

Answers to the questions during the terrestrial workshop at WRS-20

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Administrative and general questions

Question	Who	Answer
Is this presentation available online?	Per Werner	Yes, all workshop presentations are published on the web at https://www.itu.int/en/ITU-R/terrestrial/workshops/WRS-20/Pages/default.aspx
Can you send here the links with videos and all material for this tools for self-training?	Luis Cumaio	https://www.itu.int/en/ITU-R/terrestrial/broadcast/africa/Pages/Workshop.aspx https://www.itu.int/en/ITU-R/terrestrial/broadcast/africa/Pages/Workshop.aspx https://www.itu.int/en/ITU-R/terrestrial/broadcast/africa/Pages/Workshop.aspx https://www.itu.int/en/ITU-R/terrestrial/broadcast/africa/Pages/Workshop.aspx

<p>the different sessions have been recorded, where can we find the videos? thank you</p>	<p>Juan Pablo Hernandez (MINECO)</p>	<p>Dear Juan, you may find the webcasts of this seminar (plenary and workshops) at https://www.itu.int/en/ITU-R/information/events/webcast/Pages/default.aspx</p>
<p>The MDB Extract File on the website. Is it possible to update the BRIFIC database using this file? Or the only way is to download the ISO file?</p>	<p>Salebona Shongwe</p>	<p>No, these extract MDB files only contain the changes in their corresponding BR IFICs and cannot be used to update the contents of previous BR IFIC databases. The latest ISO file published on the web or the latest BR IFIC DVD contains the latest updated version of the BR IFIC database.</p>
<p>Information of intermodulation product</p>	<p>George A. James</p>	<p>You may find the technical basis from the following Recommendations ITU-R: SM.1009 Compatibility between the sound-broadcasting service in the band of about 87-108 MHz and the aeronautical services in the band 108-137 MHz SM.1134 Intermodulation interference calculations in the land-mobile service SM.1446 Definition and measurement of intermodulation products in transmitter using frequency, phase, or complex modulation techniques</p>

<p>Can the ITU assist our organisation, The National Telecommunications Regulatory Commission (NTRC) and ECTEL by extension, to identify a reputable organisation with an on-line calculator to evaluate Radio Frequency Electromagnetic Exposure, as with the following example for Amateur Radio enthusiasts on this website: http://hintlink.com/power_density.htm ? It would be great if the ITU could embark on having an on-line calculator for the industry or if ITU could provide or recommend an international recognised calculator to evaluate / estimate Electromagnetic Radiation in terms of RF Power Density, to assist the telecommunications industry in that regard.</p> <p>Does ITU have regulations and an administrative process to regulate Electromagnetic Radiation issues?</p>	<p>George A. James 03:37 PM</p>	<p>Currently the EMF issue is under study in ITU-R Working Party 1C. However unfortunately the scope of their work does not include the development of a tool for calculation of the EMF exposure on human body.</p> <p>ITU has not developed any regulations on the EMF, recognizing that ICNIRP is developing the recommendations on EMF exposure on human body and WHO recognizes the recommendations. ITU Member states, respecting the recommendation, establish their own regulatory framework to manage EMF exposure on human body and ITU is developing a supporting recommendation to measure the EMF exposure on human body.</p>
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Regulatory questions

Question	Who	Answer
Can Switzerland implement IMT in the 3400-3600 MHz band without applying 9.21?	Juris Rencis [LVA-- VAS ES]	No. IMT is an application in the mobile service. Pursuant to footnote RR 5.430A it can be used only if RR9.21 is applied.
When will RR-2020 come into force?	GAO Sheng	In general, it comes into force on 1 January 2021. Some of the provisions and the Resolutions and Recommendations came already into force on 23 November 2019.

<p>How about the Rules of Procedure. What's the relationship between RRB, ROP, ITU-R SG and BR? And also, when dose the Rules of Procedure come into force generally?</p>	<p>GAO Sheng</p>	<p>The Rules of Procedures is for clarification of the Radio Regulations if needed. The Rules of Procedure is reviewed and updated by the RRB. ITU-R SG mainly develops the ITU-R Recommendations and Reports. BR is the secretariat in the ITU-R Sector to support the ITU-R Members to hold the necessary meetings and perform the necessary administrative actions.</p>
<p>what is the words "higher status" in slide 8 means? is it related the service ?</p>	<p>Yudhistira Prayoga</p>	<p>If an allocation is made subject to application of RR9.21 for a secondary service, the primary and secondary services in the same band are protected. The primary service is considered as "higher status" with respect to the secondary service applying RR9.21.</p>
<p>Can the protection of some frequency assignment of secondary basis service written into the MIFR be a reason to object some modification of the Plan in the respective band?</p>	<p>CELACANDRE</p>	<p>The assignments to a station in a secondary service cannot be a basis of an objection to the modification of the Plan, since the planned services are always primary</p>
<p>What would be the correct workflow to seek coordination if the administration receives a negative coordination answer from the neighbouring administration based on Article 48 of the Constitution without any technical suggestions to resolve the matter?</p>	<p>Matiss Skabs</p>	<p>The operation of a station based on Article 48 of the CS has some uncertainty. We cannot ask ADM to publish the characteristics of their station used for their defence system. This issue will be discussed in the next RRB and may be reported to the next WRC or Plenipotentiary Conference. If the objection was in the course of RR9.21 procedure and continued, the notified station may be recorded under the condition of RR4.4 with respect to that station of the objecting administration, even if the parameters are not known.</p>
<p>I find a definition of station in No. 1.61 of RR. One or more transmitters or receivers or a combination of transmitters and receivers. So, could you pls give me an example of that station? Which kind of station in which service has combined transmitters? And, additionally, for Radio Relay System of Fixed Service, do we have such a station combined with many transmitters?</p>	<p>GAO Sheng</p>	<p>The station in general can have multiple transmitters and receivers. In the course of notification, a station represents links from a transmitter to a receiver. In the fixed service for example, if a transmitting station send the same signal with a frequency to multiple receivers (for example a FWA system) the multiple links as operations in one notice. If a base station uses 3-sector antenna, they can be notified in one notice for the base station with 3 operation where each operation can have a specific antenna power, radiated power, antenna height, antenna azimuth, antenna tilt, etc.</p>

