

Earth needs asteroid shield, UN told

An asteroid shield must be built to protect the earth as a matter of emergency, leading scientists have told the United Nations.

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An international network must be established to search the skies for asteroids on a collision course with Earth, they warned. The system would also need to be responsible for deploying spacecraft that could destroy or deflect incoming objects.

Although an asteroid collision with the planet is a relatively remote risk, the consequences of a strike would be devastating, the scientists told a UN delegation in Vienna.



An asteroid that struck the Earth 65 million years ago wiped out the dinosaurs and 70 per cent of the species then living on the planet. The destruction of the Tunguska region of Siberia in 1908 is known to have been caused by the impact of a large extraterrestrial object.

"The international community must begin work now on forging three impact prevention elements – warning, deflection technology and a decision-making process – into an effective defence against a future collision," said the International Panel on Asteroid Threat Mitigation, which includes the Royal Society president Lord Rees.

The risk of a significantly sized asteroid, defined by the panel as being more than 45 metres in diameter, striking the Earth has been calculated at two or three such events every 1,000 years, a rare occurrence. The panel added that developments in telescope design mean that, by 2020, it should be possible to pinpoint about 500,000 asteroids in orbit around the Sun and study their movements.

Of these, several dozen will be revealed to pose threats to Earth, the panel added.

The group warned however, that it would be impossible to predict exactly which of these 'at-risk' asteroids would actually strike until it was very close to our planet.

By then, it would be too late to take action.

As a result, the panel said it would be necessary to launch missions to deflect or destroy asteroids that have only a one in 10, or even a one in 100, risk of hitting our planet.

"Over the next 10 to 15 years, the process of discovering asteroids will likely identify dozens of new objects threatening enough that they will require proactive decisions by the United Nations," the report added. In addition, such missions will have to be launched well ahead of a predicted impact, so that slight deflections by spaceships can induce major changes in an asteroid's paths years later.