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COMMUNITY POLLING RESULTS IN TANDEM WITH THE LEO KINETIC SPACE SAFETY
WORKSHOP

Abstract

The accelerating pace of commercial space activity and the increasing frequency of debris-generating events have led to an unprecedented growth of the population of objects in low-Earth orbit (LEO). Industry, governments, and others are concerned for the near-term safety of operational satellites and the longer-term stability of the space environment. In response, the LEO Kinetic Space Safety Workshop was held in May 2022 to focus on specific solutions and pragmatic actions to enhance kinetic space safety (i.e., all measures to minimize collision risk for current and future space systems).

A web-based community poll was performed for months leading up to the workshop in which respondents were asked to provide feedback on a series of 25 proposed effective space safety activities. The poll queried the global community to register their opinions in two areas: first, why do you feel kinetic space safety is important and from what perspective do you view these issues (space operator, regulator, etc.), and second, in what order would you rank specific kinetic space safety activities from the highest to lowest in three critical dimensions: (1) benefit: positive outcomes for space safety; (2) maturity: readiness of the solution for implementation, and (3) cost: resources required to develop and implement a solution. Respondents were allowed to “write in” three other space safety activities to ensure all options were considered. The poll also collected demographic information about respondents to include profession, years of experience, and work location to provide additional dimensions of consideration in evaluating the results of the poll.

The results from this poll are analyzed to examine the responses and their potential implications. The poll was taken both before and after the LEO Kinetic Space Safety Workshop held in Lausanne, Switzerland. This approach provides insights into the potential for respondents to learn more about these issues and modify their rankings.