Press Release

Scientists from Atos engage in HERA mission to preserve the planet from asteroid collision

Bucharest, Romania and Paris, France – December 2, 2020 – Atos today announces that a team of digital transformation experts from Atos Romania are taking part in HERA, the first planetary defense mission of the European Space Agency (ESA) in collaboration with NASA, which aims to determine how asteroids can be deflected so that they do not hit Earth.

HERA is unprecedented in its scientific and technical objectives and will bring the first building blocks of a planetary protection capability. It aims to determine whether the maneuver of diverting a dangerous asteroid from its collision course with Earth is the appropriate strategy to deploy to prevent a real threat and will launch a deflection test to find out.

During the HERA mission, **a team of scientists and experts from Atos in Romania** will test the data manipulation systems on board of the space probe during the assembly procedures and integration and verification steps. They will also support flight software development, the loading and execution monitoring interfaces, as well as the diagnostic interfaces for the flight processor. The multi-disciplinary team includes Atos experts in design, development, validation and integration of software and hardware solutions, especially in the areas of radio frequencies and power circuits.

> *"The HERA mission is a major step in protecting our planet, and Romania will contribute decisively to the global defense effort. This mission represents an important progress in developing the capacity of the national industry to take part in deep-space missions. Through this expedition to a binary system of asteroids, as well as the experimental route deviation of one of them and the careful observation of the result, space exploration is reaching a new milestone in human history*", said **Marius-Ioan Piso, President of the Romanian Space Agency (ROSA)**.
>
> *"The Atos team from Brașov has been working for several years together with ESA to carry out various space missions and contribute to the evolution of mission planning and control systems. However, this is the first time we are taking part in a "Planetary Defense" mission which brings us new technical challenges, but also the satisfaction that we can do our part to save the planet in addition to our efforts in digitization and decarbonization. We are well aware that there is no Planet B*", said **Günther Lackner, VP, GM & Global Head of BU Space & Avionics at Atos.**

Atos Romania is a key competency center for Atos Space global solutions, a trusted partner in the journey to Space. Atos in Romania has extensive experience in the fields of Electric Ground Support Equipment (EGSE), Mission Control Systems (MCS), Ground Stations (GS) and Federated Identity Management (FIM). EGSE activities carried out by Atos in Romania include the validation of radio-frequency, satellite communications components, verification of space shuttle instruments and data flows, simulation of communications with ground stations, verification and electrical systems (solar panels, batteries, etc.), central coordination systems for verification and control instruments.

Specialists from Atos in Romania have already contributed to various other significant ESA & non-ESA missions, such as Euclid, Juice, Proba-3, MetOpSG, Plato, Sentinel 5 & 6 and OneWeb.

More information about Atos' solutions for space & avionics :
https://atos.net/en/solutions/aerospace-defense-electronics

***

More information on HERA

The HERA mission is part of the international AIDA (Asteroid Impact & Deflection Assessment) program, developed in collaboration with NASA, responsible for conducting the DART (Double Asteroid Redirection Test) space test. There are two steps in the mission:

- In July next year, the DART satellite will be launched and directed to hit the Didymoon asteroid (165m diameter), a natural satellite of the larger asteroid Didymos (775m diameter)which represents a potential risk to Earth. Experts estimate that DART will hit the asteroid in September 2022.
- In October 2024, 3 HERA satellites will be launched to analyze the "crime scene". They should arrive near Didymoon in January 2027 to collect and analyze important data which will help scientists better understand the composition and structure of asteroids and to develop new technologies and methods to deviate them.

About Atos

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of € 12 billion. European number one in Cloud, Cybersecurity and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications and Digital Workplace solutions. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos|Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Atos Press Contacts

Global: Lucie Duchateau – lucie.duchateau@atos.net - +33 7 62 85 35 10
Romania: Amira Ciobotea - amira-dana.ciobotea@atos.net - +00 (40) 757574214