

FXM Submission guidelines
(Updated on 25.10.2001)

**Consolidated information concerning the use of the Forms of notice/submission
and the file formats for electronic notification/submission of frequency
assignments/allotments to stations in the fixed, mobile and other terrestrial
services (excepting the broadcasting service in the LF/MF and VHF/UHF
bands)**
(based on BR Circular-letter CR/118 and its Addendum 1)

Introduction

1.1 At various occasions, the Bureau informed the administrations about the activities on the modernization of its information systems, and especially on the moving from the current Frequency Management System (**FMS**), using a mainframe computer, to a client-server configuration, using PCs and relational databases under the Terrestrial Radiocommunication System (**TerRaSys**). Initial information on **TerRaSys**, together with an explanation of the differences between the **FMS** and the **TerRaSys**, was presented to the administrations in Circular-letter CR/36. Subsequent developments, related mainly with the FM/TV component of **TerRaSys**, comprising the VHF-UHF television and VHF sound broadcasting services, were communicated in Circular-letters CR/63 and CR/99.

1.2 With Circular letter CR/118 (dated 31 March 1999) and its Addendum 1 (dated 23 April 1999), the Bureau covered essentially all aspects that are relevant for the FXM component of the **TerRaSys**, comprising the fixed, mobile and other services (excepting the VHF/UHF broadcasting and LF/MF broadcasting). In the subsequent communications from administrations, the Bureau's attention was drawn to some missing elements as well as to some inconsistencies. The Bureau's own review of the subject matter also resulted in a need for some update of the material contained in the referred Circular letter (and its Addendum). As the development progresses, and with more intensive involvement of administrations in the testing of the new FXM component, the Bureau expects further refinement of the material dealing with the FXM component of **TerRaSys**. Therefore, the Bureau considers that it would be impractical to issue a revised version of the mentioned Circular letter every time an inconsistency is discovered. Instead of that, the Bureau considers that it would be more appropriate to keep an up-to-date version of the relevant material on the ITU Website. Such an approach is fully in line with the recommendations of the ITU Council concerning the production and dispatch of voluminous documents. Therefore, this document, which is essentially based on the information communicated to administrations with Circular-letter CR/118 and its Addendum 1, will be updated permanently so that administrations may have easy reference to the most recent (and up-to-date) situation in respect to the FXM component of **TerRaSys**.

1.3 This consolidated information on the FXM component of **TerRaSys** contains several parts. *Part 1* contains the description of the FXM structure (based on information of Annex 1 to Circular letter CR/118), the relevant notice forms are included in Part 2 (posted separately on this Website), the associated electronic format is presented in Part 3 (based on Annex 3 to CR/118) and the detailed description of the data as well as some additional explanations are given in Part 4 (based on Annex 4 which was communicated with Addendum 1 to CR/118). The relevant forms of notice take account of all requirements for coordination and notification, as specified in Appendix 4 of the Radio Regulations (RR), edition of 2001¹ and in various Resolutions and Regional Agreements.

¹ This edition differs from the previous edition of 1998, inter alia, in abolishing the prefix "S" in front of the Article numbers, provision numbers and Appendix numbers.

1.4 As indicated in Circular letter CR/118, the new formats, as described in Circular letter CR/118 as well as in this consolidated information, are the only formats which are to be used by the administrations, as from 1 October 1999, when notifying frequency assignments to stations in the fixed, mobile and other services (excepting sound and television broadcasting in the LF/MF and VHF/UHF bands).

1.5 In this connection, the Bureau already informed administrations that it completed essentially all examinations with respect to the notices, which were submitted in the old formats and which were receivable by the cutoff date of 1 October 1999. The relevant information can be retrieved from the December-1999 edition of the IFL on CD-ROM, which represents the last publication on the frequency assignment notices in the **FMS** format.

1.6 Frequency assignment notices related to the FXM component which have been received from administrations as from 1 October 1999 are being processed and examined by the Bureau on a provisional basis pending the introduction of the relevant TerRaSys component. The FXM assignments published in provisional Part 1, which constitutes the confirmation of their receipt by the BR, are contained in every edition of the BR IFIC in directory FXM_pub in Acrobat Reader and Microsoft Access formats. The FXM assignments published provisionally in Parts 2 and 3 containing relevant finding information can be also found in directory FXM_pub of the BR IFIC in Acrobat Reader format. These publications can not be accessed through the TerRaSys query program (TerRaQ). They are accessible using Windows Explorer (or File Manager) at the location CD ROM:\FXM_Pub\Partie_Part_Parte 1P\No 24XY Part 1P-index.pdf for Part 1 in Acrobat Reader format and \No_24XY_FXM_Part1P.exe for Part 1 in Microsoft Access format (24XY denoting the current BR IFIC number). For Parts 2 and 3 the location is CD ROM:\FXM_Pub\Partie_Part_Parte 2(3)P\No 24XY Part 2(3)P.pdf. To read notices published in MS Access Part 1P use the supplied software, which is to be found at

CD ROM:\FXM_Pub\Partie_Part_Parte 1P\Software\Setup.exe

1.7 The Bureau is presenting up-to-date and complementary information on TerRaSys at every seminar on spectrum management and consequently it encourages administrations to participate in such Seminars. Appropriate training is also provided to individuals of administrations at the regular training sessions in the BR (normally every spring and every autumn). Further information on these courses, as well as any additional information on this subject, is available from the following contacts:

- Seminars/training: Mr. M. Giroux, phone +41 22 730 5313, fax: +41 22 730 5785, email: brmail@itu.int;
- Queries of general nature concerning **TerRaSys**: Mr. A. Mendez, phone +41 22 730 5574, fax +41 22 730 5785, e-mail: brmail@itu.int.
- Specific queries concerning the FXM portion of **TerRaSys**: Mr. W. Frank, phone +41 22 730 5062, fax +41 22 730 5785, e-mail: brmail@itu.int.
- Requests for help with **TerRaSys** software: Mr. J. Boursy, phone: +41 22 730 5952, fax: +41 22 730 5785, e-mail terrasofthelp@itu.int.

PART 1

Description of the FXM component of the *TerRaSys*

1 Structure of the FXM records

1.1 The development of the FXM component (i.e. the *TerRaSys* component which deals with the fixed, mobile and other services, excepting the broadcasting services in the LF/MF and VHF/UHF bands) was preceded by a critical review of the current **FMS** structure, in which all elements were analyzed from the point of view of their compatibility with the requirements of Appendix 4 to the Radio Regulations, of various Resolutions which treat the issues of coordination and notification, as well as of the relevant Regional Agreements. In this connection, the comments of the representatives of administrations at various Seminars were reviewed, as well as those of participants in Task Group 1/4 which dealt with the establishment of the Radiocommunication Data Dictionary published as Recommendation ITU-R SM.1413. The main objective of this review was to identify those elements in the **FMS** structure which were not clear enough so that they were very frequently the source for erroneous submission of data. Furthermore, the concept of notification was reviewed from the point of view of its basic purpose, i.e. its relevance in the context of international frequency management. To this end, the Bureau concluded that many difficulties can be eliminated if the relevant elements for notification are grouped differently for the different services. The former concept of a universal notice, intended for use by many services in many frequency bands, proved to be inefficient, because of the different requirements for different services and, consequently, the Bureau decided to introduce many more notices, which are applicable only to certain categories of services. This approach, in conjunction with the supply of an appropriate software to administrations, for performing a preliminary data validation before their submission to the Bureau (*TerRaNV*), is expected to result in a considerable decrease of errors in the process of submission of data. Against this background, the Bureau proceeded to the design of the new FXM component of the *TerRaSys* for the fixed, mobile and other services, whose salient points are described hereafter.

1.2 The new FXM component is structured in several "fragments", notably:

- NTFD_RR (fragment which deals with the records in the Master Register and with the associated submissions under Article 11 of the Radio Regulations);
- Req_agrt (fragment which deals with the submissions under RR 9.21, in so far as terrestrial services are concerned);
- Com_Freq (fragment which deals with those records in the Master Register which are related to frequencies for common use, as specified in RR 11.13 and RR 11.14) - this fragment is maintained exclusively by the Bureau;
- AP25 (fragment dealing with the Allotment Plan of Appendix 25 to the RR and the relevant plan modification procedure);
- AP26 (fragment dealing with the Allotment Plan of Appendix 26 to the RR and the relevant plan modification procedure) - this fragment is maintained exclusively by the Bureau;
- AP27 (fragment dealing with the Allotment Plan of Appendix 27 to the RR) - this fragment is maintained exclusively by the Bureau;

- GE85M (fragment dealing with the frequency assignment plan governed by the Regional Agreement concerning the MF Maritime Mobile and Aeronautical Radionavigation Services for Region 1, Geneva, 1985);
- GE85N (fragment dealing with the frequency assignment plan governed by the Regional Agreement concerning the planning of the Maritime Radionavigation Service (Radiobeacons) in the European Maritime Area, Geneva, 1985).
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The structure of the FXM component provides for a full flexibility in removing of a fragment, or adding of a new fragment, if required, without difficulty, a feature which was not readily available in the former **FMS/PMS**.

Although the relevant database (***TerRaBase***) contains composite data concerning all these fragments, the relationship between each record and a specific fragment is established in a unique and unambiguous manner.

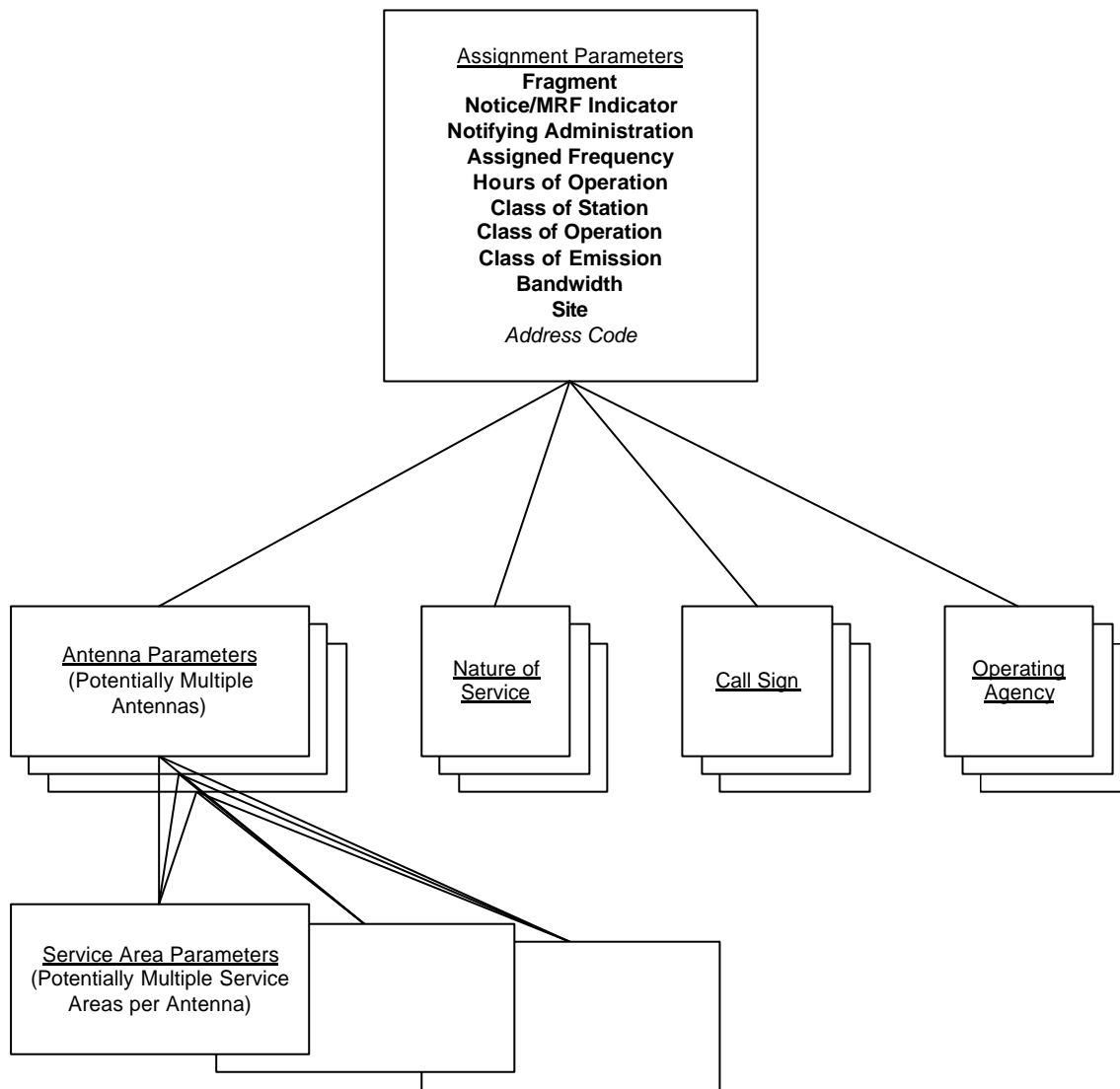
1.3 In the new FXM structure, the following concepts applicable to data contained in ***TerRaBase*** are used:

- the concept of "assignment" with respect to all records of the frequency assignments in the MIFR pertaining to the fragment NTFD_RR, with respect to all entries in the frequency assignment Plans, and with respect to all entries in the MIFR pertaining to the fragment Com_freq;
- the concept of "allotment" with respect to the allotments of the frequency allotment plans of Appendices **25**, **26** and **27** to the RR;
- the concept of "notice" with respect to all submissions of data under Articles **9** and **11**² of the Radio Regulations, and under the plan modification procedures of Appendix **25** to the RR and the Regional Plans GE85M (additions, modifications and suppression) and GE85N (suppressions only)³.

² In the context of Article **11**, the concept of a "notice" corresponds to the meaning of the "frequency assignment" as defined in No. **11.1**, which is sometimes referred to as a "frequency assignment notice".

³ The Bureau is considering the need for a notice in the context of the Allotment Plan governed by Appendix **26** (suppressions only).

1.4 Each assignment (or allotment, or notice, as appropriate) in the FXM structure in ***TerRaSys*** can be represented in the following way:



Each assignment (or allotment, or notice, as appropriate) is distinguished from the other assignments (or allotments, or notices, as appropriate) by certain specific fields (indicated in bold characters in the above graphical representation). The values of these specific fields are unique for the given assignment (or allotment, or notice, as appropriate) and they are used as identifying parameters (e.g. for identifying the target in the case of a submission of a notice intended to modify an existing assignment or allotment).

