

ROSHYDROMET DCS CURRENT STATUS AND DEVELOPMENT PLANS

Summary and purpose of the WP

The first batch of 20 DCPs had been installed at hydrometeorological stations in the European and Ural regions of Russia. DCP tests have been started at the end of summer 2002. DCP signals are transmitted via Meteosat-7 I25 and I26 channels on experimental basis. Data collection is carried out by SRC Planeta ground receiving station near Moscow. The developed GOMS/Electro N2 DCS will provide the operation of 300 national and 33 international channels.

Action proposed: none.

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Status of the Roshydromet DCS

The first batch of 20 DCPs had been installed at hydrometeorological stations in the European and Ural regions of Russia. These DCPs were designed for operation in Russian DCS via Meteosat (on first stage) and GOMS/Electro N2 geostationary satellites. DCP signals are transmitted via Meteosat –7 International channels I25 and I26 (according with Agreement between EUMETSAT and Roshydromet, supported by CGMS). At present, DCPs are working on an experimental basis with the major objective to develop and to test ground segment of Russian DCS until GOMS/Electro N2 will be launched.

Data collection is carried out by SRC PLANETA ground receiving station near Moscow. The decoded data (messages) are transmitted to the Roshydromet Main Communication Center for the subsequent transmission (in GTS code form) via ground telecommunication channels to GTS.

As a result of DCS operation tests, it had been noted, that the satisfactory quality of data collection was not ensured for the DCPs allocated near the north-polar boundary of Meteosat –7 sector and operated via channel I26. It may be induced of Meteosat –7 deviations from fixed position. It is planned to allocate these DCPs at new positions in European part of Russia and to continue channel I26 usage.

Roshydromet DCS development plans

The development of the Roshydromet DCS is realized in the framework of GOMS/Electro N2 programme. The tentative launch date of GOMS/Electro N2 satellite is 2006. According to current planning the developed GOMS/Electro N2 DCS will provide the operation of 300 national and 33 international channels with the bandwidth of each channel 3 kHz. It is planned to develop two ground receiving centres in Russia and to allocate not less than 800 national data collection platforms (DCP).

In order to ensure developing Russian DCS Roshydromet and Russian Aviation and Space Agency plan to use another Russian (telecommunication) geostationary satellites to complement the meteorological geostationary satellite communication capabilities.