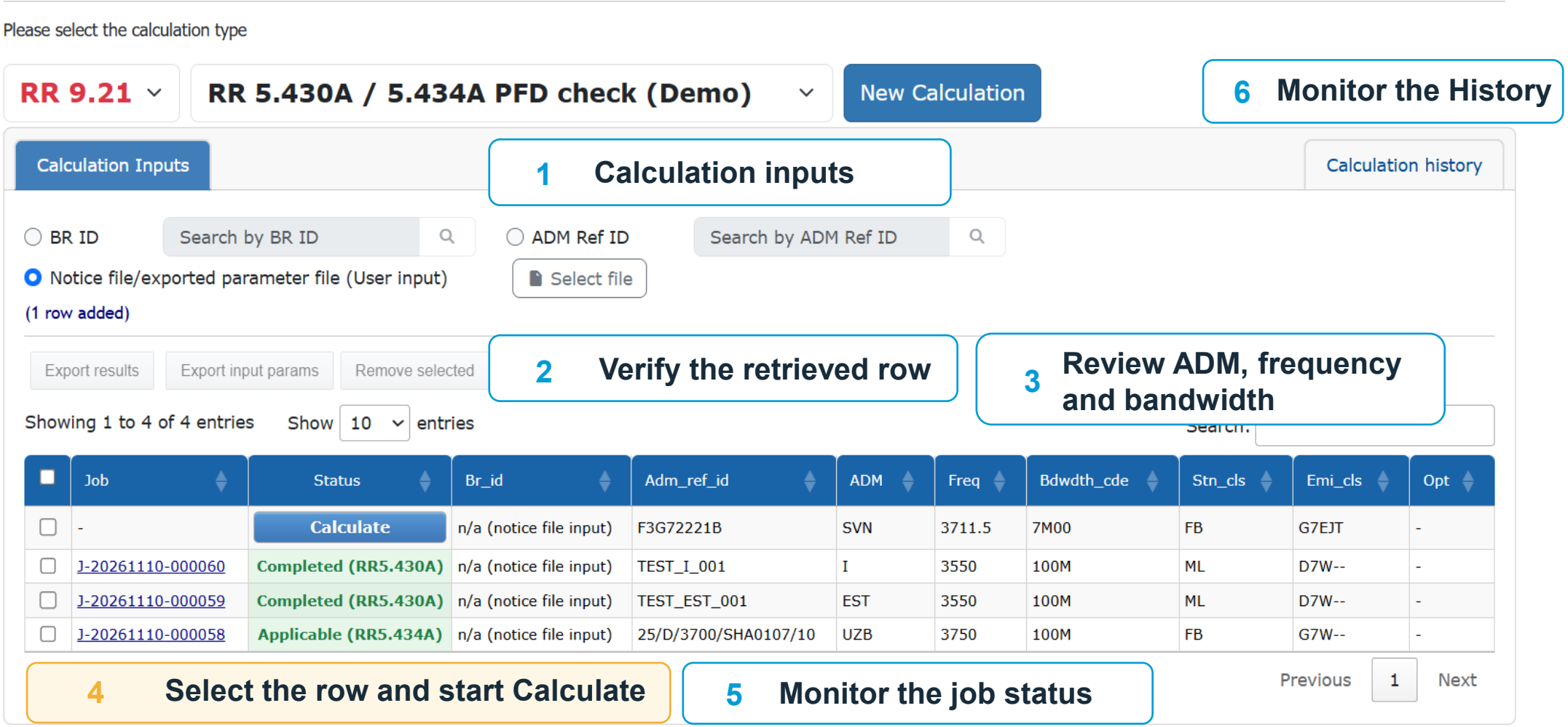
Calculation evidence

Review transmitter parameters, affected administrations, distance, basic transmission loss and calculated PFD.

Regulatory meaning

Compare the calculated PFD with the applicable limit. Record assumptions and explain why the output is a demonstration result.

Exercise 6: eToolsFXM



Exercise 6-1: eToolsFXM: input BRID

- Select calculation type: RR 5.430A/5.434A PFD check (Demo)
- Input BRID
- Check the jobs list
- Do calculation
- Check jobs status and calculation details

Exercise 6-2: eToolsFXM: input ADM Ref ID

- Select calculation type: RR 5.430A/5.434A PFD check (Demo)
- Input ADM Ref ID
- Check the jobs list
- Do calculation
- Check jobs status and calculation details

Exercise 6-3: eToolsFXM: (User input) notice file

- Select calculation type: RR 5.430A/5.434A PFD check (Demo)
- Upload Notice file
- Check the jobs list
- Do calculation
- Check jobs status and calculation details

Exercise session complete

Questions, observations and feedback

Please share any issue that prevented you from completing a task.

For follow-up: brfmd@itu.int