## Ensuring the launch of the Meteor-M Earth remote monitoring spacecraft from the Vostochny Space Launch Centre

A spacecraft carrying a foreign-manufactured payload will be launched by Russian launch vehicles from the Vostochny Space Launch Centre.

## Reference

Prepared by the Roscosmos State Corporation for Space Activities in keeping with the federal law On Space Activity.

A signed directive approves a set of measures to launch a Meteor-M spacecraft (hereinafter referred to as SC) from the Vostochny Space Launch Centre for remote monitoring of the Earth. In particular, the directive provides for the rendering of services with the involvement of Defence Ministry personnel and resources. The Meteor-M SC will be launched as part of the Federal Space Programme for 2016–2025.

The Meteor-M remote earth monitoring SC was constructed by the All-Russian Scientific Research Institute of Electromechanics named after Andronik Iosifyan (VNIIEM).

At the same time, together with launching the Meteor-M SC, the following probes will be also launched:

- Baumanets-2 SC, built by the NPO Mashinostroyeniya, commissioned by the Bauman Moscow State Technical University for remote monitoring of the Earth's surface in an optical wavelength band and for conducting experiments to study communication conditions through the "SC — downlink point" channel in the millimetre wavelength band.
- LEO Vantage SC (Canada) built by the Space Flight Laboratory at the University of Toronto Institute for Aerospace Studies (UTIAS/SFL) commissioned by the Canadian company Telesat. This SC is meant to test and approve its further usage in a global low-orbit satellite fleet in the Kaband.
- 11 AISSat-3 SC (Kingdom of Norway) built by the Canadian Space Flight Laboratory, Inc. and commissioned by the Norwegian Space Centre. This SC is meant to receive signals from sea-craft automatic identification systems.
- IDEA SC (Japan) built by and for Astroscale Japan Inc. for observing orbital submillimetre space rubbish.

The directive also provides for additional payloads for scientific purposes consisting of 14 small spacecraft:

- SEAM SC built by and for the Royal Institute of Technology represented by the Department of Space and Plasma Physics (Kingdom of Sweden). This SC's purpose is to measure the Earth's magnetic fields for scientific purposes (and study associated processes in the geocosmic system).
- Two Landmapper-BC type SC manufactured by the Astro Digital US Inc. These SC are designed to collect multispectral images for agricultural planning, water monitoring and land development.
- Ten LEMUR type SC built by and for the Spire Global, Inc. (US). These SC are intended to monitor marine traffic by way of receiving signals from sea-craft automatic identification systems, to conduct weather forecasting on the basis of GPS-signal radio occultation measurements (GPS-RO) and to monitor aircraft using automatic dependent surveillance broadcasts (ADS-B) for peaceful purposes.
- D-Star One SC built by and for the German Orbital Systems GmbH. This SC is meant to upgrade a new satellite platform with a communication link for the D-Star service, which is used by amateur radio enthusiasts.

The ability to launch SC carrying foreign-manufactured payloads with Russian launch vehicles will provide additional income for the state coffers and will free up surplus funds that can then be further invested in the development of space's infrastructure, as well as create new orders for Russian businesses and expand cooperation in space activities. It will also allow for the implementation of programmes for advancing the space industry and creating an infrastructure for the Vostochny Space Launch Centre, including financing using extrabudgetary funds.