

**IMPLEMENTATION OF THE 1999 OPERATIONAL PLAN  
(ACTIVITIES OF TERRESTRIAL SERVICES DEPARTMENT (TSD))**

**3. Terrestrial Services**

During the year 1999, the Bureau examined frequency assignments notices to terrestrial services under two different sets of provisions: under Article 12 of the RR (edition of 1994) for notices received prior to 1 January 1999, and under Article S11 of the RR (edition of 1998) for notices received after 31 December 1998. Also, due to the changes in the processing systems, the Bureau treated notices under two different formats: in FMS format for notices received by 1 October 1999 (excepting the broadcasting service in the VHF and UHF bands where the FMS format was receivable only until 1 April 1999) and in TerRaSys format (for notices to stations in the broadcasting service in VHF and UHF bands as from 1 April 1999, for all other services as from 1 October 1999). This variety of procedures and formats made the processing and the examination of notices rather complex. Nevertheless, the objectives set forth in the Operational plan were mainly achieved, notably:

- the major part of notices received by 31 December 1998 were examined by 31 March 1999 in accordance with the procedures of Article 12 (RR, 1994) and the resultant situation was reflected in the March-99 edition of the IFL/CD-ROM (released in April 1999). Furthermore, all remaining notices from 1998 and the 1999 submissions in FMS format which were received by 1 October 1999 and which were declared complete, were examined by the end of November 1999 (excepting notices in the bands shared with space services received after 31 December 1998), and the December-99 edition of the IFL/CD-ROM (released in January 2000) contained the updated situation. The examination of notices submitted in TerRaSys formats was delayed and could not commence prior to 1 January 2000;
- all internal procedures were reviewed and many elements of the production chain (registry, validation rules, finding system) have been adapted to the requirements of the Simplified Radio Regulations;
- the MIFR was reviewed and the findings of the frequency assignments to stations in terrestrial services were appropriately modified so as to conform with the numbering system of the Simplified Radio Regulations, as well as with the pertinent provisions, which entered into force on 1 January 1999. The December-99 edition of the IFL/CD-ROM reflects the findings fully in consistence with the provisions of the Simplified Radio Regulations.

**3.1 Coordination requests pertaining to terrestrial services**

Table 3-1 indicates the activities related to coordination requests (under S9.21) pertaining to terrestrial services. All requests were processed within the statutory time limits and the resources used were within the forecasts indicated in the Operational Plan (4 professional staff-months).

**Table 3.1-1: Coordination requests**

<b>Procedure</b>	<b>S9.21</b>
Expected input (OP-99)	100
Received notices during 1999	157
Examined notices in 1999	159

### 3.2 Plan modification procedures for terrestrial services

Tables 3.2-1 and 3.2-2 summarize the activities related to plan modification procedures pertaining to terrestrial services: A lower than expected number of notices was received, especially in the VHF/UHF bands, which is probably due to the change of the format for submission of notices. The resources used were within the forecasts indicated in the Operational Plan (35 professional and 30 general service staff-months).

**Table 3.2-1: Plan modification procedures (BC/BT services)**

Procedure	ST61	GE75	GE84	RJ81	GE89
Expected input	3600	150	3500	200	400
<b>Capture and Validation</b>					
Received Notices	1347	100	1692	40	167
Captured notices	1727	117	1624	80	167
Performance indicator for data capture	Satisfied (note 1)	Satisfied	Satisfied (note 1)	Satisfied	Satisfied (note 1)
Backlog (weeks)	0	0	0	0	0
<b>Examination</b>					
Examined notices	1431	113	2474	98	69
Performance indicator for examination	Partially satisfied (note 2)	Satisfied	Partially satisfied (note 2)	Satisfied	Partially satisfied (note 2)
Backlog (weeks)	21	0	40	0	24

NOTE 1: All notices that were received in the FMS format were captured within the regulatory limits. The capture of notices in TerRaSys format commenced on 20 September 1999 and the slight accumulated backlog was rapidly eliminated; however, the publication of notices in TerRaSys format will commence in early 2000.

NOTE 2: The examination of the notices received in the FMS format was within the statutory limits, excepting some GE84 cases, where the backlog, which occurred due to the large influx of notices in 1998, could not be eliminated before the cutoff date from FMS to TerRaSys. At the end of 1999, the examination of the notices received in the TerRaSys format was undergoing the final testing, with a view to commencing the regular examination (and publication) in early 2000.

