

A Special Purpose Fund and Independent Business Unit under the

**Anusandhan National Research Foundation** 

# Implementation Guidelines for the

RESEARCH
DEVELOPMENT &
INNOVATION
SCHEME



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## **Glossary**

Term	Definition
Alternative Investment Fund (AIF)	A fund as defined in Section 2 (1) (b) of Securities and Exchange Board of India (Alternative Investment Fund) Regulations, 2012.
Anusandhan National Research Foundation (ANRF)	The Foundation established through the Anusandhan National Research Foundation Act, 2023.
Carried Interest	A percentage of profit generated from investments, and is a reward for the fund manager for maximising the return for investors in the Alternative Investment Fund.
Central Public Sector Enterprise (CPSE)	In these documents, referring to a broader definition of being Government companies, besides Statutory Corporations, where a Government Company is defined in Section 2 (45) of the Companies Act, 2013 as a company in which not less than 51 per cent of the paid-up share capital is held by Central Government, or by any State Government or Governments, or partly by the Central Government and partly by one or more State Governments, and includes a company which is a subsidiary of a Government Company.
Commitment Period	Period specified in Investment Agreement, during which investors are expected to fulfil their capital commitments, and the fund manager is authorized to request capital from the investors for making investments.
Comptroller and Auditor General (CAG)	Comptroller and Auditor General as established under Article 148 of the Constitution of India.
Consolidated Fund of India (CFI)	Consolidated Fund of India, as under Article 266 (1) of the Constitution of India.
Control	As defined in the Department for the Promotion of Industry and Internal Trade's Consolidated Foreign Direct Investment Policy 2020, Section 2.1.8.
Development Financial Institutions (DFIs)	Development Financial Institutions as defined in Sections 3 and 29 of the National Bank for Financing Infrastructure and Development Act, 2021.
Distribution Waterfall	Determines how the proceeds of the fund will be returned back to investors, in what proportion and priority, including return of capital, hurdle rate, catchup, and carried interest.

Distributions to Paid-in Capital (DPIC)	Realised returns i.e., the amount that is paid out to investors. It is calculated by dividing cumulative distributions to investors by total capital contributions.
Eligible Technology Entities (ETEs)	Any legal entity which is engaged in developing Research, Development & Innovation (RDI)-intensive technology (Technology Readiness Level 4 and above). These could include companies registered under the Companies Act, 2013, partnerships registered under the Indian Partnership Act, 1932, and limited liability partnerships registered under the Limited Liability Partnership Act, 2008, engaged in scale-up of RDI-intensive technologies beyond Technology Readiness Level 4. These shall include startups as defined in the Department for Promotion of Industry and Internal Trade Notification G.S.R. 127(E) dated 19 February 2019, as may be modified from time to time.
Empowered Group of Secretaries (EGoS)	An Apex Level Committee of RDIF comprising of Cabinet Secretary as the Chair, Principal Scientific Advisor to the Government of India, Secretaries to the Government of India in the Department of Economic Affairs, Department of Promotion of Industry and Internal Trade, Department of Science and Technology, and other co-opted members depending on subjects/ sectors/ projects involved.
Executive Council (EC)	The Council constituted under Sub-Section 1 of Section 7 of the Anusandhan National Research Foundation Act, 2023.
Executive Director (ED)	The Executive Director of RDIF, appointed by the Executive Council of ANRF, to be responsible for the overall management of the RDIF.
Expert Advisory Committee (EAC)	A committee constituted by the Executive Council under Sub-Section 1 of Section 12 of the Anusandhan National Research Foundation Act, 2023, comprising of an eminent industry leader drawn from technology, industry, investment, and/ or R&D sectors as the Chair; three to four experts drawn from industry, investment, and/ or technology R&D sectors, and Executive Director as the Member Secretary of the Committee.
Financial Year (FY)	The year beginning on 1st April and ending on 31st of March of the following year.

Focused Research Organisations (FROs)	Statutory organisations, public institutions, academic/research/non-profit organisations funded by the Government of India or State Governments; defined by a specialised focus on particular technologies, sectors, or innovation functions.
Fund of Funds (FoF)	Alternative Investment Funds which themselves invest in units of other AIFs as per the Securities and Exchange Board of India (Alternative Investment Fund) Regulations, 2012. Such an AIF would be referred to as a Fund of Funds. In such cases, these Funds of Funds shall ensure that any daughter AIFs to which it contributes RDIF funds (a) shall not themselves invest RDIF funds in units of other AIFs (b) shall themselves comply with all the provisions specified for, and be treated as, SLFMs in the Implementation Guidelines
General Financial Rules (GFR)	General Financial Rules 2017 of the Government of India, to be followed while dealing with matter involving public finances.
Hurdle Rate	The threshold return that the investors in the Alternative Investment Fund must receive, before the fund manager receives additional returns, if any.
Independent Business Unit (IBU)	Division established at the Anusandhan National Research Foundation to house the Management Team of the Research Development and Innovation Fund.
Intellectual Property Rights (IPRs)	Rights pertaining to patents, trademarks, registered designs, copyrights and layout design of integrated circuits, and all other property rights protected by The Patents Act, 1970, as amended by the Patents (Amendment) Acts of 1999, 2002, and 2005; and other statutes and acts relevant to these rights.
Internal Rate of Return (IRR)	The discount rate at which net present value of all cashflows from a specific project or investment equals zero.
Investment Committee (IC)	A committee set up by Second Level Fund Managers, for assessing and vetting investment proposals presented by the Fund Management Team, and taking investment decisions.