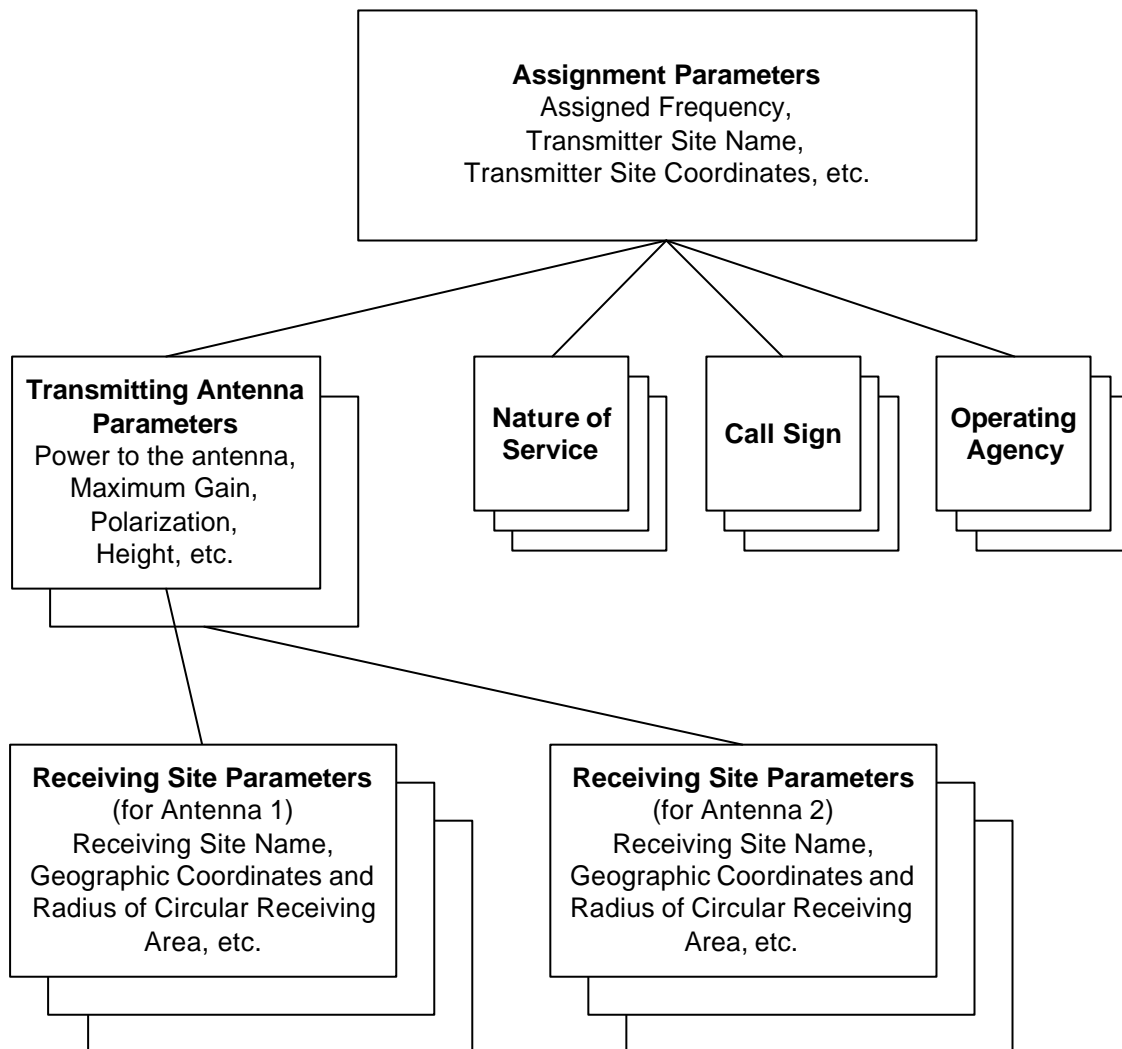
1.5 Each assignment (or allotment, or notice, as appropriate) in the FXM component of ***TerRaSys*** is further described with some additional attributes (data elements), which are organized in terms of "groups" and which may have multiple appearances. These data groups are the antenna parameters (which include the power delivered to the antenna), nature of service, station identification parameters (call sign), service area parameters, and, for some fragments, data on the operating agencies.

1.6 The data pattern concerning antenna parameters is essentially the same as the one in the **FMS**, with the allowance for multiple sets of transmitting antenna parameters. Similarly, the data pattern concerning the service area parameters follows the **FMS** structure, with the possibility of multiple service area per antenna (which was represented by the concept of "sub-entry" in the **FMS**). However, the **FXM** structure in **TerRaSys** provides for a possibility of notifying multiple entries in the fields "Nature of service", "Call sign" and "Operating agency", which represents a major departure from the current **FMS** structure which allows for only one entry in each of these fields. In introducing this change, the Bureau responded to the requests of those administrations which are licensing the same frequency to several operating agencies, for use under different conditions of operation (CO, CP, etc.) and with different call signs, in an unspecified time-sharing arrangement. Such conditions of use are represented, in the current MIFR, through a considerable number of assignments, which differ between them only by the nature of service (e.g. CO/CP), or by the call sign. The proposed new functionality will provide for substantial decrease of the number of recorded assignments, without any loss of the relevant information⁴.

1.7 The application of the above concepts, with respect to specific types of notice, is explained in the following paragraphs.

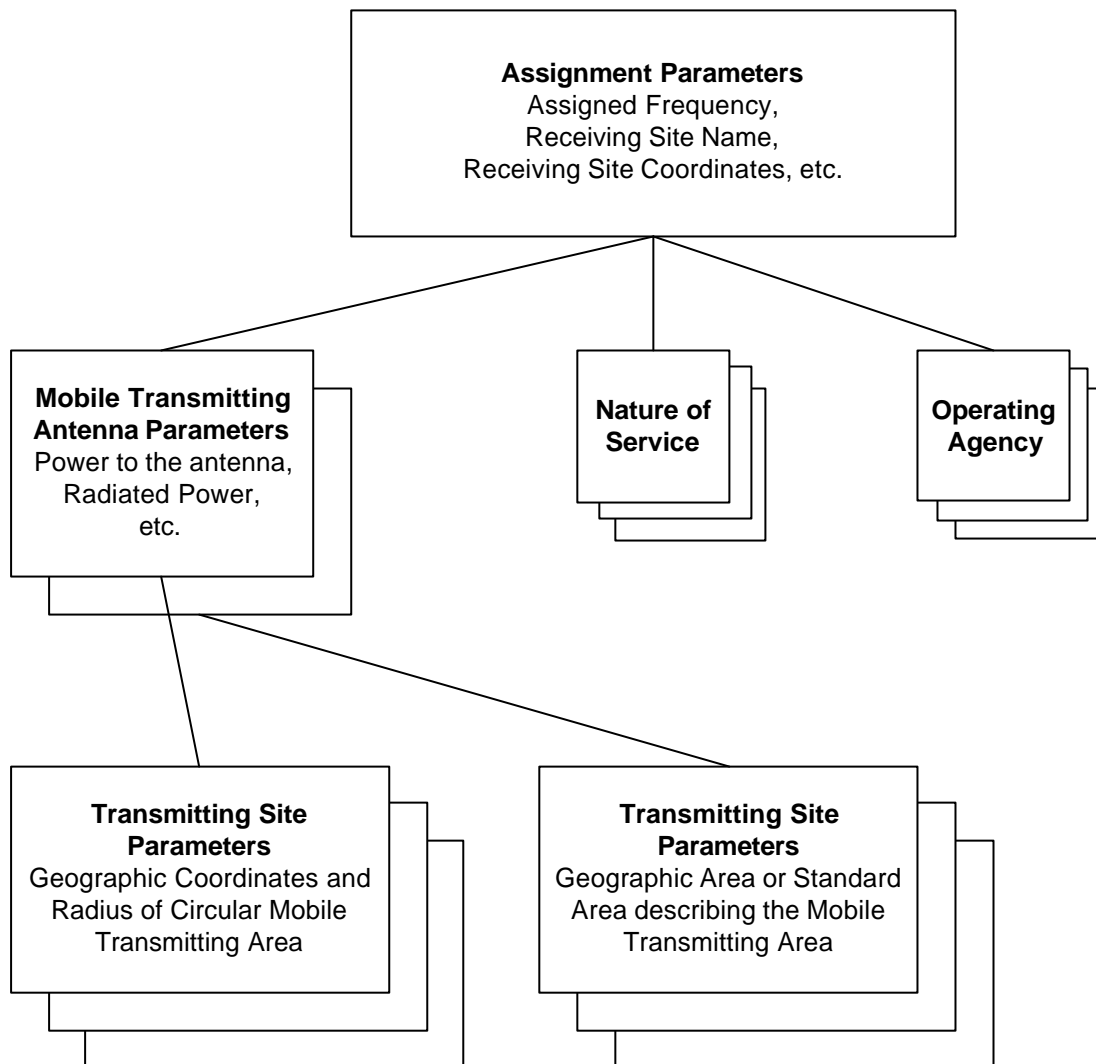
⁴ In case of the examination of the probability of harmful interference (e.g. under Resolution 300) the Bureau will use the most sensitive nature of service (e.g. CP).

1.7.1 For Notice Types T11 (individual transmitting station in the fixed services), T12 (individual transmitting station in services other than fixed service and the broadcasting service in the LF/MF and VHF/UHF bands), T16 (individual transmitting station for updating of the GE85M Plan), and T17 (individual transmitting station using adaptive systems at MF/HF), the general structure is as follows:



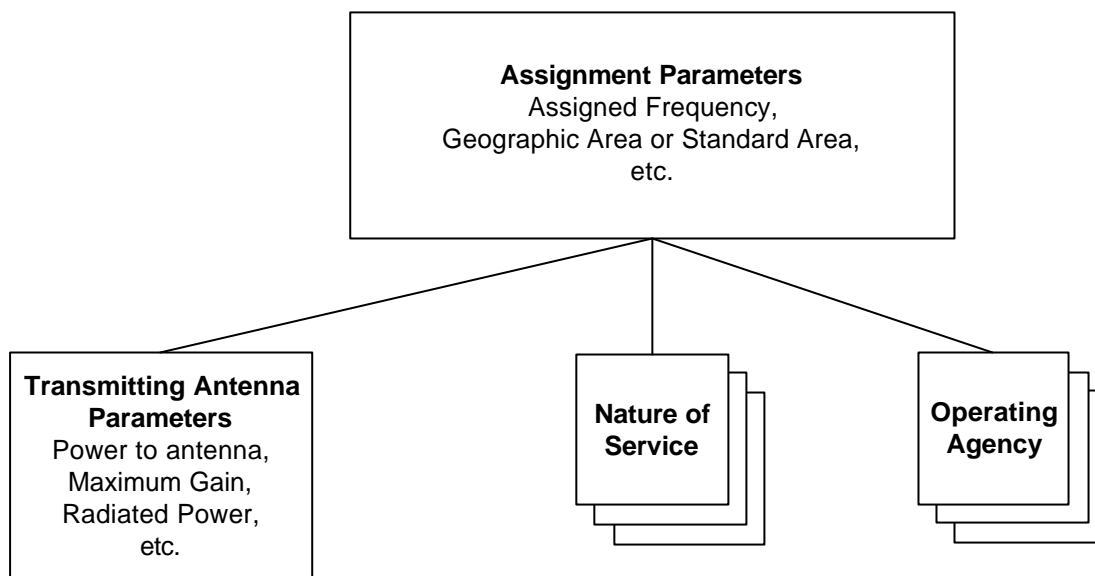
As shown in the above diagram, this notice has two sets of transmitting antenna parameters ("antennas"), each with its own set of three receiving sites. In fact, there is *no* limit concerning the number of "antennas" for one notice, and *no* limit concerning the number of receiving sites per antenna. Note, however, that the precise parameters for the assignment, the antenna, and the receiving site vary according to the Notice Type; the fields shown above are merely examples.

1.7.2 For Notice Type T13 (individual receiving land station), the general structure is:



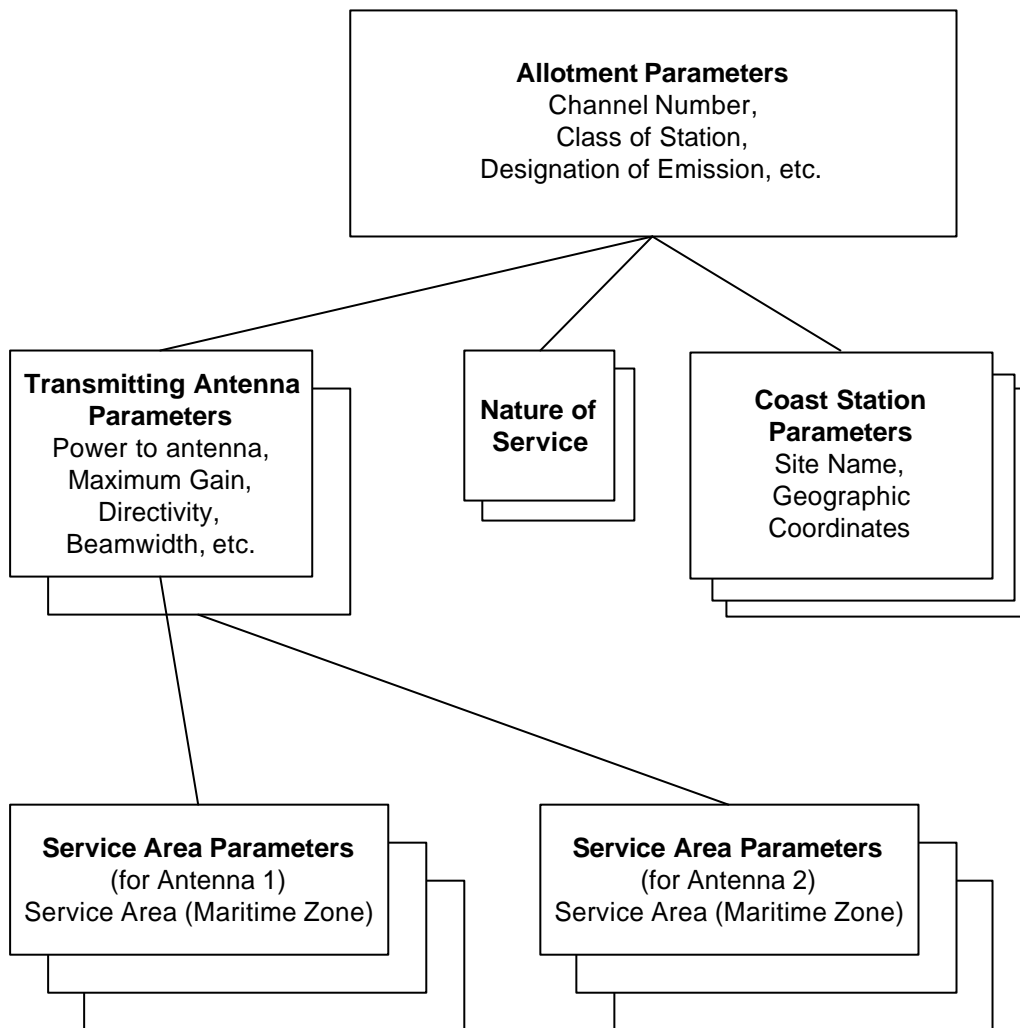
As shown in the above diagram, this notice has two sets of transmitting antenna parameters ("antennas"), each with its own set of three transmitting sites. In fact, there is *no* limit concerning the number of "antennas" for one notice, and *no* limit concerning the number of transmitting sites per antenna.

1.7.3 For Notice Type T14 (typical transmitting station), the general structure is:



It is to be noted, that the new structure provides only for a single set of transmitting antenna parameters, in line with the concept of typical station (RR11.17).

1.7.4 For Notice Type T15 (frequency allotment in the maritime mobile services, in the bands governed by Appendix **25** to the RR), the general structure is:



As shown in the above diagram, this notice has two sets of transmitting antenna parameters ("antennas"), each with its own set of three service areas. In fact, there is *no* limit concerning the number of "antennas" for one notice, and *no* limit concerning the number of service areas per antenna. Similarly, as shown in the above diagram, this notice has three intended coast stations (which have to be submitted in the context of request for initial allotments by administrations that have no allotments in the Allotment Plan of Appendix 25 to the RR); in fact, there is *no* limit concerning the number of intended coast stations.

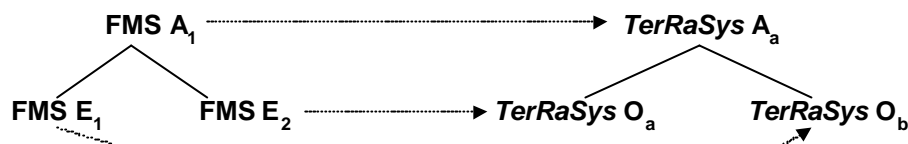
2 Conversion from FMS to *TerRaSys*

2.1 The structure of the FXM component in ***TerRaSys***, as explained in the previous section of this Part, has considerable impact on the conversion of the FXM records from **FMS** to ***TerRaSys***. In general, as one FXM assignment in ***TerRaSys*** contains only one class of emission, the "entries" from the current **FMS** assignments, which correspond to different classes of emission, will be converted into separate ***TerRaSys*** assignments. This concept would eliminate many inconsistencies from the former **FMS**, where different classes of emission (both symmetric and non-symmetric)

were related to the same assigned frequency, which often resulted in an incompatible relationship between the assigned frequency, the reference (carrier) frequency and the notified bandwidth.

