INTERNATIONAL TELECOMMUNICATION UNION

Radiocommunication Bureau
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Circular letter
CR/63

4 November 1996

To Administrations of Member States of the ITU

Subject: Request for Comments: Notification on electronic media of frequency assignments concerning Terrestrial Radiocommunication Services

To the Director General

Dear Sir,

As noted in CR/36, the ITU is in the process of modernizing its information systems, including moving from its current mainframe operations to a client-server configuration using PCs and relational data bases. CR/36 presented many of the concepts of the new system for terrestrial services — the **Ter**restrial **Ra**diocommunication **Sys**tem ***(TerRaSys)*** — now under development.

Because ***TerRaSys*** is a completely new system, rather than a conversion or migration of an existing system, the Bureau has started with a clean slate in its analysis, taking into account CR/26 (which relates to electronic data submission in the current terrestrial system).

This Circular Letter is devoted to the explanation of the concepts related to electronic data submission (electronic notices) for ***TerRaSys***. Thus, it is limited to the terrestrial radiocommunication services, with particular emphasis to those terrestrial services for which electronic notices will be first implemented.

The letter comprises 3 main parts : Goals and objectives, General concepts and proposed electronic notices for Television and VHF Sound Broadcasting (the first areas to be covered by ***TerRaSys***.), followed by our views on processing and a tentative schedule of implementation.

The ideas presented here are proposals. We wish to receive your comments and suggestions. We have already received several comments and suggestions in response to CR/36, and they have been helpful in guiding us in the development of the concepts of the ***TerRaSys*** electronic notices as well as in other areas of ***TerRaSys*** development. We hope to receive further helpful comments regarding this Circular letter, and will take them into account in preparing the final ***TerRaSys*** electronic notice formats which will be provided in a subsequent Circular letter.

1 Goals and Objectives

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The Bureau has numerous goals and objectives concerning ***TerRaSys*** electronic notices. Among these, in no particular order, are:

1.1 ***TerRaSys*** electronic notices should permit the Bureau to implement an automated system, with as little human intervention as possible. This will lead to : Increased speed in processing the notices, savings in the cost of processing, and minimized back-and-forth communication between the Bureau and administrations.

1.2 ***TerRaSys*** electronic notices should implement the same concepts as discussed in CR/36, such as:

1.2.1 Notice forms (such as AP1/A2 and GE75, and AP1/A7 and RJ81) will be merged so that a common format is used for notices under Article 12 of the Radio Regulations[1] and for notices under applicable Plans.

1.2.2 An administration proposing to bring into operation under Article 12 an assignment that has previously been notified under one of the Plans would *not* have to resubmit all of the technical data if it is identical to what is in the corresponding updated Plan.

1.2.3 Notices for modifications of existing assignments would have to include all data, not just those fields which have changed. (However, for ***TerRaSys*** electronic notices, we introduce some additional kinds of notices for special purposes, as described in paragraph 2.5 below; not all data need be submitted with these special-purpose notices.)

1.2.4 Notices for modifications of existing assignments would also include both the *old* and *new* values of a few key fields (e.g., frequency and geographic coordinates) that uniquely identify the assignment for which the modification is being submitted. Alternatively, the Bureau will reserve, in ***TerRaSys***, a 20-character field that administrations may use as their own unique identifier.

1.3 ***TerRaSys*** electronic notices should be consistent with the work being done in ITU-R Study Group 1 regarding an International Data Dictionary (IDD).

1.4 ***TerRaSys*** electronic notices should follow, as much as possible, international and *de facto* standards.

1.5 The ***TerRaSys*** electronic notice structure should be flexible and adaptable. Specifically:

1.5.1 ***TerRaSys*** electronic notice formats should follow the ***TerRaSys*** paper notices regarding spectrum management data. If the paper notice changes substantively, the substance of the electronic notices would change to match the paper notice. Only the data required in the paper notices should be required in the electronic notices.

1.5.2 A corollary is that the ***TerRaSys*** electronic notice formats would be independent of the design of the Bureau's ***TerRaSys*** data base ***(TerRaBase)*** design, as well as independent of the design of administrations' data bases.

1.5.3 ***TerRaSys*** electronic notice formats should be easy to modify. By this, we mean that it should be easy to add, delete, and modify data elements which are notified, without a lot of delay or disruption. We therefore search for a notice structure that is not rigid. If, in the future, a new feature or capability is added, the structure should *not* require all administrations to change their electronic notice programs; rather, only those administrations wishing to take advantage of the new feature or capability would be required to change.

1.6 ***TerRaSys*** electronic notice formats should be usable by others outside of the context of notices to the Bureau, both directly and in an expanded form, if they wish. One example is a

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[1] The World Radiocommunications Conference (WRC-95) (Geneva, 1995) has renamed Article 12 to Article S11. Because the final, revised version of the Radio Regulations may use another numbering system, we retain our reference to Article 12 in this Circular Letter, keeping in mind that we are actually referring to Article S11 of the Final Acts of WRC-95.

structure that could allow administrations to add additional information which may be useful in a bilateral or multilateral context, although the Bureau would not need these data. With such a structure, the Bureau would be easily able to ignore these additional data, permitting administrations to send the same electronic files to the Bureau as well as to others.

1.7 The structure for the ***TerRaSys*** electronic notices should permit the easy addition of electronic submission of additional types of information not now generally submitted using a pre-printed paper notice form. One example is the submission — after the initial notice — of the results of attempts at coordination.

1.8 ***TerRaSys*** electronic notices should minimize the possibility of submitting erroneous data, or overlooking the submission of data.

1.9 ***TerRaSys*** electronic notices should take advantage of advances in computer technology when appropriate. For example:

1.9.1 ***TerRaSys*** electronic notices should be submitted using current computer technology. The system should not depend on older technology, nor should it jump too far into future technology. Specifically, this means that:

1.9.1.1 The Bureau would accept ***TerRaSys*** electronic notices on MS-DOS/Windows 3½-inch diskettes, ftp file transfers, and attachments to electronic mail. Other type of media may also be envisaged, particularly when there is a large number of notices being submitted at one time.

1.9.1.2 We have specifically omitted 5¼-inch diskettes because we see that these are rapidly becoming obsolete. We have also specifically omitted tapes and tape cartridges from our targeted media because we see these as being less flexible.

1.9.1.3 We have also intentionally omitted the possibility of an administration interacting directly with the ITU data base; we believe that it is too early in the ***TerRaSys*** development to consider the possibility of clients in the administrations working with the ***TerRaBase*** server in ITU.

1.9.2 ***TerRaSys*** is to replace a system which works with a limited character set. Specifically, our existing system does not use lowercase letters, nor does it use accented and other alphabetic characters outside the range of the 26 letters from **A** to **Z**. The Bureau believes that it is appropriate to consider extending the acceptable character set, in particular concerning Station Name and Remarks in the ***TerRaSys*** electronic notices.

We pose these questions with regard to Station Name and Remarks in the context of *TerRaSys* electronic notices:

1.9.2.1 Should Station Names and Remarks be limited to the 26 uppercase characters **A** to **Z**, plus numbers, punctuation and spaces, as in the present system?

1.9.2.2 Should the 26 lowercase characters **a** to **z** be permitted in Station Names and Remarks?

1.9.2.3 Should all of the printable characters from the ISO 8859-1 character set (accented and other alphabetic characters, in addition to uppercase and lowercase **A** to **Z**, plus punctuation and spaces) be permitted in Station Names and Remarks?

1.9.2.4 If the Station Names and Remarks are to be restricted, then how should the Bureau handle Station Names and Remarks containing characters outside of the allowable set of characters? Should the notices be returned? Should the Bureau convert to the limited set of characters?

