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COMMUNICATION PROTOCOL ON PHO FOR DISASTER MANAGEMENT BY LEGITIMATE BRAZILIAN INSTITUTIONS

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Objective

In case of a hypothetical necessity of being communicated of an impact warning, which would be a possible path to be followed for the Brazilian government to address the necessary actions in a reasonable time?

- Conduct a literature review to investigate existing and eligible mechanisms and entities for the exchange of information on the risks of the impact of PHO / NEO disaster risk management, using international networks of technical and scientific cooperation already established.
- Based on this information, suggest an initial communication protocol for Brazilian government, taking advantage of the existing proceedings and infrastructure for natural disasters already established in Brazil.

Introduction

- UNCOPUOUS has sponsored activity to build international capacity, dialogue, and coordination, resulting in the formation in 2014, of an International Asteroid Warning Network (IAWN) and a Space Mission Planning Advisory Group (SMPAG)
- Established as a result of the United Nations-endorsed recommendations, and represent important mechanisms at the global level for strengthening coordination in the area of planetary defense.
- In January 2016, NASA reorganized its Near-Earth Object Observations Program and established a Planetary Defense Coordination Office (PDCO)
- The PDCO coordinates efforts with the space agencies of other nations as a member of the multinational IAWN and SMPAG, under the endorsement of the UNCOPUOUS.

International collaboration networks for Planetary Defense

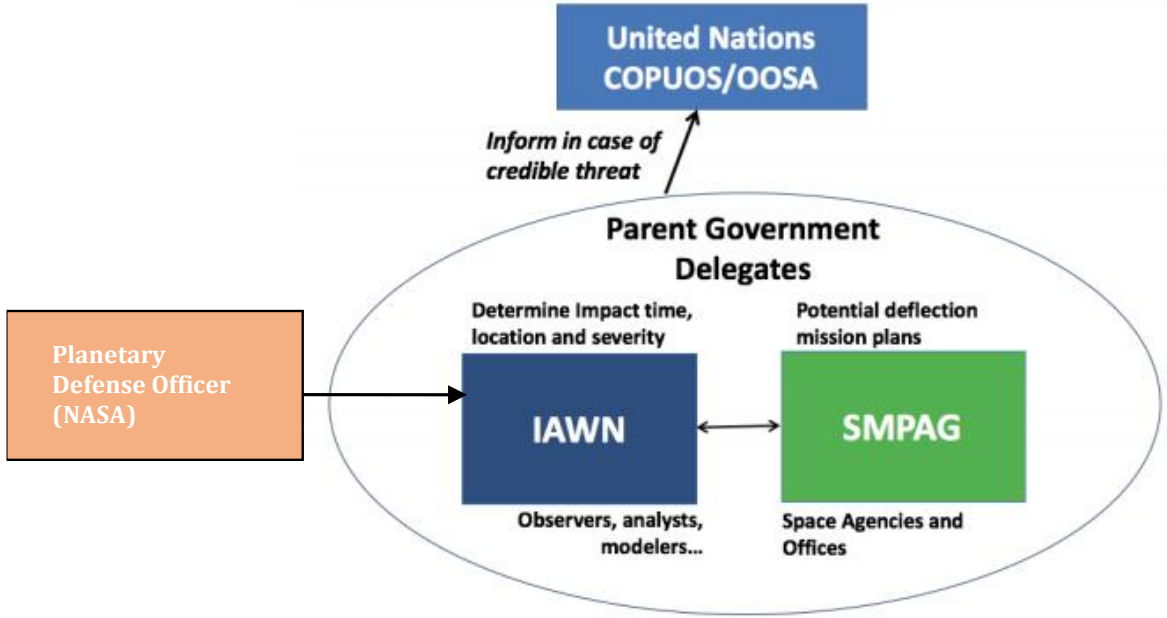
- International partnerships in the space area represent a growing trend
- International cooperation is an effective way of mitigating the risks of conflict in space
- In this sense, Brazil has relevant space cooperation agreements with countries on all continents, specifically, with eleven countries on cooperation for the peaceful uses of outer space.
- Brazil don not have specific partnerships for matters related to planetary defense, and it´s not a member of IAWN or SMPAG (until this presentation).