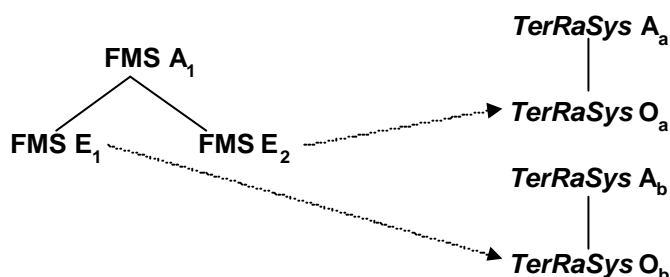
2.2 Due to the above differences between the FXM structure in **FMS** and the FXM structure in **TerRaSys**, the current records in the MIFR (under **FMS**) may look differently in **TerRaSys**⁵. Some of the possible results of the conversion are explained hereafter.

2.2.1 Entries which currently pertain to a single **FMS** assignment may remain together in a single **TerRaSys** assignment (e.g. in the cases of two entries which are related to the same class of emission, but with two different azimuths of maximum radiation):



Abbreviations **FMS A₁** and **FMS E₁** used above designate "assignment No 1" and "entry No 1" in current **FMS**. Abbreviations **TerRaSys A_a** and **TerRaSys O_a** designate "assignment A" and "operation A"⁶ in **TerRaSys**.

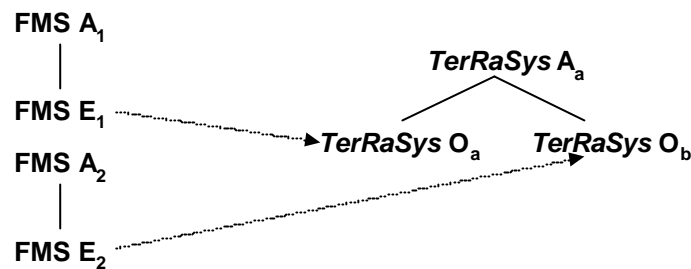
2.2.2 Entries which currently pertain to a single **FMS** assignment may be separated into different **TerRaSys** assignments (e.g. in the case of two different classes of emission):



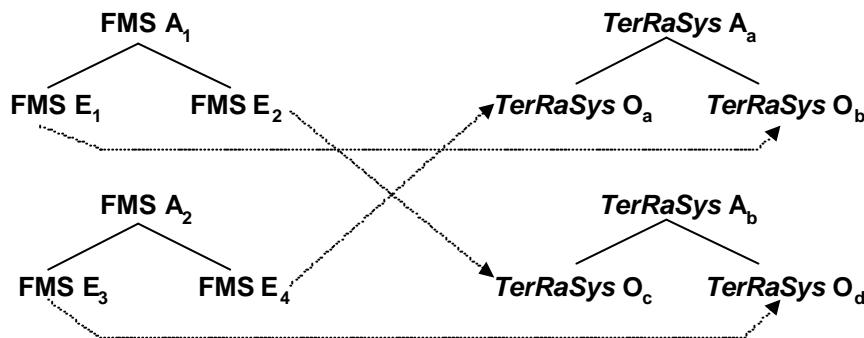
⁵ Some aspects related to the possible differences in this regard were explained in Circular-letter CR/110, dated 4 December 1998, which described the new "Terrestrial CD-ROM publication", in pursuance of Resolution 30 (WRC-97).

⁶ The term "operation", in the **TerRaSys** structure, is related to a set of transmitting antenna parameters with an associated set of service area parameters, and has no direct equivalence with any term from the **FMS** structure. Consequently, it may be a combination of "FMS entries" if both FMS entries were related to the same class of emission. However, it may be also a combination of "FMS sub-entries" related to different service area parameters.

2.2.3 Entries which currently appear in separate **FMS** assignments may be grouped together into a single **TerRaSys** assignment (e.g. two identical assignments, at the level of identifying parameters, with the only difference of having two different azimuths of maximum radiation):



2.2.4 Combinations of the above, such as operations from two **FMS** assignments being converted into two **TerRaSys** assignments, but with different operations grouped together in the assignments:

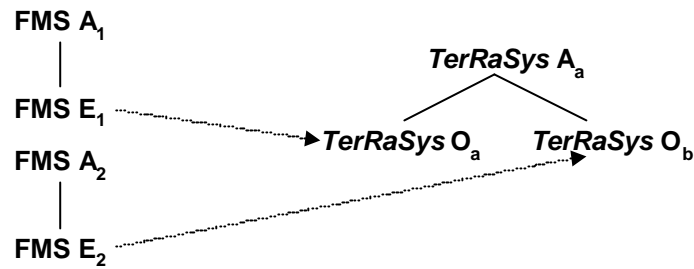


2.3 There are many implications arising from this conversion. Among them are:

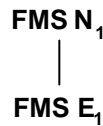
- One **TerRaSys** assignment may have multiple Assignment ID numbers from multiple **FMS** assignments.
- Two or more **TerRaSys** assignments may have the same Assignment ID numbers from a single **FMS** assignment.
- Combinations of the above, such as two or more **TerRaSys** assignments, each with the same set of multiple Assignment ID numbers from the same **FMS** assignments.
- Because of the above implications, the Assignment ID numbers transferred from **FMS** *cannot* be considered to be unique, and they *cannot* be considered to point to a single **TerRaSys** assignment or notice.
- The implications regarding Assignment ID numbers also apply to Administration Reference ID numbers for those cases where they exist.

2.4 All of **TerRaSys** (not only FXM) treats notices as replacement notices when they are notices to modify an existing assignment. With FXM, **FMS** assignments may be split and merged to create **TerRaSys** assignments.

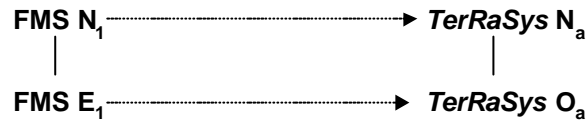
2.4.1 Consider two separate **FMS** assignments which would be grouped together into a single *TerRaSys* assignment:



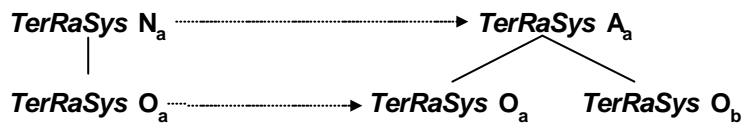
2.4.2 An administration intending, for example, to modify **FMS A₁** would submit a simple notice:



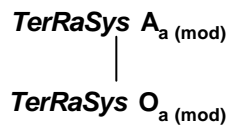
2.4.3 A simple conversion from the **FMS** notice to a *TerRaSys* notice would be:



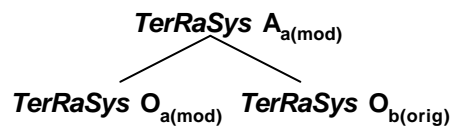
2.4.4 In *TerRaSys*, this would find **TerRaSys A_a** as its target:



2.4.5 When **TerRaSys N_a** received favorable findings, it would replace **TerRaSys A_a**, leaving:

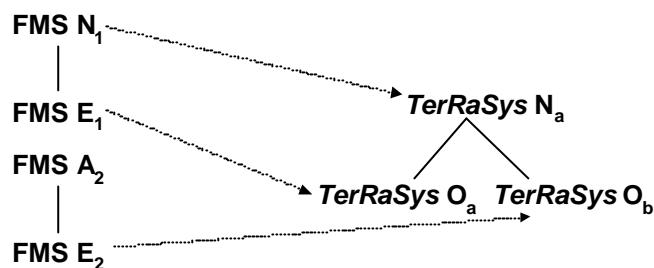


2.4.6 Significantly, because the notice would replace the entire *TerRaSys* assignment, it would *not* leave:



2.4.7 In other words, the second operation would disappear. This may or may not be the wish of the administration submitting the notice. This is something which may happen accidentally because the administration is thinking in **FMS** terms rather than *TerRaSys* terms.

2.4.8 To avoid this problem during the conversion from **FMS** to **TerRaSys**, in such a situation, the conversion program will actually generate a notice such as:



2.4.9 This will permit the replacement notice concept to work with those notices arriving from **FMS** in the manner anticipated by those submitting the notices under **FMS**. However, notices submitted using the **TerRaSys** notice format will be treated in accordance with the **TerRaSys** methods. In other words, administrations will have to take into account all of the operations of a **TerRaSys** assignment when they prepare a **TerRaSys** notice.

2.5 In the conversion process, the Bureau was faced with situations where some fields, pertaining to non-identifying parameters, have conflicting values as a result of a merge of two **FMS** assignments into a single **TerRaSys** assignment. The majority of these conflicting situations are being resolved through appropriate algorithms (e.g. determination of a missing carrier frequency). However, some conflicting situations cannot be resolved in a simple way. Although some of them are subject of consultations with the administrations concerned, others (like the site name problem) could not be resolved on a case-by-case basis, due to the large number of conflicting situations⁷ and the tight schedule for implementation of **TerRaSys**. The site name problem appears when two (or more) **FMS** assignments, related to two different site names (but with identical geographical coordinates and related to the same assigned frequency), are merged into a single **TerRaSys** assignment. To resolve this problem, the Bureau decided to use the concept of a "principal site name", which is determined on the basis of the site name which appears in the assignment (notice) with the most recent (highest) assignment ID, and to store all other appearances in a table of "secondary site names". In all searches by site name, only the principal site name would be considered. However, the display of the results would include also the secondary site names (if any). This problem is drawn to the attention of the administrations due to possible consequences in future: as the new formats contain only one site name, the submission of a notice intended to modify an assignment which contains both principal and secondary site names will result in a replacement of all these names with the latest submission. The administrations are therefore invited to pay attention to the first **TerRaSys** CD-ROM publication after the cutover, so as to keep trace of the multiple site names, if required.

2.6 The Bureau is aware that these considerations do *not* cover all of the implications arising from the conversion of the FXM structure in **FMS** to the FXM structure in **TerRaSys**. None the less, this provides a sampling of the implications, and should be useful in providing the basic information to administrations for use of the forthcoming **TerRaSys** CD-ROM publication, as well as for preparing the necessary forms under the new **TerRaSys** format.

2.7 Administrations were informed on the completion of the conversion from **FMS** to **TerRaSys** format on 15 May 2001 (see Circular-letter CR/161). The Bureau considers that all administrations approved the results of the conversion, which have been included in BR IFIC No 2445, dated 29 May 2001, as no request for correction has been received from any administration in the three-month interval following the publication of BR IFIC No 2445.

⁷ The trial run against a limited sample (API/A1 records) indicated some 6 656 conflicting cases of this type.

3 Practical impact of the new TerRaSys structure and the conversion from FMS to TerRaSys on the process of notifications of frequency assignments.

The implementation of new *TerRaSys* structure and the conversion of data from **FMS** to *TerRaSys* will have a significant impact on the process of notifications of frequency assignments. Therefore, some practical recommendations listed below concerning submission of information may be useful for administrations.

3.1 When submitting a frequency assignment to the Bureau, the information should be provided using *TerRaSys* notice forms which are presented in Part 2 of these guidelines (in case of paper notifications) or should comply with requirements to the file structure for electronic notifications which is described in Part 3.

3.2 Before submitting modifications to or suppressions of recorded frequency assignments it would be desirable to check whether the assignments to be modified (suppressed) have been split or merged as a result of the conversion. This can be done by comparison of the content of the IFL-on-CD-ROM (edition December 1999) which gives the latest status of **FMS** data base and the first *TerRaSys* CD-ROM which will describe the content of MIFR in *TerRaSys* format. If an assignment has changed its structure a careful analysis should precede the notification of this assignment in order to prevent possible loss of recorded information.

3.3 A concept of replacement notices used in *TerRaSys* would be always kept in mind during the preparation of a notification which means that the new notice completely replaces a recorded assignment (rather than modifies certain parameters as it was in **FMS**).

3.4 The BR's assignment ID can not serve any longer as unique identifying parameter for finding the assignment to be modified or suppressed or withdrawn. Consequently, it is mandatory to provide a set of identifying parameters which are described in Parts 3 and 4 in order to find the right target assignment in *TerRaBase*.

PART 2

Forms of notice for use when notifying frequency assignments to stations in the fixed, mobile and other terrestrial services (excepting the broadcasting service in the LF/MF and VHF/UHF bands) to the Radiocommunication Bureau, as from 1 October 1999

The following forms are applicable to the notification/submission of frequency assignments/allotments to stations in the fixed, mobile and other terrestrial services (excepting the broadcasting service in the LF/MF and VHF/UHF bands):

<i>TerRaSys</i> notice form	Applicable to	Replacing former FMS notice forms
T11	TERRESTRIAL TRANSMITTING STATION (TX) IN THE FIXED SERVICE (APPENDIX 4, ANNEXES 1A AND 1B)	AP1/A1, APS4/A1
T12	TERRESTRIAL TRANSMITTING STATION (TX) (Except station in the fixed, or LF/MF/VHF/UHF broadcasting services, or typical station) (APPENDIX 4, ANNEXES 1A AND 1B)	AP1/A1, APS4/A1
T13	TERRESTRIAL RECEIVING LAND STATION (RX) (APPENDIX 4, ANNEXES 1A AND 1B)	AP1/B, APS4/B
T14	TERRESTRIAL TYPICAL TRANSMITTING STATION (TP) (APPENDIX 4, ANNEXES 1A AND 1B)	AP1/C, APS4/C
T15	FREQUENCY ALLOTMENT IN THE MARITIME MOBILE SERVICE (APPENDIX 25)	AP5, APS25
T16	TERRESTRIAL TRANSMITTING STATION (TX) (Plan update Regional Agreement Geneva, 1985) (Article 4 of the agreement)	AP1/A1, APS4/A1
T17	TERRESTRIAL TRANSMITTING STATION (TX) USING ADAPTIVE SYSTEMS (APPENDIX 4, ANNEXES 1A AND 1B)	AP1/A1, APS4/A1

The relevant paper notice forms are available through the Internet at the ITU website under <http://www.itu.int/brtpr/notice-forms/index.html>.

PART 3

File structure to be used for electronic notices related to fixed, mobile and other services (except the broadcasting service in the LF/MF and VHF/UHF bands)

1 General structure

As with the file structure to be used for VHF/UHF broadcasting electronic notices (see Circular-letter CR/99), the file to be used for electronic notices in the fixed, mobile and other services (excepting the broadcasting service in the LF/MF and VHF/UHF bands) is a sequential, record-oriented file, which follows the general outline of an **SGML** (Standard Generalized Markup Language) file, using a tagging scheme. However, to simplify the approach for ***TerRaSys*** electronic notices, neither the **SGML** Document Type Definitions, nor tags for each data element are used.

The file consists of three or more sections. The first section is the **HEAD** section. The last section is the **TAIL** section. Between the **HEAD** and **TAIL** sections, there is one section for each notice. These sections are named **NOTICE**. Each section contains one or more fields, with a value (specified as a text string) associated with the field. Each section may also have sub-sections; at this time, only the **NOTICE** section may contain sub-sections.

Because this structure is the same as for VHF/UHF broadcasting electronic notices (described in Circular-letter CR/99), the **NOTICE** sections for VHF/UHF broadcasting electronic notices can be intermixed with the **NOTICE** sections for the electronic notices related to the fixed, mobile and other services, described in this circular letter.

There is a defined beginning - the start-tag - and a defined end - the end-tag - of each section. The start-tag has the format <section_name>, and the end-tag has the format </section_name>, as in **SGML**.

As indicated, a section may or may not have sub-sections. The sub-sections are also defined using start-tags and end-tags, using the formats <sub-section_name> and </sub-section_name>.

The concept is recursive, so that there may also be sub-sub-sections, etc.

The fields within a section or sub-section follow the start-tag, and continue until the corresponding end-tag. Start-tags and end-tags are mandatory.

Sub-sections are grouped at the end of the section. Sub-sub-sections are grouped at the end of a sub-section, etc.