**Table 3.2-2: Plan modification procedures (other than BC/BT)**

Procedure	AP S25	AP S26	GE85
Expected input	30	20	50
<b>Capture and Validation</b>			
Received Notices	2	0	26
Captured notices	2	-	26
Performance indicator for data capture	Satisfied	N/A	Satisfied
Backlog (weeks)	0	0	0
<b>Examination</b>			
Treated cases (including previous periods)	26 {out of 26}	-	39 {out of 39}
Performance indicator for examination (Note 3)	Satisfied	N/A	Satisfied
Backlog (weeks)	0 (Note 3)	-	0 (Note 3)
Remaining active cases	5	0	20

NOTE 3: All notices were captured within the statutory limit. The Bureau applied the relevant steps of the procedures, for AP S25 and GE85, within the statutory limits; it is to be noted, however, that for

these components the application of the procedure depends mainly on the activity of the notifying administration. For components AP S25 and GE85, there is no backlog as far as the BR examination is concerned (earliest date of receipt is: for all remaining active cases of AP S25: 14.07.1998; for all remaining active cases under GE85: 05.05.1998).

### 3.3 Notification, examination, recording and other procedures pertaining to terrestrial services

#### 3.3.1 Regulatory procedures

Table 3.3-1 summarizes the activities related to notification and other regulatory procedures pertaining to terrestrial services: The number of received notices was within the forecasts indicated in the operational plan for the year 1999, excepting the Article S12 where a lower number of notices was received due to the reduced number of seasons in the new procedure. The resources used were within the forecasts indicated in the Operational Plan (123 professional and 140 general service staff-months).

**Table 3.3-1**

<b>Procedure</b>	<b>Art. S11</b>	<b>Art. S12</b>	<b>Res. 300</b>	<b>Rec. 402</b>
Expected input	50000	40000	50	30
<b>Capture and Validation</b>				
Received Notices	51748	17379	21	18
Captured notices	40652	17379	21	18
Performance indicator for data capture	Satisfied (Note 4)	Satisfied	Satisfied	Satisfied
Backlog (weeks)	0	0	0	0
<b>Examination</b>				
Examined notices	55586	17379	21	27
Performance indicator for examination	Satisfied (Note 5)	Satisfied (Note 6)	Satisfied	Satisfied
Backlog (weeks)	40	0	0	0

NOTE 4: All Article S11 notices, under FMS format, were captured and published within the statutory limits. The capture of TerRaSys notices (FM/TV) commenced on 20 September 1999 and the slight accumulated backlog was rapidly eliminated. The publication of Article S11 notices, in TerRaSys format, started on 11 January 2000 (BRIFIC No. 2410). In addition, some 4132 internal notices were generated so as to enable appropriate amendments to the recorded assignments, especially in the context of the conversion from FMS to TerRaSys.

NOTE 5: All notices under Articles 12 and S11, under FMS format, were examined within the statutory limits, excepting those in the bands shared with space services, where slight backlog still exists and which depends on the related examinations for the space service notices. At the end of 1999, the examination of notices received in TerRaSys format was undergoing final testing, with a view to commencing the regular examination (and publication) in early 2000 (starting with the FM/TV component).

NOTE 6: The relevant schedules (A99 and B99) on CD-ROM were published in accordance with the time sequence established by WRC-97. All valid notices received up to 2 weeks before each publication could be incorporated in the data and calculation results.

#### 3.3.2 Treatment of monitoring reports

In the year 1999, monitoring reports containing 52664 observations were received from 13 administrations, which were submitted either in paper or in electronic formats. Submissions in paper format, which represent approximately 60% of the total number of observations received; were

captured and appropriately formatted with a view to posting them on the ITU Web site together with the information received in electronic format. The information is available in dBase and Zip format for internal and external download at <http://www.itu.int/brtpr/monitoring/index.html>.

### 3.4 Application of administrative and operational procedures

In 1999, the Bureau handled 61 requests dealing with allocation of series of call signs, blocks of selective call numbers and Maritime Identification Digits, in accordance with Article S19, Resolution 13(Rev.WRC-97), as well as ITU-R and ITU Recommendations. In this respect, the following means of identification were allocated to administrations: **one** call sign series, **three** blocks of ship station selective call numbers, **three** blocks of coast station identification numbers, and **six** MIDs. As all the blocks of ship station selective call numbers (SSSCN) were exhausted in the first quarter of 1999, an appropriate note was published in the ITU Operational Bulletin (No. 693 of 1 June 1999). Administrations submitting requests for additional blocks of SSSCN are advised to re-use the same five-digit ship station selective call numbers for both SFSC and NBDP (where applicable), or to migrate to the numerical identification system based on MID and the proposed course of action is generally accepted.

