

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Calling Planet Earth: Large Engagement and Communications Initiatives (6)

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WHAT DO CITIZENS EXPECT FROM SPACE?

**Abstract**

Bold ventures by billionaires, governmental lunar missions fueled by a new space race, and public stock offerings by space companies make the space sector increasingly visible. As a result, more and more citizens are forming opinions about space-related topics. These opinions are relevant, as space missions critically depend on citizens as qualified employees, investors, or supporters of public funding. Hence, stakeholders in the space industry need to know citizens' opinions to foster public visions and minimize public concerns connected to space. However, public opinion regarding space has mainly been investigated in established space nations and neglected emerging space nations. In addition, past analyses of the public opinion of space are often a byproduct of general surveys that merely include one or two space-related questions. In order to provide reliable data on the public opinion on space, we surveyed over 2,000 citizens in nine developed and emerging space nations with significant space budgets in 2023. We questioned an age and gender census balanced sample in each of the nine nations and focused on fundamental questions such as the perceived need for human Mars missions, preferences regarding human or robotic space exploration, and adherence to space law. We also asked citizens of each country about their hopes and concerns regarding space. For analysis, we use statistical tests and regression analyses. We find that citizens in emerging space nations advocate for prestigious human missions, while citizens of established space nations prefer cheaper robotic missions. Overall, the main priorities for most citizens are increasing military capabilities in space and removing space debris. While most citizens are in support or indifferent to the abidance of space law, India poses an interesting outlier. 17% of surveyed participants in India stated that their country should not comply with space law compared to an average of 5% in other countries. Differences in age and education mainly drive intra-country differences in the opinion of space-related topics. For instance, 61% of survey participants with a college degree advocated for a human Mars mission, compared to only 40% of citizens without a college degree. We also highlight the potential for cooperation between countries whose citizens have similar preferences regarding space. Additionally, we offer country-specific advice on the concerns that relevant stakeholders in the space industry should address to increase support for space exploration. Therefore, our findings can help to build long-lasting support for important space-related issues.