



iDEX

Innovations for Defence Excellence

PM Awardee



DEFENCE INNOVATION ORGANISATION
(Under the aegis of Department of Defence Production)

Ministry of Defence, Government of India
New Delhi -110002

Summary of Relaunch iDEX DISC 12
Problem Statement of Indian Air Force (IAF)

S. No.	Name of Agency	Number of Problem Statement
1	Indian Air Force	1
Total		1

iDEX DISC 12 Problem Statement

Problem Statement – 1 (Indian Air Force).....	3
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Problem Statement (DISC 12): Design & Development of Helicopter Electronic Glide path-based Landing system.

Organization Name	Indian Air Force
Problem Statement/ Challenge title	Design & Development of Helicopter Electronic Glide path-based Landing system
Challenge domain	Navigation Equipment
Challenge brief/definition	<p>Design & Development of Helicopter Electronic Glide path-based Landing system</p> <p>Instrument landing aids providing electronic glide path for landing are unavailable at helipads. Most of the helicopter landings are carried out by visual references, this restricts operations of helipads during poor visibility conditions.</p> <p>A system is required that:-</p> <ol style="list-style-type: none"> 1. Assists helicopter for landing on helipads in hills in poor visibility. 2. The system must have failure monitoring and degradation visual/aural warnings. 3. The system should generate electronic glide path. <p>A system must be able to provide electronic glide path signals. The system should be transportable, configurable for different locations, configured for non-standard glide path angles. The system should be able to provide failure indications, deterioration data and monitor helicopter flight path and should be compatible with aircraft ILS system. The system may be a novel concept for guidance during landing by using ground equipment.</p>

Project Outcome	The project is expected to deliver a transportable electronic glide path based landing system that can be utilised by helicopters for landing under poor visibility conditions.
Future Expectation from the prototype / Technology developed	The system can be adapted for utilisation by transport class of aircraft also for operations from ALGs/ELFs.