

TDF Scheme - General Guidelines

1. INTRODUCTION: TECHNOLOGY DEVELOPMENT FUND (TDF) SCHEME

The Technology Development Fund (TDF) is an initiative of the Ministry of Defence (MoD) executed by DRDO to promote indigenous development of defence and dual-use technologies by Indian industry, especially MSMEs and Start-ups, in collaboration with academia and R&D institutions. Launched to enhance self-reliance in defence manufacturing.

The funding is provided as **grant-in-aid** to public and private sector industry, especially MSMEs, which work in collaboration with academia or research institutions for carrying out innovation, research and development.

The focus of the scheme is on development of technologies which form the kernel of components/assemblies to be used in defence equipment/systems/sub-systems/platforms.

Only Indian vendors including Consortium are eligible for participation.

Successful development under the scheme would result in the DAs jointly owning the IPR along with DRDO.

Objectives of Technology Development Fund (TDF)

Technology Development Fund aims to provide financial and technical support for the development of advanced technologies relevant to national defence. It helps reduce dependency on imports by fostering local innovation and accelerating the creation of proof-of-concepts and prototypes. It supports Start-ups, MSMEs, and Indian companies in upgrading technologies from **TRL-3 onwards or even lower in certain cases to realization**, enabling **import substitution**, system upgrades, and the creation of futuristic technologies aligned with user requirements. It strengthens India's defence industrial ecosystem and promotes capabilities in relevant as well as emerging areas such as avionics, semiconductor, artificial intelligence, unmanned systems, cybersecurity, advanced materials, secure communications, energy technologies, naval technology, guidance, space defence, robotics etc.

TDF Provides grant-in-aid funding, technical mentoring, & mentoring milestone-based by approach. TDF reduces the financial and technical risks of innovation. The scheme accelerates the transition from concept to **prototypes and deployable products**, provides access to DRDO testing infrastructure, enables creation of R&D framework in industries.

2. TYPE OF PROJECTS FOR FUNDING SUPPORT

Under the TDF scheme, the following nature of products/technologies will be covered:

- Significant up-gradation/improvements/further developments in the existing products/process/application/upgrades in terms of reduced material

consumption, improved functioning, improved quality, reduced energy consumption resulting in overall cost reduction.

- Technology readiness level up-gradation from TRL-3 onwards to realization of products as per Services requirements.
- Development of Cutting-Edge technologies/innovative products which can be useful for Defence applications.
- Import substitution of components whose technologies do not exist with the Indian industry and where there is a clear need from the User.
- Development of technologies or prototype having potential use for Defence/National Security/Dual use.

The cost of development spread across all the required technology development phases shall not exceed INR 50 Crore. Projects with budget above INR 50 Crore may be taken up after approval from RM.

Typically, the projects under the TDF scheme will not exceed a development period of four years.

3. GOVERNANCE STRUCTURE

Empowered Committee (EC)

The Empowered Committee under the chairmanship of Secretary (DDR&D) shall be the apex governing and principal decision-making body for matters pertaining to the TDF scheme.

The Empowered Committee shall:

- Identify and approve projects based on recommendation of Technical Committee.
- Approve cost overruns and revisions as per delegation of financial powers.
- Approve closure/foreclosure of projects.
- Approve certification of developed product/technology as "Fit for Military Use" on case-to-case basis.
- Define and amend processes for execution of the TDF scheme within extant Government guidelines.

The decision of the Empowered Committee shall be final for all TDF projects up to 50 Crore.

Technical Committee (TC)

The Technical Committee constituted under the chairmanship of DG (TM), DRDO shall be the key operating body for matters pertaining to the TDF scheme and shall report to the Empowered Committee.