Impact warning communication protocols

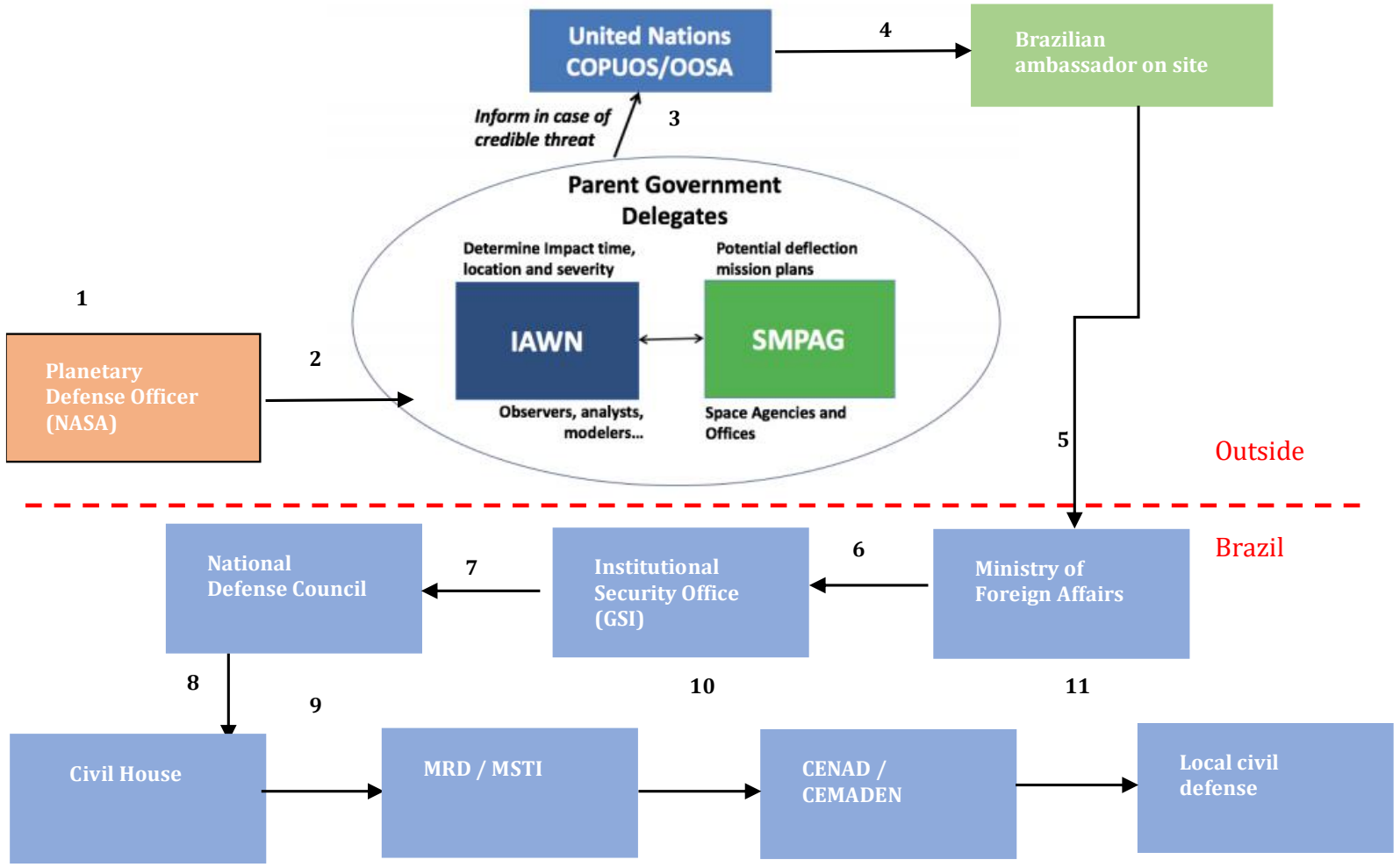
- Be provided with timely and accurate reporting of a very close approach or predicted impact of a naturally occurring NEO or PHO
- Countries and organizations that integrate technological networks like IAWN and SMPG, recognize the importance of being adequately prepared for communications of possible threats to governments, media or population.
- There are several guidelines for the establishment of communication protocols in case of threat of impact of NEOs
- These guides provided important ideas in relation to possible actors, internal and external, that would need to be involved in case of the need to warn any government regarding a threat carried out by a NEO or PHO

Impact warning communication protocols

- NASA: Notification and Communications Regarding Potential Near-Earth Object Threats. NASA Policy Directive NPD 8740.1.
- ESA: Near-Earth Object Information Plan - Distribution of information for a credible asteroid impact threat.
- SMPAG: Space Mission Planning Advisory Group (2018). SMPAG 5.5 – Planetary Defense Action Plan (draft).



Proposal for an impact warning communication protocol to Brazil



Final considerations

- Present a model for communicating as a starting point for the discussion on the establishment of a protocol on PHO for disaster management by legitimate Brazilian institutions
- Define possible points of contact between international bodies and Brazilian institutions so that they could, in a timely manner, make decisions and take preventive actions to mitigate the possible damage caused by the impact of a PHO

Need for technicality of several other stakeholders, specialists and representatives of specific areas of knowledge such as Law, International Law, International Relations, Public Security, Public Policies, among others, which would be fundamental for the elaboration of a feasible, detailed, realistic communication protocol and that, in fact, meets or directs the mechanisms already established by competent bodies in the response to disasters of any nature.

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