

PDC2025
Stellenbosch, Cape Town, South Africa

□ **The Decision to Act: Political, Legal, Social, and Economic Aspects**

Geopolitical, Socio-Economic and Legal Aspects of the 2024PDC25 Event

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Abstract

The virtual object of the 2025 PDC exercise assumes an asteroid of about 200 Meters diameter, approaching Earth at 14 km/s with a possible impact in 2041. The risk corridor is a north-south line from northeastern Europe across the Mediterranean, the Sahara, and central Africa towards South Africa. Even though the exercise assumes that attempts will be made to deflect 2024PDC25, the probability of an impact at some point in the risk corridor remains. It is evident that a threat of this nature will have serious consequences, starting several years before the actual event.

As it is very difficult to extrapolate from 2025 across 16 years, we bring the scenario forward to 2031 and examine it with today's global background. Today would be T-6yrs and the threat is becoming immediate: On Aug 1 2024 IAWN would have notified SMPAG and UNOOSA, who in turn would have warned all countries. As IAWN and SMPAG report to COPUOS, the Scientific and Technical Subcommittee would start discussions in Feb 2025: recon missions, mitigation strategies, including NEDs, and evacuation options are explored. The UN Security Council will convene. Governments, NGOs and space agencies will become involved.

Most importantly, the global economy will start to react to the threat of a possible major impact.

This presentation examines the geopolitical, economic and legal consequences, based on current events, for four possible impact sites:

- Western Ukraine
- Mediterranean Sea
- Sub-Saharan Africa
- South Africa

For these potential impact points the paper will explore the following issues

- Displacement/evacuation of large groups
- Military and civil conflicts
- Humanitarian issues
- Effects of a Tsunami
- Disruption of important trade routes and supply chains
- Impact on the global commodity market
- Impact on the global financial markets

Compliance of all actions with applicable international and space law will be considered.

Some major actors, like the US and China, are not immediately affected. Their role, including their options in the mitigation effort, and possible obligations of the global community under international law are being explored.

While the situation in 2035 will be different from the situation today, we can assume that the nature of the geopolitical, socio-economic and legal issues, which will unfold at T-6yrs, will be very similar. This is also true for the role of the UN and for the interests of the major actors, so our considerations will be indicative of the issues which we have to expect.

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