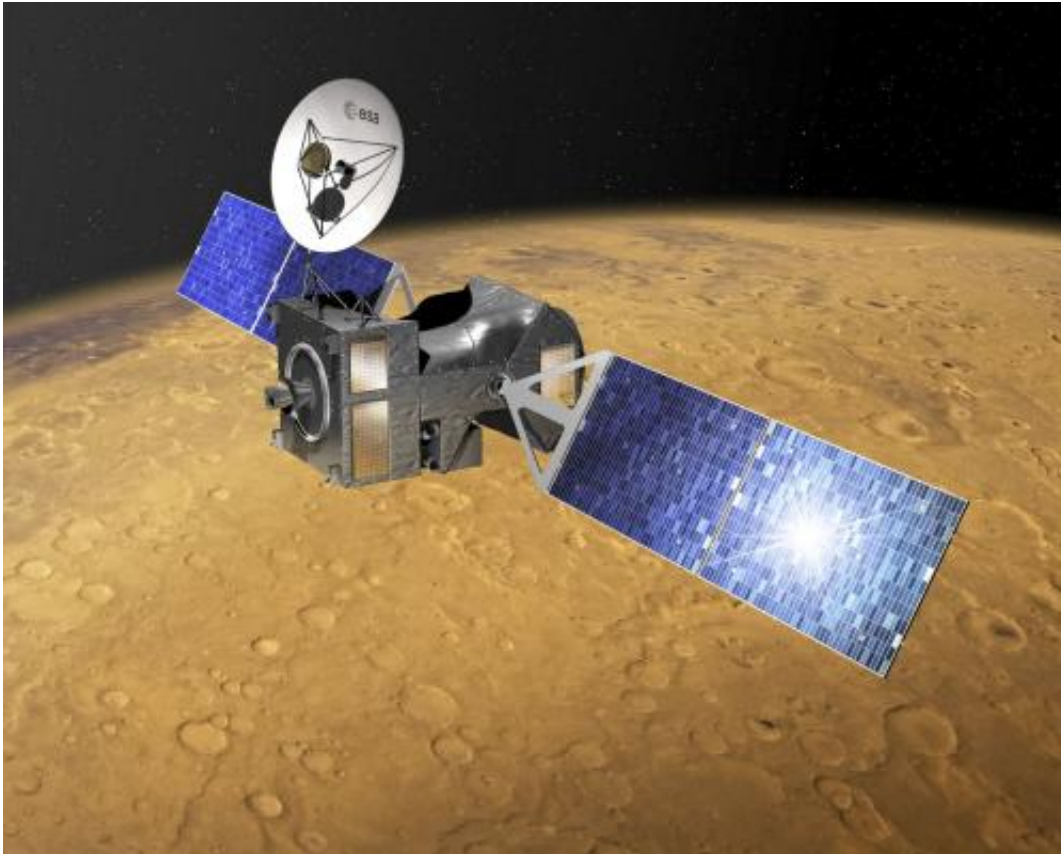


# ExoMars orbiter core module completed

February 4 2014

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ExoMars Trace Gas Orbiter. Credit: ESA–D. Ducros

(Phys.org) —The ExoMars Trace Gas Orbiter module consisting of the spacecraft structure, thermal control and propulsion systems was handed over by OHB System to Thales Alenia Space France at a ceremony held in Bremen, Germany, today.

The delivery marks an important step in the ExoMars programme, a joint endeavour between ESA and Russia's Roscosmos space agency.

Comprising two missions that will be launched to Mars in 2016 and 2018, respectively, ExoMars will address the outstanding scientific question of whether life has ever existed on Mars by drilling the surface of the planet and analysing in situ the samples. The ExoMars programme will also demonstrate key technologies for entry, descent, landing, drilling and roving on the martian surface.

The Trace Gas Orbiter, or TGO, will be launched in 2016 along with Schiaparelli – the entry, descent and landing demonstrator module.

TGO will search for evidence of methane and other atmospheric gases that could be signatures of active biological or geological processes on Mars. It will also serve as a communications relay for the 2018 rover and surface science platform.

Today's handover at OHB headquarters marks the end of an intense construction and test period readying this core module to be used as the basis for integration of other TGO subsystems and units, including the science instruments.

The ceremony was attended by ESA's Director General, Jean-Jacques Dordain, who met representatives of the ExoMars industrial consortium to celebrate this important milestone.

"ExoMars is a challenging project, a premiere for Europe, and, in some aspects, a premier in the world," noted Mr Dordain.

"Thanks to the expertise of our industrial partners here in Germany we are on track to deliver this crucial element of the 2016 mission. We are already looking forward to the significant scientific discoveries that

TGO will make on our quest to understand the evolution of planet Mars, a sister planet of Earth, and in particular, if life has ever existed on Mars."

Marco Fuchs, CEO of OHB said: "The timely release marks a key step in the development of the ExoMars programme. We are proud to be part of this ambitious international science and research program."

"This was a very pleasant start to my new position as aviation and space coordinator. With the ExoMars programme, the German space industry is demonstrating its outstanding skills," said Brigitte Zypries after the core module was handed over.

OHB System AG is a member of the European industrial syndicate that is responsible for developing the Mechanical, Thermal and Propulsion core module of the Trace Gas Orbiter for the 2016 mission with ExoMars prime contractor Thales Alenia Space.

TGO and Schiaparelli will be launched in January 2016, arriving at Mars nine months later. The second mission, with ESA's rover and the Russian surface platform, is scheduled for launch in May 2018, arriving at the planet in early 2019. Roscosmos is the main partner of ESA on ExoMars.

Provided by European Space Agency

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