Assistance and clarifications concerning administrative provisions of the RR were given to several administrations, as well as to a number of entities outside the administrations (operating agencies, private companies and general public). Necessary liaison with IMO, Inmarsat / IMSO, ICAO, and the UN was provided with regard to the application of the ITU treaty texts within these organizations. A total of 408 communications was exchanged.

The ITU Master List for means of identification has been maintained and updated using the new Global Administration Database (GLAD).

In pursuance to Resolution 27(Rev.WRC-97), the provisions of Articles and Appendices to the Radio Regulations, making reference to ITU-R Recommendations, were reviewed and appropriate reports were submitted to the SC meeting (July 1999) and to CPM-99.

*Performance indicator:* satisfied. All requests were treated in time. Objections were received from some administrations, as to the treatment of their requests for additional means of identification, but these objections were due to non-familiarity of the administrations with all aspects of the standard procedures (e.g., non-eligibility for additional means of identification due to unsatisfied conditions stipulated in the RR as to the number of notified ship stations); administrations generally follow the course of actions and other guidance suggested by BR in this respect. The staff resources used were within the forecasts indicated in the Operational Plan (3 professional and 8 general service staff-months).

### 3.5 Implementation of Conference Resolutions dealing with terrestrial matters

3.5.1 The Bureau reviewed all the relevant aspects concerning the application of the new regulatory arrangement adopted by WRC-95 and WRC-97, as from 1 January 1999. The following activities were undertaken in this respect:

- The frequency assignments governed by Resolutions 8 and 412 were reviewed and the findings of the MIFR assignments were corrected accordingly;
- The forms of notice for the terrestrial services were reviewed so as to adapt them to the requirements of Appendix S4 and **TerRaSys**; the new forms of notice, together with appropriate instructions, were communicated to the administrations with the Circular-letters CR/118, CR/120 and CR/125;

- CD-ROMs containing HF schedules, results of compatibility analysis and latest version of HFBC software were published regularly, in accordance with the timetable set out in Article S12. The implementation of Article S12 also led to important data treatment for the establishment of reference tables and to a considerable exchange of correspondence with administrations and regional coordination groups concerning possible improvements to software, correction of reference tables and presentation of calculation results.
- Pursuant to Resolution 29, a multi-address letter was sent to 166 administrations requesting them to furnish the Bureau information on the occupancy by fixed and mobile services of those HF bands allocated to the broadcasting service by WARC-92. The replies were consolidated and appropriate reports were submitted to CPM-99 and WRC-2000. Administrations were also furnished with extracts of assignments recorded in the Master Register in these bands, on their behalf, with a view to review and delete those not in use - appropriate follow up was undertaken in this respect (amendments to the MIFR, either as deletions or as notification of new assignments).
- Pursuant to Resolution 30, the Bureau undertook a comprehensive program of activities with a view to replacing the former weekly circular formats (paper, microfiche and diskettes) with a new CD-ROM format. After the necessary testing, which was conducted over the whole year of 1999, the new publication format was gradually introduced and, as of 11 January 2000, the new BR International Frequency Information Circular (IFIC) on CD-ROM became a regular and the only publication format which integrates all services (terrestrial and space);
- In response to Resolution 340, and subsequent to the consultation with administrations, the format for notification of ship stations was modified so as to include additional search and rescue information.
- In response to Resolution 535, three versions of the HFBC propagation software (HFBC 1.3.1, 2.1 and 2.2) were released in March, September and November 1999, respectively. The corresponding HFBC web page is continuously updated with updated reference tables and on-line help files. Improvement of the software is still on-going.

*Performance indicator:* satisfied (all relevant activities initiated in time; no complaint received from a Member State).

## **8 Development of BR publications**

### **8.1 Regulatory publications (including publication of service documents)**

8.1.1 In 1999, the preparation of the regulatory publications followed the standard pattern, as foreseen in the Operational Plan, notably;

- Weekly Circulars on paper, microfiche and diskette were produced regularly, with no delay (50 issues in 1999), WIC No. 2409 dated 21 December 1999, represented the last one in the WIC series on paper, microfiche and diskette formats, as these formats have been discontinued at the end of 1999;
- Following the successful testing, the new publication "BR International Frequency Information Circular", on CD-ROM format, was gradually introduced as from 7 September 1999 (7 regular issues in 1999). Given the fact that this publication also contains updated versions of the terrestrial frequency assignment plans, there was no need to prepare a special publication dealing with terrestrial plans, as initially foreseen in the Operational Plan;
- The editions of the IFL on CD-ROM (March-99 and December-99) were published in time; the December-99 edition has a particular importance because it contains the reference situation of the MIFR, in the FMS format, before its migration to TerRaSys format;
- The March-99 and December-99 editions of the Preface were published in time; the Preface is now being updated regularly and distributed with BRIFIC.