The Technical Committee shall:

- Identify technologies to be developed through funding under the TDF scheme based on LTTPP (Long Term Technology Perspective Plan) and taking inputs from a mix of appropriate sources such as SHQs, DRDO, DMA, and DDP only.
- Conduct feasibility studies.
- Constitute Project Monitoring and Mentoring Groups (PMMG).
- Approve release of funds for various phases of development based on recommendation of PMMG.
- Oversee and monitor overall implementation of the project.
- Approve release of funds for the various phases of development i.e milestone closure based on the recommendation of the PMMG.
- Approve time overrun and cost change within delegated powers.
- Technical Committee may constitute any subcommittee to expedite its tasks related to TDF scheme. All such subcommittees will be non-statutory in nature.

Technology Development Fund Directorate (DTDF)

DRDO has established a Technology Development Fund Directorate headed by Scientist 'G' or equivalent.

The Directorate shall:

- Approval by processing a SoC for proposed projects from EC. Process Statement of Case (SoC) with inputs from DRDO experts / user /DG (Clusters) & other Stakeholders for each TDF project and collate comments from EC.
- Process projects for which approval has been accorded by Empowered Committee.
- Monitor all projects under the TDF scheme.
- Conduct outreach programs and innovation contests.
- Provide platform to Development Agencies to showcase developed products.

Project Monitoring and Mentoring Group (PMMG)

At the project level, the **Project Monitoring and Mentoring Group (PMMG)** provides hands-on execution support by preparing the **Project Definition Document (PDD)**, evaluating Detailed Project Reports (DPRs), monitoring progress, reviewing deliverables, and mentoring Development Agencies. PMMG also verifies milestone

deliverables, and mentors Development Agencies throughout execution & submits its report to TC.

4. METHODOLOGY

The development process under the TDF scheme shall consist of the following major functions:

- Identification of potential projects based on phase wise consolidated plan/Technology Grid/Long-term, Mid-term, short-term plan/ Suo-Moto/Dare to dream winners/ other National innovation contests / National pool of experts /reps from DG (Clusters)/ any other potential requirements etc & conducting of Feasibility Study (wherever needed) by TC or its sub-committees.
- Feasibility Study to assess indigenous capability, estimated time and cost, number of DAs and exit criteria.
- Formulation of Statement of Case (SoC) and submission to Empowered Committee after recommendation of Technical Committee.
- Constitution of Project Monitoring and Mentoring Group (PMMG).
- Preparation of Project Definition Document (PDD) by PMMG and approval by Technical Committee.
- Issue of RFP on dedicated website hosted on NIC domain and solicitation of Detailed Project Reports (DPRs).
- Evaluation of DPRs and selection of Development Agency(ies) through approved criteria.
- Approval of CFA on file and financial sanction.
- Monitoring of projects post award.

5. FUNDING AND RELEASE OF FUNDS

Projects up to INR 10 Crore shall be considered for funding subject to a maximum of 90% of the total project cost in general; however, up to 100% funding may be considered on case-to-case basis.

Projects greater than INR 10 Crore and up to INR 50 Crore shall be considered for funding subject to a maximum of 70% of the total project cost in general; however, up to 100% funding may be considered on case-to-case basis.

Funding shall be milestone-based.

Advance funding shall be released against submission of Bank Guarantee of equal amount (except Government-owned institutions).

Subsequent instalments shall be released based on:

- Detailed Project Update Report
- Utilization Certificate & Statement of Expenses
- Certificate from Chartered Accountant
- Recommendation of PMMG and approval of Technical Committee

6. MONITORING, CLOSURE AND ASSET MANAGEMENT

Development Agencies shall maintain separate books of accounts and independent bank account for TDF projects. DRDO shall have access to books of accounts.

Cost overruns and time overruns shall require approval of competent authority as per delegation of powers.

Projects may be foreclosed in case of non-performance, undue time and cost overruns or failure of prototype.

Ownership of developed prototypes/deliverables shall vest with the user.

Tangible assets created for development shall remain with the Development Agency at book value as per extant Government guidelines.

DRDO may share its test facilities to MSMEs/Start-ups and Academia as per laid down policy.

Upon successful completion, Empowered Committee may approve certification of the developed product as "Fit for Military Use."