Manual on Regular Monitoring Query and Visualisation web application

(Version 1.0; Date last updated: 21-01-2020)

The objective of the regular monitoring program in frequency bands between 2 850 kHz and 28 000 kHz is to:

- identify whose emissions are not in compliance with the Radio Regulations (RR);
- provide administrations that do not have monitoring facilities with information for frequency management purposes and to comply with No.3.14 of the RR;
- assemble information on spectrum utilization at the location of the monitoring stations and to derive thereafter how the spectrum is used;
- collect information, when required by Radiocommunication conference, on the use of the bands exclusively allocated to specific services (i.e. broadcasting, maritime, aeronautical) for consideration by the appropriate Radiocommunication Conferences

Monitoring stations participating in the International Monitoring System (IMS) send their reports to the Bureau via their designated centralizing office and in accordance with Article 16 of the RR, the Bureau records and publish periodically the summaries of monitoring information.

Browser compatibility and content accessibility

This web application supports the following browsers:

- Microsoft Edge
- Google Chrome
- Microsoft Internet Explorer 8 and above
- Mozilla Firefox
- Apple Safari
- Opera
- And most modern browsers

This web application is W3C accessibility compliant. Reference: <u>Web Content Accessibility Guidelines</u> (WCAG).

How to query

| De Not | ine the search criteria for retrieval: that the number inside the brackets "(#)" corresponds to the column number as described in the Electronic data format. |
|------------------|--|
| Me | sured frequency' from: 2850 (4) to 28000 (4) ervation date (yyyy-mm-dd)' from: 2002-03-03 (2002-04-19) |
| Frequency slider | story fields |
| | Advanced search criteria: Search criteria headers |
| | Particulars of the Monitoring center |
| Particulars | Time of observation from: 0000 (HHMM) to: 2400 (HHMM) Estimated location: Longitude: E • • • • • • • • • • • • • • • • • • |
| | Class of emission: Reference Examples Remarks: |
| F | Search Search button |

Fill the various fields provided to make the final criteria of the query. Measured frequency (from and to) and Observation date (from and to) are mandatory fields. They must be filled. Measured frequency can also be filled by dragging the 2 sliders horizontally. Observation date fields provide drop down calendar. Other fields are found in 'Advanced search criteria' grouped under the particulars of a Monitoring center or of a Monitored station. Click on these criteria headers to switch its display.

Upon the completion of creating the criteria, the search button will be activated. Click the button to return the result. Reset button returns the fields to its initial default values.

This web application is accessibility compliant. You can navigate through different fields using keyboard like tab, shift + tab and the arrows. As you move from one field to another, additional contextual information is provided. Also, certain fields have links to references, example and additional information.