		<p>A radio relay system usually uses different frequency for transmitting and receiving. In this case four different notices are required for the same site. (transmitter 1 for forward direction transmitter 2 for backward direction receiver 1 for forward direction receiver 2 for backward direction)</p>
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Questions on notifications

Question	From whom	Answer
Please explain as a beginner, how can start the notification process in an administrator for FM/Tv and FXM.	Thanuja Ariyaratne	See the Guidance for notification concerning terrestrial services at: https://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/Notification.aspx and also the webcast of Terrestrial Workshops at: https://www.itu.int/en/ITU-R/information/events/webcast/Pages/default.aspx
can some other institutions make a submission other than the State?	Carlston Jobe	Submissions can be made by institution if officially designated by the Administration concerned
particularly if the country is a member state of a regional organisation. Can that organisation make the submission of a notice?	Carlston Jobe	It must be the administration that notifies unless there are special agreements within the administration
where can a user see the notices he/she has submitted?	Maria Stefan	The complete notices will be published in Part 1 for MIFR or in Part A of the Special Section of a Plan
How long does it take from when submitting a notification until it appears in the one next BRiFiCs?	Maria Stefan 03:53 PM	It will take 1 month if it is notified in the frequency band other than those shared with space service, to publish a notice in a BR IFIC. It can reach 4 months if it is notified in a shared frequency band or planned frequency band.
With regard to pros 11.2 and 9.21, if we are not sure can we submit under both provisions? For example frequency within HF range, we normally coordinated with neighboring countries...but for other than neighbour countries, we not sure does it affected or not?	Asreen Anuar Abd Aziz	Submissions under 9.21 shall be made only if a footnote in RR Article 5 related to your frequency bands contains the obligation to obtain agreement under provision No. 9.21.
What does modification of the plan mean? Does it refer to the addition and or modifications of assignments?	Salebona Shongwe	Yes, the modification of the Plan means to modify the characteristics of a frequency assignment recorded into the Plan (MOD) or to include a new assignment (ADD) or to suppress an assignment recorded into the Plan (SUPP). Assignment not yet recorded into the Plan (appearing in Part A of a Special Section) can be withdrawn.

What is main difference in G11-G14 and T11-T16 notice types ?	Mantas Barcys LTU	G11-G14 notice types are related to Other services within the GE06 Planning and frequency bands
what's kind of information i have to put in consideration to do my first notification?	AGL-Gilson Inácio	Highly recommend you use the Wizard of TerRaNotices which will guide you for selection of notice type and all mandatory data items
We see 'guidelines' documents and the Preface - but sometimes what is listed there is in contradiction with the specifications of the TerRaSys format, which are in Circular Letters (e.g. CR/120) ?	Klaus Huber	<p>This question is linked to the replacement of CR/120 by the Guidelines made by the BR in 2019 to remove the discrepancy, which existed in these two documents concerning the directivity of antenna.</p> <p>According to Appendix 4 to the Radio Regulations, the directivity of antenna shall be mandatory for notification of VHF/UHF television and VHF sound broadcasting assignments. The CR/120 indicates that on electronic notices, this information is deduced from the existence or non-existence of an attenuation subsection. In 2018, the BR updated the relevant software to make the notification of the directivity of antenna mandatory in accordance with Appendix 4. After receiving questions about this change, the BR updated the Guidelines and indicated these replace the notifications instructions contained in CR/120.</p>
During the notification procedure, are the parameters and data of stations measured or designed?	GAO Sheng	Usually designed parameters are notified. However sometimes the measure parameters also be notified.
So, if a station combined several transmitters like you exemplified before, how to notify the delivered power. like described in 8AA, of that sort of station in previous experiences? The whole station or each transmitter?	GAO Sheng	A notice can include multiple operations. Each operation includes the power (8AA) and radiated power (8B), antenna azimuth, antenna height, antenna tilt and etc. For example, 3-sector antenna with different power can be notified in one notice.
Can I make notifications in SMS4DC at all?	gilson.inacio@inacom.gov.ao	That software is able to create notices for assignments in the fixed, the land mobile and the broadcasting services as well as earth stations in the space services.
Where can I find this form to make notification? and how long this process during?	gilson.inacio@inacom.gov.ao	The notices are available in TerRaNotices available in the BR IFIC