The ITU's working languages, English, French, and Spanish can be fully represented using the ISO 8859-1 coded character set. Use of this set would not change the representation of any of the Station Names currently notified to the Bureau, while adding additional possibilities.

At some time in the future, it may be possible to consider ISO/IEC 10646-1 (also known as Unicode), which would also permit the use of other alphabets, such as Cyrillic and Arabic, and other characters. However, Unicode is not yet widely available[2] and could lead to other difficulties. Therefore, we believe that it would be premature to use Unicode in the electronic notice system.

Note that expansion beyond the limits of the present system would be restricted to the ***TerRaSys*** electronic notices. We would continue to retain the current limits — the 26 uppercase characters **A** to **Z**, plus numbers, punctuation and spaces — for the paper notices because of the possible difficulties in transcription.

2 General Concepts of *TerRaSys* Electronic Notices

These general concepts will apply to all ***TerRaSys*** electronic notices.

2.1 The most important general concept involves the format to be used. We have considered numerous possible formats, including the format described in CR/26, generic formats (such as fixed format, comma-delimited format, and space-delimited format), EDIFACT, and SGML.

Finally, the Bureau has chosen to use a text format which mixes some SGML concepts with some ideas from the initialization files (the **.INI** files) in 16-bit Windows programs. This is a very flexible format which meets all of our goals and objectives. We describe the *generic* format for such files in some detail in Annex 2.

This format provides great flexibility for electronic notices, allowing even more flexibility than the paper notices, for example, the possibility to specify a large number of administrations with which coordination has been successfully achieved.

We expect that the ***TerRaSys*** electronic notices will be generated by a computer program. Nonetheless, the format we have chosen is suitable for viewing with a text editor, a word processor, etc. However, because of the syntax, we recommend against generating the ***TerRaSys*** electronic notices using an editor or word processor.

We describe the general file structure for ***TerRaSys*** electronic notices in Annex 3.

2.2 We intend that the ***TerRaSys*** electronic notices require only the information required on the paper notices. There are five exceptions:

2.2.1 The file containing the ***TerRaSys*** electronic notices must also specify the coded character set which is used. As currently proposed, only the ISO 8859-1 coded character set would be acceptable. However, we include this in anticipation of allowing additional character sets in the future.

2.2.2 The file containing the ***TerRaSys*** electronic notices may optionally contain the electronic mail address to which communications regarding the electronic notices should be addressed.

2.2.3 Each ***TerRaSys*** electronic notice must also include the Notice Type, which will be preprinted on the paper notices.

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[2] In fact, within the Bureau, ***TerRaSys*** is being developed using Windows NT, which uses Unicode as its native character set, as our client platform. Our concern about the use of Unicode is primarily related to those administrations which do not yet have Unicode capability.

2.2.4 Each ***TerRaSys*** electronic notice may optionally contain Remarks, which are comments by the notifying administration to assist the Bureau in processing the notice. The Remarks would not be translated, nor would they be published.

2.2.5 The file containing the ***TerRaSys*** electronic notices must specify the total number of notices included in the file.

2.3 On the other hand, the ***TerRaSys*** electronic notices do not require the submission of the directional/non-directional indicator [3]. This will be determined from other information (such as whether an antenna pattern is supplied).

2.4 In some cases, the paper notice forms have boxes to check to show a particular option. For example, the proposed television notice form provides boxes to check to show that the notice is intended for the ST61 Plan, the GE89 Plan, or for notification under Article 12 of the Radio Regulations. These boxes are translated into data to be submitted; in this example, the name of the field containing this information is **t_plan**. Another example involves the boxes which indicate whether the paper notice is for an addition, modification, or suppression; with the ***TerRaSys*** electronic notices, this is included in a field named **t_action**.

2.5 In addition to the traditional concepts of notices for additions, modifications, and suppressions of assignments, we introduce four new types of actions with the ***TerRaSys*** electronic notices:

2.5.1 The CONFORM action, which is to be used — as described in CR/36 — when an administration is proposing to bring into operation under Article 12 an assignment which conforms to one of the Plans. This could be either a new Article 12 assignment or a modification of an existing Article 12 assignment. Use of the CONFORM action is intended to ensure that Article 12 and Plan assignments are identical, if that is the intention. The details of the CONFORM action appear in Annex 7.

2.5.2 The COORDINATION action, which is to be used when an administration is updating the list of administrations with which coordination has been achieved. Use of the COORDINATION action would not require submission of all of the information required with a typical modification. The details of the COORDINATION action appear in Annex 8.

2.5.3 The ADMINID action, which is to be used when an administration is providing its unique Administration Serial Number for the first time, or when it is updating this number. Use of the ADMINID action would not require submission of all of the information required with a typical modification because this is not really a “notice” under the Plans or the Radio Regulations; rather, this is an administrative update. The details of the ADMINID action appear in Annex 9.

2.5.4 The PARTB action, which is used when an administration is requesting the publication of a modification in Part B of the Special Section without changing any technical characteristics from the ones published in part A. This applies only to Plans modifications, not to Article 12 notifications. Use of the PARTB action would not require submission of all of the information required with a typical modification. The details of the PARTB action appear in Annex 10.

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[3] For the paper notices, the Bureau prefers to ask for the directional/non-directional indicator because the directional antenna pattern (if any) is on a separate page, and it is possible that this page has become separated from the rest of the notice. Obviously, this problem doesn’t exist with electronic notices.

3 Proposed Format for Television and VHF Sound Broadcasting

The first phase in the implementation of ***TerRaSys*** electronic notices is limited to television and VHF sound broadcasting. It is too early to provide details for the other services.

As a result of your comments regarding CR/36, we will be making some minor changes in the proposed television and VHF sound notice forms presented in CR/36; these changes are still under development. The proposed formats for ***TerRaSys*** electronic notices which are described here are based on the paper notice forms in CR/36. As we revise these paper notice forms, so too we will revise the ***TerRaSys*** electronic notice format. Because we expect these revisions to be minor, we think that it would be very helpful to provide an electronic format based on the currently proposed paper notice forms.

The details for the formats for television and VHF sound broadcasting are described in Annex 4 and Annex 5.

Examples of ***TerRaSys*** electronic notices for VHF sound broadcasting appear in Annex 6.

4 Processing of *TerRaSys* Electronic Notices

When ***TerRaSys*** electronic notices are received, they will be treated within the Bureau in a manner similar to the paper notices, with some exceptions:

4.1 Each incoming electronic notice will be quickly examined in the Bureau for syntax and completeness errors. Any errors discovered will be referred to the notifying administration

4.2 The search for existing assignments to be modified or copied will be an automated search. Failure to find the existing assignment will result in an automated communication.

4.3 On the paper notices, a field can be submitted only one time. However, with the proposed ***TerRaSys*** electronic notices, it is possible that a field could *mistakenly* be submitted multiple times for the same notice or sub-section of a notice. With the exception of **t_remarks** in the **NOTICE** section and **t_adm** in the **COORDINATION** sub-section, duplicate fields are *not* allowed. If unallowed duplicate fields are discovered, this will result in rejection of this notice.

4.4 If the notice was submitted via electronic mail, the communications with the administration will be by electronic mail. We anticipate — particularly in the case of electronic mail submissions — a significantly faster turnaround time than with paper notices for preliminary portions of processing (such as validation). Of course, the Bureau would continue to publish in the order of receipt of both paper and electronic notices.

