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SUMMARY

The primary focus of WRC-95 must be on the issues which are critical to the implementation of MSS, including the availability of satellite feeder links. Priority should be given to the completion of technical studies to identify conditions pursuant to which MSS feeder links may be shared with the FSS in time for WRC-95. With regard to simplification of the Radio Regulations, CWS recommends a procedure pursuant to which the ITU Council, at its 1994 session, would assess the progress made in considering the recommendations contained in the VGE Report. This procedure, described in greater detail herein, would allow the Council to

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	ET Docket No. 93-198
Preparation for International	)	
Telecommunication Union	)	
Radiocommunication Conferences	)	

REPLY COMMENTS OF COMSAT WORLD SYSTEMS

COMSAT World Systems, a business unit of COMSAT Corporation (CWS), herein submits the following reply comments in response to the Commission's Notice of Inquiry (Notice) in the above-captioned proceeding.

I. Introduction

CWS has stressed the need for a limited agenda for WRC-95 which, in view of the importance of the issues, would be confined to the two items designated by the December 1992 Additional Plenipotentiary Conference (APP-92), i.e. the report of the

Voluntary Group of Experts (VGE) and consideration of ways to facilitate the use of the Mobile Satellite Service (MSS) bands allocated at WARC-92, including analysis of feeder link issues.[1] There is strong agreement among a number of commenters that the 1995 and 1997 WRC must devote a substantial amount of time to facilitating the use of the frequency bands currently allocated to MSS systems and to addressing MSS feeder links which could share Fixed Satellite Service (FSS) bands.[2] In view of the importance of these MSS issues, a number of parties have suggested that substantive consideration of the VGE report should be considered at WRC-97[3] or at a separate conference convened solely for this purpose.[4]

In response, CWS continues to believe that the primary focus of WRC-95 must be on the issues which are critical to the implementation of MSS, including the availability of MSS satellite feeder links. In view of the critical nature of the MSS issues, and, as analyzing the merits of any proposed changes to the Radio Regulations at WRC-95 may be premature, CWS herein recommends a procedure, pursuant to which the 1994 session of the ITU Council would assess the progress made in considering the

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[1] See Comments of CWS, at 6-7.

[2] See, e.g., Comments of Constellation Communications, Inc. (Constellation), at 2; Comments of COMSAT Mobile Communications, at 10; Comments of AMSC Subsidiary Corporation (AMSC), at 1; Comments of Loral Qualcomm Satellite Services, Inc. (LQSS), at 6.

[3] See Comments of Motorola Inc., at 14; Comments of The National Academy of Sciences (NAS), at 3.

[4] See Comments of ARINC, at 3; Comments of Motorola, at 14.

recommendations contained in the VGE Report. This procedure, described in greater detail below, would allow the Council to determine whether any substantive changes to the Radio Regulations are ripe for action at WRC-95. Finally, CWS concurs with the Chairman of Task Group 4/4, who urges that United States take appropriate actions to have WRC-95 confirm the sharing parameters specified in Footnote 855A, as required by Resolution 112.

II. MSS Feeder Links Using FSS Frequency Bands

CWS has emphasized the importance of completing studies in the ITU Radiocommunication Sector (RC) to develop appropriate sharing criteria and the need to initiate studies to determine which FSS or other bands, could be shared as MSS feeder links.[5] We have further stressed the need to complete these studies in sufficient time to address MSS feeder links issues at WRC-95.[6] Other parties also note the need to examine MSS feeder link issues at WRC-95.[7] Motorola suggests that the necessary technical studies would not be completed in time for consideration at WRC-95, and that therefore such issues as coordination of non-geostationary MSS feeder links with

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[5] Comments of CWS, at 5.

[6] Id. at 6.

[7] See e.g., Comments of Constellation at 2; Comments of Loral Qualcomm Satellite Services, Inc. (LQSS), at 6; Comments of the International Small Satellite Organization, at 4.

geostationary FSS operations should not be addressed until WRC-97 or a later conference.[8]

CWS disagrees with Motorola's contention that appropriate studies cannot be completed in time for WRC-95. However, we do agree that high priority must be given to completing such studies, if they are to be available in time for WRC-95.

We note that the issue of MSS feeder links is directly related to the provisions of Radio Regulation 2613 concerning unacceptable interference to geostationary satellite systems (GSO) operating in the FSS caused by non-geostationary satellite systems (non-GSO).[9] RR 2613 was included in the Radio Regulations to protect FSS GSO systems from unacceptable interference from non-GSO systems in the absence of technical sharing criteria. Now that a number of non-GSO MSS systems are proposing to operate feeder links using FSS bands, it is urgent to complete sharing studies on the criteria and on the most appropriate bands to use as feeder link bands for MSS systems.[10]

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[8] Comments of Motorola, at 4.

