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DEFINING ELIGIBLE INITIATIVES FOR A PLANETARY DEFENSE STRATEGY IN BRAZIL BY
APPLYING THE STRATEGIC CHOICE APPROACH (SCA) OF SOFT OPERATIONAL RESEARCH

Abstract

Recognized as a leader in Latin America, whether for economic, political or territorial reasons, Brazil has been working to guarantee its autonomy in the space sector, despite budgetary restrictions and operational difficulties. This is possible through its National Policy for the Development of Space Activities (NPDSA) instituted in 1994, which establishes objectives and guidelines for national programs and projects in the space area, with the National Space Activities Program (NSAP) as its main ten-year planning and programming instrument. The PNAE's mission is to plan internal actions for national development and the use of space technologies to solve problems and benefit Brazilian society. An analysis of the PNAE shows that there is no mention of any initiative related to risks of a sidereal nature, perhaps Planetary Defense. In Brazil, Planetary Defense is a topic restricted to a few academic research groups or a few groups of amateur astronomers. It is known that the high cost of space infrastructure and technologies makes it impossible for many countries to participate in space-related initiatives, and in the specific case of planetary defense, the subject is also not very well understood or disseminated. Therefore, the aim of this paper is to present eligible alternatives for initiatives related to Planetary Defense that can be carried out by the Brazilian government, taking into account its restrictions, prior to the launch of the project. The method chosen to structure this complex problem was the Strategic Choice Approach (SCA), which comes from Soft Operational Research, in the sub-area of Decision Making. The method was applied to a group of stakeholders related to space who had been previously identified using a systems engineering approach called contextual-and-behavioral-centric-stakeholder-identification method.