

AWEIL Comprehensive Policy Framework for Funding and Management of DRISHTI Challenges

1. Purpose: This policy establishes a structured institutional framework for AWEIL to sponsor, fund, administer, and manage innovation challenges within the iDEX ecosystem. The policy enables AWEIL to directly support startups, MSMEs, innovators & academia in solving technology gaps relevant to defence production and strategic capabilities. The framework defines governance mechanisms, financial processes, evaluation procedures, contractual frameworks, project monitoring methods, intellectual property policy and transition pathways from prototype development to scalable production.

2. Strategic Context: India's defence innovation ecosystem is undergoing rapid transformation with a focus on self-reliance, technology leadership and startup participation play a critical role as system integrator, manufacturers, and long-term sustainment partners for the armed forces.

To accelerate innovation adoption, it is required to actively engage with startups and innovators. This policy enables to create structured innovation challenges aligned with internal technology gaps.

3. Objectives of the Policy

- a) Promote indigenous defence innovation
- b) Engage startups and MSMEs in solving technology challenges
- c) Accelerate development of emerging defence technologies
- d) Enable rapid prototyping and field validation
- e) Create a pipeline of technologies for production programs
- f) Support national self-reliance initiatives

4. Scope: This policy applies to all business units, R&D centers, maintenance, engineering, quality, procurement division of AWEIL. The policy covers:

- a) Identification of technology challenges
- b) Launch of innovation challenges through iDEX platform
- c) Funding Mechanism
- d) Startup selection and evaluation
- e) Prototype development and monitoring
- f) Technology transition and commercialization

5. Definitions:

- a) **DRISHTI Challenge** – A structured competition inviting startups/MSMEs/innovators/academia to develop solutions for defined defence technology problems.
- b) **Startup** – A company recognized under relevant national startup policies or equivalent innovation entity.
- c) **Prototype** – A working model demonstrating functional capability of the proposed technology.
- d) **TRL** – Technology Readiness Level used to measure maturity of technologies. Following is the simple break-up of all 09 TRL:
 - i. **TRL 1** – Basic principles observed: Scientific research begins; no practical application yet.

- ii. **TRL 2** – Technology concept formulated: Ideas and potential applications are identified.
- iii. **TRL 3** – Experimental proof of concept: Initial lab experiments validate the concept.
- iv. **TRL 4** – Technology validated in lab: Components are tested in a controlled environment.
- v. **TRL 5** – Technology validated in relevant environment: Testing moves closer to real-world conditions.
- vi. **TRL 6** – Technology demonstrated in relevant environment: Prototype is tested in conditions similar to actual use.
- vii. **TRL 7** – System prototype demonstrated in operational environment: Working prototype tested in real-world settings.
- viii. **TRL 8** – System complete and qualified: Technology is finalized and proven to work reliably.
- ix. **TRL 9** – Actual system proven in operation: Fully deployed and in regular use.

6. Governance Structure: AWEIL shall establish a governance framework consisting of the following bodies:

- a) All units of AWEIL shall propose challenges to be launched under DRISHTI scheme .
- b) R&D desk shall consolidate all challenges forwarded by units and put up for approval to the Competent Authority.
- c) The Approved projects shall be forwarded to iDEX-DIO for uploading on iDEX portal where applicants can apply against the same.
- d) Post last date of applications, consolidated list of applications shall be forwarded to AWEIL by iDEX for further action.
- e) Technical Evaluation Committee (TEC): Shall be formulated by AWEIL HQ, responsible for evaluating startup proposals and recommending selected innovator.
- f) Project Monitoring Group (PMG): Shall be constituted by AWEIL HQ, responsible for tracking project progress and milestone completion, budget allocation, fund disbursement and audit oversight.
- g) Contract Division Responsible for contractual agreements

7. Identification of Technology Challenges: Each Production Unit shall conduct periodic technology gap assessments. Potential sources include:

- a) Operational feedback from armed forces
- b) Import dependency analysis
- c) Future technology road maps
- d) Manufacturing process challenges
- e) Product modernization requirements

Each unit at AWEIL will draft Problem Definition Statements (PDS) based on their specific challenges, ensuring they include clear performance metrics and expected results. Once collected, AWEIL HQ will review and approve these statements. The final, authorized PDSs will then be shared with iDEX to invite solutions from startups, MSMEs, and innovators.