8.1.2 In 1999, the publication of service documents followed the dynamics indicated in the Operational Plan, notably

- List IV (Coast stations): two supplements to the 16<sup>th</sup> edition of the list, 180 pages
- List V (Ship stations): one full edition (39<sup>th</sup>) and three supplements: 3800 pages;
- List VI (Radiodetermination and special service stations): two supplements to the 13<sup>th</sup> edition: 186 pages;
- List VIIA (Call signs and numerical identities used by the maritime service): one full edition (19<sup>th</sup>) and three supplements: 1890 pages;
- List VIIB (Other call signs): one full edition (16<sup>th</sup>) and one supplement: 400 pages;
- The 1999 edition of the Manual for use by the maritime mobile and maritime mobile-satellite service: 540 pages.

In addition to the standard treatment of notifications from administrations related to the above publications and to the related activities concerning the publication of the relevant information in the ITU Operational Bulletin, appropriate activities were undertaken with a view to transferring the production of the service documents from the IDMS-based mainframe computer to a client-server configuration, bearing in mind the phasing out of the ITU mainframe computer at the end of 1999.

In 1999, the Bureau continued to maintain and to update, on a regular basis, the accessible ship-station database (MARS). As requested by Resolution 340 (WRC-97), additional GMDSS information has been made available on MARS.

*Performance indicator:* satisfied (all activities completed in time; no complaint received from users). The staff resources used were within the forecasts indicated in the Operational Plan (23 professional and 90 general service staff-months).

## **9 Assistance to Members**

In 1999, the Bureau continued to provide various kinds of assistance to administrations, as listed in paragraphs 9.1 to 9.4 below.

*Performance indicator:* partially satisfied (some requests could not be completed in a reasonable timeframe, due to heavy workload on the migration from FMS to TerRaSys). However, no complaint has been received from administrations). The staff resources used were within the forecasts indicated in the Operational Plan.

### **9.1 Specific assistance to administrations of developing countries**

The Bureau organized three regional Seminars. Participants from developing countries were granted 30 fellowships for these Seminars, at which a wide range of issues were presented, including the subjects related to national spectrum management. Appropriate software modules were distributed to support the activities of national spectrum management units within these administrations. In addition, specific missions were undertaken, either on request of the administration concerned (e.g., mission to MRC, in July 1999, to assist the newly established body for frequency management) or on request of BDT (see also paragraph 10.1 below).

### **9.2 Special monitoring and treatment of cases of harmful interference cases**

In 1999, the Bureau continued with the special monitoring program referred to in Resolution 205. Some 39 reports were received in this regard concerning 125 unauthorized emissions. As a result of the Bureau's actions, 38 unauthorized emissions have ceased.

In addition, the Bureau dealt with 81 cases of harmful interference in 1999, 45 of them being new cases, and with 4 cases of special assistance to administrations. During 1999, 54 cases have been closed.

### **9.3 Special assistance on coordination, notification and plan modification procedures**

In 1999, the Bureau provided assistance to administrations in relation to the application of various regulatory procedures. Detailed calculation results and test calculations in the framework of the regional agreements GE75, RJ81, GE84 and GE89 absorbed some two person-months, while the assistance in the framework of Article S12 (HFBC) absorbed one person-month.

### **9.4 Assistance to non-Sector Members**

Assistance and clarifications concerning regulatory and administrative provisions of the RR were given to a number of entities outside the administrations (operating agencies, private companies and general public).

## **10 Cooperation**

### **10.1 Cooperation with ITU-D**

Staff of the Bureau participated actively in the second part of the Distance Learning Course on spectrum management and service planning, in the frame of the ITU-D Virtual Training Centre. BR participation was highly praised by BDT. Staff of the Bureau continued to effect missions on request of BDT in order to assist administrations in various issues related to spectrum management (e.g., in Bogota, September 1999; in Nairobi, December 1999).

### **10.4 Cooperation with International and Regional Organizations**

The Bureau maintained liaison and cooperation with many International and Regional Organizations, particularly with a view to ensuring effective preparation for WRC-2000 (CEPT, CITELE, APT, etc).

Staff of Bureau participated in several meetings concerning the coordination of the HFBC schedules organized by the regional coordination groups (HFCC, ASBU, ABU) and presented the relevant software, as well as the associated procedures for broadcasting services.