Within a section, sub-section, etc., each value is preceded by a field, as in the example below:

t_action = ADD

Within each section, sub-section, etc., each field shall be unique, except for specific fields (in the case of T11, T12, T13, T14, T15, T16, and T17 notices), these specific fields are **t_call_sign**, **t_nat_srv**, **t_op_agcy**, and **t_remarks** in the <NOTICE> section and **t_adm** in the <COORDINATION> sub-section.

The general schema for a single file with several notices is:

```
<HEAD>
field1=string
field2=string
.....
</HEAD>
<NOTICE>
field1=string
field2=string
.....
</NOTICE>
<NOTICE>
field1=string
field2=string
.....
</NOTICE>
<NOTICE>
field1=string
field2=string
.....
</NOTICE>
.....
<TAIL>
field1=string
</TAIL>
```

The lines in the file are variable length. Each line in the file is terminated with a CR/LF (carriage return/linefeed) combination, a CR (carriage return), or an LF (linefeed).

The ISO 8859-1 (Latin-1) coded character set is to be used throughout the file. Only printable characters (plus carriage return and linefeed) may be used.

The **HEAD** section must be the first section in the file. The **TAIL** section must be the last section in the file. The **NOTICE** sections may be in any order within the file between the **HEAD** and **TAIL** sections. The name of the section may be in uppercase, lowercase, or mixed case. White space (e.g. blanks) must *not* appear before a start-tag or end-tag, nor within a start-tag or end-tag.

The fields for a section or sub-section may be in any order within that section or sub-section; they are referenced by name — within this section or sub-section — rather than by position. The name of the field may be in uppercase, lowercase, or mixed case. White space (e.g. blanks) must *not* appear before or within a field name.

Each field is composed of alphanumeric text and must be unique within its section (apart from the two cases noted above). Each field is followed by the symbol = and then by the value associated with this field. There can be zero or more spaces between the field and the equal sign, and zero or more spaces after the equal sign and before the value corresponding to the field. The first non-space character after the equal sign will be the first character of the value corresponding to the field; in other words, the first character of a field can never be a space. However, white space is permitted within the value associated with the field. (For example, the name of the location of the transmitting or receiving station may consist of several words, separated by blank spaces.)

Each string associated with a field is an undelimited text string; there are no quotation marks or other delimiters.

Administrations are requested to strictly conform to this format in order to avoid unnecessary errors.

2 Structure of numeric and other data

Each string must be less than or equal to the length allowed on the corresponding paper notice form.

If the string contains numeric data (e.g. power), then:

- no white space (e.g. blanks) may appear within the string;
- the decimal separate (if used) is the FULL STOP character (not a comma, for example);
- there must be no thousands separators in the string; that is, the value ten thousand, for example, would be submitted as **10000** and *not* as 10,000 nor as 10.000. In fact, 10.000 would be interpreted as ten, not ten thousand;
- the sign, if any, must be at the beginning of the string. With the exception of the geographic coordinates, the plus sign is optional if the value is greater than or equal to zero.

Each field and its corresponding value must be on a separate line, and must terminate with CR/LF, CR, or LF, as described above.

Sections and sub-sections which do not match any of the *TerRaSys* sections will be entirely ignored by *TerRaSys*. Therefore, administrations wishing to send the same file to the Bureau and to others can add additional sections and/or sub-sections for other purposes without fear of disruption of the *TerRaSys* electronic notice process.

Currently, the names of the sections and sub-sections are in English only.

The fields in each section correspond to the name of a data element being notified. The string associated with the field is the value of the data element. To avoid any conflicts with the Radiocommunication Data Dictionary (RDD) being developed by ITU-R Study Group 1, all data elements names are prefixed with **t_**. After the RDD is adopted, the Bureau may revise the names to correspond to those in the RDD. Nonetheless, both the current names and the RDD names would be acceptable for a sufficiently long transition period.

Certain fields have default values. It is not necessary to enter the field (and associated value) if the default is to be used.

Fields which do *not* begin with **t_** will be ignored by *TerRaSys*. Therefore, administrations wishing to send the same file to the Bureau and to others can use additional fields for other purposes without disrupting the *TerRaSys* electronic notice process. All unknown fields beginning with **t_** within a *TerRaSys* section will be flagged as errors to be referred to the administration submitting the notice, as typographic errors will be suspected.

The format for dates and times in the *TerRaSys* electronic notices was described in Circular-letter CR/99. Similarly, the format for the geographic coordinates in the *TerRaSys* electronic notices was described in Circular-letter CR/99. These descriptions are not repeated here, but are incorporated by reference.

3 Characteristics of electronic notices for fixed, mobile and other services (except the broadcasting service in the LF/MF and VHF/UHF bands)

3.1 The section named **HEAD** was described in Circular-letter CR/99, and is incorporated by reference.

3.2 The section named **TAIL** was described in Circular-letter CR/99, and is incorporated by reference.

3.3 Detailed explanations of each of the fields appear in Part 4. The description here is a summary description. The section named **NOTICE** contains some or all of the following fields:

t_notice_type	The type of notice; corresponds to the paper notice.
t_d_adm_ntc	The date that the administration gives to this notice. This may be different than t_d_sent in the HEAD section.
t_fragment	The part of the database to be updated.
t_prov	The name of the provision of the Radio Regulations under which this notice is submitted.
t_is_resub	For Notice Types T11, T12 and T13 only. This is equal to TRUE if this notice is a resubmission of a notice which was returned. This is equal to FALSE if this is <i>not</i> a resubmission. FALSE is the default if this field is not specified.
t_action	The action to be taken regarding this notice.
t_adm_ref_id	Administration's <i>unique</i> identifier, assigned by the administration.
t_call_sign	The call sign. Note that multiple call signs are possible.
t_station_id	The information transmitted by the radio station to aid identification of the source of its emission.
t_freq_assgn	The assigned frequency (MHz). Note that the assigned frequency is <i>always</i> specified in megahertz in the electronic notice format, whereas this may be specified in kilohertz, megahertz or gigahertz in the paper notice format.
t_freq_carr	The reference (carrier) frequency (MHz). Note that the reference frequency is always specified in megahertz in the electronic notice format, whereas this may be specified in kilohertz, megahertz or gigahertz in the paper notice format.
t_band_pref	For Notice Type T15, the preferred frequency band (MHz).
t_chan_no	For Notice Type T16, the channel number.
t_chan_pref	For Notice Type T15, the preferred channel number (proposed or allotted).
t_chan_alt	For Notice Type T15, the alternative channel number.
t_freq_dev	For Notice Type T11, the frequency deviation (MHz).
t_stn_cls	The class of station.
t_op_cls	For Notice Types T11 and T17, the class of operation.
t_emi_cls	The class of emission.

t_bdwidth_cde	The four-character code for the necessary bandwidth.
t_freq_rng_u	For Notice Type T17, the usable frequency range (MHz). Note that the usable frequency range is always specified in megahertz in the electronic notice format, whereas this may be specified in kilohertz or megahertz in the paper notice format.
t_ctry	The three-character code for the name of the geographic area where the transmitting or receiving antenna is located.
t_site_name	The name of the location of the transmitting or receiving station.
t_long	The longitude of the transmitting or receiving antenna site, using the format for the longitude described in Circular-letter CR/99.
t_lat	The latitude of the transmitting or receiving antenna site, using the format for the latitude described in Circular-letter CR/99.
t_site_alt	The altitude (metres) of the site above mean sea level.
t_geo_type	For Notice Type T14, the type of Geographic Area or Standard Area to which the typical station is applicable. The possible values are CIRCLE when the area is specified as a circle, or ZONE when the area is specified as a Standard Area.
t_zone_id	The Zone or Standard Area.
t_radius	For Notice Type T14, the radius (kilometres) of the Circular Area to which the typical station is applicable.
t_nat_srv	The two-character code for the nature of service. Note that multiple codes for the nature of service are possible.
t_op_agcy	The three-character code for the operating agency. Note that multiple codes for the operation agency are possible.
t_addr_code	The two-character address code for the responsible administration.
t_op_hh_fr	The starting time for the hours of operation.
t_op_hh_to	The ending time for the hours of operation.
t_d_inuse	The date at which the administration intends to bring this assignment into use.
t_energy_dsp	For Notice Type T11, the energy dispersal (kHz).
t_traffic	For Notice Type T15, the estimated traffic (minutes per day).
t_remarks	Any comment designed to assist the Bureau in processing the notice. There is no limit on the number of characters per line nor is there a limit on the number of t_remarks fields which may be included in a given NOTICE .

t_trg_adm_ref_id	The Administration's unique identifier of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_freq_assgn	The assigned frequency (MHz) of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn. Note that this frequency is <i>always</i> specified in megahertz in the electronic notice format, whereas this may be specified in kilohertz, megahertz or gigahertz in the paper notice format.
t_trg_chan_no	For Notice Type T15, the channel number of the target of the allotment to be replaced, modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_long	The longitude of the transmitter or receiver site of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_lat	The latitude of the transmitter or receiver site of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_geo_type	For Notice Type T14, the type of Geographic Area or Standard Area of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn. The possible values are CIRCLE when the area is specified as a circle, or ZONE when the area is specified as a Standard Area.
t_trg_zone_id	The Zone or Standard Area of the assignment/allotment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_stn_cls	The class of station of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_op_cls	The class of operation of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_emi_cls	The class of emission of the assignment/allotment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_bdwidth_cde	The four-character code for the necessary bandwidth of the assignment/allotment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.
t_trg_op_hh_fr	The starting time of the hours of operation of the assignment/allotment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.

t_trg_op_hh_to The ending time of the hours of operation of the assignment/allotment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.

Additional fields in the **NOTICE** section uniquely define the existing assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn.

In the case of a notice for modifying or suppressing an assignment or for updating or withdrawing a notice under treatment, it is necessary to identify the target assignment or notice. There are two alternative methods of submitting such identifiers:

- Supply the Administration's unique identifier of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn (the target), **t_trg_adm_ref_id**. Note that the combination of the identifier and the Fragment must be unique within a given administration.
- Supply other identifying parameters, which vary according to the Notice Type. These parameters include the assigned frequency, channel number, geographic coordinates, geographic type, zone, standard area, class of station, class of operation, class of emission, necessary bandwidth code, and hours of operation of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn, **t_trg_freq_assgn**, **t_trg_chan_no**, **t_trg_long**, **t_trg_lat**, **t_trg_geo_type**, **t_trg_zone_id**, **t_trg_stn_cls**, **t_trg_op_cls**, **t_trg_emi_cls**, **t_trg_bdwidth_cde**, **t_trg_op_hh_fr**, and **t_trg_op_hh_to**.
- *TerRaSys* will first use the Administration's unique identifier of the target, **t_trg_adm_ref_id** — if submitted — to identify the target. If the Administration's unique identifier of the target is *not* submitted, *TerRaSys* will use the combination of the other parameters (listed in the previous paragraph) to identify the target.

The sub-section named **COORDINATION**, if it exists, contains one field for each administration with which coordination has been successfully completed. The field is named **t_adm**, and the value is the code of the administration with which coordination has been achieved. If there is more than one such administration, each administration should be listed with a separate **t_adm** field on a separate line. Note that, unlike the paper notices, there is no limit on the number of administrations which can be entered here.

t_adm The code of the administration with which coordination has been successfully achieved.

For Notice Type T15, there may be **zero**, one or more sub-sections named **PEAK_HOURS**. Each of these sub-sections must contain two fields, and only two fields. These two fields contain the starting and ending times for a period of peak hours. Note that, unlike the paper notices, there is no limit on the number of sets of peak hours which can be entered here.

t_peak_hh_fr The starting time for this set of peak hours of operation.

t_peak_hh_to The ending time for this set of peak hours of operation.

For Notice Type T15, there may be **zero**, one or more sub-sections named **COAST_STATION**. Each of these sub-sections must contain the following three fields:

t_site_name The name of the location of the coast station.

t_long The longitude of the site of the coast station, using the format for the longitude described in Circular-letter CR/99.

t_lat The latitude of the site of the coast station, using the format for the latitude described in Circular-letter CR/99.

There are one or more **ANTENNA** sub-sections in each **NOTICE** section. Each **ANTENNA** sub-section describes an antenna and its attributes, including corresponding receiving or transmitting stations. The allowable fields in the **ANTENNA** sub-section depend on the Notice Type (T11 through T17).

t_pwr_xyz The type of power.

t_pwr_ant The power to the antenna (dBW).

t_pwr_dbw The radiated power (dBW).

t_pwr_eiv The type of radiated power.

t_pwr_dens For Notice Type T11, the maximum power density (dBW/Hz).

t_ant_dir Indicates whether the antenna is directional (D) or non-directional (ND).

t_azm_max_e For directional antennas, the azimuth (degrees from true North) of maximum radiation.

t_bmwidth For directional antennas, the beamwidth (degrees).

t_gain_type The type of maximum antenna gain.

t_gain_max The maximum antenna gain (dB).

t_ant_ref The reference antenna.

t_elev The elevation angle (degrees).

t_polar For Notice Type T11, the polarization.

t_hgt_agl The height (metres) above ground level of the center of radiation of the antenna.

t_dist_max The maximum length of the circuit (kilometres).

t_pwr_range For Notice Type T17, the range of power control (dB).

An antenna described in an **ANTENNA** sub-section which uses a rotational antenna may have one or more **ROTATIONAL** sub-sub-sections, depending on the number of azimuthal sectors. Each **ROTATIONAL** sub-sub-section, if any, describes a sector, and must contain the following fields:

t_azm_fr The starting azimuth (degrees from true North) for this azimuthal sector.

t_azm_to The ending azimuth (degrees from true North) for this azimuthal sector.

Each antenna described in an **ANTENNA** sub-section for Notice Types T11, T12, T15, T16, and T17 must also describe one or more receiving stations. Similarly, each antenna described in an **ANTENNA** sub-section for Notice Type T13 must also describe one or more transmitting stations. These are described in **RX_STATION** and **TX_STATION** sub-sub-sections, respectively.

There is one **RX_STATION** sub-sub-section for each receiving station. An **RX_STATION** sub-sub-section may contain the following fields, depending on the Notice Type and the type of receiving area. It is necessary to pay particular attention to the field **t_geo_type** because this field influences the choice concerning the other fields.

t_geo_type	The type of geographic area describing the location of the receiving station. The possible values are POINT when the area is specified as a single point, CIRCLE when the area is specified as a circle, MULTIPOINT when the area is specified as a series of points, and ZONE when the area is specified as a standard area.
t_noise_temp	For Notice Type T11, the receiving system noise temperature, in Kelvin.
t_site_name	When t_geo_type is equal to POINT , the name of the location of the receiving station(s).
t_ctry	When t_geo_type is equal to POINT , the three-character code for the name of the geographic area where the receiving station is located.
t_long	When t_geo_type is equal to POINT , the longitude of the site of the receiving station. When t_geo_type is equal to CIRCLE , the longitude of the center of the circular receiving area. In either case, this uses the format for the longitude described in Circular-letter CR/99.
t_lat	When t_geo_type is equal to POINT , the latitude of the site of the receiving station. When t_geo_type is equal to CIRCLE , the latitude of the center of the circular receiving area. In either case, this uses the format for the latitude described in Circular-letter CR/99.
t_radius	When t_geo_type is equal to CIRCLE , the nominal radius (kilometres) of the circular receiving area.
t_zone_id	When t_geo_type is equal to ZONE , the Zone or Standard Area.

When **t_geo_type** in an **RX_STATION** sub-sub-section is equal to **MULTIPOINT**, the **RX_STATION** sub-sub-section must contain at least three **POINT** sub-sub-sub-section. Each **POINT** sub-sub-sub-section must contain the following two fields:

t_long	The longitude of the point, using the format for the longitude described in Circular-letter CR/99.
t_lat	The latitude of the point, using the format for the latitude described in Circular-letter CR/99.