5 Tentative Schedule

As indicated in CR/36, the conversion to ***TerRaSys*** will be accomplished in phases. The first phase will involve television and VHF sound broadcasting. This phase will be followed by LF/MF broadcasting. The final phase involves the remaining services.

The Bureau is currently analyzing the comments received in response to CR/36. Final, revised notice forms for television and VHF sound broadcasting will be included in a Circular Letter tentatively scheduled to be mailed in January 1997. We anticipate that we can also include the final format for ***TerRaSys*** electronic notices in this Circular Letter.

In order to provide time for administrations to adapt their systems to the new (paper and/or electronic) formats, we anticipate that the date for use of the new format for television and VHF sound broadcasting will be no earlier than July 1997. Between this date and the date of implementation of ***TerRaSys*** (expected to be end of 1997), we propose that:

- electronic notices will be accepted in both CR/26 and the new format, and

- paper notices will be accepted in the old format (AP1/A4, AP1/A5 and AP1/A6) only.

After the implementation of ***TerRaSys***, notices will only be accepted in the new paper and electronic format.

The use of electronic and paper notices for LF/MF and fixed and mobile services will be the subject of a future circular letter to Administrations.

We plan to develop a program[4] for use by administrations to perform syntax analyses of ***TerRaSys*** electronic notice files before submission

6 Conclusion

The Bureau would appreciate receiving your comments on these proposals no later than 15 December 1996

Yours faithfully,

R.W. JONES

Director
Radiocommunication Bureau

Distribution:

- Administrations of Member states of the ITU
- Members of the Radio Regulations Board

[4] Such a program would run under Windows NT.

Annex 1

References and definitions

EDIFACT	See ISO 9735
GE84	The Plan for VHF Sound Broadcasting (Region 1 and part of Region 3) (Geneva, 1984).
GE89	The Plan for VHF/UHF Television Broadcasting in the African Broadcasting Area and Neighboring Countries (Geneva, 1989).
IEC	**I**nternational **E**lectrotechnical **C**ommission
ISO	International Organization for Standardization
ISO 6709	ISO 6709:1983 Standard Representation of Latitude, Longitude and Altitude for Geographic Point Locations
ISO 8601	ISO 8601:1988 Data Elements and Interchange Formats — Information Interchange — Representation of Dates and Times; Technical Corrigendum 1:1991 to ISO 8601:1988.
ISO 8859-1	Information Processing — 8-bit Single-Byte Coded Graphic Character Sets — Part 1: Latin Alphabet No. 1, ISO 8859-1, 1987.
ISO 8859-5	Information Processing — 8-bit Single-Byte Coded Graphic Character Sets — Part 5: Latin/Cyrillic alphabet, ISO 8859-5, 1988.
ISO 8859-6	Information Processing — 8-bit Single-Byte Coded Graphic Character Sets — Part 6: Latin/Arabic alphabet, ISO 8859-6, 1987.
ISO 8879	ISO 8879:1986 Information Processing — Text and Office Systems — Standard Generalized Markup Language (SGML); Amendment 1:1988 to ISO 8879:1986
ISO 9735	ISO 9735:1988 Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) — Application Level Syntax Rules (Amended and reprinted 1990); Amendment 1:1992 to ISO 9735:1988
ISO/IEC 10646-1	ISO/IEC 10646-1:1993(E) Information Technology — Universal Multiple-octet Coded Character Set (UCS).
ST61	The Plan for VHF/UHF Broadcasting (Region 1) (Stockholm, 1961)
SGML	See ISO 8879
Unicode	(1) a registered trademark of Unicode, Inc. (2) a world-wide character encoding standard based on a 16-bit unit of encoding developed by Unicode, Inc. (3) a usage profile of ISO/IEC 10646 UCS-2, the international character set standard based on the Unicode Standard. ©Unicode, Inc.

Annex 2

Generic File Structure Used For *TerRaSys* Electronic Notices

The file is a sequential, record-oriented file, which follows the general outline of an SGML file, using a tagging scheme. However, because our approach for ***TerRaSys*** electronic notices is quite simple, it does not use the SGML Document Type Definitions, nor does it tag each data element.

We believe that this format is sufficiently flexible that there is no need for version numbers for this format. Rather, changes in the format should be able to be incorporated without having to modify existing programs unless the programs wish to take advantage of the changes.

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 keys, with a value (specified as a text string) associated with the key. Each section may also have sub-sections; at this time, only the **NOTICE** section may contain sub-sections.

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

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

We have chosen to use keys with corresponding values — rather than start-tags and end-tags for each data element — to avoid files that are unnecessarily large. We believe that something such as:

t_action=ADD

is better, from the point of view of ***TerRaSys*** electronic notices, than something such as:

<t_action>ADD</t_action>

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

<HEAD>
key1=string
key2=string
.....
</HEAD>
<NOTICE>
key1=string
key2=string
.....
</NOTICE>
<NOTICE>
key1=string
key2=string
.....
</NOTICE>
<NOTICE>
key1=string
key2=string
.....
</NOTICE>
.....

<TAIL>
key1=string
key2=string
.....
</TAIL>
EOF

There is *no* end-of-file (EOF) character at the end of the file; it is shown above simply for clarity.

The lines in the files 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). This provides support for files generated on MS-DOS/Windows, Macintosh, and Unix, respectively.

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. Non-printable characters are prohibited, except for the carriage return and linefeed.

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; however, they are processed in the order in which they are in the file. The name of the section may be in uppercase, lowercase, or mixed case. White space (e.g., blanks) must not appear before or after a start-tag or end-tag, nor within a start-tag or end-tag.

The keys 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 key may be in uppercase, lowercase, or mixed case. White space (e.g., blanks) must *not* appear before, after, or within a key name.

Each key is composed of alphanumeric text and must be unique within its section. Each key is followed by the symbol = and then by the value associated with this key. White space (e.g., blanks) must *not* appear before and/or after the = symbol. However, white space is permitted within the value associated with the key. (For example, the Station Name may consist of several words, separated by blank spaces.)

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

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 separator — 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 key and its corresponding value must be on a separate line, and must terminate with CR/LF, CR, or LF, as described above. At this time, we do not plan to allow multiple key/value combinations on a single line (separated by a delimiter). However, **we solicit any interest in whether we should provide this possibility in a future version.**

Annex 3

General File Structure for All *TerRaSys* Electronic Notices

The general description in this Annex applies to all ***TerRaSys*** electronic notices. Specific details for ***TerRaSys*** electronic notices for television and VHF sound broadcasting are given in Annex 4.

1 The file containing ***TerRaSys*** electronic notices must meet the following criteria:

1.1 The file must contain only ***TerRaSys*** electronic notices. As described in the *Tentative Schedule* section of the main body of this Circular Letter, there will be a transition period during which electronic notices for certain services (initially television and VHF sound broadcasting) will be submitted in ***TerRaSys*** format, while other services will be submitted in CR/26 format. During the transition period from CR/26 format to ***TerRaSys*** format, electronic notices in CR/26 format should be submitted in a separate file from ***TerRaSys*** electronic notices.

1.2 The file must contain a single section named **HEAD** that contains data common to all notices in the file. The **HEAD** section must be the first section in the file.

1.3 The file must contain a single section named **TAIL**. The **TAIL** section must be the last section in the file.

1.4 A file can contain multiple television and VHF sound broadcasting notices. (Eventually, the file will be able to contain other types of notices as well.) For each notice in the file, there is a section named **NOTICE**. All of the data for this notice must be contained within this **NOTICE** section.

1.5 For each notice in the file which contains coordination information, there is a sub-section named **COORDINATION**. If a given notice does not contain coordination information, there is *no* need for a **COORDINATION** sub-section.

