

**ROSHYDROMET/SRC PLANETA SYSTEM FOR DISSEMINATION OF  
OPERATIONAL SATELLITE IMAGES AND PRODUCTS**

Summary and purpose of the WP

The document contains information on status and development plans of Roshydromet/SRC Planeta system for dissemination of operational satellite images and products.

Action proposed: no action required.

## **ROSHYDROMET/SRC PLANETA SYSTEM FOR DISSEMINATION OF OPERATIONAL SATELLITE IMAGES AND PRODUCTS**

### ***Status***

The major components of the Roshydromet's ground segment are three Main Regional satellite data receiving and processing Centres at different locations: European (Moscow, SRC PLANETA), Western-Siberian (Novosibirsk) and Far-Eastern (Khabarovsk). The ground segment also includes the network of APT, HRPT and WEFAX receiving stations. Roshydromet's main satellite Centre SRC PLANETA (Moscow) performs a scientific and methodological management and coordinates the activities of the above-mentioned acquisition Centres and stations. The radiovisibility circles of these Centres cover the whole territory of Russia as well as Baltic States and major part of Europe.

Present SRC PLANETA receiving facilities provide on a regular basis the data acquisition from geostationary (METEOSAT-7 and METEOSAT-5, GOES-E, GOES-W, GMS via METEOSAT-7) and polar-orbiting (Meteor-3M N 1, NOAA series, EOS/Terra/Aqua) satellites.

On the base of acquired raw data SRC PLANETA produces every day above 50 types of output informational products namely clouds cover, sea surface temperatures, vegetation, ice and snow covers condition, floods, forest fires, pollutions of water and snow covers, etc.

In full accordance with the user's requirements, products are generated in the forms of image maps, charts, numerical data files.

SRC PLANETA provides satellite informational products for more than 60 users. The operational products are disseminated via widespread network of various communication channels. Since Hydrometeorological Centre of Russian Federation (one of the main users) is integrated into SRC PLANETA computer network it has the direct access to operational images and products. Various territorial departments of Roshydromet as well as others Federal, regional and local levels users have an access to operational products via on-line systems: web-sites, FTP server, e-mail server. Hydrometeorological services of Republic Moldova and Uzbekistan have got operational satellites products via FTP server and e-mail server. Clouds nephanalysis maps (derived from NOAA/AVHRR data) and tropical cyclones co-ordinates (derived from acquired geostationary and polar-orbiting satellite data) are disseminated via GTS.

### ***Future***

In near future the following primary factors will influence on the development of Roshydromet/SRC PLANETA dissemination system :

- Transition to new digital standards of direct broadcast – LRIT, HRIT, LRPT, AHRPT;
- The forthcoming launches of new environmental satellites (including R & D satellites) should provide data direct X-band frequencies broadcast in non-standard formats;
- Intensive development of ground and satellites communication systems.

During the transition period the data from current and new satellites will be transmitted in old analogue, as well as in new digital formats. It means, that one of the ways is to install

supplementary stations within the network of regional and local users. It's rather expensive and not so simple way, which should can take a lot of time. At the same time, users need in products derived from operated and future environmental satellites data (including R & D satellites). It seems, that more efficient way is to focus activities on the development of main receiving and processing centres with simultaneous design of alternative dissemination systems. As for Roshydromet, it's intended to develop the satellite's products dissemination on the base of on-line systems (web-sites, FTP server, e-mail server) and also to investigate the possibilities of TV and others satellites communication systems.