[9] Radio Regulation 2613 provides: Non-geostationary space stations shall cease or reduce to a negligible level their emissions, and their associated earth stations shall not transmit to them, whenever there is insufficient angular separation between non-geostationary satellites and geostationary satellites resulting in unacceptable interference to geostationary-satellite space systems in the fixed-satellite service operating in accordance with these Regulations. RR 2613, International Radio Regulations, as modified at WARC-92.

[10] We also note that Motorola's IRIDIUM system proposes the Ka-bands (at 30/20 Ghz) as feeder links for IRIDIUM. No FSS GSO commercial system now operates in the these bands, which may explain why Motorola sees no need to consider the MSS feeder link issue at WRC-95.

The Advisory Committee's Informal Working Group-3 on feeder links found that the provision of RR 2613 could be interpreted in different ways and has recommended a particular interpretation that would require that three conditions be met before a non-GSO system would be requested to cease or reduce transmissions in order to protect a GSO system.[11] We believe that this raises a substantial question about the practicality of relying solely on RR 2613 to protect GSO systems and points to the need to either establish workable coordination and sharing arrangements between GSO and non-GSO systems operating in the FSS bands or to find bands other than the FSS bands to be feeder links for MSS systems.[12]

Another important aspect of the MSS feeder link issue needing resolution concerns the question of whether or not MSS GSO and MSS Non-GSO systems could share the same feeder link bands. This question is not governed by RR 2613, since, in this case, no fixed-satellite system is involved. Nevertheless, if sharing is not feasible, additional MSS feeder links in the FSS bands may be necessary to accommodate a combination of future GSO and non-GSO systems.

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[11] See Report of the MSS Above 1 Ghz Negotiated Rulemaking Committee, April 6, 1993, Establishment of an Advisory Committee to Negotiate Proposed Regulations, 7 FCC Rcd 5241 (1992).

[12] The Advisory Committee has recommended that bands between 15 Ghz, and preferably below 10 Ghz, be used for MSS feeder links. Since FSS GSO systems are operating in these bands, it becomes more urgent to establish sharing arrangements in these bands.

In sum, CWS continues to believe that it is possible to

complete the appropriate technical studies in time for WPC 95 to

any VGE recommendations to modify the Radio Regulations.[14]

Both Motorola and NAS express the view that WRC-95 should not attempt to address the substance of the VGE recommendations, but rather that consideration of the VGE Report should be on the WRC-97 agenda.[15] As an alternative, Motorola also suggests that the VGE Report could be dealt with at a separate conference called for that purpose. ARINC believes that the United States should take steps to ensure that the review of the Radio

conclusions on the critical MSS issues.

Based on these concerns, CWS believes that the United States should make the following proposal for consideration at WRC-93. The ITU Council at its 1994 session should assess the progress made on the VGE Report and determine if any substantive matters regarding changes to the Radio Regulations are ripe for action at WRC-95. Any such items identified could be scheduled for the WRC-95 agenda. Also, a comprehensive review of the status of the total VGE work product could occur at WRC-95. If no substantive items are ready for consideration at WRC-95, only a status report would then be considered. Members could express views and provide some guidance on the future work of the VGE. The Council would continue to evaluate the recommendations of the VGE and schedule items for consideration at WRC-97 and future WRCs. If appropriate, the Council could recommend that a separate conference be devoted to addressing the VGE's recommendations and any proposed changes to the Radio Regulations.

Footnote 855A

It is anticipated that the U.S. Task Group 4/4's examination of the sharing parameters established by WARC-92, described in Footnote 855A to the Table of Frequency Allocations for the services in the 13.75-14 GHz band, will be completed by October 1993. CWS concurs with the comments of the Chairman of Task Group 4/4, who strongly urges that U.S. proposals to WRC-95

include an agenda item to review and confirm the technical sharing parameters specified in Radio Regulation 855A, as required by Resolution 112.[18] This work can be expected to be approved by both Study Group 4 and the subsequent Radiocommunications Assembly in ample time for consideration at WRC-95.

CWS wishes to emphasize that the validation of the 855A technical sharing parameters at WRC-95 is necessary to allow the commencement of the necessary satellite system planning and system design for use of this band, which will provide much needed intercontinental satellite connectivity. Most importantly, we believe that validation of the 855A technical sharing parameters will lead to the use of the 13.75 to 14 Ghz frequencies and thus relieve Ku-band uplink frequency congestion problems by the latter part of the 1990's.

