PDC2023 Vienna, Austria

Session: Decision to Act

Diplomatic, Geopolitical and Economic Consequences of an Impending Asteroid Threat

Rudolf Albrecht⁽¹⁾, Sergio Camacho-Lara⁽²⁾, and Laura Jamschon Mac Garry⁽³⁾
(1) Austrian Space Forum, Etrichgasse 18, A-6020 Innsbruck, Austria, +43 664
875 5655, rudolf.albrecht@gmail.com

(2) Instituto Nacional de Astrofisica, Óptica y Electronica, Luis Enrque Erro, No.1.
Tonanzintla, Puebla. C.P. 72840, Mexico, +52 222 226 3100
Sergio.camacho@inaoep

(3) Universidad de Belgrano, Buenos Aires, Argentina,
laura.jamschon@communidad.ub.edu.ar

Keywords: Politics, diplomacy, economy, United Nations, Security Council

ABSTRACT

The PDC 2023 exercise assumes the impact of a large (800-1000 meter) body along the western coastline of southern Africa. Warning time is on the order of 10 years, deflection is deemed impossible. An event of this magnitude will have severe consequences for the countries in the immediate vicinity, and in the case of an impact in or near the water there might be a tsunami of a magnitude which will cause damage as far as the South American coast. It will also influence the global climate, with consequences for agriculture and food production.

Technical matters are supposed to be solved by a collaboration of space agencies. These are government offices under the jurisdiction of their respective ministries. This means that there will be geopolitical, diplomatic and economic aspects to consider, first and foremost among the countries which are directly affected, but also among the international community.

As soon as the threat is identified, the International Asteroid Warning Network (IAWN) will notify the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) via the UN Office for Outer Space Affairs (UNOOSA). Other UN agencies will get involved, such as the International Atomic Energy Agency (IAEA), as the possibility of a nuclear deflection must be considered, and the UN High Commissioner for Refugees, as refugees and evacuees have to be expected. IAWN will also alert the Space Mission Planning Advisory Group (SMPAG), the governments of all countries potentially at risk, and the country of the chair of COPUOS will alert the UN Security Council, which will monitor the events.

While the above chain of events can be foreseen with certainty, there are other aspects which are undefined, but which will have to be considered, as they affect the global political environment. These issues might include the following:

- What would be the possible/likely immediate, mid- and long-term political and diplomatic reactions of the affected countries? Namibia? South Africa? Brazil? Argentina?
- How would the major powers react? Would they authorize their space agencies to implement the SMPAG plans?
- What if a global or regional power were to exploit the situation economically or militarily?
- What are the geopolitical implications of the evacuation/migration of local elites, governments, security forces, and the general population?
- Would there be obligations, moral or juridical, for unaffected countries, especially those with major space capabilities? Should there be obligations like accepting evacuees, render aid, supply food?
- What would be the role of the UN General Assembly and the Security Council during the pre-impact period?

The paper will collect the available information on those issues and examine possible geopolitical options and consequences.

Comments: Preference is oral presentation, poster if no other possibility