There is one **TX_STATION** sub-sub-section for each transmitting station. A **TX_STATION** sub-sub-section may contain the following fields, depending on the type of transmitting station. It is necessary to pay particular attention to the field **t_geo_type** because this field influences the choice concerning the other fields.

t_geo_type	The type of geographic area describing the location of the mobile transmitting station. The possible values are CIRCLE when the area is specified as a circle, and ZONE when the area is specified as a standard area or as a standard ITU three-character symbol for a Geographic Area.
t_long	When t_geo_type is equal to CIRCLE , the longitude of the center of the circular transmitting area, using the format for the longitude described in Circular-letter CR/99.
t_lat	When t_geo_type is equal to CIRCLE , the latitude of the center of the circular transmitting area, using the format for the latitude described in Circular-letter CR/99.
t_radius	When t_geo_type is equal to CIRCLE , the nominal radius (kilometres) of the circular transmitting area.
t_zone_id	When t_geo_type is equal to ZONE , the Zone or Standard Area.

In summary, the structure for these electronic notices includes the **NOTICE** section and other sub-sections, sub-sub-sections, etc., as follows:

section	sub-section	sub-sub-section	sub-sub-sub-section	Notice Types
NOTICE				T11, T12, T13, T14, T15, T16 and T17
	COORDINATION			T11, T12, T13, T14, T15, T16 and T17
	PEAK_HOURS			T15
	COAST_STATION			T15
	ANTENNA			T11, T12, T13, T14, T15, T16 and T17
		ROTATIONAL		T11, T12, T15 and T17
		RX_STATION		T11, T12, T15, T16 and T17
			POINT	T11, T12 and T17
		TX_STATION		T13

A sample file containing one of each of the seven kinds of notices might have this structure:

```
<HEAD>
(fields and data for heading)
</HEAD>
<NOTICE>
t_notice_type = T11
(general fields and data for T11 assignment)
<ANTENNA>
(fields for first antenna of this assignment)
<RX_STATION>
(fields for first receiving station associated with this antenna)
</RX_STATION>
<RX_STATION>
(fields for second receiving station associated with this antenna)
</RX_STATION>
</ANTENNA>
<ANTENNA>
(fields for second antenna of this assignment)
<ROTATIONAL>
(fields for starting and ending azimuths of rotational sector)
</ROTATIONAL>
<RX_STATION>
(fields for first receiving station associated with this antenna)
</RX_STATION>
<RX_STATION>
(fields for second receiving station associated with this antenna)
</RX_STATION>
</ANTENNA>
<COORDINATION>
(t_adm for each administration with which coordination has been completed)
</COORDINATION>
</NOTICE>
<NOTICE>
t_notice_type = T12
(general fields and data for T12 assignment)
<ANTENNA>
(fields for first antenna of this assignment)
<RX_STATION>
(fields for first receiving station associated with this antenna)
</RX_STATION>
</ANTENNA>
<ANTENNA>
(fields for second antenna of this assignment)
<RX_STATION>
(fields for first receiving station associated with this antenna)
</RX_STATION>
<RX_STATION>
(fields for second receiving station associated with this antenna)
<POINT>
```

(fields with geographic coordinates for this receiving point for this antenna)

</POINT>
 <POINT>
 (fields with geographic coordinates for this receiving point for this antenna)
 </POINT>
 <POINT>
 (fields with geographic coordinates for this receiving point for this antenna)
 </POINT>
 </RX_STATION>
 </ANTENNA>
 <COORDINATION>
 (**t_adm** for each administration with which coordination has been completed)
 </COORDINATION>
 </NOTICE>
 <NOTICE>
t_notice_type = T13
 (general fields and data for T13 assignment)
 <ANTENNA>
 (fields for first antenna of this assignment)
 <TX_STATION>
 (fields for first transmitting station associated with this antenna)
 </TX_STATION>
 <TX_STATION>
 (fields for second transmitting station associated with this antenna)
 </TX_STATION>
 </ANTENNA>
 <ANTENNA>
 (fields for second antenna of this assignment)
 <TX_STATION>
 (fields for first transmitting station associated with this antenna)
 </TX_STATION>
 <TX_STATION>
 (fields for second transmitting station associated with this antenna)
 </TX_STATION>
 </ANTENNA>
 <COORDINATION>
 (**t_adm** for each administration with which coordination has been completed)
 </COORDINATION>
 </NOTICE>
 <NOTICE>
t_notice_type = T14
 (general fields and data for T14 assignment)
 <ANTENNA>
 (fields for first antenna of this assignment)
 </ANTENNA>
 <ANTENNA>
 (fields for second antenna of this assignment)
 </ANTENNA>
 <COORDINATION>
 (**t_adm** for each administration with which coordination has been completed)

</COORDINATION>

</NOTICE>

<NOTICE>
t_notice_type = T15
 (general fields and data for T15 allotment)
 <PEAK_HOURS>
 (fields for starting time and ending time of peak hours of operation)
 </PEAK_HOURS>
 <COAST_STATION>
 (fields for first coast station for this allotment)
 </COAST_STATION>
 <COAST_STATION>
 (fields for second coast station for this allotment)
 </COAST_STATION>
 <COAST_STATION>
 (fields for third coast station for this allotment)
 </COAST_STATION>
 <ANTENNA>
 (fields for first antenna of this allotment)
 <RX_STATION>
 (fields for first receiving station associated with this antenna)
 </RX_STATION>
 <RX_STATION>
 (fields for second receiving station associated with this antenna)
 </RX_STATION>
 </ANTENNA>
 <ANTENNA>
 (fields for second antenna of this allotment)
 <ROTATIONAL>
 (fields for starting and ending azimuths of rotational sector)
 </ROTATIONAL>
 <RX_STATION>
 (fields for first receiving station associated with this antenna)
 </RX_STATION>
 <RX_STATION>
 (fields for second receiving station associated with this antenna)
 </RX_STATION>
 </ANTENNA>
 <COORDINATION>
 (**t_adm** for each administration with which coordination has been completed)
 </COORDINATION>
 </NOTICE>
 <NOTICE>
t_notice_type = T16
 (general fields and data for T16 assignment)
 <ANTENNA>
 (fields for first antenna of this assignment)
 <RX_STATION>
 (fields for first receiving station associated with this antenna)
 </RX_STATION>
 <RX_STATION>

(fields for second receiving station associated with this antenna)
</RX_STATION>

</ANTENNA>
 <ANTENNA>
 (fields for second antenna of this assignment)
 <RX_STATION>
 (fields for first receiving station associated with this antenna)
 </RX_STATION>
 <RX_STATION>
 (fields for second receiving station associated with this antenna)
 </RX_STATION>
 </ANTENNA>
 <COORDINATION>
 (**t_adm** for each administration with which coordination has been completed)
 </COORDINATION>
 </NOTICE>
 <NOTICE>
t_notice_type = T17
 (general fields and data for T17 assignment)
 <ANTENNA>
 (fields for first antenna of this assignment)
 <RX_STATION>
 (fields for first receiving station associated with this antenna)
 </RX_STATION>
 <RX_STATION>
 (fields for second receiving station associated with this antenna)
 </RX_STATION>
 </ANTENNA>
 <ANTENNA>
 (fields for second antenna of this assignment)
 <ROTATIONAL>
 (fields for starting and ending azimuths of rotational sector)
 </ROTATIONAL>
 <RX_STATION>
 (fields for first receiving station associated with this antenna)
 </RX_STATION>
 <RX_STATION>
 (fields for second receiving station associated with this antenna)
 </RX_STATION>
 </ANTENNA>
 <COORDINATION>
 (**t_adm** for each administration with which coordination has been completed)
 </COORDINATION>
 </NOTICE>
 <TAIL>
t_num_notices=7
 </TAIL>

PART 4

Additional information concerning the use of the forms of notice and the file formats for electronic notification concerning the frequency assignments to fixed, mobile and other services

1 Guidelines concerning the use of forms of notice for fixed, mobile and other services (excepting the broadcasting service in the LF/MF and VHF/UHF bands)

1.1 Application of the procedures prescribed in the Radio Regulations requires the administration to supply information to another administration or to the Radiocommunication Bureau in the context of the modification of a Plan, a request for agreement, coordination of an assignment, or the notification to the Bureau with a view to updating the MIFR. The information to be supplied varies from case to case, depending on the intention and on the particular service, frequency band and type of station involved. Necessary details in this respect, concerning the terrestrial services, are included in Appendix 4 (Annexes 1A and 1B) to the RR as well as in the respective Regional Agreements. This Part deals only with the submission of information to the Bureau - the exchange of information between administrations is a matter of agreement between administrations insofar as the content and format of the information is concerned.

1.2 Article 11 of the Radio Regulations, in provisions RR 11.2 - RR 11.8, specifies the conditions when a notification to the Bureau is necessary (these conditions apply to a transmitting station and to its associated receiving station). Provisions RR 11.9 - RR 11.11 specify further the conditions for notification of a frequency assignment to a land station for reception from mobile stations. Provisions RR 11.13 - RR 11.14 specify the cases when no notification is required. Provisions RR 11.17 - RR 11.21A specify the conditions when a typical station may be notified.

1.3 Article 11 also specifies the time-frame for submission of notices to stations in terrestrial services. The frequency assignment shall be notified normally after its bringing into use, but it may be notified also before the bringing into use. If the frequency assignment is notified before its bringing into use, then the relevant notices shall reach the Bureau:

- not earlier than **five years** before the assignment is brought into use, for those assignments that pertain to high altitude platform stations in the fixed service in the bands 47.2 - 47.5 GHz and 47.9 - 48.2 GHz (see RR11.26; on the notice, these stations have to be identified by the symbol "HP" under item 6b);
- not earlier than **three years** before the assignment is brought into use, for those assignments that are involved in coordination with a satellite network (i.e., in the bands shared between terrestrial and space services, where the allocation to the space service comprises the space-to-Earth direction; see RR11.25);
- not earlier than **three months** before the assignment is brought into use, for all other cases (see RR11.24).

The frequency assignments which are notified in advance of their bringing into use shall be entered provisionally in the Master Register (if all other conditions are fulfilled). The provisional entry shall be deleted from the Master Register, following the appropriate procedure, if no confirmation is received that the assignment was effectively brought into use (RR 11.47).

1.4 Appendix 4 to the Radio Regulations, in its Annex 1A lists the characteristics of stations in the terrestrial services which are required for notification in every particular case. That information is further summarized in Annex 1B of Appendix 4, in terms of mandatory or optional information, for different notice types. All mandatory characteristics (in some cases referred to as "required in some cases"), as specified in that annex for the relevant type of notice, have to be submitted by the notifying administration; otherwise the notice will be declared incomplete and will be returned to the notifying administration (see RR 11.27).

1.5 In accordance with the provisions of Appendix 4, as revised by WRC-97 and WRC-2000, the Bureau has developed up-to-date "forms of notice", which represent an easy means for conveying the appropriate information, so as to conform with the statutory requirements of Appendix 4. These forms, when correctly completed, present all the information required in a particular case in a standard manner, which ensures that no essential information is omitted, and that the data is appropriate for immediate entry into the Bureau's computer based processing system (TerRaSys). Detailed description of the data fields, which appear in these forms of notice, and of additional fields used in the electronic notification, is given in Section 2 of this Part.

1.6 For easy reference on the mandatory and optional data elements, as defined in Appendix 4, the Bureau, when developing the paper forms of notice, used the approach of shaded and non-shaded fields. In this context, the Bureau offers the following guidelines:

- 1.6.1 The non-shaded fields (as indicated in the paper forms) correspond to those characteristics of Appendix 4 which are indicated therein as "mandatory" or "one of the items". Consequently, both the paper notice forms and the corresponding electronic submissions have to contain data related to these data elements.
- 1.6.2 The shaded fields (as indicated in the paper forms) are to be filled-in only in specific cases. These fields generally correspond to optional characteristics of Appendix 4, to those characteristics of Appendix 4 which are indicated therein as "required in some cases", and to those characteristic of the recorded assignment which are required for unambiguous identification of the "target" (i.e., the recorded assignment or allotment which is intended to be modified or suppressed by the relevant submission, or the previously submitted notice which is to be withdrawn or otherwise amended).
- 1.6.3 In the context of the submissions for modification or suppression of a recorded assignment or allotment, as well as in the context of a withdrawal or other amendment of a notice, the following identifying elements have to be submitted (depending on the type of notice):
 - a) Previously recorded Administration Unique Identifier (please note, that the current FMS database does not contain these uniquely identifying data); or
 - b) the combination of data items listed in the following table:

Paper notice	Electronic notice	Description/Paper notices	Notice Types
O-1a: Assigned frequency	t_trg_freq_assign	Assigned frequency of the target	T11, T12, T13, T14, T16, T17
O-1z: Channel number	t_trg_chan_no	Channel number of the allotment to be replaced, modified or suppressed	T15
O-6a: Class of station	t_trg_stn_cls	Class of station of the target	All
O-7a: Designation of emission	t_trg_emi_cls t_trg_bdwth_cde	Designation of emission of the target	All
O-7b: Class of operation	t_trg_op_cls	Class of operation of the target; only in the context of the fixed service in the bands 3 000 - 28 000 kHz	T11, T17
O-10b: Hours of operation	t_trg_op_hh_fr; t_trg_op_hh_to.	Hours of operation of the target	All
O-4c: Coordinates (O-5c for T13)	t_trg_long; t_trg_lat	<ul style="list-style-type: none"> Coordinates of the target Coordinates of the centre of the circular area 	<ul style="list-style-type: none"> T11, T12, T13, T16, T17 T14
O-4e: Geographic area, or standard area to which the typical station is applicable, or allotment area	t_trg_geo_type (electronic notice only) and t_trg_zone_id	<ul style="list-style-type: none"> Geographic area of the target, or standard area of the target to which the typical station is applicable. Allotment area of the target 	<ul style="list-style-type: none"> T14 T15

1.6.4 With respect to the data elements indicated in the other shaded fields (as indicated in the paper notices), the following guidance is provided:

- the reference frequency (item 1b, t_freq_carr) has to be submitted only in the context of non-symmetric emissions (e.g., J**, H**, R**) or composite emissions (e.g., C**);
- the preferred frequency band (item 1c, t_band_pref) has to be submitted only in the context of the procedure of Appendix 25 to the RR (on notice type T15);
- the information on the azimuth of maximum radiation (item 9a, t_azm_max_e), angular width of radiation main lobe (beamwidth, item 9c, t_bmwidth) and maximum antenna gain (item 9g, t_gain_max) has to be supplied only when the transmitting antenna is a directional one (indicated with symbol D in item 9, element t_ant_dir); similarly, the information on the azimuthal sector for rotating antenna (item 9ab, t_azm_fr and t_azm_to in the subsection ROTATIONAL) has to be supplied only when a rotating antenna is used;
- the submission of the information on the elevation angle of the site (item 9b, t_elev), polarization of the emission (item 9d, t_polar), height of the antenna above ground level (item 9e, t_hgt_agl) and altitude of the site above sea level (item 9ea, t_site_alt) is required only in

those cases where the relevant emission is situated in a frequency band shared between space radiocommunication and terrestrial radiocommunication services on an equal basis;

- the submission of the information on the maximum length of the circuit (item 5g, t_dist_max) is an option which the administrations may use if the receiving areas are other than circular;
- the submission of the information on frequency deviation (item 7e, t_freq_dev), energy dispersal (item 7f, t_energy_dsp), maximum power density (item 8ab, t_pwr_dens) and receiving system noise temperature (item 9k, t_noise_temp) is an option. Administrations may furnish this information to the Bureau, at their discretion (normally when such information has been used as a basis to effect coordination with another administration).

2 Detailed data information and validation rules

2.1 The character set used in the file (only for electronic notification)

t_char-set

This information is optional. If not specified, the default value is ISO-8859-1. This is also currently the only acceptable value.

The field is provided in the **HEAD** section.

2.2 The date when the file is sent (only for electronic notification)

t_d_sent

This information is optional. It is equivalent to the date of the covering letter accompanying paper notices. It shall be a valid date. This field shall not be mixed up with the date of the notice (**t_d_adm_ntc**) that also appears on individual paper notices.

