

## Biography Clemens Heese:

Clemens Heese studied applied physics at the University of Münster in Germany and completed his PhD in ultrafast laser physics at ETH Zürich in 2012.

As an optoelectronics and photonics engineer, he then joined the European Space Agency (ESA-ESTEC, The Netherlands) in the technical directorate, responsible for managing R&D activities and supporting ESA programs (e.g., Aeolus, ATLID, Sentinel-5, AIM...). He also worked in optical communications, taking over the operations of ESA's first optical ground station in Tenerife, Spain in 2020.

In 2021 he became head of optical technologies at ESA-ESOC in Darmstadt, Germany. At ESOC he is dealing with technology developments of optical ground systems, ranging from optical ground stations for deep-space optical communication, quantum key distribution, satellite laser ranging and space debris observation to frequency and timing distribution.