1.6 For each notice in the file, there may be additional sub-sections that contain the pertinent information for this type of notice. As noted above, the ***TerRaSys*** electronic notices for Television and VHF Sound Broadcasting are the first to be implemented; these sub-sections are described in Annex 4 of this Circular Letter. Sub-sections for other services will be described in future Circular Letters, with the corresponding paper notice forms.

1.7 A given notice must be entirely within one file. (However, more than one file may be submitted on a given day. If more than one file is submitted, the file names should be unique, and each file must have a **HEAD** section and a **TAIL** section.)

2 The sections and sub-sections used in the file for the ***TerRaSys*** electronic notices have the following characteristics:

2.1 Sections and sub-sections which do not match any of the ***TerRaSys*** sections will be 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.

2.2 The ***TerRaSys*** sections and sub-sections will, of course, be validated.

2.3 Currently, the names of the sections and sub-sections are in English only. **We would appreciate comments on whether alternative section and sub-section names (in French and Spanish) would be desirable.**

3 The keys used in the file for the ***TerRaSys*** electronic notices have the following characteristics:

3.1 The keys in each section correspond to the name of a data element being notified. The string associated with the key is the value of the data element. To avoid any conflicts with the International Data Dictionary (IDD) being developed by ITU-R Study Group 1, we initially prefix all of our data element names with **t_**. After the IDD is developed, the Bureau intends to modify the names to correspond to those in the IDD. Nonetheless, we will have a reasonably long transition period where both the current names and the IDD names would be acceptable.

3.2 Certain keys have default values. It is *not* necessary to enter the key (and associated value) if the default is to be used.

3.3 Keys 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 add additional keys for other purposes without fear of disruption of the ***TerRaSys*** electronic notice process. We suggest that administrations wishing to take advantage of this feature take steps (such as using a prefix) to avoid any conflicts with the IDD under development. All unknown keys beginning with **t_** will be flagged as errors to be referred to the administration submitting the notice; we will suspect that these are typographical errors in the program generating the electronic notices.

3.4 Currently, the names of the keys are in English only. If the IDD includes names in other languages, we will include these as alternatives at the time that we convert the ***TerRaSys*** keys to correspond to the IDD.

4 Dates and times in the ***TerRaSys*** electronic notices are to be specified as follows:

4.1 Dates must follow the ISO 8601 standard. That is, they must be in the format **yyyy-mm-dd**, where:

yyyy is the full year, including the century

mm is the month, from 1 through 12

dd is the day, from 1 through 31

For example, 29 February 1996 would be represented as 1996-02-29.

4.2 Times 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 (00-24).

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

5 Geographic coordinates — containing the latitude and longitude of the transmitting and/or receiving sites — must follow the ISO 6709 standard[5]. Depending on the service, the seconds of the latitude and longitude may or may not be required. For Television and VHF Sound Broadcasting, seconds are required. The geographic coordinates must be in one of the two following formats, depending on whether seconds are submitted:

±DDMMSS±DDDMMSS

or

±DDMM±DDDMM

[5] ISO 6709 also provides for including the altitude. However, we have chosen not to do so because we do not need the altitude in all cases where we require geographic coordinates. Instead, we ask for the altitude separately.

where:

5.1 The latitude is first and the longitude — with no separator — is second.

5.2 North Latitude is represented by a (mandatory) plus sign; South Latitude is represented by a minus sign.

5.3 East Longitude is represented by a (mandatory) plus sign; West Longitude is represented by a minus sign.

5.4 DD refers to the degrees portion of the latitude, with a leading zero if this is less that 10.

5.5 DDD refers to the degrees portion of the longitude, with one or two leading zeros if this is less than 100.

5.6 MM refers to the minutes portion, with a leading zero if this is less than 10.

5.7 SS refers to the seconds portion, with a leading zero if this is less than 10.

Examples (taken from ISO 6709) are:

+401213-0750015

+4012-07500

6 The section named **HEAD** contains keys as follows:

t_char_set Currently, the only acceptable value is **ISO-8859-1**. In the future, the Bureau may accept additional character sets.

t_d_sent The date that this file is sent, in **yyyy-mm-dd** format.

t_adm The three-character code for the name of the administration submitting the notice.

t_email_addr The electronic mail address to be used for communications regarding this file, and the notices in this file (only if different from the return address on the electronic mail submitting this file).

7. The section named **TAIL** contains a single key as follows:

t_num_notices The number of notices contained in the file. 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.

8. The section named **NOTICE** contains common keys as follows:

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**.

t_action The action to be taken regarding this notice. Possible values are:

ADD	to add an assignment.
MODIFY	to modify an assignment.
SUPPRESS	to suppress an assignment.
CONFORM	to add or modify an Article 12 assignment which conforms to a Plan assignment.
COORDINATION	to update a pending notice to show all successful coordinations.
ADMINID	to insert or update the unique Administration Serial Number for an assignment.

t_adm_ref_id	Administration's serial number, assigned by the administration. Within an administration, the combination of Administration Serial Number and Plan Name must be unique. The only allowable characters are the printable characters in the ISO 8859-1 coded character set.
t_plan	The name of the Plan with which this assignment is associated. If not given, this assignment is associated with Article 12 of the Radio Regulations.
t_ctry	The three-character code for the name of the country or geographic area.
t_stn_name	The transmitting station name. The only allowable characters are the printable characters in the ISO 8859-1 coded character set.
t_call_sign	The call sign.
t_op_agcy	The three-character code for the operating agency.
t_addr_code	The two-character address code for the responsible administration.
t_assgn_id	The Bureau's assignment identification number (for modifications only), if known.
t_d_inuse	The date at which the administration intends to bring this assignment into use.
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_prov	The applicable provision under Article 12 of the Radio Regulations.
t_remarks	This contains free-formatted comments, using any of the printable characters in the ISO 8859-1 coded character set, which are designed to assist the Bureau in processing the notice. There is no limit on the number of characters per line[6], nor is there a limit on the number of **t_remarks** keys which may be included in a given **NOTICE**. However, these will be processed in order. The remarks will not be translated, nor will they be published.

9. The sub-section named **COORDINATION**, if it exists, contains one key for each administration with which coordination has been successfully completed. The key is named **t_adm**, and the value is the name 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** key on a separate line. Note that — unlike the paper notice — there is no limit on the number of administrations which can be entered here.

[6] Nonetheless, we recommend that the length of a line be limited so that it could be displayed easily if someone wishes to view the input file.

Annex 4

Specific Details for *TerRaSys* Electronic Notices for Television and VHF Sound Broadcasting

The ***TerRaSys*** electronic notices for television and VHF sound broadcasting include the sections **HEAD**, **TAIL**, **NOTICE**, **COORDINATION**, and **REMARKS** as described in Annex 3. There are also additional sections: **ANT_HGT**, **ANT_DIAGR_H**, and **ANT_DIAGR_V**.

1 The **HEAD** and **TAIL** sections for television and VHF sound broadcasting are as described above.

2 In the case of a notice for a modification (**t_action**="MODIFY" in the **NOTICE** section), it is necessary to identify the assignment to be modified. As noted in CR/36, there are two alternative methods of submitting such identifiers:

2.1 Supply the Administration's Serial Number of the assignment to be modified. Note that the combination of the Serial Number and the Plan Name must be unique within a given administration. If the Serial Number is also being modified, it is necessary to supply *both* the old and new values, if this means of identification is used.

