



iDEX Innovations for
Defence Excellence
PM Awardee

Re-Open Batch 2.0

Problem Statements

S. No	Name of Agency	Number of Problem Statements
1.	Defence Space Agency	02
Total		02

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MISSION DEFSPACE PROBLEM STATEMENTS

Prime X Problem Statement – 8: Integration of Optical and Radar Sensors into a network with AI based Analytical Platform

Organization Name	Defence Space Agency (Mission DefSpace)
Problem Statement/ Challenge title	Integration of Optical and Radar Sensors into a network with AI based Analytical Platform
Challenge brief/definition	<p>Presently, the capability for detecting, tracking and monitoring satellites/ space debris is very limited. There is a need for development of an integrated optical and radar sensors network along with AI based analytical system.</p> <p>The developed system should be scalable in terms of addition of incremental number of sensors for credible and real time Space Situational Awareness (SSA).</p> <p>The system should be capable of real time monitoring and trajectory analysis of very large number of space objects, confluence analysis and collision prediction of any space object and provide timely warning and window for evasive manoeuvres.</p> <p>Note: This challenge is the composite(Mother) challenge no 4 of Mission Defspace, which will integrate challenge 4.1 & 4.2 (Link)</p>

Prime X Problem Statement – 9: Training Simulator for Space Activities

Organization Name	Defence Space Agency (Mission DefSpace)
Problem Statement/ Challenge title	Training Simulator for Space Activities
Challenge brief/definition	<p>There is a requirement to simulate space-based contingency scenarios periodically so as to train upon the requisite counter measures and also to test the efficacy of these counter measures once they are developed.</p> <p>It is proposed to develop a space simulator, which is a software-based training simulator specifically designed for simulating dynamic space situations. The simulator should be scalable to include many feasible scenarios and its counter measures.</p>