

## Talking to the moon: Europe pitches lunar satellites plan

May 20 2021, by Frank Jordans



In this early Monday, Oct. 5, 2020, file photo, a waning moon is seen at the sky over Frankfurt, Germany. The European Space Agency, ESA, national counterparts and private companies are presenting their vision Thursday to put satellites in orbit around the moon, to make future missions to Earth's closest neighbor easier. Credit: AP Photo/Michael Probst, File



The European Space Agency presented a vision Thursday to put satellites in orbit around the moon that would facilitate future missions to Earth's closest neighbor.

The plan, dubbed "Moonlight," would see ESA offer communications and <u>navigation services</u> to any country that wants to carry out lunar exploration missions.

By relying services provided from <u>lunar orbit</u>, space agencies would be able to design their moon landers without the need for cumbersome communications and navigation devices on board. This would free up space to carry other cargo, making each launch more cost-effective, said Paul Verhoef, ESA's director of navigation.

The project builds on one of the agency's strengths: launching satellites to provide services to third parties. ESA has a fleet of observation satellites in orbit around Earth that supply weather, climate and other data to public and commercial companies.

It also has a constellation of navigation satellites, known as Galileo, that provide highly accurate global positioning data to rival the U.S.-based GPS system.

But it also highlights the European agency's weakness: unlike the United States, China or India, ESA lacks any ambitious moon exploration programs of its own. Instead, ESA is hoping to partner with NASA to build a "lunar gateway" that would be a staging post for future moon missions.





In this Thursday, May 7, 2020 file photo, the full moon sets behind trees in the Taunus region near Frankfurt, Germany. The European Space Agency, ESA, national counterparts and private companies are presenting their vision Thursday to put satellites in orbit around the moon, to make future missions to Earth's closest neighbor easier. Credit: AP Photo/Michael Probst, file

The proposal outlined by ESA on Thursday will see two international consortiums devise ways for building a reliable and dedicated lunar communications and <u>navigation</u> service.

The first such <u>satellite</u>, called "Lunar Pathfinder," will be operational in 2024.



David Parker, ESA's director of human and robotic exploration, said the agency's member states would be given a formal proposal for a constellation next year.



In this Wednesday, Jan. 31, 2018 file photo, a super blue blood moon rises behind the 2,500-year-old Parthenon temple on the Acropolis of Athens, Greece. The European Space Agency, ESA, national counterparts and private companies are presenting their vision Thursday to put satellites in orbit around the moon, to make future missions to Earth's closest neighbor easier. Credit: AP Photo/Petros Giannakouris, file

"If approved, the project could start full steam ahead at the beginning of 2023 to ensure it's operational within four or five years," he said.



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