

The World's First Environmental and Ocean Satellite Lineage Continues Cheollian-6 Satellite to Deliver More Precise Observations

- Preliminary feasibility study passed for the development of the Geostationary Environmental and Ocean Satellite (Cheollian-6 Satellite) project

The Ministry of Climate, Energy and Environment (MCEE, Minister Kim Sungwhan), the Ministry of Oceans and Fisheries (MOF, Minister Hwang Jongwoo), and the Korea AeroSpace Administration (KASA, Administrator Oh Taeseog) announced that the “Geostationary Environmental and Ocean Satellite (Cheollian-6 Satellite) Development Project,” jointly planned by the three ministries, has passed the preliminary feasibility study for national R&D projects.

The Cheollian-6 Satellite Development Project is a follow-up project aimed at succeeding the environmental and ocean observation missions of Cheollian-2B Satellite, launched in 2020, whose mission is scheduled to end in 2030. The project will invest approximately KRW 769.4 billion over seven years from 2027.

Cheollian-6 Satellite, featuring enhanced performance compared with its predecessor, is scheduled for launch in 2033. It will precisely monitor changes in the atmospheric environment caused by disasters and emergencies, including fine particulate matter, ground-level ozone, and wildfires, as well as changes in the marine environment such as red tides, oil spills, and low-salinity water, helping relevant agencies respond swiftly while actively supporting the

protection of public health and safety.

In addition, the project will domestically develop payloads for geostationary satellites for the first time in Korea, along with a chemical-electric hybrid propulsion system and technology for simultaneous observation using environmental and ocean observation payloads. This is expected to enhance technological self-reliance in Korea's satellite industry and strengthen the foundation for entering overseas markets.

The three ministries plan to establish a detailed project plan for the development of Cheollian-6 Satellite and ensure the smooth implementation of subsequent procedures, including securing the necessary budget and selecting R&D institutions.

Sung Ji-won, Director General for the Atmospheric Environmental Research Department at the National Institute of Environmental Research, said, "With the project's passage of the preliminary feasibility study, Korea will build on its world-class experience in developing and operating environmental satellites accumulated through Cheollian-2B Satellite with the more advanced Cheollian-6 Satellite." He added, "We will use more comprehensive and accurate observations to quickly identify changes in the atmospheric environment and actively apply them to environmental information services that the public can directly benefit from."

Chang Myo-in, Director General of the Korea Hydrographic and Oceanographic Agency under the MOF, said, "The extensive, long-term continuous ocean observation data accumulated over more than 30 years, from Cheollian-1 to Cheollian-6 Satellites, will serve as key data for marine and fisheries policy decisions and responding to climate change." She added, "Through Cheollian-6 Satellite, we will more accurately identify changes in the marine environment around our waters and support responses to marine disasters and safe maritime activities for the public."

Kim Jin-hee, Deputy Minister for the Satellite Directorate at the KASA, said, “Cheollian-6 Satellite is both a national core space asset that will continuously monitor the atmospheric and marine environments closely connected to people’s daily lives and an important project for expanding Korea’s capabilities in developing geostationary satellites.” He added, “Through the transition to a fully private-sector-led satellite development system, we will expand the domestic development of core technologies and enhance the competitiveness of Korea’s space industry.”