Does it have any gain to notify several terrestrial station in the same city with the same frequency and characteristics, due to the fact that all of them normally locate in the same coordination contours of earth stations of other countries. can we say notifying one of them automatically protect all of them. is this case also correct for several identical earth stations which are near each other.	Reza Naderi	No. In accordance with RR No.11.17, the individual notice of frequency assignment to stations with the coordination area of an earth station shall be notified. Normally the protection is based on the individual receiving terrestrial station. Even the stations are in the same city, they might have different locations. In this case they are in the same contours of earth stations of neighbouring countries. However, in the course of bilateral coordination procedure, the interference levels would be different and some of them can get an agreement while some other cannot. The two side of situation of interference should be considered in the coordination.
is the direct focal point user supposed to send an e-mail for access request to ITU to get access to WISFAT?	Maria Stefan 03:21 PM	No, it must be your administration that sends an official e-mail to the BR indicating: name, position, service e-mail and ITU user login with TIES services to brmail@itu.int
I have TIES access but not WISFAT...so I would like to also have WISFAT. The DFP user still works with us	Maria Stefan 03:29 PM	An official request should be sent to the BR Director (see CR/297)
Can you please develop a bit further?	Maria Stefan 03:30 PM	The creation of the TIES account is the first step for registering a notifier. Once the TIES account is created, at the request of the Administration, the person is registered by BR as notifier in the WISFAT database (see CR/297)

Question on terrestrial BRIFIC and related publications

Question	From whom	Answer
To do the exercises, do we need to download BR IFIC? For the time been we don't have subscription for downloading. Is there any method to do the exercises?	Muditha Gunasinghe	The BR IFIC used for the workshop is the 2933 edition and can be downloaded from the Terrestrial workshop web page at https://www.itu.int/en/ITU-R/terrestrial/workshops/WRS-20/Pages/default.aspx
The MDB Extract File on the website. Is it possible to update the BRIFIC database using	Salebona Shongwe	No, these extract MDB files only contain the changes in their corresponding BR IFICs and cannot be used to update the contents of previous BR IFIC databases. The latest ISO file published on the web or

<p>this file? Or the only way is to download the ISO file?</p>		<p>the latest BR IFIC DVD contains the latest updated version of the BR IFIC database.</p>
<p>Does BR IFIC (mdb file) downloaded from ITU website contains overall existing database or the ones that only needs be notified/added/suppressed? Thanks</p>	<p>Farhah Toha</p>	<p>Those MDB files available on the terrestrial BR IFIC web page for each BR IFIC edition only contain the changes (additions, modifications, suppressions, withdrawals etc.) on the MIFR and Plans published in that specific BR IFIC edition. In order to have access to the whole database you should have the BR IFIC DVD or its ISO image file.</p>
<p>When do we need older versions of BR IFIC. Does the latest version meet all our needs?</p>	<p>GOKHAN.KARATAS</p>	<p>Older BR IFICs may be needed for history check purposes. Normally, the latest BR IFIC meets most of our daily needs.</p>
<p>In case of using BR-IFIC within an organisation, should the database be installed in an individual PC and afterwards copied to the common resource in the corporate network? or can it be installed directly in the network?</p>	<p>Angel León</p>	<p>Both options work for organizations. You may decide to put the database on each individual PC or on a network drive.</p>
<p>Where characteristic of assignments published in Special Section No RR 9.21/C/ are available?</p>	<p>Juris Rencis [LVA - VAS ES]</p>	<p>Special Sections RR9.21 are published in PDF format in the BR IFIC. Also, available at https://www.itu.int/en/ITU-R/terrestrial/brific/Pages/default.aspx, see for example https://www.itu.int/en/ITU-R/terrestrial/brific/BRIFIC/SpecialSection/RR921/RR921C992.pdf</p>
<p>how to replace the old BRIFIC database installed in our pc with the latest BRIFIC database edition? should we uninstall the older BRIFIC edition first and then install a new one?</p>	<p>Yudhistira Prayoga</p>	<p>When a new BR IFIC is installed, it copies the new database but does not delete the old database(s). You do not need to uninstall the old BR IFICs.</p>
<p>How we can download the BRIFIC?</p>	<p>GUI Mamadi NABE</p>	<p>BR IFIC can be downloaded by users designated by administrations and subscribers at https://www.itu.int/en/publications/ITU-R/Pages/publications.aspx?lang=en&media=electronic&parent=R-SP-LN.IT-2020</p>
<p>I think we don't need DVDs. i ALREADY wrote it to save money to ITU.</p>	<p>Dr. Haim Mazar</p>	<p>According to Article 20 of the Radio Regulation, the ITU is mandated to publish this information. As indicated in CR/361, in case of any regulatory dispute, the original BR IFIC (Terrestrial services) on DVD-ROM shall prevail against the downloaded version of the BR IFIC (Terrestrial services) in ISO format and a local copy of the DVD-ROM created from this ISO file.</p>

