

ROSHYDROMET DCS CURRENT STATUS AND DEVELOPMENT PLANS

Summary and purpose of the WP

The batch of modernized russian DCPs had been installed at hydrometeorological stations in the European and Ural regions of Russia. At present, DCPs are working on an experimental basis with the major objective to develop and to test ground segment of Russian DCS until Electro-L N1 will be launched. Data collection is carried out by SRC Planeta ground receiving station near Moscow. The developed Electro-L N1 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 batch of modernized 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 Electro-L N1 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 Electro-L N1 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.

Satisfactory quality of data collection was not ensured for the DCPs allocated near the north-polar boundary of Meteosat –7 sector. It may be induced of Meteosat –7 deviations from fixed position. These DCPs has been re-allocated at new positions in European part of Russia.

On the base of exploitation results the existing DCPs have been modernized and at present they operates on an experimental basis.

Roshydromet DCS development plans

The development of the Roshydromet DCS is realized in the framework of Electro-L N1 programme. The tentative launch date of the satellite Electro-L N1 is 2007. According to current planning the developed Electro-L N1 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 (Moscow and Novosibirsk) and to allocate not less than 800 national data collection platforms (DCP).

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