2.2 Supply the Frequency and Geographic Coordinates of the assignment to be modified. If the frequency is also being modified, it is necessary to supply both the old and new frequencies. If the geographic coordinates are also being modified, it is necessary to supply both the old and new geographic coordinates. If this is a television broadcast notice, the frequency of concern is the vision carrier frequency. If this is a VHF sound broadcast notice, the frequency of concern is the assigned frequency.

TerRaSys will first use the Administration's Serial Number — if submitted — to identify the assignment being modified. If the Administration's Serial Number is not submitted, ***TerRaSys*** will use the combination of frequency and geographic coordinates to identify the assignment being modified.

In the case of a modification, when the former (i.e., old) values are submitted, there are the following possible keys in the **NOTICE** section:

t_old_adm_ref_id	The former Serial Number for the administration (only if changed).
t_old_freq_assgn	The former assigned frequency (MHz), if this is a notice for VHF sound broadcasting (only if changed).
t_old_freq_vcarr	The former vision carrier frequency (MHz), if this is a notice for television broadcasting (only if changed).
t_old_geo_coords	The former geographic coordinates (only if changed) for the transmitting antenna site, using the format for geographic coordinates described above.

3. The **NOTICE** section for television is as described above, with the addition of the following possible keys:

t_plan For television, possible values for the Plan Name are:

ST61

GE89

If **t_plan** is missing, this assignment is associated with Article 12 of the Radio Regulations.

t_notice_type For television, the Notice Type is **T02**

t_freq_vcarr The frequency (MHz) of the vision carrier.

t_offset The offset, in units of 1/12 of the line frequency of the TV system.

t_tran_sys The transmission system.

t_color The color system (equal to "NTSC", "PAL", or "SECAM")

t_polar Equal to "H" for horizontal polarization only, equal to "V" for vertical polarization only, equal to "M" for mixed horizontal and vertical polarization.

t_erp_h_dbw The maximum horizontally polarized Effective Radiated Power (dBW) for the vision carrier in the horizontal plane.

t_erp_v_dbw The maximum vertically polarized Effective Radiated Power (dBW) for the vision carrier in the vertical plane.

t_pwr_ratio The power ratio (dB) between the vision effective radiated power and sound effective radiated power.

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

t_site_alt The height (meters) above sea level of the ground level at the antenna site.

t_eff_hgtmax The maximum effective height (meters).

t_geo_coords The geographic coordinates of the transmitting antenna site, using the format for the geographic coordinates described earlier.

4. The **NOTICE** section for VHF sound broadcasting is as described above, with the addition of the following possible keys:

t_plan For VHF sound, possible values for the Plan Name are:

ST61

GE84

If **t_plan** is missing, this assignment is associated with Article 12 of the Radio Regulations.

t_notice_type For VHF sound broadcasting, the Notice Type is **T01**.

t_freq_assgn The assigned frequency (MHz).

t_tran_sys The transmission system.

t_polar Equal to "H" for horizontal polarization only, equal to "V" for vertical polarization only, equal to "M" for mixed horizontal and vertical polarization.

t_erp_h_dbw The maximum horizontally polarized Effective Radiated Power (dBW) in the horizontal plane.

t_erp_v_dbw The maximum vertically polarized Effective Radiated Power (dBW) in the vertical plane.

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

t_site_alt The height (meters) above sea level of the ground level at the antenna site.

t_eff_hgtmax The maximum effective height (meters).

t_geo_coords The geographic coordinates for the transmitting antenna site, using the format for the geographic coordinates described earlier.

5. The **ANT_HGT** section is used for both television and VHF sound broadcasting. This section has the following keys:

t_eff_hgt@azm*zzz* The effective height (meters) at the azimuth *zzz* (degrees). There should be a key for each azimuth from 0 through 350 degrees, in increments of 10 degrees. Additional azimuths (not multiples of 10 degrees) are not accepted, and will be ignored if submitted. *zzz* should *not* have leading zeros, and it must be an integer. Sample values of the keys are **eff_hgt@azm0**, **eff_hgt@azm10**, **eff_hgt@azm20**, etc., for the azimuths of 0, 10, 20, etc., degrees.

6. The **ANT_DIAGR_H** and the **ANT_DIAGR_V** sections for both television and VHF sound broadcasting are included only when there is a directional antenna. The **ANT_DIAGR_H** section is used for attentuations of the horizontally polarized signal, while the **ANT_DIAGR_V** section is used for attenuations of the vertically polarized signal. Both of these sections have the following keys:

t_attn@azm*zzz* The attenuation (dB) at the azimuth *zzz* (degrees). There should be a key for each azimuth from 0 through 350 degrees, in increments of 10 degrees. Additional azimuths (not multiples of 10 degrees) are not accepted, and will be ignored if submitted. *zzz* should *not* have leading zeros, and it must be an integer. Sample values of the keys are **attn@azm0**, **attn@azm10**, **attn@azm20**, etc., for the azimuths of 0, 10, 20, etc., degrees.

A sample file containing one television broadcasting notice and one VHF sound broadcasting notice might have this structure:

<HEAD>
(keys and data for heading)
</HEAD>

First Notice

<NOTICE>
(general keys and data for television assignment)
<ANT_HGT>
(antenna height data for television assignment)
</ANT_HGT>
<ANT_DIAGR_H>
(antenna attentuation data — horizontal polarization — for television assignment)
</ANT_DIAGR_H>
<COORD>
(coordination data for television assignment)
</COORD>
<ANT_DIAGR_V>
(antenna attenuation data — vertical polarization — for television assignment)
</ANT_DIAGR_V>
</NOTICE>

Second Notice

<NOTICE>
(general keys and data for VHF sound broadcasting assignment)
<COORD>
(coordination data for VHF sound broadcasting assignment)
</COORD>
<ANT_DIAGR_H>
(antenna attentuation data — horizontal polarization — for VHF sound broadcasting assignment)
</ANT_DIAGR_H>
<ANT_HGT>
(antenna height data for VHF sound broadcasting assignment)
</ANT_HGT>
<ANT_DIAGR_V>
(antenna attenuation data — vertical polarization — for VHF sound broadcasting assignment)
</ANT_DIAGR_V>
</NOTICE>

<TAIL>
t_num_notices=2
</TAIL>

Annex 5 - Table of Fields to be Notified

<SECTION> <SUB-SECTION> t_field=	**Identifiers**[8]	**----- Mandatory / Ignored / Sometimes** [7] **-------**						**Valid Values**	**Default Values**	**Dates / Numerics**	**TV or VHF Sound**
		Add	**Mod**	**Sup**	**Conform**	**Coord-ination**	**Adminid**				
<HEAD>		**M**	**M**	**M**	**M**	**M**	**M**				
t_char_set=		**M**	**M**	**M**	**M**	**M**	**M**	**An.3.6**	**An.3.6**		
t_email_addr=											
t_d_sent=		**M**	**M**	**M**	**M**	**M**	**M**			**An.3.4.1**	
t_adm=		**M**	**M**	**M**	**M**	**M**	**M**				
<NOTICE>		**M**	**M**	**M**	**M**	**M**	**M**				
t_notice_type=		**M**	**M**	**M**	**M**	**M**	**M**	**An.4.3/4**			
t_d_adm_ntc=										**An.3.4.1**	
t_plan=	**An.4.3/4** [9]							**An.4.3/4**	**An.4.3/4**		
t_action=		**M**	**M**	**M**	**M**	**M**	**M**	**An.3.8**			
t_assgn_id=					**I**	**I**	**I**				
t_adm_ref_id=	**An.3.8**						**M**				

[7] "M" means "Mandatory"; "I" means that the value is "Ignored", even if specified; "S" means that the value is required in certain circumstances (as an identifier; see next footnote), and a blank means that this is Optional.