Question on notification of assignments to broadcasting stations

Question	From whom	Answer
Can you explain as how to create a notice for a GS1 Assignment and GS2 TDAB Allotment and explain the various parameters included in the notification file field on the GS1 and GS2 format	CHIBANI-ALG	The description of the electronic format and the data items of the notices GS1 and GS2 for the notification of digital sound broadcasting (T-DAB) assignments and allotments, respectively, are provided in the Guidelines for GE06 submissions related to terrestrial broadcasting services. Please see also examples of GS1 and GS2 notices at https://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/FMTVNotices.aspx#GE06Notices .
how to make ADD notice for DRM (digital radio Mondiale)station in LF/MF band ?	chelali	It is possible to notify assignments to DRM stations using T03 notice for LF and MF sound broadcasting in Region 1 and MF sound broadcasting in Region 3 and T04 for MF sound broadcasting in Region 2. For further information, please see Guidelines for notification relating to the GE75 and RJ81 Agreements and examples at https://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/LFMFNotices.aspx#T03Notices .
Can you say something about the difference between publication T03 Brific and Master reg.?	Gordana Lunestad	<ul style="list-style-type: none"> - T03 in application of Article 4 procedure for the addition of a new assignment to the GE75 Plan or for modification of an existing assignment recorded in the GE75 Plan (t_action=ADD or MODIFY). This modification will be published in a Special Section of GE75 (LF/MF). - T03 in application of Article 5 procedure for the addition of a new assignment to the MIFR or for modification of an existing assignment recorded in the MIFR when the technical characteristics of the assignment being notified are not the same as in the Plan (t_fragment=NTFD_RR). If they are the same, notice form TB7 is to be used. At the end the assignment will be recorded in the MIFR. <p>The BR IFIC concerns the publications of “fragments”, i.e, GE75, GE84, Art 11 (MIFR)</p>
good afternoon, what is the criteria to decide if a published assignment (not recorded) in Part A is considered in the analysis? thank you	Juan Pablo Hernandez (MINECO)	When you start GE84 Compatibility Analyses or GE84 Optimization tools, tick the check box “consider TIP”.

<p>Good afternoon, I want to understand the difference between NFS and others EU information, what's the most important to analyze</p>	<p>AGL-Gilson Inácio</p>	<p>The NFS is the nuisance field strength generated by one source of interference (also called single source interference) The Eu represents an aggregate interference which is a summation of multiple single sources of interference, using the simplified multiplication method as described in Chapter 4 of Annex 2 to the GE84 Agreement In the context of the consideration of a proposed modification to the Plan, the Eu should be assessed. In the optimization tool, only the NFS is calculated due to involvement of many requirements which are not and may never be included in the Plan.</p>
<p>For research with the flexible channel, the polarization is horizontal and the spacing is 100KHz or in our countries, the polarization is vertical and the spacing is 200 or 300KHz, so it does not affect the result?</p>	<p>1- GUI Mamadi NABE</p>	<p>We are assessing the NFS received and generated, considering 100 kHz spacing. 200kHz and 300 kHz refer to the bandwidth. The bandwidth is not taken into account in the calculations. With respect to the polarization, if one transmitter is operating in H polarization and the other transmitter is using V polarization, polarization discrimination is applied, if the check box is ticked.</p>
<p>For GE84 tools, those info have one format? or we can put at any order...?</p>	<p>AGL-Gilson Inácio</p>	<p>The format to be used is the T01 notice format</p>
<p>our country (Indonesia) is not listed as part of GE84 Countries, so can we also used the T01 notification form to notify our FM radio station?</p>	<p>Yudhistira Prayoga</p>	<p>Yes, an administration which is not part of GE84 Agreement can notify to MIFR its FM radio stations using T01 the</p>
<p>For the new comer to organization, how can get knowledge or training in this GE84 tools?</p>	<p>Martins Langa</p>	<p>In addition to WRS, on the https://www.itu.int/en/ITU-R/terrestrial/broadcast/Pages/Services.aspx, you may find documentation on the GE84 Software. Also on the page of GE84 Online Workshop on GE84 optimization for Africa (https://www.itu.int/en/ITU-R/terrestrial/broadcast/africa/Pages/Workshop.aspx), materials such as videos, presentations, examples and documentation are provided. And finally, if any questions or assistance need, email to BRBCD@itu.int</p>
<p>what is the action on countries do not make agreement to Geneva84?</p>	<p>Muditha Gunasinghe</p>	<p>The administration which wishes to modify the Plan should preferably seek the agreement directly from administrations whose services are</p>

		likely to be affected. These affected administrations have 100 days following publication in Part A to provide with their comment (agreement or objection). No comment within this 100-day period means an agreement according to provision 4.3.11 of Article 4. Then notifier-administration can submit TB3 notice for this assignment to be recorded into the Plan. In case of objection, the 2 administrations have 2 years and 100 days for coordination. Then pursuant to paragraphs 1.3 of Part A2 and 4.6.1 of Part A5 of the Rules of Procedure (RoP) if no agreement is reached at the end of this period, the pending assignment will be deleted from database and return the administration notifier. The administrations may request the assistance of the BR at any stage.
Do these tools use digital terrain modelling or assume flat earth model?	Oswald Kooma	Normally the tools consider terrain only via the effective antenna heights. The only tool which use terrain in eTools are the P.1812 calculations (currently using SRTM-3 90m)
You are calculating the field strength at the border of the country too? Or only on the transmitter station location?	Viktor Stooss	The NFS and Eu, based on GE84 tools, are calculated at the receiver site.
Does the GE84 compatibility tool take into consideration the ground terrain when calculating the NFS?	Bharati Ramrekha	Terrain is currently considered only via the effective antenna heights.
what is deference between (28 Day Period) &(100 Day Period) ?	Salem Tabet	‘- The 28 Days Period is the Limit for an Administration to declare itself affected - 100 Days Period is the Limit date for comments Both deadlines are considered from the date of publication of the Special Section annexed to the BR IFIC.
after the notices published in part B. Is it recorded in the plan? And we can access it from the online tools or only access the notices recorded in the MIFR ?	EGY, Ahmed Elkaradawy	After publication in part B, the assignment is recorded in the Plan. It can be accessed from eBroadcasting platform as Plan Entry. For the notices recorded in the MIFR, you can also use the online platform eMIFR
Q1 :During the optimization exercise period will the provision 4.6.1 of part A5 of the Rules of Procedure relating to the Geneva	MRC_ Fatiha ZERGANI	Q1: No new addition to the Plan will be encouraged, if agreed by African countries during the 1 st Frequency meeting. But if the proposed modification was published in part A before the start of the optimization

