NOT A REAL-WORLD EVENT This is part of a hypothetical asteroid threat exercise conducted at the 2019 IAA Planetary Defense Conference

DAY 2

PRESS RELEASE

ASTEROID NOW HAS 1 IN 10 CHANCE TO IMPACT EARTH

July 29, 2019 - Based on observations conducted over the last four months, the International Asteroid Warning Network (IAWN) reports that the chance the asteroid designated 2019 PDC could impact Earth on April 29, 2027, is now 1 in 10. This possible impact prediction supersedes the previous prediction of chance of impact that IAWN reported back in April.

Hundreds of observations made by multiple observatories around the world have enabled IAWN experts to improve the understanding of the asteroid's orbital path and update the possible impact predictions made last April. The updated information means that in 9 chances out of 10 the asteroid will pass safely by Earth in 2027. 2019 PDC will remain observable over the next 6 months, and observers around the world will continue to track the asteroid until it moves out of range early next year. These additional observations will enable the experts to further refine their predictions of the asteroids future position and potential for impact in 2027.

The size of asteroid 2019 PDC also still remains uncertain, since the asteroid did not approach close enough to Earth to be directly observed by planetary radar. The best indication of size came from a few space-based infrared observations made by NASA's NEOWISE spacecraft in late April. This allowed astronomers to narrow the estimate of size of 2019 PDC to roughly 140 to 260 meters (460 to 850 feet).

Based on this size estimate, NASA experts supporting IAWN calculate that if this asteroid were to impact Earth it could release in the range of 100 to 800 megatons of equivalent energy, possible producing serious devastation over a large region. IAWN emphasizes, however, that this asteroid is too small to cause globally damaging effects if an impact were to occur.

The international forum for space agencies called the Space Mission Planning Advisory Group (SMPAG) is meeting to consider a coordinated international response to the impact risk posed by 2019 PDC. SMPAG recommends that space-capable nations begin development of a suite of space missions to characterize the asteroid and be prepared to deflect it should it be confirmed it is likely to be on a collision course with Earth

For more information, see: <u>https://cneos.jpl.nasa.gov/pd/cs/pdc19/day2.html</u>. IAWN will publish weekly updates of impact probability as this asteroid is tracked throughout 2019.

Contact: http://iawn.net/misc/contacts.shtml

EXERCISE