

Mission planned to clear up space junk

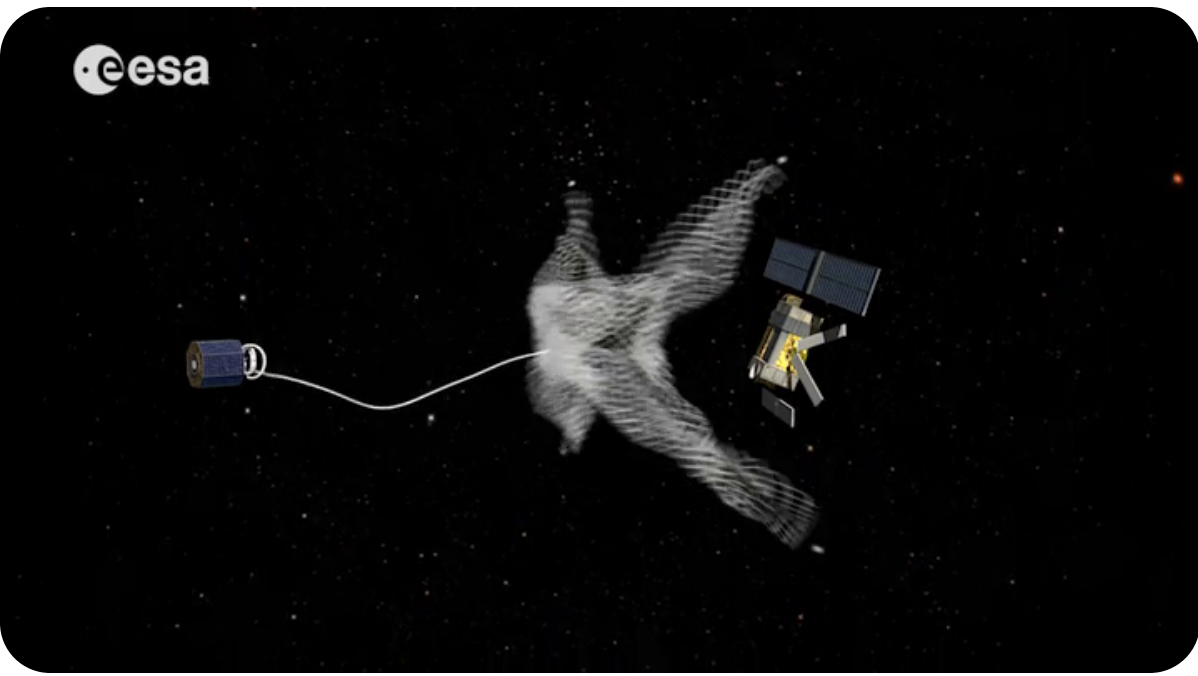


Space junk is becoming a big problem!

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Space around Earth is being littered with old satellites, parts of rockets, and other unwanted pieces of plastic and metal. For more than 60 years this “space junk” has been building up, surrounding our planet and causing problems. Space junk can collide with active satellites, damaging or destroying them, and then create even more space junk! ESA scientists and engineers have thought of a clever idea to clean up space junk: a mission called e.Deorbit.



This picture shows what e.Deorbit may look like, closing in on a disused satellite

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If all goes to plan, e.Deorbit will commence in the year 2023. A special satellite will be launched from Earth and will track down a larger, disused satellite that is currently tumbling around our planet. e.Deorbit will then attach itself to the junk satellite – either by grappling onto it with robotic arms, or perhaps by firing a special net. Next, e-Deorbit will use thrusters to force itself and the junk satellite lower and lower, and eventually they will both burn up harmlessly in Earth's atmosphere, effectively clearing them away.



e. Deorbit could use a net to capture space junk

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Europe's space ministers are meeting in December to discuss e.Deorbit and decide whether to give it the go-ahead. If the mission does receive the green light, it will be like nothing ESA has ever tried before!

In the decades to come we may see more and more space junk clearing missions, building on the start that e.Deorbit will make. Can you think of a clever way of clearing away space junk?

Cool fact: There are around 29,000 human-made objects larger than 10cm orbiting Earth!

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