<p>1984 Regional Agreement be applied. Knowing that no submission to BR is tolerated during this exercise.</p> <p>Q2 : What about the assignment that has been deleted by this provision, the Administration shall notify it in order to be taken into consideration in this exercise of optimization</p>		<p>project for Africa, and it gets all the agreements, nothing prevents it from being published in part B and recorded in the Plan.</p> <p>Q2: You may modify the Plan before the 1st frequency coordination meeting , or have it among requirements and coordinate it during the optimization process for Africa.</p>
<p>Thanks for answer and after the end 28 day can the affected admin send their objections</p>	<p>Salem Tabet</p>	<p>Yes, the affected administration can send their comment within the 100-day period following the date of publication in Part A</p>
<p>GE84 what is difference between NTFS & EU and what to considered to calculate interference ?</p>	<p>Salem Tabet</p>	<p>The NFS is the nuisance field strength generated by one source of interference (also called single source interference)</p> <p>The Eu represents an aggregate interference which is a summation of multiple single sources of interference, using the simplified multiplication method as described in Chapter 4 of Annex 2 to the GE84 Agreement</p> <p>In the context of the consideration of a proposed modification to the Plan, the Eu should be assessed.</p> <p>In the optimization tool, only the NFS is calculated due to involvement of many requirements which are not and may never be included in the Plan.</p>
<p>What is the difference between e tool and GE06 calc?</p>	<p>Gordana Lunestad</p>	<p>-eTools allows to run coordination examination and conformity examination under Article 4 of the GE06 Agreement, Compatibility Analysis for GE06, GE84, and provides P model tools, etc.;</p> <p>-GE06Calc is used for conformity examination under Article 4 and/or Article 5 of the GE06 Agreement. ; It also “reads” the compatibility analysis results done through eTools-GE06 Compatibility Analysis.</p>
<p>what is GE75 tools online is available to calculate interference ?</p>	<p>Salem Tabet</p>	<p>No online GE75 tool is currently available to calculate the interference. If needed, the Bureau could prepare what-if study for a specific notice.</p>

E broadcasting platform is prepared for special broadcasting plans for region 1 and region 2. Can we use this platform for region 3 in general?	Muditha Gunasinghe	If an Administration is not party to broadcasting agreements, there will be no data on eQuery, Pub and myAdmin. However, eTools propagation models P.1812 and P.1546 can be used.
Can you say few words about prop. model tool	Gordana Lunestad	He will shortly start the part on P models.
Greetings! Is there a limit on the number of users from one administration who have access to MyAdmin? Could you also explain why focal point can lack access to MyAdmin?	[KAZ] Aigerim Mambetalina	There is no limit. Administrations should send to brbcd@itu.int a consolidated list with focal points (first name, last name, ties username and email address). At this point the BR would take necessary actions to allow access to myAdmin.
How do we demarcate "warm sea" and "cold sea" in propagation analysis ?	Muditha Gunasinghe	This depends on the specific propagation model used. Please refer to the relevant recommendations (P1546; P1812).
The min field strength value for DVB-T2 calculation is taken from Rec. ITU-R BT.2033	GIHAN HELMY	BT-2382
Why frequencies below 5 MHz for broadcasting aren't listed as part of AR12 HFBC freq band? If we used freq below 5 MHz, how to notify those frequencies	Yudhistira Prayoga	HF bands below 5900 kHz and allocated to the Broadcasting service, are governed by the provisions of RR 5.16 to RR 5.20 and RR 23.3 to RR 23.10.
What is number stations? What is the nature of their origin? How comply this stations to the ITU Radio Regulations?	Vladislavs Himins	
what is software to be use GE75 to calculate harmonic interference?	Salem Tabet	There is no currently available tool to calculate the interference. The Bureau has planned to develop such software in the future.
Is there any maximum permissible bandwidth for HFBC?	Benny Elian	Depending on the type of modulation, different values of bandwidth is used. As a general principle, this value shall not exceed 10 kHz.
how to download the reference tables	GIHAN HELMY	The HFBC Reference tables are available on: https://www.itu.int/en/ITU-R/terrestrial/broadcast/HFBC/Pages/Reference.aspx
I noticed these frequency bands are allocated for broadcasting in Region 3 on primary basis:	Benny Elian	As replied by M. Miltchev , the listed frequency bands on the web, are HF frequency bands for international broadcasting and subject to Article 12 of RR. The frequencies that you listed in your question are listed under