[8] Different field combinations may be used to create a single identifier. See Section 2 of Annex 4, Sections 5 and 6 of Annex 7, Section 5 of Annex 8, and Section 5 of Annex 9 for details.

[9] "An" refers to an Annex in this document.

<SECTION> <SUB-SECTION> t_field=	Identifiers[8]	----- Mandatory / Ignored / Sometimes [7] -------						Valid Values	Default Values	Dates / Numerics	TV or VHF Sound
		Add	Mod	Sup	Conform	Coord-ination	Adminid				
t_call_sign=				I	I	I	I				
t_freq_assgn=	An.4.4	M	M	S	S	S	S			An.2	VHF sound only
t_freq_vcarr=	An.4.3	M	M	S	S	S	S		An.4.3	An.2	TV only
t_offset=		M	M	I	I	I	I			An.2	TV only
t_stn_name=		M	M	I	I	I	I				
t_ctry=		M	M	I	I	I	I				
t_geo_coords=	An.4.3/4	M	M	S	S	S	S	An.3.5		An.3.5	
t_tran_sys=		M	M	I	I	I	I	IFL Preface, Table 7C1		An.2	
t_color=		M	M	I	I	I	I	An.4.3			TV only
t_polar=		M	M	I	I	I	I	An.4.3/4	An.4.3/4		
t_erp_h_dbw=		M	M	I	I	I	I			An.2	
t_erp_v_dbw=		M	M	I	I	I	I			An.2	
t_pwr_ratio=		M	M	I	I	I	I			An.2	TV only
t_hgt_agl=		M	M	I	I	I	I			An.2	
t_site_alt=		M	M	I	I	I	I			An.2	
t_eff_hgtmax=		M	M	I	I	I	I			An.2	

<SECTION> <SUB-SECTION> t_field=	Identifiers[8]	----- Mandatory / Ignored / Sometimes [7] ------- Add	Mod	Sup	Conform	Coord-ination	Adminid	Valid Values	Default Values	Dates / Numerics	TV or VHF Sound
t_prov=		**M**	**M**	**I**	**M**	**I**	**I**	**An.3.8**	**An.3.8**		
t_op_agcy=				**I**	**M**	**I**	**I**	**IFL Preface Table 12A/12B**			
t_addr_code=				**I**	**M**	**I**	**I**	**IFL Preface Table 12A/12B**			
t_op_hh_fr=				**I**	**I**	**I**	**I**	**An.3.4.2**		**An.3.4.2**	
t_op_hh_to=				**I**	**I**	**I**	**I**	**An.3.4.2**		**An.3.4.2**	
t_d_inuse=		**M**	**M**	**I**	**I**	**I**	**I**			**An.3.4.1**	
t_old_freq_assgn=	**An.4.2**	**I**	**S**	**I**	**S**	**S**	**S**			**An.2**	
t_old_freq_vcarr=	**An.4.2**	**I**	**S**	**I**	**S**	**S**	**S**			**An.2**	
t_old_geo_coords=	**An.4.2**	**I**	**S**	**I**	**S**	**S**	**S**	**An.3.5**		**An.3.5**	
t_old_adm_ref_id=	**An.4.2**	**I**	**S**	**I**	**S**	**S**	**S**				
t_plan_freq_assgn=	**An.7.5**	**I**	**I**	**I**	**S**	**I**	**I**			**An.2**	
t_plan_freq_vcarr=	**An.7.5**	**I**	**I**	**I**	**S**	**I**	**I**			**An.2**	
t_plan_geo_coords=	**An.7.5**	**I**	**I**	**I**	**S**	**I**	**I**	**An.3.5**		**An.3.5**	
t_plan_adm_ref_id=	**An.7.5**	**I**	**I**	**I**	**S**	**I**	**I**				
t_remarks=[10]								**An.3.8**			
<COORDINATION>				**I**		**M**	**I**				

[10] This field may occur multiple times.

<SECTION> <SUB-SECTION> t_field=	**Identifiers**[8]	**----- Mandatory / Ignored / Sometimes** [7] **-------**						**Valid Values**	**Default Values**	**Dates / Numerics**	**TV or VHF Sound**
		Add	**Mod**	**Sup**	**Conform**	**Coord-ination**	**Adminid**				
t_adm=[11]				**I**		**M**	**I**				
<ANT_HGT>		**M**	**M**	**I**	**I**	**I**	**I**				
t_eff_hgt@azm**zzz**=		**M**	**M**	**I**	**I**	**I**	**I**			**An.2**	
<ANT_DIAGR_H>		**M**	**M**	**I**	**I**	**I**	**I**				
t_attn@azm**zzz**=		**M**	**M**	**I**	**I**	**I**	**I**			**An.2**	
<ANT_DIAGR_V>		**M**	**M**	**I**	**I**	**I**	**I**				
t_attn@azm**zzz**=		**M**	**M**	**I**	**I**	**I**	**I**			**An.2**	
<TAIL>		**M**	**M**	**M**	**M**	**M**	**M**				
t_num_notices=		**M**	**M**	**M**	**M**	**M**	**M**				

[11] This field may occur multiple times.

Annex 6

Sample *TerRaSys* Electronic Notices

```
<HEAD>
t_char_set = ISO-8859-1
t_d_sent = 1996-10-08
t_adm = ITU
comment = This is a sample of data
comment = from 3 different administrations
</HEAD>
<NOTICE>
t_notice_type = T01
t_action = MODIFY
t_ctry = TUR
t_stn_name = BOLU
t_assgn_id = 092001398
t_plan = GE84
t_prov = GE84
t_freq_assgn = 89.600000
t_tran_sys = 4
t_polar = H
t_hgt_agl = 40.000000
t_eff_hgtmax = 440
t_erp_h_dbw = 40.000000
t_geo_coords = +403600+0311900
t_site_alt = 1794
t_old_freq_assgn = 89.600000
t_old_geo_coords = +403800+0312100
<COORD>
t_adm = BUL
t_adm = GRC
t_adm = ROU
t_adm = URS
</COORD>
<ANT_HGT>
t_eff_hgt@azm0 = 200
t_eff_hgt@azm10 = 200
t_eff_hgt@azm20 = 300
t_eff_hgt@azm30 = 300
t_eff_hgt@azm40 = 350
t_eff_hgt@azm50 = 440
t_eff_hgt@azm60 = 400
t_eff_hgt@azm70 = 200
t_eff_hgt@azm80 = 100
t_eff_hgt@azm90 = 100
t_eff_hgt@azm100 = 50
t_eff_hgt@azm110 = 50
t_eff_hgt@azm120 = 50
t_eff_hgt@azm130 = 100
t_eff_hgt@azm140 = 100
t_eff_hgt@azm150 = 150
t_eff_hgt@azm160 = 150
t_eff_hgt@azm170 = 200
t_eff_hgt@azm180 = 200
t_eff_hgt@azm190 = 250
t_eff_hgt@azm200 = 250
t_eff_hgt@azm210 = 250
t_eff_hgt@azm220 = 300
t_eff_hgt@azm230 = 300
t_eff_hgt@azm240 = 300
t_eff_hgt@azm250 = 200
t_eff_hgt@azm260 = 150
t_eff_hgt@azm270 = 150
t_eff_hgt@azm280 = 100
t_eff_hgt@azm290 = 100
t_eff_hgt@azm300 = 150
t_eff_hgt@azm310 = 200
```