However, we do not believe that consideration of the 855A sharing parameters, requested by a previous conference, need be placed on the agenda in the same manner and with the same status as other new and possibly controversial issues. Thus, changes to

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[18] Resolution 112, Final Acts of the World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum, (WARC-1992). Resolution 112 deals with the allocation of the FSS to the band 13.75-14 GHz on a primary basis. Resolution 112 calls on the CCIR (Radiocommunication Sector) to conduct studies prior to January 31, 1994 with respect to the values given in Radio Regulation 855A relating to allocations in the band 13.75-14 Ghz; and to conduct studies with regard to technical compatibility between the primary allocation to the FSS and the secondary allocations to the space research service and the Earth exploration-satellite service in the band 13.75-14 Ghz.

the Radio Regulations resulting from technical studies in the Radiocommunication sector and approved at Radiocommunications Assemblies (such as will be the case for Footnote 855A), do not need to be stand alone agenda items for WRCs. Rather, they should be dealt with in reports from the Radiocommunication Assemblies to the WRCs and, when approved, the consequential changes can be made in the Radio Regulations. Future WRCs can expect to receive technical reports as a routine matter and should routinely consider technical reports which do not propose new allocations or change existing allocations. We propose that WRC-95, and all future conferences, have as an agenda item "Consideration of Technical Reports of the Radiocommunications Assembly." We submit that the review and consideration of the 855A sharing parameters, as called for in Resolution 112, should properly be considered under such an agenda item.

CONCLUSION

It is clear from the information provided to the Commission that the agenda for WRC-95 must be limited in scope and that the highest priority must be given to the MSS issues raised by the

concerns that the Conference may not be prepared to address the substance of the VGE Report, it may be appropriate to postpone consideration of the report until 1997, or later. Finally, U.S. proposals to WRC-95 should propose the necessary actions to reflect any changes in Footnote 855A resulting from the work of U.S. Task Group 4/4 and the report of the Radiocommunication Assembly in November 1993.

Respectfully submitted,

COMSAT World Systems

By: _____

Howard D. Polsky
Robert A. Mansbach
Its Attorneys
(301) 214-3459

COMSAT Corporation
COMSAT World Systems
6560 Rock Spring Drive
Bethesda, Maryland 20817-1146

July 29, 1993

CERTIFICATE OF SERVICE

I, Robert A. Mansbach, hereby certify that a copy of the foregoing Reply Comments of COMSAT World Systems were served by first class mail postage prepaid to the following parties on this 29th day of July 1993:

Leslie A. Taylor, Esq.
6800 Carlynn Court
Bethesda, MD 20817

Philip K. Malet, Esq.
Steptoe & Johnson
1330 Connecticut Ave., NW
Washington, DC 20036

Norman P. Leventhal, Esq.
Leventhal, Senter & Lerman
2000 K Street, NW
Washington, DC 20006

Lon C. Levin, Esq.
Regulatory Counsel
AMSC Subsidiary Corporation
1150 Connecticut Ave., NW
Washington, DC 20036

Jill Abeshouse Stern, Esq.
Shaw, Pittman, Potts
and Trowbridge
2300 N Street, NW
Washington, DC 20037

William Torak
Deputy Chief
Spectrum Engineering Division
Federal Communications Commission
Room 7130
2025 M Street, NW
Washington, DC 20554

John L. Bartlett, Esq.
Wiley, Rein & Fielding
1776 K Street, NW
Washington, DC 20006

Jeffrey L. Sheldon, Esq.
Sean A. Stokes, Esq.
Utilities Telecommunication Council
1140 Connecticut Ave.
Washington, DC 20036

Tara Kalagher Giunta, Esq.
Reid & Priest
Market Square
701 Pennsylvania Ave., NW
Washington, DC 20004

Carl Frank, Esq.
Wiley, Rein & Fielding
1776 K Street, NW
Washington, DC 20006

Richard Beaird
Acting Director, Bureau
of Internal Communications
and Information Policy
U. S. Department of State
Room 6317
2201 C Street, NW
Washington, DC 20520

Lawrence Palmer
Director, International Affairs
National Telecommunications and
Information Administration
U. S. Department of Commerce
Room 4701
14th & Constitution Aves., NW
Washington, DC 20230

Linda K. Smith, Esq.
Crowell & Moring
1001 Pennsylvania Ave.
Washington, DC 20004

Robert A. Mazer, Esq.
Nixon, Hargrove, Devans & Doyle
One Thomas Circle, NW
Washington, DC 20005

Stuart E. Overby
Manager, Regulatory Programs
Motorola, Inc.
1350 Eye St., NW
Washington, DC 20005

George Jacobs & Associates, Inc.
8701 Georgia Ave.
Silver Spring, MD 20910

Stephen L. Godman, Esq.
Halprin, Temple & Godman
Suite 1020 East Tower
1301 K Street, NW
Washington, DC 20005

Christopher D. Imlay, Esq.
Booth, Freret & Imlay
1233 20th Street, NW
Washington, DC 20036

John Joseph McVeigh, Esq.
Fisher, Wayland, Cooper
& Leader
1255 23rd Street, NW
Suite 800
Washington, DC 20037-1125

Neal Kilminster, Esq.
COMSAT Mobile Communications
22300 COMSAT Drive
Clarksburg, MD 20871

Robert L. Riemer
Associate Director, Committee
on Radio Frequencies
HA-562
National Research Council
2101 Constitution Ave., NW
Washington, DC 20418

W. Theodore Pierson, Jr., Esq.
Pierson & Tuttle
1200 19th Street, NW
Washington, DC 20036

Robert A. Mansbach