<p>3200 – 3400 kHz 3900 – 4000 kHz 4750 – 4995 kHz 5005 – 5060 kHz</p> <p>is there any specific reason why these bands are not listed in the HFBC web page?</p>		<p>national HF Broadcasting listed at https://www.itu.int/en/ITU-R/terrestrial/broadcast/Pages/Bands.aspx</p>
<p>Can adms add new allotments? and if so, what do they need to do?</p>	<p>USA - FCC - Louis Bell</p>	<p>Yes. New allotments can be added according to GE06 Plan. A new allotment can be added by submitting the appropriate notice type (GS2 for sound or GT2 for TV) and following the usual coordination procedure after publication in Part A.</p>
<p>if two administrations have agreed one assignment inside a recorded allotment, what would be the procedure? via wisfat to be published in part A? via BR the compatibility according to Annex 4 of GE06? thank you</p>	<p>Juan Pablo Hernandez (MINECO)</p>	<p>For assignments inside a recorded allotment (converted assignments) the normal procedure would be to submit as a converted assignment. In this case no agreements with other administrations are needed. Instead, the converted assignment needs to be in conformity with the Plan (conformity examination) according to the criteria established in Section II of Annex 4 of the Agreement. A second possibility would be to submit this assignment as a single assignment (1S) indicating the agreement of the other administration. In this case, the proposed modification would be published in Part A with the list of potentially affected administrations according to Section I of Annex IV of the Agreement and the notifying administration would need to get all agreements from these administrations before requesting its publication in Part B.</p>
<p>Do the references in the plan to "T-DAB" imply any kind of limitation for the use of other technologies for digital sound broadcasting (namely DVB-T2 Lite)?</p>	<p>Angel León</p>	<p>When putting a station in operation, GE06 Agreement allows the submission of an entry of the Plan under Article 5 (for recording in the MIFR) using different characteristics of those recorded in the Plan. If the notified assignment is in the broadcasting service within DVB-T or T-DAB systems, provision 5.1.2 would apply. If the notified assignment is to be used in the broadcasting service for other systems than DVB-T or T-DAB, or is operating as other primary services, the provision 5.1.3 would apply.</p>
<p>Should the GE06 Calc tool be updated to the newest version of BRIFIC?</p>	<p>Maria Stefan</p>	<p>It is highly recommended to use the latest BR IFIC for calculations using GE06 Calc because results of calculations may differ. While launching the</p>

		GE06 Calc automatically addresses to ITU servers for checking if there are any updates relating to the software.
In our countries in general it is not easy to modify the antenna diagram with the degrees used by e-tools. What to do?	1- GUI Mamadi NABE	It is recommended to use TerRaNotices tool which allows to introduce antenna diagram in 10-degree steps.
Good Afternoon, when I use the RJ81 e-tool, at the moment to download the outcome there is an error message that say "An error occurred performing GetTestPackageData action. The problem has been notified to the ITU. Please note the current date and time to require assistance 12/10/2020 4:46:57 PM"	Prg - CONATEL – Pablo Centurión	When you have this issues please send an email to BRBCD@itu.int and we will reply as soon as possible. In this case the files had a duplicate, and as the Online Validation had not yet been integrated for LFMF calculations the software had an issue. We implemented a fix.
Is TIES account enough to access myAdmin? The page does not load for me...	Maria Stefan	No, the administration should notify a list of Focal Point for broadcasting online tools to brbcd@itu.int
Is there the option for what type of propagation model we will use?	Demetris Takoushis (Cyprus)	P.1812 and P.1546 calculations are implemented in eTools. For the other calculations available in eTools (GE06, GE84,...). the propagation model used is outlined in the agreement.
is there a difference between to choices P1812v4 and P1812 v4 ?	G.H.	This is a typo. You can run P1812v4 P2P (Point-To-Point) and P2A (Point-To-Area) calculations. V4 labels the version of the recommendation in use.
one practical question, (althought , maybe it is not the correct forum), what recommendation you would use to simulate a land path in the FM band (87,5-108MHz) and DTT (470-694MHz)? we have been using ITU-R 526. thank you	Juan Pablo Hernandez (MINECO)	The ITU-R P.526 is not a full propagation model, it deals with diffraction only. You can choose the model depending on your needs. Both P1812 and P.1546 can be used in that frequency bands and for those services.
When WE CAN have e tool for GE75 plan?	amel.djenane@tdz.dz	It is not in the top list of priorities due to low usage, but we hope by WRS2022.
If an administration followed all the procedures in GE84 but still has objections in some notification from other administrations	Eng.Omar Abdulla Ebrahim (Bahrain)	If the administration is not affected based on ITU calculations and has not requested to be considered as affected according to provision 4.3.2 of Article 4 of the GE4 Agreement, its objection is not taken into consideration.

which are not affected based ITU calculations then what is the solution?		
Do aeronautical compatibility tests for GE84 and GE06 have to be done only for pre-coordination requests? Sometimes it is indicated in part A which stations have to be checked for aeronautical compatibility. Is it too late to check this after receiving the notification in Part A?	Maria Stefan 03:42 PM	No it is not too late. You may wish to investigate the compatibility with respect to the aeronautical service even after the publication of the notices in Part A, in the comments period established in Article 4 of the relevant Agreement.