Query result

| Reset Search | Reco | ords found | | | | | | | Link to vis | ualis | atio | on | | | | | |
|--|------|----------------|-----------|----|----|-------|--------|-------|----------------------|-------|------|-------|-----|----|---|-------|------|
| Query result: 11069 record/s found Visualise | | | | | | | | | | | | | | | | | |
| SUMMARY #: Monitoring Perio | d 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 22 | | | |
| 361: 01/01/19 - 31/03/19 | INS | MSKH-KUPANG | 17890.000 | 13 | 03 | 1401 | 1412 | 33.0 | CNR 1 | CHN | BC | 9K00E | A3E | | ٦ | | |
| 361: 01/01/19 - 31/03/19 | 1 | ROMA | 17895.000 | 03 | 01 | 1733 | 1759 | 30.1 | | | BC | 10K0E | A3E | | | | |
| 361: 01/01/19 - 31/03/19 | INS | MSKH-KUPANG | 17895.000 | 13 | 03 | 1645 | 1650 | 24.0 | R.SAUDI | ARS | BC | 9K00E | A3E | | | | |
| 361: 01/01/19 - 31/03/19 | F | RAMBOUILLET | 17895.000 | 16 | 02 | 1200 | 1200 | 25.0 | PADIO SAUDI | ARS | BC | 10K0 | A3E | | | | |
| 361: 01/01/19 - 31/03/19 | F | RAMBOUILLET | 17895.000 | 16 | 0 | Lin | k to | iter | m details | STP | BC | 10K0E | A3E | 6 | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17895.000 | 28 | 03 | 0500 | 2400 | | SAUDI R.I. | ARS | BC | | A3E | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17919.000 | 10 | 01 | 0641 | 2400 | | GUAM | | FA | | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17919.000 | 21 | 01 | 0446 | 2400 | | GUAM | | FA | | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17919.000 | 28 | 01 | 0223 | 2400 | | GUAM | | FA | | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17919.000 | 12 | 02 | 1050 | 2400 | | GUAM | | FA | | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17919.000 | 26 | 02 | 0706 | 2400 | | GUAM | | FA | | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17919.000 | 04 | 03 | 0502 | 2400 | | GUAM | | FA | | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17919.000 | 11 | 03 | 0240 | 2400 | | GUAM | | FA | | J2D | | F | Table | e of |
| 361: 01/01/19 - 31/03/19 | 1 | ROMA | 17919.000 | 14 | 03 | 0916 | 2400 | 2.0 | 016 GUAM CH2 | USA | MA | 3K00E | J2D | | | res | ult |
| 361: 01/01/19 - 31/03/19 | 1 | ROMA | 17922.000 | 14 | 03 | 0905 | 2400 | 5.0 | 008 JOHANNESBURG CH2 | AFS | MA | 3K10 | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | 1 | ROMA | 17928.000 | 14 | 03 | 1002 | 2400 | 5.0 | 017 TELDE CH 2 | Е | MA | 3K10 | J2D | | | | |
| 361: 01/01/19 - 31/03/19 | F | RAMBOUILLET | 17930.000 | 03 | 02 | 1000 | 1830 | 10.0 | | | | 2K80E | J7B | 9 | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 17969.990 | 10 | 01 | 0643 | 2400 | | | | BC | | A3E | | | | |
| 361: 01/01/19 - 31/03/19 | F | RAMBOUILLET | 18043.900 | 04 | 02 | 0700 | 1400 | 15.0 | | | | 3K40E | J7B | 9 | | | |
| 361: 01/01/19 - 31/03/19 | F | RAMBOUILLET | 18043.900 | 04 | 02 | 1440 | 1550 | 15.0 | | | | 3K40E | J7B | 9 | | | |
| 361: 01/01/19 - 31/03/19 | 1 | ROMA | 18050.000 | 12 | 03 | 1214 | 2400 | 47.0 | OTH RADAR | CYP | FX | 20K0 | P0N | | | | |
| 361: 01/01/19 - 31/03/19 | F | RAMBOUILLET | 18055.000 | 04 | 02 | 1011 | 1021 | 18.0 | | | | 20K0E | PXX | 9 | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 18060.000 | 07 | 01 | 1048 | 2400 | | | AUS | | | F3C | | | | |
| 361: 01/01/19 - 31/03/19 | J | TOKYO | 18060.000 | 10 | 01 | 0746 | 2400 | | VN | | | | F3C | | | | |
| 361: 01/01/19 - 31/03/19 | J | ΤΟΚΥΟ | 18060.000 | 21 | 01 | 0606 | 2400 | | Link to page | nur | nbe | er | F3C | | | | |
| | P | age: 1 2 3 4 5 | 6789 | 10 | 11 | 12 13 | 3 14 1 | 15 16 | 17 18 19 20 > | | | | | | | | |

Successful query returns the records found in a table view below the search button. Its title displays the number of records found. Click on any of the table's headers (in blue) to sort the result accordingly. Hovering the mouse (or by keyboard) on its header shows information in tooltip. The query displays 25 results per page. Click on any page number to view results on other pages.