For paper notices it should be presented in DDMMYYYY format as follows:

02011999 meaning 2 January 1999

On electronic notices this item must be in YYYY-MM-DD format, for example:

1999-01-02 meaning 2 January 1999

For electronic notices the field is provided in the **HEAD** section.

2.3 The electronic mail address (only for electronic notification)

t_email_addr

This information is optional. If notified, it will be used by the Bureau for any correspondence related to the completeness and validity of the notices included in the file.

The field is provided in the **HEAD** section.

2.4 Item B - Notifying administration

t_adm in the HEAD section

(All notice types)

This information is mandatory. It shall correspond to an ITU three-character code of the notifying administration listed in Chapter IV, Section 1 of the Preface to the BR IFIC for terrestrial services. Note that this information is in the header of electronic notices and therefore applies to all notices in the file, whereas it appears on each individual paper notice.

2.5 Notice type (only for electronic notification)

t_notice_type

This information is mandatory. The allowed values are T11, T12, T13, T14, T15, T16 and T17.

The field is provided in the **NOTICE** section.

2.6 Date of Notice

t_d_adm_ntc

The date that the administration gives to the notice. It may be different from the date at which the file or the covering letter is sent. This information is optional.

For paper notices it should be presented in DDMMYYYY format as follows:

02011999 meaning 2 January 1999

On electronic notices this item must be in YYYY-MM-DD format, for example:

1999-01-02 meaning 2 January 1999

For electronic notices the field is provided in the **NOTICE** section.

2.7 The part of the database to be updated (only for electronic notifications)

t_fragment

This information is mandatory. Definition of each fragment is given in paragraph 2 of Part 1 to the guidelines . The allowed values depend on the notice type and the provision of a regulating document as follows:

Fragment	Notice type and the provision of a regulating document
NTFD_RR	T11 (RR11.2), T12 (RR11.2), T13 (RR11.9), T14 (RR11.17), T17 (RR11.2)
Req_agrt	T11 (RR9.21), T 12 (RR9.21), T13 (RR9.21)
AP25	T15 (AP25/1.1.1, AP25/1.1.2, AP25/1.25)
GE85M	T16 (GE85 (R1-MAR), GE85(R1-AER))
GE85N	T12 (GE85N); suppressions only

The field is provided in the **NOTICE** section.

2.8 Provision of a document regulating submission of information

t_prov

On the paper notices one box and only one shall be checked.

On electronic notices the allowed values for field **t_prov** are the following:

RR11.2 for **t_notice** equal to T11, T12, T17

RR9.21 for **t_notice** equal to T11, T12, T13

RR11.9 for **t_notice** equal to T13

RR11.17 for **t_notice** equal to T14
GE85N for **t_notice** equal to T12 (suppressions only)
GE85(R1-MAR) for **t_notice** equal to T16
GE85(R1-AER) for **t_notice** equal to T16

AP25/1.1.1 for **t_notice** equal to T15
AP25/1.1.2 for **t_notice** equal to T15
AP25/1.25 for **t_notice** equal to T15

For electronic notices the field is provided in the **NOTICE** section.

2.9 ADD/MOD/SUP/WITHDRAW indicator

t_action

On the paper notices, one box and only one shall be checked.

On electronic notices, **t_action** may have the following values:

ADD to add an assignment
MODIFY to modify an assignment
SUPPRESS to suppress an assignment
WITHDRAW to withdraw a notice under treatment

Please note that a modification notice should contain all necessary information, as it will completely replace the existing assignment in the concerned fragment.

For electronic notices the field is provided in the **NOTICE** section.

2.10 Resubmission indicator

(Notices T11, T12 and T13)

t_is_resub

This indicator is applicable only in the context of the notification procedure of Article 11 of the Radio Regulations, and only for those frequency assignment notices that are subject to coordination procedures under RR 9.16, RR 9.18 or RR 9.19 (i.e., in some bands which are allocated on a shared bases between terrestrial and space services).

On the paper notices T11, T12 and T13, the box for resubmission shall be checked only if this notice is a resubmission within 6 months after the return of the notice by the BR:

- a) under the provisions of RR 11.41 of a notice which was returned under the provisions of RR 11.38 (unfavorable finding with respect to the probability of harmful interference, following the examination under RR 11.33, with respect to frequency assignments of those administrations with which the coordination procedure under RR 9.18 could not be successfully completed); or
- b) under the provisions of RR 11.43C of a notice which was returned under the provisions of RR 11.37 (unfavourable finding with respect to the conformity with the procedures relating to coordination with other administrations, following the examination under

RR 11.32, for those cases when RR 11.33 does not apply, i.e., in the case of coordination under RR 9.16 or RR 9.19); and for which the notifying administration did complete the coordination procedure under RR 9.16 or RR 9.19; or

- c) under the provisions of RR 11.43D of a notice which was returned under the provisions of RR 11.37 (unfavourable finding with respect to the conformity with the procedures relating to coordination with other administrations, following the examination under RR 11.32, for those cases when RR 11.33 does not apply, i.e., in the case of coordination under RR 9.16 or RR 9.19) and for which the notifying administration requested the Bureau to effect the required coordination procedure under RR 9.16 or RR 9.19; in this case the box "Other information ..." shall also be checked and the administration shall provide all supporting documentation. This option is available only for paper notices.

On electronic notices T11, T12 and T13, the resubmission indicator is equal to **TRUE** if this notice is a resubmission of a notice which was returned under the conditions specified above. The indicator is equal to **FALSE** if this is *not* a resubmission. **FALSE** is the default if this field is not specified which corresponds to a first notification by default.

For electronic notices the field is provided in the **NOTICE** section.

2.11 Administration Unique Identifier

t_adm_ref_id

(All notice types)

This field is optional for actions ADD and MODIFY. Administration Unique Identifier shall not be notified in case of action SUPPRESS or WITHDRAW.

The allowed characters for this field are limited to upper-case letters A to Z, digits 0 to 9, space, parenthesis, dash and forward slash for both electronic and paper notices. If notified, the field may be used in the future for modifying, deleting or, generally for making reference to this particular assignment. However, if notified, this field shall be unique for the notifying administration in the given fragment.

Administrations should take care not to confuse this new field with the older, and now obsolete, field named "Administration Serial Number". Duplicate values are *not* allowed in this new field. An administration should not use this new field unless it intends to use this field as its *unique* identifier.

For electronic notices the field is provided in the **NOTICE** section.

2.12 Previously Recorded Administration Unique Identifier

t_trg_adm_ref_id

(All notice types)

This field may be used to uniquely identify the assignment to be modified or suppressed, or the notice under treatment to be updated or withdrawn if the set of identifying parameters listed in item 1.6.3 of this Part for each notice type is not given. For an additional notice, this field shall not be notified.

For electronic notices the field is provided in the **NOTICE** section.

2.13 Item 1a - Assigned Frequency

t_freq_assgn

(All notice types with exception of T15)

This information is mandatory for ADD and MODIFY actions. It shall not be notified in case of action SUPPRESS or WITHDRAW. The Assigned Frequency is always expressed in MHz in the electronic notice format. On paper notice forms it can be specified in kilohertz (symbol k), in megahertz (symbol M) or in gigahertz (symbol G) using rule below.

Symbols to be used:

- kHz for frequencies up to 28 000 kHz inclusive;
- MHz for frequencies above 28.000 MHz up to 10 500 MHz inclusive;
- GHz for frequencies above 10.500 GHz.

For electronic notices the Assigned Frequency is always expressed in megahertz (MHz).

The allowed frequency range for T17 notice type is up to 28 000 kHz.

The black dot on paper forms indicate the position of the decimal point.

The Assigned Frequency can be notified with the precision of 4 characters after the decimal point for paper notices. There is no such limitation for electronic notices.

For electronic notices the field is provided in the **NOTICE** section.

2.14 Item O-1a - Assigned Frequency of the Target

t_trg_freq_assgn

(All notice types with exception of T15)

For actions MODIFY or SUPPRESS or WITHDRAW the Assigned Frequency of the Target is mandatory and used as a parameter to uniquely identify the assignment to be modified or suppressed, or the notice to be updated or withdrawn, if the Administration Unique Identifier of the Target is not given. For action ADD this information shall not be provided.

For the format of this data item the same rules as for item 1a - t_freq_assgn shall apply.

For electronic notices the field is provided in the **NOTICE** section.

2.15 Item 1aa - Usable Frequency Range

(Notice T17)

t_freq_rng_u

Indicate the Usable Frequency Range in kHz or MHz on the paper notice format and in MHz only in the electronic notice format. This information is mandatory if under item 1a - Assigned Frequency only the centre assigned frequency of the frequency band to be used for the adaptive system is notified. The usable frequency range corresponds to the difference between the maximum and minimum assignable frequencies of a distinct frequency band.

For electronic notices the field is provided in the **NOTICE** section.

2.16 Item 1b - Reference (Carrier) Frequency

t_freq_carr

(All notice types with exception of T15)

This information is mandatory for ADD and MODIFY actions if the Reference (carrier) frequency is different from the centre of the assigned frequency band (if the first symbol in the Class of Emission is C, H, J or R). The value of the Reference Frequency should be equal to the value of the Assigned Frequency plus or minus the half of the Necessary Bandwidth (item 7a). For action SUPPRESS or WITHDRAW this information shall not be provided.

For the format of this data item the same rules as for item 1a - t_freq_assgn shall apply.

For electronic notices the field is provided in the **NOTICE** section.

2.17 Item 1c - Preferred band (MHz)

(Notice and T15)

t_band_pref

For the Notice Type T15 the preferred frequency band in MHz. This item is optional and it shall not be notified if item 1x - Channel number (T15) is notified. Possible values are: 04, 06, 08, 12, 16, 18, 22, and 25.

For electronic notices, the leading zero is not required, and the field is provided in the **NOTICE** section.

2.18 Item 1x - Channel number (assigned)

(Notice T16)

t_chan_no

For the Notice Type T16 the channel number of the proposed plan assignment. This information is optional. Possible values are the channel numbers listed in Annex III, Tables 1 and 3, of the Regional Agreement GE85(R1-MAR).

For electronic notices the field is provided in the **NOTICE** section.

2.19 Item 1x - Channel number (proposed)

(Notice T15)

t_chan_pref

For the Notice Type T15 the channel number of the proposed allotment. This information is mandatory, but it shall not be notified if item 1c - Preferred band is notified. Possible values are the channel numbers listed in Section II of Appendix 25 to the RR.

For electronic notices the field is provided in the **NOTICE** section.

2.20 Item 1y - Channel number (alternative proposal)

(Notice T15)

t_chan_alt

For the Notice Type T15 the channel number of the alternative proposed allotment. This information is optional, but it shall not be notified if item 1c - Preferred band is notified. Possible values are the channel numbers listed in Section II of Appendix 25 to the RR.

For electronic notices the field is provided in the **NOTICE** section.

2.21 Item 1z - Channel number of channel to be replaced

(Notice T15)

t_trg_chan_no

For Notice Type T15, the channel number of the target. This information is mandatory for an allotment to be replaced, modified or suppressed, or for the notice under treatment to be amended or withdrawn. Possible values are the channel numbers listed in Section II of Appendix 25 to the RR.

For electronic notices the field is provided in the **NOTICE** section.

2.22 Item 2c - Date of bringing into Use

t_d_inuse

(All notice types with exception of T16)

The date of bringing assignment into use is mandatory for ADD and MODIFY actions. It shall not be notified in case of action SUPPRESS or WITHDRAW. For paper notices it should be presented in DDMMYYYY format as follows:

02011999 meaning 2 January 1999

On electronic notices this item must be in YYYY-MM-DD format, for example:

1999-01-02 meaning 2 January 1999

For electronic notices the field is provided in the **NOTICE** section.

2.23 Item 3a - Call Sign, Station Identification

(Notices T11, T12, T17)

t_call_sign, t_station_id

Either the Call Sign or the Station Identification is mandatory for ADD and MODIFY actions for all classes of station with the exception of radiodetermination and radio-relay stations for which this information is optional. These parameters shall not be notified in case of action SUPPRESS or WITHDRAW. If the Call Sign is provided, the Station Identification shall not be furnished.

The first three characters of the Call Sign shall correspond to the Table of allocation of international call sign series contained in Appendix 42 to the RR. Multiple call signs for one assignment (notice) are allowed.

Different identifying information like a name of station, a flight identification number, a maritime mobile service identity, etc. can be used for the Station Identification as described in Article 19 of the Radio Regulations. If the Station Identification is provided, the Call Sign shall not be furnished. Multiple Station Identifications are not permitted.

For electronic notices the field is provided in the **NOTICE** section.

2.24 Item 4a - Name of the location of the transmitting station

(Notices T11, T12, T16, T17)

t_site_name

This item is mandatory for ADD and MODIFY actions. It shall not be notified in case of action SUPPRESS or WITHDRAW. Indicate the name of the site where the corresponding station is located. Up to 30 characters can be used for notification of a station name. Standard abbreviations may be used as shown in Chapter IV, Section 3 of the Preface to the BR IFIC for terrestrial services in order to compress long station names. For site names it is recommended to use upper-case letters A to Z and digits from 0 to 9 and space.

For electronic notices the Name of the location of the transmitting station shall be provided in the **NOTICE** section.

2.24bis Item 4aa - Name of the location of the intended coast station

t_site_name

(Notice T15)

This item is mandatory for submissions under AP25/1.1.1. It shall not be notified in case of submissions under AP25/1.1.2 or AP25/1.25. Indicate the name of the site where the corresponding station is located. Up to 30 characters can be used for notification of a station name. Standard abbreviations may be used as shown in Chapter IV, Section 3 of the Preface to the BR IFIC for terrestrial services in order to compress long station names. For site names it is recommended to use upper-case letters A to Z and digits from 0 to 9 and space.

For electronic notices the Name of the location of the intended coast station shall be provided in the subsection named **COAST_STATION**.

2.25 Item 5a - Name of the Location of the Receiving Station

(Notices T11, T13, T17)

t_site_name

The nature of information to be notified is described in No 2.24 above.

For notices T13 this item is mandatory for ADD and MODIFY actions. For T11 notices the item is mandatory for ADD and MODIFY actions if a single station or a number of stations described by name(s), geographical area(s) and coordinates is(are) notified.

For T17 notice this item is mandatory for ADD and MODIFY actions if a circular receiving area is not provided.

The item shall not be notified in case of action SUPPRESS or WITHDRAW.

For electronic notices **t_site_name** shall be notified in the following sections:

- for T11 and T17 notices the Name of the location of the receiving station shall be provided in subsection named **RX_STATION** (field **t_geo_type** shall be equal to **POINT**).

- for T13 notice the Name of the location of the receiving station shall be provided in the **NOTICE** section.

2.26 Item 4b - Geographic Area

(Notices T11, T12, T16 and T17)

Item 5b - Geographic Area

(Notices T11, T13, T17)

t_etry

The items shall not be notified in case of action SUPPRESS or WITHDRAW.

Item 4b is mandatory for ADD and MODIFY actions.

Item 5b is mandatory for ADD and MODIFY actions for T13 notices. For T11 notices the item is mandatory for ADD and MODIFY actions if a single station or a number of stations described by name(s), geographical area(s) and coordinates is(are) notified. For T17 notice it is mandatory for ADD and MODIFY actions if neither a circular receiving area nor an area of the receiving stations is notified.

Indicate the geographical area in which the station is located using ITU three-character codes listed in Chapter IV, Section 2 of the Preface to the BR IFIC for terrestrial services.

For electronic notices **t_etry** shall be notified in the following sections:

- the Geographic area in which the transmitting station is located for notices T11, T12, T16 and T17 shall be provided in **NOTICE** section;
- the Geographic Area in which the receiving station is located for T13 notice shall be provided in **NOTICE** section;
- the Geographic Area in which the receiving station is located for T11 and T17 notices shall be provided in sub-subsection named **RX_STATION** (in this case field **t_geo_type** shall be equal to **POINT**).