Question on notification of assignments to fixed and mobile stations

Question	From whom	Answer
For the Base Station, there are often 3 sectors of a station contains 3 antennas. Will we notify this station for 3 times?	GAO Sheng	If a base station uses 3-sector antenna, they can be notified in one notice for the base station with 3 operations where each operation can have a specific antenna power, radiated power, antenna height, antenna azimuth, antenna tilt, etc. Therefore, no need to notify 3 times.
Do we have other provisions in FXM notification procedures or do we have only two RR11.2 and RR9.21... for example for Fx (point to point)?	hanine	In addition to RR11.2 and 9.21 used for transmitting stations there are: RR11.9: for receiving land stations for recording in the Master Register; and RR11.17 for typical transmitting stations for recording in the Master Register
How do I ensure that I am using the right notification. E.g. using a T14 notification instead of a T12 notification.	Salebona Shongwe	you may use the functionality in TerRaNotices which is under File/Wizard. T12 is under provision RR11.2 for notifying a frequency assignment to a transmitting station T14 is under provision RR11.17 for recording many stations, with one notice, having the same technical details within a given area.
Why, in case of T11 notification, assignments with all the significant data like assignment identifier, operating frequency, radiation class, location of station, call sign, nature of service etc., but have different polarizations	Glebs Kuzminovs	The group of technical parameters identifying the uniqueness of an assignment is formed by: Assigned Frequency, Class of station, Bandwidth, Emission Class, Geographical coordinates and the Operations Hours. The polarization is an antenna parameter. Therefore the different

are considered as duplicated assignments when being validated?		polarizations shall be notified in different antennas within the same notice. .
What are the provisions for considering the antenna patterns?	Juris Rencis [LVA-- VAS ES]	For stations in non-planned bands, there are no provisions in the RR that oblige to consider antenna patterns in identification of affected administrations. However, it is used in a bilateral coordination and it gives an effective way to get an agreement of neighbouring countries.
Can You please name the tool used in slide Nr.16 to determine coordination area of Earth station? Is it available for national administrations?	Glebs Kuzminovs	BR Space Department provide with a tool named GIBS (Graphical Interface for Batch Calculations on PC) for this purpose, which can be downloaded from ITU-R webpage https://www.itu.int/en/ITU-R/software/Pages/gibc.aspx
hello, which provision is referring to coordination procedure between two Fixed stations or two land mobile stations or between land fixed and land mobile station	hanine	The coordination between terrestrial services is mandated when a footnote is referring to RR9.21. There are some other provisions in WRC Resolutions to mandate coordination between terrestrial services for HAPS and oceanographic radar.
what if coordination agreement couldn't be reached between administrations, could we continue to the notification process?	Yudhistira Prayoga	It can be notified but would be returned with an unfavorable finding. Therefore it is highly recommended to finish the coordination before notifying the assignment.
Can administration use propagation model defined in App7 or SM.1448 ?	mindaugas	For coordination under RR9.16 and RR9.18, Appendix 7 and Recommendation ITU-R SM.1448 should be used. However for RR9.21 coordination the agreed criteria and methods which are given in the footnote in question or in an associated WRC Resolution or in an associated RoP should be used.
In maritime service are ship stations used to be notified like coast stations?	TUN Hajer Ghazali	Ship stations shall not be notified according to No. 11.14 . It is covered by notification of a receiving coast station with class of station MS under 11.9 (using notice type T13).
How to calculate the interference of the stations in APP25	renhong	The Bureau has implemented the calculation tool for identification of apparent incompatibilities between a proposed allotment and any other existing allotments in AP25. It applies the technical standards, method of calculation and computer programs in accordance with Resolution No.325 of WARC MOB-87 (IFRB CR No.843).

when is pfd unit dB(W/(m ² .MHz)) used and under what condition can it be converted to dB(W/m ² .4kHz) ?	Teng Lock Khoo	The two units has no difference to use for expression of pfd except for the different reference bandwidth. The unit dB(W/(m ² .MHz)) can be converted into dB(W/m ² .4kHz) by adding $10 \cdot \log(4/1000) = -24\text{dB}$.
In the exercise 9 of the "Coordination under No. 9.21 of the RR for Terrestrial services (FXM)" presentation, the trigger pfd of -181 dB(W/m ²) over 4 kHz of reference bandwidth was converted to field strength = 28 dB(uV)/m. What formula was used to derive the field strength from pfd?	Maxim Cumpanici	The formulas to convert between different types of criteria are given in Recommendation ITU-R P.525.
What are the provisions/measures in the RR to reduce the noise/interference level at the space station from the IMT stations operating in S band by neighbouring administrations?	Khagendra Singh	The limits of antenna power (8AA) and radiated power (8B) are given in Article 21 (Nos. 21.3 and 21.5). The S band is included in Table 21-2 of the RR. There are many ways of reducing interference/noise level at the space stations. Reducing power, using high gain antenna, placing antenna not directing GSO and etc are the way of reducing the interference to the space station.
Situation: there is a frequency assignment to bases station (T12 form) in the MIFR. Directivity of the antenna is D, Beamwidth 60 deg and Azimuth 145 deg. Reference antenna is optional and not given. How can I determine the antenna pattern? What is front-to back ratio of such antenna?	martinsg	There is no way to obtain the exact value of the front-to-back ratio of an antenna from the notified specifications. However we can estimate the ratio using a reference antenna radiation pattern given in Recommendation ITU-R F.1336 .
What to do with frequency assignment of land mobile station, which in real life situation is capable of causing harmful interference (RR11.2), but at the same time it shall not be notified (RR11.14)? There is no FB. To notify mobile stations assignment or not?	martinsg	The individual mobile station shall not be notified in accordance with No. 11.14 however, the mobile station communicating with a land station is, in the process of notification, notified as a receiving land station using notice type T13 with class of station ML.

