

Mr. Chair, Distinguished Delegates,

Japan recognizes the importance of the exploration of asteroids. Even though the probability of a near-earth object (NEO) collision with the Earth is low, it is important to understand the fundamental characteristics of NEOs by exploring them to avoid such a collision.

In 2010, Japan brought back samples from the asteroid Itokawa through the asteroid explorer, Hayabusa developed by JAXA. This was the world’s first sample return mission from an asteroid. Four years later, its successor, Hayabusa2 was launched and arrived at the C-type asteroid Ryugu in 2018. During its mission, Hayabusa2 conducted two successful touchdowns on Ryugu, and brought back samples back to the Earth in 2020. Currently, Hayabusa2 is on its way to explore another small and fast rotating asteroid known as 1998 KY26 and is expected to arrive there in 2031.

Itokawa and Ryugu, the target asteroids of Hayabusa and Hayabusa2, are objects that travel near earth. Detailed data on these NEOs is valuable to investigate ways and means to avoid the collision of NEOs with the Earth. In the realm of NEO observation, JAXA has developed a method to find fast-moving celestial bodies. So far, JAXA has spotted 11 fast-moving celestial bodies moving towards the Earth by using 20cm telescopes located at a remote observation site on the Siding Spring observatory in Australia, and Japan hopes to further enhance this technology.

Another contribution that addresses the risks of NEOs is the Hera mission led by the European Space Agency (ESA). This is a planetary defense mission investigating near-Earth binary asteroids called “Didymos” and “Dimorphos” to demonstrate technology for planetary defense. JAXA is planning to participate in the mission by providing a thermal imager and knowledge of asteroid science.

JAXA is a member of the Space Mission Planning Advisory Group (SMPAG) and an observer of the International Asteroid Warning Network (IAWN). Japan would like to continue contributing to their activities using its observation facilities.

Mr. Chair,

Japan will continue to conduct research missions to deepen our understanding of the basic features of NEOs in order to better assess the probability of a NEO collision with the Earth. To end, I would like to reiterate the importance of international cooperation on NEOs, and Japan's commitment to continue contributing to this important issue.

Thank you for your attention.