2.27 Geographical coordinates

Item 4c - Geographical Coordinates of the Transmitting Antenna Site

(Notices T11, T12, T16 and T17)

Item 4c - Geographical Coordinates of the Centre of the Circular Area

(Notices T13 and T14)

Item 5c - Geographical Coordinates of the Receiving Antenna Site

(Notices T11, T12, T13 and T17)

Item 5e - Centre of the Circular Receiving Area (Notice T12, T17)

Centre of the Service Range (Notice T16)

t_long, t_lat

The items shall not be notified in case of action SUPPRESS or WITHDRAW.

Geographical Coordinates of the Transmitting Antenna Site are mandatory for actions ADD and MODIFY.

Geographical Coordinates of the Centre of the Circular Area are mandatory for actions ADD and MODIFY if the Geographic Area or Standard Area is not notified.

Geographical Coordinates of the Receiving Antenna Site for T11 and T13 notices are mandatory. For T12 and T17 notices this information is mandatory if neither an area of the receiving station(s) nor a circular receiving area are notified.

Geographical Coordinates of the Centre of the Circular Receiving Area for T12 notice are mandatory if neither an area of the receiving station(s) nor coordinates are notified.

Geographical Coordinates of the Centre of the Circular Receiving Area for T17 notice are mandatory if neither a receiving station nor an area of the receiving station(s) are notified.

Geographical Coordinates of the Centre of the Service Range for notice T16 are mandatory.

Please note that the format of coordinates for paper notices and electronic ones is different as indicated below.

Leading zeros have to be provided in all cases.

Format of geographical coordinates

	Paper notices	Electronic notices
Longitude	DDDMMSSE(W) Example: 0123454W	+(-)DDDMSS Example: -0123454
Latitude	DDMMSSN(S) Example: 45N2314	+(-)DDMMSS Example: +452314

where

D - degrees, M - minutes, S - seconds, E - East, W - West, N - North, S - South.

Notification of seconds is optional for all cases with the exception of geographical coordinates of stations operating in the bands shared between terrestrial and space services with equal rights.

The geographical coordinates are checked vis-à-vis the ITU Digitized World Map (IDWM) to verify that the corresponding point does not fall in another geographical area than the one notified or in the sea at the distance more than 10 km from the border.

For electronic notices **t_long** and **t_lat** shall be notified in the following sections:

- the Geographical Coordinates of the Transmitting Antenna Site for T11, T12, T16 and T17 notices shall be provided in the **NOTICE** section;
- the Geographical Coordinates of the Centre of the Circular Area for T14 notice shall be provided in the **NOTICE** section;
- the Geographical Coordinates of the Centre of the Circular Area for T13 notice shall be provided in the **TX_STATION** sub-subsection (in this case field **t_geo_type** shall be equal to **CIRCLE**);
- the Geographical Coordinates of the Receiving Antenna Site for T11 and T17 notices shall be provided in the **RX_STATION** sub-subsection if a single or a number of receiving points described by the name, geographical area and coordinates is furnished (in this case field **t_geo_type** shall be equal to **POINT**);
- the Geographical Coordinates of the Receiving Antenna Site for T11 and T17 notices shall be provided in the **POINT** sub-sub-subsection if the receiving area is identified in terms of a geographical area described by several sets of geographical coordinates (without information in items 5a and 5b). In these cases field **t_geo_type** shall be equal to **MULTIPOINT**;

- the Geographical Coordinates of the Receiving Antenna Site for T12 notice shall be provided in the **POINT** sub-sub-subsection (in this case field **t_geo_type** in an **RX_STATION** sub-subsection shall be equal to **MULTIPOINT**);
- the Geographical Coordinates of the Receiving Antenna Site for T13 notice shall be provided in the **NOTICE** section (in this case field **t_geo_type** shall be equal to **POINT**);
- the Centre of the Circular Receiving Area for T12 and T17 notices shall be provided in the **RX_STATION** sub-subsection (in this case field **t_geo_type** shall be equal to **CIRCLE**);
- the Centre of the Service Range for T16 notice shall be provided in the **RX_STATION** sub-subsection.

2.27bis Item 4ca - Geographical Coordinates of the intended coast station

(Notice T15)

Geographical Coordinates of the intended coast station are mandatory for submissions under AP25/1.1.1.

For the format of this data item the same rules as for item 4c - Geographical coordinates shall apply.

For electronic notices, the Geographical Coordinates of the Intended Coast Station(s) shall be provided in the **COAST_STATION** subsection;

2.28 Geographical Coordinates of the Target

Item O-4c - Geographical Coordinates of the Transmitting Antenna Site of the Target

(Notices T11, T12, T16 and T17)

Item O-4c - Geographical Coordinates of the Centre of the Circular Area of the Target

(Notice T14)

Item O-5c - Geographical Coordinates of the Receiving Antenna Site of the Target

(Notice T13)

t_trg_long t_trg_lat

Together with some other parameters of the target, these fields shall be used to uniquely identify the assignment to be modified or suppressed, or the notice under treatment to be amended or withdrawn, if the Administration Unique Identifier of the target is not given. For an additional notice, these fields shall not be notified.

For the format of this data item the same rules as for item 4c - Geographical coordinates shall apply.

For electronic notices the fields are notified in the **NOTICE** section.

2.29 Item 4e - The Geographical Area or Standard Area (Notices T13, T14)

Allotment area (Notice T15)

Item 5d - Service Area (Notice T15)

Area of the Receiving Stations (Notice T12, T17)

t_zone_id

The items shall not be notified in case of action **SUPPRESS** or **WITHDRAW**. In case of actions **ADD** or **MODIFY** the rules below apply.

The Geographical Area or Standard Area is mandatory for T13 and T14 notices if a circular area is not provided.

The Allotment area for notice T15 is mandatory.

The Service Area for notice T15 is mandatory.

The Area of the Receiving Stations for T12 notices is mandatory if neither a circular receiving area nor a zone identified by minimum 3 sets of geographical coordinates is provided.

The Area of the Receiving Stations for notice T17 is mandatory if neither a receiving station (defined by name, geographic area and coordinates) nor a circular receiving area nor a zone identified by minimum 3 sets of geographical coordinates are notified.

Indicate only standard defined areas, the definition of which is found in the Radio Regulations or in Chapter IV, Sections 2 and 4 of the Preface to the BR IFIC for terrestrial services.

These areas may be either:

- an ITU three-character geographical area symbol; or
- a maritime Zone in the case of transmitting or receiving coast stations; or
- an aeronautical Zone as used in Appendix 27 to the Radio Regulations.

For electronic notices **t_zone_id** shall be notified in the following sections:

- the Geographical Area or Standard Area for T13 notice shall be provided in the **TX_STATION** sub-subsection (in this case field **t_geo_type** shall be equal to **ZONE** if the value comes from Chapter IV, Sections 2 or 4 of the Preface to the BR IFIC for terrestrial services);
- the Geographical Area or Standard Area for T14 notice shall be provided in the **NOTICE** section;
- the Allotment Area for T15 notice shall be provided in the **NOTICE** section;
- the Area of the Receiving Stations for notices T12 and T17 shall be provided in the **RX_STATION** sub-subsection (in this case field **t_geo_type** shall be equal to **ZONE** if the value comes from Table B1 or from Table 4E1).
- the service area for T15 notice shall be provided in the **RX_STATION** sub-section (in this case field **t_geo_type** shall be equal to **ZONE** and the value shall come from Chapter IV, Sections 2 or 4 of the Preface to the BR IFIC for terrestrial services).

2.30 Item O-4e - The Geographical Area or Standard Area of the Target (Notice T14) Allotment Area of the Target (Notice T15)

t_trg_zone_id

In combination with some other parameters of the target, this field shall be used to uniquely identify the assignment/allotment to be modified or suppressed, or the notice under treatment to be amended or withdrawn, if the Administration Unique Identifier of the target is not given. For an additional notice, these fields shall not be notified.

For electronic notices the fields are notified in the **NOTICE** section.

2.31 Item 4d - Nominal Radius of the Circular Transmitting Area

(Notices T13, T14)

Item 5f - Nominal Radius of the Circular Receiving Area (Notices T12 and T17) Nominal Service Range (Notice T16)

t_radius

The items shall not be notified in case of action SUPPRESS or WITHDRAW. In case of actions ADD or MODIFY the rules below apply.

Nominal Radius of the Circular Transmitting Area for notices T13 and T14 is mandatory if the Geographical Area is not provided.

Nominal Radius of the Circular Receiving Area for notice type T12 (item 5f) is mandatory (together with item 5e - Geographical centre of the circular receiving area) if neither the Area of the receiving stations (item 5d) nor a zone identified by minimum 3 sets of geographical coordinates (item 5c) are provided.

Nominal Radius of the Circular Receiving Area for notice type T17 is mandatory if neither a receiving station nor the Area of the receiving stations nor a zone identified by minimum 3 sets of geographical coordinates are provided.

Nominal Service Range for T16 notice is mandatory.

The Radius of Circular Area shall be always notified together with the geographical coordinates of the centre of the Circular Area.

Indicate the Nominal Radius or Nominal Service Range in kilometres.

For electronic notices **t_radius** shall be notified in the following sections:

- Nominal Radius of the Circular Transmitting Area for notice T13 shall be provided in the **TX_STATION** sub-subsection (in this case field **t_geo_type** shall be equal to **CIRCLE**);
- Nominal Radius of the Circular Transmitting Area for notice T14 shall be provided in the **NOTICE** section;
- Nominal Radius of the Circular Receiving Area for notices T12 and T17 as well as the Nominal Service Range for T16 notice shall be provided in the **RX_STATION** sub-subsection (in this case field **t_geo_type** shall be equal to **CIRCLE**).

2.32 Indicator - Type of Geographic Area

(Electronic notice T14 only)

t_geo_type

Indicate the type of Geographic Area or Standard Area to which the typical station is applicable. The possible values are CIRCLE when the area is specified as a circle, or ZONE when the area is specified as an ITU three-character code for a Geographic Area or as a Standard Area using a designation other than the ITU three-character code.

The indicator shall be provided in the **NOTICE** section for T14 notice. For notices T11, T12, T13, T15, T16 and T17 this field is not notified at the level of **NOTICE**.

2.33 Indicator - Type of Geographic Area of the Target

(Electronic notice T14 only)

t_trg_geo_type

Indicate the type of Geographic Area or Standard Area of the assignment to be modified or suppressed, or of the notice under treatment to be updated or withdrawn if the Administration Unique Identifier of the target is not given. The possible values are CIRCLE when the area is specified as a circle, or ZONE when the area is specified as an ITU three-character code for a Geographic Area or as a Standard Area using a designation other than the ITU three-character code.

The indicator shall be provided in the **NOTICE** section for T14 notice. For notices T11, T12, T13, T15, T16 and T17 this field is not notified.

2.34 Indicator - Type of Geographic Area (in RX_STATION)

(Electronic notices only - T11, T12, T15, T16 and T17)

t_geo_type

For Notice Types T11, T12, T15, T16 and T17 indicate the type of geographic area describing the location of the receiving station.

For Notice Type T11, the possible values are **POINT** when the area is specified as a single point or a number of distinct points described by names of locations of receiving stations, geographic areas and coordinates and **MULTIPOINT** when the area is described by minimum 3 sets of geographical coordinates.

For Notice Type T12, the possible values are **CIRCLE** when the area is specified as a circle, **MULTIPOINT** when the area is described by minimum 3 sets of geographical coordinates. and **ZONE** when the area is specified as a Standard Area using a designation other than the ITU three-character code.

For Notice Type T15, the possible value is **ZONE**.

For Notice Type T16, the possible value is **CIRCLE**.

For Notice Type T17, the possible values are **POINT** when the area is specified as a single point or a number of distinct points described by names of locations of receiving stations, geographic areas and coordinates, **CIRCLE** when the area is specified as a circle, **MULTIPOINT** when the area is described by minimum 3 sets of geographical coordinates, and **ZONE** when the area is specified as an ITU three-character code for a Geographic Area or as a Standard Area using a designation other than the ITU three-character code.

The indicator shall be provided in the **RX_STATION** sub-subsection.

2.35 Indicator - Type of Geographic Area (TX_STATION)

(Electronic notice T13 only)

t_geo_type

For Notice Type T13 indicate the type of Geographic Area or Standard Area in which the mobile transmitting station is operating.

The possible values are **CIRCLE** when the area is specified as a circle, or **ZONE** when the area is specified as a Standard Defined Area or a standard ITU three-character geographical area symbol.

The indicator shall be provided in the **TX_STATION** sub-subsection.

2.36 Item 5g - Maximum Length of the Circuit

(Notices T11, T12, T15 and T17)

t_dist_max

The maximum length of the circuit (kilometres) for receiving areas other than circular. This information is optional.

For electronic notices this field shall be provided in the **ANTENNA** subsection.

2.37 Item 6a - Class of Station

(All notice types)

t_stn_cls

This information is mandatory for ADD and MODIFY actions. It shall not be notified in case of action SUPPRESS or WITHDRAW. Indicate the class of station using symbols appearing in Chapter IV, Section 5 of the Preface to the BR IFIC for terrestrial services.

The allowed values, in terms of notice type are given below;

Notice type	Allowed value of class of station (item 6a)
T11	FX
T12	AL, BC ⁸ , FA, FB, FC, FD, FG, FL, FP, LR, NL, OE, RN, SM, SS
T13	AM, MA, ML, MO, MR, MS, NR, OD, RM, SA
T14	AL ^{9,10} , FA ¹⁰ , FB ¹⁰ , FC ⁹ , FD ⁹ , FG ⁹ , FL ¹⁰ , FP, FX ¹⁰ , LR, NL ⁹ , OE, RN, SM, SS
T15	FC
T16	AL, FC
T17	FX, FA, FB, FC ⁹ , FG ⁹ , FD ⁹ , FL, FP

For electronic notices this field shall be provided in the **NOTICE** section.

2.38 Item O-6a - Class of Station of the Target

(All notice types except T15)

t_trg_stn_cls

In combination with other parameters of the target, this field shall be used to uniquely identify the assignment to be modified or suppressed, or the notice under treatment to be updated or withdrawn, if the Administration Unique Identifier of the target is not given. This field shall not be notified for ADD action.

The allowed values for this data item are the same as for item 6a - Class of station.

For electronic notices this field shall be provided in the **NOTICE** section.

2.39 Item 6b - Nature of Service/System

(All notice types)

t_nat_srv

This information is mandatory for ADD and MODIFY actions for some classes of station (e.g., FD, FG, FX). It shall not be notified in case of action SUPPRESS or WITHDRAW. Indicate the nature of service using symbols appearing in Chapter IV, Section 6 of the Preface to the BR IFIC for terrestrial services.

⁸ In the non-planned bands below 28 000 kHz.

⁹ In the non-planned bands.

¹⁰ Outside the bands governed by the GE85M and GE89 Regional Agreements

The allowed values, in terms of class of station, are given below:

Class of station	Allowed value of nature of service (item 6b)
AL, AM, NL, NR, RM, RN	OT, RC, RD, RG, RT
BC	blank
FA, FB, FC, FL	CO, CP, CR, CV, FS, OT, AS
FP, MA ¹¹ , ML, MS, MO	CO, CP, CR, CV, FS, OT
FD, FG	CO, CV, OT, AS ¹¹
FX	AX, AS, CO, CP, CR, CV, HP, MX, OT, PX, ST
LR, MR	OT
OD, OE	CO, OT
SA, SM, SS	CO, CV, OT

Multiple codes for the Nature of Service/System are possible for one assignment (notice), provided that they are mutually compatible.

For T17 notice type value AS (adaptive system) is mandatory as the first Nature of Service symbol and can be accompanied by other allowed Nature of Service symbols.

For electronic notices this field shall be provided in the **NOTICE** section.

2.40 Item 7a - Designation of Emission

(All notice types)

t_bdwidth_cde and **t_emi_cls**

On electronic notifications the Designation of Emission is presented by two separate fields: **t_bdwidth_cde** (Necessary bandwidth) and **t_emi_cls** (Class of Emission).

