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REPORT ON SOURCES OF INTERFERENCE TO GEOSTATIONARY METEOLOLOGICAL SATELLITE SERVICES

This document refers to the action 26.31 of CGMS XXVI. CGMS is invited to continue monitoring of IDCS and to report interference to responsible frequency authorities.

CGMS-XXVI I EUM-WP-18

REPORT ON SOURCES OF INTERFERENCE TO GEOSTATIONARY METEOLOLOGICAL SATELLITE SERVICES

1 INTRODUCTION

Interference to services operated on geostationary meteorological satellites is experienced since the beginning of operations of CGMS co-ordinated satellite systems in the 70s. Reports were submitted to various sessions of CGMS and discussions showed that similar interference is experienced by neighbouring systems in some cases. This document gives a short update on activities to identify and de-activate interference sources.

2 STATUS OF INTERFERENCE TO THE METEOSAT DCS

All DCS channels of the nominal Meteosat spacecraft (Meteosat-7) at the orbit position 0 degrees are regularly monitored and appearance of interference is registered. The present status is that permanent interference is observed on regional channels R15 and R18. This results in a situation, which does not allow using these channels for operations. Spurious interference is detected on channels R16 and R23.

Some occasional interference checks were performed on IDCS channels of Meteosat-5 at 63 degrees. All checked channels were received without interference. It has to be noted that due to limited monitoring facilities at the Meteosat ground station it is not possible to permanently monitor the system on Meteosat-5.

3 ACTIVITIES BETWEEN ROSHYDROMET AND EUMETSAT

Interference to IDCS in the frequency band 401 - 403 MHz has been reported for years by CGMS operators. Similar interference was monitored by Roshydromet on GOMS/Elektro, by China on FY-2, by India on INSAT, and by Meteosat spacecraft on nominal and Indian Ocean operations positions. It strongly affects the operations of Data Collection Systems and disables the operations of various channels completely. The analysis of interference geography shows that the interference source is located in the territory of Russia.

EUMETSAT informed the Russian State Committee on Communication and Information of these facts and asked for assistance in locating the interference source and to modify the operations at this source in such a way that IDCS systems are no longer affected. A copy of the letter was sent to the Radiocommunication Bureau of the International Telecommunication Union. The ITU acknowledged the reception of the letter and asked for information on further developments. So far no reply was received from the Russian authorities.

4 CONCLUSIONS

Interference to Data Collection Systems of CGMS operators are still being observed. Mission operations are affected and partially inhibited.

Activities to locate and disable interference sources are initiated.

CGMS operators are invited to continue monitoring the interference on their DCS and to report interfering signals to the responsible frequency authorities.