

Joint Statement
By
Japan Aerospace Exploration Agency (JAXA),

The Centre National d'Etudes Spatiales (CNES),
and
Deutsches Zentrum für Luft- und Raumfahrt e.V.,
Linder Höhe, 51147 Köln, represented by its Executive Board
(The German Aerospace Center DLR)
on
Joint Study Activities for a Rover onboard
Martian Moon eXploration Mission (MMX)

The DLR - CNES asteroid lander MASCOT (Mobile Asteroid Surface Scout) onboard Hayabusa 2 is intended to land on the surface of asteroid *Ryugu* on October 3, 2018. MASCOT will significantly enhance the mission's science result through performing remote observation as well as surface composition analysis.

In the light of this success, JAXA, CNES, and DLR jointly declare their wish to cooperate on the MMX (Martian Moons eXploration) mission as follows:

MMX is a JAXA led mission to explore Martian moons, Phobos and Deimos, aiming for observation, landing, and sample return.

JAXA, CNES, and DLR have agreed that the rover onboard MMX would be developed through French-German collaboration.

The rover would be released to the surface of Martian Moon prior to the landing of its mother ship, MMX. The rover is to analyze the surface regolith and configuration in great details to optimize the MMX landing and sample return operation. This process is expected not only to reduce the mission risk but also to achieve scientific result as the rover acquires surface data in advance of the physical sample return to the Earth.

While the MASCOT with primary batteries allows approximately 1-day of operation, the rover onboard MMX is to be powered by solar cell, which is to enable mobile surface observation that is expected to last for several months.

The scientific observation instrument to be onboard MMX will be determined in the aim of maximizing the outcome of MMX mission.

JAXA, CNES, and DLR are going to jointly conduct study activities for MMX and the rover with the aim for launch in 2024.

In witness hereof this Statement has been signed on October 3, 2018 at International Astronautical Congress in Bremen, Germany.

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