8. Preparation of Problem Definition Statement (PDS): Each problem statement shall contain:

- a) Title of challenge
- b) Background and operational relevance

- c) Technical specifications
- d) Expected deliverables
- e) Target technology readiness level
- f) Development timeline
- g) Estimated budget requirement

Note: Annexure 1 attached as reference for PDS

9. Approval Workflow

- a) Units shall prepare problem statement
- b) Review by R&D Cell
- c) Financial feasibility review by Unit finance
- d) Approval by AWEIL HQ

10. Funding Framework: Funding for innovation challenges shall be provided through R&D /CAPEX fund. Funding shall be milestone-based. Indicative funding structure:

- a) **Proof of Concept:** Its Deliverables are:

- Design document
- Simulation or Initial prototype
- Feasibility report

Based on above, 1st tranche (20%) of sanctioned cost may be provided to challenge winner

- b) **Prototype Development, system integration & testing:** Its Deliverables are:

- Functional prototype
- System integration
- Testing results
- Performance validation against specifications

Based on above, 2nd tranche (50%) of sanctioned cost may be provided to challenge winner subject to scrutiny by PMG.

- c) **Final Demonstration & Field trials:** Its Deliverables are:

- Field trial reports
- Final Prototype demonstration
- Compliance with operational requirements

Based on above, 3rd tranche (30%) of sanctioned cost may be provided to challenge winner subject to scrutiny by PMG.

11. Launch of Innovation Challenges

- a) Once approved, challenges shall be published through iDEX website.
- b) Application window shall normally remain open for 4–8 weeks.
- c) iDEX/DIO shall forward the collated applications to AWEIL after last date of submission for proposal against challenges.

12. Application Process: Applicants shall submit, technical proposal, development plan, team credentials, cost estimates, project timeline

13. Evaluation Methodology: Evaluation shall follow a multi-stage process:

Stage 1 – Eligibility screening: All applications shall undergo Preliminary screening to verify:

- a) Eligibility of applicant
- b) Completeness of documentation
- c) Compliance with challenge requirements
- d) Alignment with scope of problem statement

Stage 2 – Technical evaluation: Only Eligible applications shall be evaluated in detail by TEC based on:

- a) Soundness of technical approach
- b) Degree of innovation & originality
- c) Feasibility of implementation
- d) Alignment with required performance parameters
- e) Technology Readiness level

A scoring mechanism shall be used by TEC to shortlist proposals for next stage.

Stage 3 – Presentations by challengers: Shortlisted applicants shall be invited to present their proposals before the TEC. Presentation shall include:

- a) Detailed solutions/Architecture,
- b) Development road-map and milestone
- c) Experience and team expertise
- d) Risk mitigation plan
- e) Cost and timeline justification

Stage 4 – Final selection: Based on cumulative evaluation score and presentation outcome, TEC shall:

- a) Rank the shortlisted applicants
- b) Recommend challenge winner
- c) Submit recommendation to AWEIL HQ
- d) Final selection shall be approved by competent authority of AWEIL HQ

14. Evaluation criteria:

Criteria	Weightage
Innovation and Originality	25%
Defence relevance	25%
Technical feasibility	20%
Team capability	15%
Scalability	15%

15. Contractual Framework: Selected challenge winners shall sign an Innovation Development Agreement (IDA) with AWEIL or unit of AWEIL. The agreement will define scope of work, funding schedule, milestones, intellectual property rights, and confidentiality provisions.

16. Project Execution: Projects shall normally run for 3 to 18 months depending on complexity. Each project shall have a designated Project Monitoring Group responsible for oversight.

17. Project Monitoring: Monitoring mechanisms include:

- a) Quarterly progress reviews
- b) Technical milestone evaluations
- c) Financial utilization reports
- d) Prototype demonstration checkpoints

18. Prototype Testing and Validation: Testing may include:

- a) Laboratory testing
- b) Environmental testing
- c) Field trials
- d) User evaluation

19. Transition to Production: Successful technologies may transition to production through:

- a) Joint manufacturing program
- b) Licensed production program

20. Intellectual Property Policy (IPR)

- a) The ownership of IPR (Intellectual Property Rights) generated under the project shall be exclusively owned by AWEIL as the Project is fully funded and managed by AWEIL.
- b) Innovator who has succeeded in evaluation of its prototype shall be considered as ‘established supplier’ for the item developed and will be able to participate in further ‘limited tenders’ of the item issued by AWEIL.
- c) Innovator may be given non-exclusive license on case-to case basis (on Royalty basis if innovator agrees to pay royalty fee up to 2% of the supply cost per manufactured unit with a cap on total maximum royalty payable of up to 10 times the cost incurred by the AWEIL, in developing the product/technology, which will be included in the contract with AWEIL) depending upon sensitivity of the Project to commercially exploit such technologies.
- d) Conformance to IPR regulations, as legislated from time to time and applicable in the case, shall be ensured

21. Risk Management: Potential risks include:

- a) Technology failure
- b) Project delays
- c) Budget overruns
- d) Regulatory constraints
- e) Mitigation strategies include milestone-based funding and periodic reviews.

22. Reporting Mechanisms: Annual innovation reports shall be submitted to leadership summarizing:

- a) Number of challenges launched
- b) Startups funded
- c) Prototypes developed
- d) Technologies commercialized

23. Review and Amendments: The policy shall be reviewed every three years or earlier, if required.