What is the height above ground level of typical transmitting stations antenna? Is it 2 m, 100 m or maybe 1000 m?	martinsg	Normally it is 1.5 m for portable stations, 30 m for land stations and fixed stations 10000 m for aircraft stations. However, if a specific height is given in the Radio Regulations or in ITU-R Recommendations, as a reference for a frequency band for a specific service, it should be respected.
Can you explain how HAPS station is notified? Is it under satellite or terrestrial service?	Ranjala Gunathunge	With a definition, the HAPS is under the scope of the terrestrial service and should be notified as a terrestrial station. BR is developing the notice forms and the program for calculation of compatibility between HAPS and other services and going to send a circular letter with a detailed information for the notification of the HAPS.
In some cases when notifying T11, coordination is required with neighbouring countries. How these countries are identified by ITU or administration. Is there a tool available?	Janko Dolgan, AKOS Slovenia	If the FX in the coordination contour of a FSS earth station, AP7 should be applied. If it is within 1200 km from the BSS service area, the RoP 9.19 should be applied. If it is in the band of Appendix 30 Plan, it should follow the criteria and method given in Appendix 30. If it is subject to RR9.21 coordination, the criteria given in the related footnotes, in a WRC Resolution or in an associated RoP. For RR9.18 and 9.19 coordination, the notifying administration should identify the affected administrations. For RR9.21 coordination, BR identifies the affected administrations. The tools are depending on frequency bands. The GIBC tool may be used for the identification of the affected earth stations.
What are the possible process to correct or modify record T11 already recorded in part 2 of MR.	Janko Dolgan, AKOS Slovenia	If your assignment is published in Part 2, you can correct it by submitting a MODIFY notice

Question on maritime issues, MARS database submissions coast and ship stations for Lists IV and V,

Is it obligation for Administration to register all coast guard station to ITU? Thank you?	Osmond Aritonang	There are no provisions in the RR which put obligations to register all coast stations in the ITU maritime database. However, administrations, through provision of RR 20.16, are
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		urged to provide such information, considering the importance of this information for safety at sea.
Hello :) First and foremost, can you please explain the scope and responsibility of a national regulator when issuing coast/port/ship station licenses.	Yannish Sewpersadsing_Mauritius	The provisions on licenses are contained in Article 18 of the RR. However, the responsibility of national regulators concerning issuing of coast and ship station licenses is subject to the administrations concerned.
2. Do we need to notify all vessels to the ITU? even those small vessels which operate in territorial waters only.	Yannish Sewpersadsing_Mauritius	There are no provisions in the RR which put obligations to administrations to register all ship stations in the ITU maritime database. However, administrations, through provision of RR 20.16, are urged to provide such information. It should be noted that Resolution 356 (WRC-07) underlines the importance of ship stations database for enhancement of safety at sea.
In the case that an operator uses maritime handheld VHF radios in the port area, does the regulator need to assign specific call sign and notify to ITU as a port station?	Yannish Sewpersadsing_Mauritius	According to definitions in the RR. Port station: A coast station in the port operations service which is not intended to be used while in motion. Therefore, handheld VHF radios, by nature, cannot be used as a "coast station".
What is a pilot station in the case of 00MID3	UGA-George WK	There is no definition for "Pilot Station" in the Radio Regulations. However, Pilot Stations refer to those coast stations providing communications to support maritime pilotage services.
I missed the template/forms bit. May the presenter share the link to download one.	1. UGA_Bogere Joseph Alfred	Here is the link to the MARS presentation, where links to notification forms, are available: https://www.itu.int/en/ITU-R/terrestrial/workshops/WRS-20/Documents/MaritimePublications_MARS.pdf
In addition to Yannish's question, do we have also to notify the inland control stations that may serve as a coastal station	UGA-George WK	If a station has the status of "coast station" i.e. land station in the maritime-mobile service (RR Nos. 1.69 and 1.75), it may be notified to the ITU as a coast station.
are the accounting authorities mandatory for the all ship stations notification or only for those using satellite equipment?	Bilel Benzid - Tunisie	Accounting Authorities fields are not mandatory for ship notifications in general.

		However, field 19 need to be notified when the ship is equipped with a satellite terminal and associated with an accounting authority dealing with satellite communications.
is there any recommendation that we can use to ask the assistance of the BR	BOUBAKARY Souley (ART)	You may contact BR through brmail@itu.int and provide with details on the topic.
Should ship station inspections be performed for all non-GMDSS vessels prior to issuing ship station licences? if not, can u please elaborate on good practices?	Yannish Sewpersadsing_Mauritius	The procedure of issuing ship station licenses, regardless GMDSS or non-GMDSS vessels, is subject to national regulations, including the need of ship stations inspections as a part of this procedure.