



*Radiocommunication Bureau*

*(Direct Fax N°. +41 22 730 57 85)*

Administrative Circular  
CA/89

30 November 2000

## **To Administrations of Member States and Radiocommunication Sector Members of the ITU**

**Subject:** Request for Administrations and Sector Members to supply data on the characteristics of Radiolocation and Radionavigation systems operating in the frequency band 13.75-14.0 GHz

### **1 Introduction**

Resolution 733 (WRC-2000) invites ITU-R to conduct studies, as a matter of urgency and in time for consideration by WRC-03, in order to review the constraints contained in footnote S5.502 on radiolocation (maximum e.i.r.p. averaged over one second of 59 dBW) and FSS (minimum Earth station antenna size of 4.5 m) and to propose alternative sharing conditions to those contained in S5.502 and S5.503. Joint Task Group 4-7-8 has been assigned the responsibility of reporting the results of these studies to the 2002 Conference Preparatory Meeting (CPM-02).

At its first meeting in October 2000, Joint Task Group 4-7-8 identified parameters which would have an impact on the sharing conditions between FSS and other co-primary services in the band 13.75-14.0 GHz, if the current limits in S5.502 were to be relaxed. In particular, the parameters of interest with respect to the Radiolocation and Radionavigation Services were identified.

Parameters of certain class of Radiolocation systems are available from Recommendation ITU-R Recommendation S.1068, though not all parameters of interest. The parameters of any Radionavigation systems operating in the band 13.75-14.0 GHz are not available. Joint Task Group 4-7-8 decided it would be useful to its work to obtain the missing Radiolocation system parameters, and further to determine whether or not there are any Radionavigation systems operating in the band and obtain their parameters (if any).

This letter extends an invitation to Administrations and Sector members to supply data on the current or planned use of the band 13.75-14.0 GHz.

An equivalent Administrative Circular (CA/90) is being sent to Administrations and Sector Members to supply data on the current and expected use of the band 13.75-14.0 GHz (through the knowledge of the use of the band 14.0-14.5 GHz) by FSS in order to permit JTG 4-7-8 to perform analysis of the global sharing environment between co-primary services in the band 14.0-14.5 GHz.

## **2 Data on Radiolocation and Radionavigation stations using the band 13.75-14.0 GHz**

Administrations and Sector members are requested to supply information regarding the characteristics of Radionavigation and Radiolocation systems operating or planned for operation in the band 13.75-14.0 GHz. Annex 1 contains an incomplete table of systems and parameters of interest. The missing parameters in this table, as well as the full set of parameters in the table for additional systems (including shipborne, land based and, if any, airborne terminals) to be considered in studies of the band 13.75-14.0 GHz, are requested.

## **3 Submission of contributions**

Administrations and Sector members are urged to submit the information requested at the latest on 2 April 2001.

Contributions should be sent, if possible in a standard electronic format, to Mr. Robert Hinkle (USA) through Mr. Jinxing Li (Counsellor, Study Group 4, Radiocommunication Bureau, Tel.: +41 22 730 5990, Fax: +41 22 730 5806, e-mail: [jinxing.li@itu.int](mailto:jinxing.li@itu.int)).

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### Distribution:

- Administrations of Members states of the ITU
- Radiocommunication Sector members
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and the Special Committee on Regulatory/Procedural Matters
- Chairman and Vice-Chairmen of the Radiocommunication Advisory Group
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

ANNEX

**Characteristics of radars operating in the band 13.75-14 GHz**

System	Name	Nominal power minimum (Kwatts)	Average power minimum (Watts)	Average power max. (Watts)	Pulse width min. (micro seconds)	Pulse width max. (micro seconds)	Pulse repetition freq min. (pulses per second)	Pulse repetition freq max. (pulses per second)	Mainbeam gain max. (dbi)	Mainbeam gain min. (dbi)	Type of platform & antenna height	Radar sensitivity	Signal BW (kHz)	Protection criteria	Density of co-frequency radars	Separation of co-located stations	Operating mode (scanning, tracking, etc.)
A	CONDOR COMMAND	0.01							32	0							
B	MM/SPQ003 SMA	100	67.5		1.5		450		35	0							
C	MM/SPQ003 SMA	180	67.5		0.15		2500		43	0							
D	MM/SPQ003 SMA	180	67.5		1.5		450		43	0							
E	RCSMS	0.1	0.16	20	0.04	20.475	62.5	40000	29	0							
F	RCSMS	0.4	0.001	20	0.07	20.475	62.5	40000	23	0							
H	RCSMS	1	0.0003	20	0.005	20.475	62.5	40000	40	0							
I	RCSMS	1	0.0003	20	0.005	20.475	62.5	40000	41	0							
J	RCSMS	1	0.0006	20	0.01	20.475	62.5	40000	36	0							
K	RCSMS	1	0.001	20	0.02	20.475	62.5	40000	30	0							
L	STEP FREQ RDR 4580	1	0.05	0.5	0.1	5	10	5000	36	0							
M	TRS 2300 THC	200	196		0.7		1400		37	0							
N	TRS 2300 THC	200	196		0.7		1400		38	0							

NOTE - It is assumed that the area of operation of a radar was defined down to its horizon. Any different configuration should be clearly indicated.