t_eff_hgt@azm320 = 200
t_eff_hgt@azm330 = 200
t_eff_hgt@azm340 = 200
t_eff_hgt@azm350 = 200
</ANT_HGT>
</NOTICE>
<NOTICE>
t_notice_type = T01
t_action = MODIFY
t_ctry = S
t_stn_name = UPPSALA
t_assgn_id = 094003761
t_plan = GE84
t_prov = GE84
t_freq_assgn = 90.300000
t_tran_sys = 4
t_polar = H
t_hgt_agl = 165.000000
t_eff_hgtmax = 187
t_erp_h_dbw = 43.000000
t_geo_coords = +595100+0174700
t_site_alt = 37
t_old_freq_assgn = 90.300000
t_old_geo_coords = +595100+0174700
<COORD>
t_adm = D
t_adm = DNK
t_adm = EST
t_adm = FIN
t_adm = LTU
t_adm = LVA
t_adm = NOR
t_adm = POL
t_adm = RUS
</COORD>
<ANT_HGT>
t_eff_hgt@azm0 = 187
t_eff_hgt@azm10 = 187
t_eff_hgt@azm20 = 187
t_eff_hgt@azm30 = 187
t_eff_hgt@azm40 = 187
t_eff_hgt@azm50 = 187
t_eff_hgt@azm60 = 187
t_eff_hgt@azm70 = 187
t_eff_hgt@azm80 = 187
t_eff_hgt@azm90 = 187
t_eff_hgt@azm100 = 187
t_eff_hgt@azm110 = 187
t_eff_hgt@azm120 = 187
t_eff_hgt@azm130 = 187
t_eff_hgt@azm140 = 187
t_eff_hgt@azm150 = 187
t_eff_hgt@azm160 = 187
t_eff_hgt@azm170 = 187
t_eff_hgt@azm180 = 187
t_eff_hgt@azm190 = 187
t_eff_hgt@azm200 = 187
t_eff_hgt@azm210 = 187
t_eff_hgt@azm220 = 187
t_eff_hgt@azm230 = 187
t_eff_hgt@azm240 = 187
t_eff_hgt@azm250 = 187
t_eff_hgt@azm260 = 187
t_eff_hgt@azm270 = 187
t_eff_hgt@azm280 = 187
t_eff_hgt@azm290 = 187
t_eff_hgt@azm300 = 187
t_eff_hgt@azm310 = 187
t_eff_hgt@azm320 = 187
t_eff_hgt@azm330 = 187
t_eff_hgt@azm340 = 187
t_eff_hgt@azm350 = 187
</ANT_HGT>
<ANT_DIAGR_H>
t_attn@azm0 = 0.000000
t_attn@azm10 = 0.000000

t_attn@azm20 = 0.000000
t_attn@azm30 = 0.000000
t_attn@azm40 = 0.000000
t_attn@azm50 = 0.000000
t_attn@azm55 = 3.000000
t_attn@azm60 = 3.000000
t_attn@azm70 = 3.000000
t_attn@azm80 = 3.000000
t_attn@azm90 = 3.000000
t_attn@azm100 = 3.000000
t_attn@azm110 = 3.000000
t_attn@azm120 = 3.000000
t_attn@azm130 = 3.000000
t_attn@azm140 = 3.000000
t_attn@azm150 = 3.000000
t_attn@azm160 = 3.000000
t_attn@azm170 = 3.000000
t_attn@azm180 = 0.000000
t_attn@azm190 = 0.000000
t_attn@azm200 = 0.000000
t_attn@azm210 = 0.000000
t_attn@azm220 = 0.000000
t_attn@azm230 = 0.000000
t_attn@azm240 = 0.000000
t_attn@azm250 = 0.000000
t_attn@azm260 = 0.000000
t_attn@azm270 = 0.000000
t_attn@azm280 = 0.000000
t_attn@azm290 = 0.000000
t_attn@azm300 = 0.000000
t_attn@azm310 = 0.000000
t_attn@azm320 = 0.000000
t_attn@azm330 = 0.000000
t_attn@azm340 = 0.000000
t_attn@azm350 = 0.000000
</ANT_DIAGR_H>
</NOTICE>
<NOTICE>
t_notice_type = T01
t_action = ADD
t_ctry = E
t_stn_name = POLLENSA I
t_assgn_id = 084200104
t_plan = GE84
t_prov = GE84
t_freq_assgn = 93.200000
t_tran_sys = 4
t_polar = M
t_hgt_agl = 10.000000
t_eff_hgtmax = 195
t_erp_h_dbw = 21.800000
t_erp_v_dbw = 21.800000
t_geo_coords = +395000+0030600
t_site_alt = 250
t_op_hh_fr = 00:00
t_op_hh_to = 23:59
<COORD>
t_adm = ALG
t_adm = AND
t_adm = F
t_adm = I
</COORD>
<ANT_HGT>
t_eff_hgt@azm0 = 195
t_eff_hgt@azm10 = 190
t_eff_hgt@azm20 = 185
t_eff_hgt@azm30 = 180
t_eff_hgt@azm40 = 185
t_eff_hgt@azm50 = 190
t_eff_hgt@azm60 = 195
t_eff_hgt@azm70 = 190
t_eff_hgt@azm80 = 185
t_eff_hgt@azm90 = 180
t_eff_hgt@azm100 = 180
t_eff_hgt@azm110 = 180
t_eff_hgt@azm120 = 180