On paper notices the Designation of Emission is presented as one field divided into two parts by a black line. The first four characters are reserved for the notification of the Necessary Bandwidth and the remaining five characters are reserved for the notification of the Class of Emission.

The Designation of Emission is mandatory for ADD and MODIFY actions. It shall not be notified in case of action SUPPRESS or WITHDRAW. Indicate the information in accordance with the method described in Appendix 1 to the Radio Regulations.

For electronic notices these fields shall be provided in the **NOTICE** section.

¹¹ Outside the bands governed by Appendices 26 and 27

2.41 Item O-7a - Designation of Emission of the Target

(All notice types)

t_trg_bdwidth_cde and **t_trg_emi_cls**

In combination with other parameters of the target, this field(s) shall be used to uniquely identify the assignment to be modified or suppressed, or the notice under treatment to be updated or withdrawn, if the Administration Unique Identifier of the target is not given. This field shall not be notified for ADD action.

For the format of this data item the same rules as for item 7a - Designation of emission shall apply.

For electronic notices these fields shall be provided in the **NOTICE** section.

2.42 Item 7b - Class of Operation

(Notices T11 and T17)

t_op_cls

The Class of Operation is mandatory for ADD and MODIFY actions for frequency assignments to fixed stations operating in bands between 3 000 and 27 500 kHz (T11 and T17 notices). Indicate class of operation A, B or C as follows:

Symbol A assignment (notice) for regular operation use which is not provided by another satisfactory means of telecommunication;

Symbol B assignment (notice) for use as a standby to some other means of telecommunication;

Symbol C assignment (notice) for occasional use on a reserve basis.

It shall not be notified in case of action SUPPRESS or WITHDRAW.

For electronic notices this field shall be provided in the **NOTICE** section.

2.43 Item O-7b - Class of Operation of the Target

(Notices T11 and T17)

t_trg_op_cls

In combination with other parameters of the target, this field shall be used to uniquely identify the assignment to be modified or suppressed, or the notice under treatment to be updated or withdrawn, if the Administration Unique Identifier of the target is not given. This field shall not be notified for ADD action.

The allowed values for this data item are the same as for item 7b - Class of operation.

For electronic notices this field shall be provided in the **NOTICE** section.

2.44 Item 7e - Frequency deviation, in MHz (Notice T11)

t_freq_dev

Item 7f - Energy dispersal, in kHz (Notice T11)

t_energy_dsp

Item 8ab - Maximum power density, in dBW/Hz (Notice T11)

t_pwr_dens

Item 9k - Receiving system noise temperature, in Kelvin (Notice T11)

t_noise_temp

This information is optional and may be furnished for stations in the fixed service when the parameters are used as a basis to effect coordination with another administration.

For electronic notices fields **t_freq_dev** and **t_energy_dsp** are provided in **NOTICE** section. Field **t_pwr_dens** is provided in the **ANTENNA** subsection. Field **t_noise_temp** is provided in the **RX_STATION** sub-subsection.

2.45 Item 8 - Type of power

(All notice types except T16)

t_pwr_xyz

The type of power, as appropriate, corresponding to item 7a - Class of emission. The possible values are X (peak envelope power), Y (mean power) and Z (carrier power), describing the power of a radio transmitter as defined in RR1.156 to RR1.159. This information is mandatory for Notice Types T11, T12, T13, T14, T15 and T17 if item 8a - Power delivered to the antenna (dBW) is notified.

For electronic notices field **t_pwr_xyz** is provided in the **ANTENNA** subsection.

2.46 Item 8a - Power to Antenna (in dBW)

(All notice types except T16)

t_pwr_ant

Provide the value of the Power to Antenna in dBW indicating whether the value is positive or negative by means of the symbol + or -.

For Notice Type T17 indicate the nominal power at which the transmitter normally operates.

2.46.1 The cases when the Power to Antenna is mandatory for ADD and MODIFY actions are described below.

- when the Assigned Frequency falls into a band shared between terrestrial and space services with equal rights and allocated to space services in the Earth-to-space direction or the emission overlaps into such a band (notice types T11 and T12);
- when the notified Class of Station is FD (aeronautical station in aeronautical mobile (R) service) or FG (aeronautical station in aeronautical mobile (OR) service) or SM (meteorological aids base station) (notice type T12);
- in all notifications in the bands below 28 MHz (excepting the notifications of AL, AM, NL, NR, RM and RN stations, where this field is not mandatory if the item 8b is notified);
- in all notifications on notice type T15.

2.46.2 The Power to Antenna is also mandatory, for ADD and MODIFY actions, in cases not described in section **2.46.1** above, if the radiated power (item 8b) is not provided (notice types T11, T12, T13, T14, T17).

In all cases not covered by paragraphs **2.46.1 - 2.46.2** the Power to Antenna is optional.

It shall not be notified in case of action SUPPRESS or WITHDRAW.

For electronic notices field **t_pwr_ant** is provided in the **ANTENNA** subsection.

2.47 Item 8b - Type of Radiated Power

(Notices T11, T12, T13, T14, T17)

t_pwr_eiv

The type of radiated power in one of the forms described in Nos. RR1.161 to RR1.163. The possible values are E (e.r.p.), I (e.i.r.p.) and V (e.m.r.p). This information is mandatory for Notice Types T11, T12, T13, T14 and T17 if item 8b - Radiated power (dBW) is notified.

For electronic notices field **t_pwr_eiv** is provided in the **ANTENNA** subsection.

2.48 Item 8b - Radiated Power (in dBW)

(Notices T11, T12, T13, T14, T17)

t_pwr_dbw

Provide the value of the Radiated Power in dBW indicating whether the value is positive or negative by means of the symbol + or -.

2.48.1 The cases when the Radiated Power is mandatory for ADD and MODIFY actions are described below:

- when the Assigned Frequency falls into a band shared between terrestrial and space services with equal rights or the emission overlaps into such a band (notice types T11 and T12); or
- when the Power to Antenna (item 8a) and the Maximum Antenna Gain are not provided (notice types T11, T12, T13, T14, T17).

In all cases not covered by paragraph **2.48.1** the Radiated Power is optional.

It shall not be notified in case of action SUPPRESS or WITHDRAW.

For electronic notices field **t_pwr_dbw** is provided in the **ANTENNA** subsection.

2.49 Item 8ba - Range of power control

(Notice T17)

t_pwr_range

For Notice Type T17 indicate the range of power control, in dB, above the nominal power indicated in item 8a if a power control is used. This information is optional.

For electronic notices field **t_pwr_range** is provided in the **ANTENNA** subsection.

2.50 Item 9 - Directivity of the Antenna

(Notices T11, T12, T15 and T17)

t_ant_dir

The Directivity of Antenna is mandatory for ADD and MODIFY actions and shall not be notified for actions SUPPRESS and WITHDRAW.

Indicate symbol D for a directional antenna or symbol ND for an omnidirectional one.

For electronic notices the field is provided in the **ANTENNA** subsection.

2.51 Item 9a - Azimuth of Maximum Radiation

(Notices T11, T12, T15 and T17)

t_azm_max_e

The Azimuth of Maximum Radiation is mandatory for ADD and MODIFY actions if the antenna is a directive one.

Indicate, in degrees, the azimuth of maximum radiation (clockwise from True North). For a rotating antenna indicate the central azimuth of the rotation sector.

If there is more than one maximum (e.g., for a Figure-8 antenna pattern), indicate only the most important azimuth.

For electronic notices the field is provided in the **ANTENNA** subsection.

2.52 Item 9ab - Azimuthal Sector for Rotating Antenna

(Notices T11, T12, T15 and T17)

t_azm_fr, t_azm_to

This item shall be provided for ADD and MODIFY actions if a rotating antenna is used.

Indicate two azimuths in degrees (clockwise from True North) defining the sector in which the antenna rotates, from **t_azm_fr** to **t_azm_to**.

For electronic notices this field is provided in the **ROTATIONAL** sub-subsection of the **ANTENNA** subsection.

2.53 Item 9b - Elevation Angle

(Notices T11 and T12)

t_elev

The item is mandatory only for stations operating in frequency bands above 1 GHz shared with space services on an equal basis. Indicate the value of elevation angle of maximum directivity in degrees.

For electronic notices the field is provided in the **ANTENNA** subsection.

2.54 Item 9c - Beamwidth

(Notices T11, T12, T15 and T17)

t_bmwidth

This item is required for ADD and MODIFY actions if antenna is directive.

Indicate, in degrees, the width of the main lobe of the antenna relating to 3 dB aperture.

For electronic notices the field is provided in **ANTENNA** subsection.

2.55 Item 9d - Polarization

(Notice T11)

t_polar

The item is mandatory for actions ADD and MODIFY only for stations operating in frequency bands above 1 GHz shared with space services on an equal basis. Indicate the polarization symbol as described in Chapter IV, Section 9 of the Preface to the BR IFIC for terrestrial services.

For electronic notices the field is provided in the **ANTENNA** subsection.

2.56 Item 9e - Height of Antenna

(Notices T11 and T12)

t_hgt_agl

The item is mandatory for actions ADD and MODIFY only for stations operating in frequency bands above 1 GHz shared with space services on an equal basis. Indicate the height of the antenna above ground level in metres using symbols + or - whether the value is positive or negative. For high altitude platforms, in the fixed service, indicate the altitude of the platform. Negative values are only applicable to stations located in tunnels or to other underground installations.

For electronic notices the field is provided in the **ANTENNA** subsection.

2.57 Item 9ea - Altitude of Site Above Sea Level

(Notices T11 and T12)

t_site_alt

The item is mandatory for actions ADD and MODIFY only for stations operating in frequency bands above 1 GHz shared with space services on an equal basis. Indicate the altitude of the site above sea level in metres using symbols + or - whether the value is positive or negative.

For electronic notices the field is provided in the **NOTICE** section.

2.58 Item 9g - Type of Antenna Gain

(Notices T11, T12, T14, T15 and T17)

t_gain_type

Indicate the type of maximum antenna gain in one of the forms described in No. RR1.160. The possible values are I (isotropic gain) in the frequency bands above 1 GHz shared by space and terrestrial radiocommunication services, V (gain relative to a short vertical antenna) in the bands

governed by the Regional Agreements GE85M and GE85N, and D (gain relative to a half-wave dipole) in cases other than those mentioned above. This information is mandatory for Notice Types T11, T12, T14, T15 and T17 if item 9g -Maximum antenna gain (dB) is notified.

For electronic notices the field is provided in the **ANTENNA** subsection.

2.59 Item 9g - Maximum Antenna Gain (in dB)

(Notices T11, T12, T14, T15 and T17)

t_gain_max

The item is mandatory for actions ADD and MODIFY if antenna is directional, including Rotational Antennas. Indicate, in dB, the gain of antenna in the direction of maximum radiation.

For electronic notices the field is provided in the **ANTENNA** subsection.

If all three values of the Maximum gain (item 9g), the Power to Antenna (item 8a) and the Radiated Power (item 8b) are furnished, the sum of the Maximum Gain and the Power to Antenna should be equal to the value of the Radiated Power.

2.60 Item 9j - Reference Antenna

(Notices T11, T12 and T17)

t_ant_ref

This information is optional and furnished when used as a basis to effect coordination with another administration. The information to be given in item 9j should be the exact reference of the antenna appearing in the CCIR Book "Antenna Diagrams" (CCIR/78 or CCIR/84). For electronic notices the field is provided in the **ANTENNA** subsection.

2.61 Item 10b - Regular Hours of Operation

(All notices)

t_op_hh_fr, t_op_hh_to

The Regular Hours of Operation are mandatory for actions ADD and MODIFY and shall not be furnished for actions SUPPRESS and WITHDRAW.

For paper notices the format of Regular Hours of Operation is hhmm, for example 1420 meaning 14 hours 20 minutes in UTC.

For electronic notices Regular Hours of Operation must follow the ISO 8601 standard. That is, they must be in the format **hh:mm**, where:

hh is the number of complete hours which have passed since midnight (00 to 24).

mm is the number of complete minutes that have passed since the start of the hour (00 to 59).

As described in ISO 8601, 00:00 represents midnight at the beginning of the day and 24:00 represents midnight at the end of the day.

For electronic notices the field is provided in **NOTICE** section to specify operation from **t_op_hh_fr** until **t_op_hh_to**.

2.62 Item O-10b - Regular Hours of Operation of the Target

(All notices)

t_trg_op_hh_fr, t_trg_op_hh_to

For actions MODIFY or SUPPRESS or WITHDRAW the Regular Hours of Operation of the Target are mandatory if the Administration Unique Identifier of the Target is not given. They are used as a parameter to uniquely identify the assignment to be modified or suppressed, or the notice to be updated or withdrawn. For action ADD this information shall not be provided.

For the format of this data item the same rules as for item 10b - Regular hours of operation shall apply.

For electronic notices the field is provided in **NOTICE** section.

2.63 Item 10d - Estimated Peak Hours of Traffic

(Notice T15)

t_peak_hh_fr, t_peak_hh_to

For Notice Type T15 indicate the estimated starting time and ending time for this set of peak hours of operation (UTC) in the format hh:mm. On the paper notice, there is a limitation on the total number of sets of peak hours to be notified on one sheet. If the total number exceeds that limit, the remaining information shall be supplied on a separate sheet and the box for other information shall be checked. However, on electronic notices, there is no limit concerning the total number of cases for one notice.

The same rules for the format of this data item as for item 10b - Regular hours of operation shall apply.

For electronic notices the field is provided in **PEAK_HOURS** subsection.

2.64 Item 10e - Estimated daily volume of traffic

(Notice T15)

t_traffic

For Notice Type T15 indicate the estimated traffic (minutes per day) for the channel. For paper notices, allowed values are 001 to 999, which correspond to the values normally expected for the coast stations.

For electronic notices the field is provided in the **NOTICE** section.

For electronic notices the field is provided in the **COORDINATION** subsection.

2.65 Item 11 - Coordination with Other Administrations

(All notices)

t_adm

Indicate the ITU three-character code of the administration with which coordination has been successfully achieved. This information is mandatory for Notice Type T15, and for Notice Types T11 or T12 for notices in the frequency bands shared with the space services if coordination has been required and successfully completed. On the paper notice, there is a limitation on the total number of ITU three-character codes to be notified on one sheet. If the total number exceeds that limit, the remaining information shall be supplied on a separate sheet and the box for Other information shall be checked. However, for electronic notices, there is no limit concerning the total number of cases for one notice.

For electronic notices the field is provided in the **COORDINATION** subsection.

2.66 Item 12a - Operating Agency

(All notices except T15 and T16)

t_op_agcy

This item is optional for actions ADD and MODIFY and shall not be provided for actions SUPPRESS and WITHDRAW.

Indicate the name of the operating agency by means of the symbols given under the appropriate ITU three-character administration symbol in Chapter IV, Section 1 of the Preface to the BR IFIC for terrestrial services.

There can be multiple symbols for the Operating Agency.

For electronic notices the field is provided in the **NOTICE** section.

2.67 Item 12b - Administration address code

(All notices except T15 and T16)

t_addr_code

This item is mandatory for actions ADD and MODIFY and shall not be provided for actions SUPPRESS and WITHDRAW.

Indicate the name and address of the responsible Administration by means of the symbols given under the appropriate ITU three-character administration symbol in Chapter IV, Section 1 of the Preface to the BR IFIC for terrestrial services.

For electronic notices the field is provided in the **NOTICE** section.

2.68 Additional remarks

t_remarks

This field is optional. It is not validated. Any information in this field will be entered in the database.

For electronic notices the field is provided in the **NOTICE** section.

2.69 Number of Notices

(only for electronic notification)

t_num_notices

The number of notices contained in the file. This information is mandatory. If the Bureau's count of the number of notices in the file differs from this value, the Bureau will presume that the file has been corrupted, and will notify the administration submitting the notices. Although this field only exists for electronic notification, it is recommended that the covering letter accompanying the paper notices indicate the number of notices, for the Bureau to verify that all notices have been received.

For electronic notices the field is provided in the **TAIL** section.
