### COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

66th Session, 31st May - 9th June 2023

#### Item 14

Space exploration and innovation.

### ITALIAN DELEGATION

Mr. Chairman, Distinguished Delegates,

The Italian delegation would like to reiterate its high appreciation for the inclusion of this item in the COPUOS' agenda. Indeed, space exploration remains one of the most cherished fields for Italy and the Italian contribution to the most important space programs planned nowadays continues to be relevant.

In November 2022, the United Stated successfully launched the Artemis-1 mission, which carried onboard also the Italian cubesat ArgoMoon, confirming the Italian capability in developing cubesats for exploration activities. The Artemis-1 mission represents the official beginning of the Artemis program to explore the Moon and Mars and Italy is glad to be part of it at various levels. In particular, Italy was also among the eight countries that negotiated the Artemis Accords in 2020. Italy expresses its appreciation for the increasing number of countries that are joining the Accords and hopes that others will sign them in the near future.

### Mr. Chair

Allow me now to recall that, on 24th November 2021, the Light Italian Cubesat for Imaging of Asteroids (LICIACube) was launched as piggyback on board the Double Asteroid Redirection Test (DART) mission of NASA. It witnessed, on September 26th, 2022, the successful impact of the DART spacecraft with the asteroid Dimorphos and revealed the immediate aftermaths of the event while performing a quick flyby and so successfully participating in the first Planetary Defense real-scale test ever conducted by humanity.

## Mr. Chair,

During the last Ministerial Council of the European Space Agency, in November 2022, Italy increased substantially its contribution, including that dedicated to Exploration and Infrastructures programs, which will ensure a relevant role of Europe in LEO activities (through the ISS), beyond LEO (through the Lunar Gateway), and in the robotic exploration of Moon and Mars.

Mr. Chair, Distinguished delegates,

Italy continues to support the development of the International Mars Ice Mapper mission in partnership with CSA, JAXA and NASA, which will identify and characterize adequate, accessible water ice in the uppermost subsurface of Mars (from 0 to 10 meters) to meet future human exploration goals, objective that is perfectly expressed by its motto, "From Following The Water to Boots on The Ground".

Furthermore, in order to support properly the evolving worldwide exploration scenario, with particular reference to the Moon-to-Mars strategy, the Italian Space Agency launched a national initiative aimed to consolidate the national heritage and to promote the development of new enabling elements such as: a recurring deep space platform, moon and mars landing systems, inflatable technologies for Moon surface logistic modules, interplanetary telecommunication systems including a Large Deployable Antenna, in-situ-resources utilization demo-systems, a ground facility for testing, simulation and control of robotic operations on the Moon surface.

# Mr. Chair,

Allow me to conclude by reporting some information on the most recent exploration mission in which Italy has a relevant role. I am referring to the European Space Agency mission JUICE, which was launched on 14 April 2023 from the European Space Port, in French Guyana. The probe will explore Jupiter's icy moons and will travel for eight years before reaching the orbit of the giant gaseous planet and then make a three-year study of its atmosphere and magnetosphere, as well as evaluating the possible habitability of its three moons, Ganimede, Europa e Callisto, which could hide immense water oceans below their icy surface. The probe will also attempt to study the conditions for the formation of planets and how the solar system works. Italy holds the leadership of three of the ten instruments onboard the probe and also collaborated to the development of a fourth instrument. The solar panels, which are the biggest ever built for an interplanetary mission, are also Italian.

Thank you for your attention!