t_eff_hgt@azm130 = 180
t_eff_hgt@azm140 = 180
t_eff_hgt@azm150 = 180
t_eff_hgt@azm160 = 153
t_eff_hgt@azm170 = 127
t_eff_hgt@azm180 = 100
t_eff_hgt@azm190 = 26
t_eff_hgt@azm200 = -47
t_eff_hgt@azm210 = -120
t_eff_hgt@azm220 = -130
t_eff_hgt@azm230 = -140
t_eff_hgt@azm240 = -150
t_eff_hgt@azm250 = -133
t_eff_hgt@azm260 = -116
t_eff_hgt@azm270 = -100
t_eff_hgt@azm280 = -34
t_eff_hgt@azm290 = 35
t_eff_hgt@azm300 = 100
t_eff_hgt@azm310 = 93
t_eff_hgt@azm320 = 84
t_eff_hgt@azm330 = 75
t_eff_hgt@azm340 = 115
t_eff_hgt@azm350 = 155
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<ANT_DIAGR_H>
t_attn@azm0 = 0.000000
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t_attn@azm90 = 7.200000
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t_attn@azm140 = 16.800000
t_attn@azm150 = 16.800000
t_attn@azm160 = 16.800000
t_attn@azm170 = 16.800000
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t_attn@azm210 = 16.800000
t_attn@azm220 = 14.600000
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t_attn@azm250 = 6.400000
t_attn@azm260 = 3.500000
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t_attn@azm290 = 0.000000
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t_attn@azm310 = 0.000000
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t_attn@azm330 = 0.000000
t_attn@azm340 = 0.000000
t_attn@azm350 = 0.000000
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<ANT_DIAGR_V>
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t_attn@azm40 = 0.000000
t_attn@azm50 = 0.000000
t_attn@azm60 = 0.000000
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t_attn@azm80 = 3.600000
t_attn@azm90 = 7.200000
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t_attn@azm110 = 13.600000
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```
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t_attn@azm140 = 16.800000
t_attn@azm150 = 16.800000
t_attn@azm160 = 16.800000
t_attn@azm170 = 16.800000
t_attn@azm180 = 16.800000
t_attn@azm190 = 16.800000
t_attn@azm200 = 16.800000
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t_attn@azm270 = 0.600000
t_attn@azm280 = 0.000000
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t_attn@azm300 = 0.000000
t_attn@azm310 = 0.000000
t_attn@azm320 = 0.000000
t_attn@azm330 = 0.000000
t_attn@azm340 = 0.000000
t_attn@azm350 = 0.000000
</ANT_DIAGR_V>
</NOTICE>
<TAIL>
t_num_notices = 3
</TAIL>
```

Annex 7

Specific Details for *TerRaSys* Electronic Notices Which Bring Into Operation an Article 12 Assignment by Copying a Plan Assignment

The CONFORM action is to be used — as described in CR/36 — when an administration is proposing to bring into operation under Article 12 an assignment which conforms to one of the Plans. This could be either a new Article 12 assignment or a modification of an existing Article 12 assignment. Use of the CONFORM action is intended to ensure that Article 12 and Plan assignments are identical, if that is the intention. The details of a notice which institutes the CONFORM action are:

I. There is a separate **NOTICE** section for each such action. There is possibly a **COORDINATION** sub-section and possibly a **REMARKS** sub-section.

II. The value associated with the key **t_action** is **CONFORM**.

III. The value for the type of notice, associated with the key **t_notice_type**, must be either T01 or T02, depending on whether this is for television or VHF sound broadcasting.

IV. The date of the notice, **t_d_adm_ntc**, may optionally be submitted.

V. The Plan assignment to be copied must be clearly identified by specifying either:

A. The Administration Serial Number, **t_plan_adm_ref_id**, of the Plan assignment, or

B. The combination of the frequency, **t_plan_freq_assgn** (for VHF sound broadcasting) or **t_plan_freq_vcarr** (for television), and geographic coordinates, **t_plan_geo_coords**, of the Plan assignment.

VI. If the CONFORM is to modify an existing Article 12 assignment, it is also necessary to identify that existing assignment by specifying either:

VII.

A. The Administration Serial Number, **t_old_adm_ref_id**, of the Article 12 assignment to be modified, or

B. The combination of frequency, **t_old_freq_assgn** (for VHF sound broadcasting) or **t_old_freq_vcarr** (for television), and geographic coordinates, **t_old_geo_coords**, of the Article 12 assignment to be modified.

VIII. The Administration Serial Number for the new or modified Article 12 assignment is specified as **t_adm_ref_id**. The Article 12 Serial Number may the same as, or different from, the Plan Serial Number, or the old Article 12 Serial Number, at the option of the administration. However, for a given administration, the combination of Serial Number and Plan Name must be unique.

IX. The operating agency, the responsible administration, and the applicable provision of the Radio Regulations are specified as **t_op_agcy**, **t_addr_code**, and **t_prov**, respectively. Note that these three fields are not used with the Plans; therefore, they must be specified for notices under Article 12.

X. If coordination under Article 12 has been successfully achieved with one or more administrations, a **COORDINATION** sub-section should be included. Note that coordination information from the assignment in the Plan will *not* be copied; the coordination considerations for Article 12 are different than those for the Plans.

XI. Specifying of other fields is prohibited because the purpose of the CONFORM action is to copy *without modification* the parameters from the Plan. The ADD or MODIFY action should be used if an administration desires Article 12 parameters which are different than Plan parameters.

Annex 8

Specific Details for *TerRaSys* Electronic Notices Which Update the Coordination Data for a Pending Notice

The COORDINATION action is to be used when an administration is updating the list of administrations with which coordination has been achieved. As with the MODIFY action, the COORDINATION action is a replacement of existing information. The details of a notice which institutes the COORDINATION action are:

I. There is a separate **NOTICE** section for each such action.

II. The value associated with the key **t_action** is **COORDINATION** in the **NOTICE** section.

III. The value for the type of notice, associated with the key **t_notice_type** in the **NOTICE** section, must be either T01 or T02, depending on whether this is for television or VHF sound broadcasting.

IV. The date of the notice, **t_d_adm_ntc**, may optionally be submitted in the **NOTICE** section.

V. The pending assignment to be updated must be clearly identified by specifying, in the **NOTICE** section, either:

A. The Administration Serial Number, **t_old_adm_ref_id**, of the pending assignment, or

B. The combination of the frequency, **t_old_freq_assgn** (for VHF sound broadcasting) or **t_old_freq_vcarr** (for television), and geographic coordinates, **t_old_geo_coords**, of the pending assignment.

VI. There must be a **COORDINATION** sub-section.

VII. For each administration with which coordination has been successfully completed, there is, in the section **COORDINATION**, a **t_adm** key with a corresponding value, as described in Annex 3. As with the MODIFY action, all previously notified values must be replaced. Therefore, administrations which have previously been notified in this section must be notified again. If, for example, three administrations were listed in **COORDINATION** in the original notice, and subsequently coordination has been achieved with two additional administrations, the COORDINATION action would require a **COORDINATION** section with five administrations.

VIII. Specifying of other fields is prohibited because the purpose of the COORDINATION action is to update the list of administrations with which coordination has been achieved. The MODIFY action should be used if an administration desires to update other parameters.

Annex 9

Specific Details for *TerRaSys* Electronic Notices Which Update the Administration's Serial Number

The ADMINID action is to be used when an administration is providing its unique Administration Serial Number for the first time, or when it is updating this number. We expect that this would be used when an administration is reorganizing its own data base, and generating new or replacement Serial Numbers. The details of a notice which institutes the ADMINID action are:

I. There is a separate **NOTICE** section for each such action. No **NOTICE** sub-sections should be submitted.

II. The value associated with the key **t_action** is **ADMINID**.

III. The value for the type of notice, associated with the key **t_notice_type**, must be either T01 or T02, depending on whether this is for television or VHF sound broadcasting.

IV. The date of the notice, **t_d_adm_ntc**, may optionally be submitted.

V. The assignment to be updated must be clearly identified by specifying either:

A. The Administration Serial Number, **t_old_adm_ref_id**, of the assignment, or

B. The combination of the frequency, **t_old_freq_assgn** (for VHF sound broadcasting) or **t_old_freq_vcarr** (for television), and geographic coordinates, **t_old_geo_coords**, of the assignment.

VI. The new Administration Serial Number, **t_adm_ref_id**, must be specified.

VII. Specifying of other fields is prohibited because the purpose of the ADMINID action is to update the Administration's Serial Number. The MODIFY action should be used if an administration desires to update other parameters.

Annex 10

Specific Details for *TerRaSys* Electronic Notices Requesting Publication in PartB of Special Section

The PARTB action is to be used when an administration, after completion of the Plan modification procedure, informs the Bureau that no objection has been received and consequently requests publication of the assignment in Part B of the Special Section. The details of a notice which institutes the PARTB action are:

I. There is a separate **NOTICE** section for each such action.

II. The value associated with the key **t_action** is **PARTB**.

III. The value for the type of notice, associated with the key **t_notice_type**, must be either **T01** or **T02**, depending on whether this is for television or VHF sound broadcasting.

IV. The date of the notice, **t_d_adm_ntc**, may optionally be submitted.

V. The assignment to be updated must be clearly identified by specifying either:

A. The Administration Serial Number, **t_old_adm_ref_id**, of the assignment, or

B. The combination of the frequency, **t_old_freq_assgn** (for VHF sound broadcasting) or **t_old_freq_vcarr** (for television), and geographic coordinates, **t_old_geo_coords**, of the assignment.

VI. If coordination has been successfully achieved with one or more administrations, during the modification procedure, a **COORDINATION** sub-section should be included. Note that the **COORDINATION** sub-section will completely replace the existing sub-section in the pending modification.

VII. A Specifying of other fields is prohibited because the purpose of the PARTB action is to update the Plan with the same characteristics as those published in Part A of the Special Section. The MODIFY action should be used if an administration desires to update other parameters.