View item details

Click on any item under column '3' (Measured frequency) to display the item details.

| YOU ARE HERE HOME > ITU-R > TERRESTRIA BANDS BETWEEN 2 850 KHZ AND 28 000 KHZ | AL SERVICES > MONITORING > QUERY > MONITOR | Breadcrumb menu RED STATION EMITTING IN | SHARE 🕞 😒 🕅 😅 | ٦ | |
|--|--|--|------------------------------|--------------------|--------------|
| | Summary #: 294: 01/04/02 - 30/06/02 | | of [1] Administration: J | | |
| [3] Measured frequency 12843.000 | [10] Administration responsible for transmission | [9] Identification HLO | | | |
| [4] Day of observation 22 | [5] Month of observation 04 | [6] Starting time 0305 | [7] Finishing time 2400 | $\left - \right $ | Item details |
| [11] Class of station FC | [12] Occupied bandwidth | [13] Class of emission A1A | [8] Field Strength | | |
| Location: [14][15][16] Longitude | [17][18][19] Latitude | [20] Bearing to transmitting station | [21] Accuracy of the bearing | | |
| [22] Non-conformity with the RR (see No.16.8) | [23] Remarks | | | | |

Navigation

The breadcrumb menu shows your location. Click 'QUERY' to go back to the main query page.

Visualisation

The visualisation page contains 4 parts, namely: Date period header, Timeline view, Table of summaries view and Choropleth map view.

A. Date Period Header

Date period header contains the paging of date periods and number of records currently visualised. The paging of date periods only appears whenever the data is too large to be displayed efficiently. It parses the data into reasonable date periods.



B. Timeline view

Timeline view displays frequency occupation along the date line. The presented date line is contained within the page of a given date period. The color indicates the class of station. The intensity of the color manifests different class of stations are overlapping in the given frequency range while its horizontal width accounts for the duration of its occupancy. Click on any item along the Frequency axis (y-axis) to drill into frequency details. Here, every frequency details are displayed with additional information in tooltips. Click and drag the view to move it along the dateline (x-axis). The timeline view also responds to scrolling. It will zoom in or out.

| | | | Sur | mmaries header | $\mathbf{X}_{\mathbf{r}}$ |
|---|------------------------------|--------------------------------------|-----|---------------------------------------|--------------------------------------|
| - | View summary of all observed | emissions | | | 4 |
| | Class of Station | Total count of observed emissions | | Admin responsible for transmission | Total count of observed emissions |
| | BC | 3063 | | (unidentified) | 2916 |
| | (unidentified) | 2279 | | CHN | 821 |
| | FC | 749 | | RUS | 438 |
| | FX | 420 | | USA | 259 |
| | FA | 137 | | KRE | 217 |
| | FD | 37 | | J | 199 |
| | SS | 28 | | G | 137 |
| | MS | 23 | | F | 127 |
| | AL | 14 | | D | 115 |
| | FG | 12 | | PHL | 95 |
| | NL | 5 | | AUS | 75 |
| | LR | 2 | | I | 62 |
| | AX | 1 | | GRC | 54 |
| | | | | THA | 52 |
| | | | | S | 50 |
| | | | | ISR | 47 |

C. Table of summaries view

Clicking the Summaries header toggles the 2 tables shown above. These tables hold the total count of observed emissions by class of stations and by administrations responsible for transmissions. They present the total count as a reference to the partial views presented in the Timeline and Choropleth views.

D. Choropleth map view



In consonance with the Timeline view, this thematic map shades the countries geographical map in proportion to the count of observed emission for a given date period as indicated in the Date period header.

Click on the map to toggle the zooming in or out. Hover the mouse over a country and a tooltip shows. Countries in shade of grey indicates no observed emission. IDWM is the reference of this world map.

Sessions and cookies

This web application uses Session Id to keep track the user as she/he navigates in the web application. Session Id is a token of information stored in the user's local computer called cookie. However, in cases where cookie is not allowed, the application will automatically keep the Session Id either in the URL or in the page. Each session is set to 30 minutes only.

Users will be timed out if inactive for more than the specified time. If this happens, just go back to the <u>initial page</u> of the application.