Management Fee	Fees chargeable to the Alternative Investment Fund, as per the Investment Management Agreement between the fund and the fund manager. This fee is paid to the fund manager, which is usually specified as a percentage of the capital committed during the commitment period. Thereafter, it reduces to a fixed percentage of the actual invested capital, if it is lesser than the committed capital, or as a percentage of the underlying value of the assets under management (AUM) of the fund.
Multiple on Invested Capital (MOIC)	It is the fund's investment multiple, it measures the total value created by a fund.
Net Interest Margin	Difference between the interest rate at which any Second Level Fund Manager lends capital to Eligible Technology Entities, and that at which the said Second Level Fund Manager receives funding from RDIF.
Non-Banking Financial Companies (NBFCs)	As defined in Section 45I(f) of the Reserve Bank of India Act, 1934.
Notice Inviting Application (NIA)	Notice issued by the Research Development and Innovation Fund inviting prospective Second Level Fund Managers meeting eligibility criteria to participate in a selection process to access RDIF funding.
Optionally Convertible Debt	Optionally convertible debt instruments where issuer shall not convert its debt instruments into equity shares unless the holders of such convertible debt instruments have sent their positive consent to the issuer holders of such convertible debt instruments as per Sub-Section 1 of Section 22 of Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009.
Pari Passu	Meaning that multiple parties to a contract, claim, or obligation are treated the same, ranking equally and without preference.
Portfolio Yield	The income generated by investment portfolio over a specific period, expressed as a percentage of the portfolio's value.
Private Placement Memorandum (PPM)	A primary document in which all the necessary information about the AIF is disclosed to prospective investors.
Quality and Cost Based Selection (QCBS)	A selection process as defined in Rule 52 of Special Financial Rules of RDIF.

Research, Development, and Innovation Fund (RDIF)	A Special Purpose Fund of ANRF established as an Independent Business Unit under clause (d) of Sub-Section (2) of Section 13 of the Anusandhan National Research Foundation Act, 2023 with a purpose to spur private sector's efforts in Research, Development and Innovation.
Research, Development, and Innovation-intensive (RDI-intensive) technologies	Technologies that (i) are generally based on advances in science and engineering innovation (ii) typically have high uncertainty (and consequent failure risks) in functionality, adoption, production, standards / architecture (iii) may entail investment in scientific or engineering R&D before product development.
Research, Development, and Innovation Fund (RDIF) Priority Sectors	Sectors defined in Paragraph 5 of Part A of the RDIF Implementation Guidelines.
Resident Indian Citizen	As defined in the Department for the Promotion of Industry and Internal Trade's Consolidated Foreign Direct Investment Policy 2020, Section 2.1.45.
Second Level Fund Manager (SLFM)	Alternative Investment Funds, Development Finance Institutions, Non-banking Finance Corporations, and Focused Research Organisations which are selected to receive funds under the Research Development and Innovation Scheme to invest in Eligible Technology Entities the form of equity, debt, or a combination of both.
Special Purpose Fund (SPF)	A fund of ANRF under Clause (d) of Sub-section (2) of Section 13 of the Anusandhan National Research Foundation Act, 2023.
Startups	As defined in the Department for Promotion of Industry and Internal Trade Notification G.S.R. 127(E) dated February 19, 2019, as may be modified from time to time.
Technology Readiness Level (TRL)	A metric to assess the maturity of technologies from initial concept to market-ready products.
Treasury Single Account (TSA)	Treasury Single Account system as outlined in OM No. 3/ (06)/PFMS/2023 dated 21st May, 2024.

#### **PART A: Investment Policy Framework**

- 1. Introduction.¹The Investment Policy serves as a strategic framework to guide the investment activities of the Research, Development, and Innovation Fund (RDIF), which is established as a Special Purpose Fund (SPF) under the Research, Development, and Innovation Scheme. It is designed to fulfil RDIF's mandate as outlined by the Government of India.
- 2. Background. Research, development, and innovation (RDI) remains essential to India's economic security, strategic purpose, and self-reliance. To retain strategic autonomy and competitiveness, India must rank amongst the top three to five globally, in five to 10 of our chosen key technology areas.

To achieve this, India has built strength in applied R&D. India occupies global top-five positions for high-impact research in 45 out of 64 critical technologies on the 2024 Australian Strategic Policy Institute (ASPI) Critical Technology Tracker<sup>2</sup>; a top-three position in scientific publications per year; a top-three position in the number of science and engineering PhDs; and a top-seven position in resident patent filings. India has launched dedicated programmes – including the National Mission on Integrated Cyber Physical Systems, the National Quantum Mission, the India Al Mission, inter alia – to gain strategic autonomy in emerging technologies.

Despite this, India's private sector was responsible for just 36.4% of India's R&D investments (as a percentage of GDP) in 2021. Combined public and private R&D investment totalled just 0.64% of GDP. This is due the following:

2.1. Special nature of R&D scaling and RDI-intensive technologies<sup>3</sup>. Private underinvestment in RDI is caused by the novelty and uncertainty involved in applying scientific advances to commercial opportunities. Entities scaling RDI-intensive emerging technologies derive value from (a) new advances in underpinning science bases, and (b) new applications of these advances to use-cases, unlocking new markets. This novelty is essential to the high economic returns and capability that RDI generates. However, it also multiplies

<sup>&</sup>lt;sup>1</sup> The Guidelines balance three factors: (a) accountability to Parliament for public funds (b) encouraging private investors to invest in RDI-intensive technology innovators (c) derisking Indian companies including innovating RDI-intensive technologies, who are RDIF's final beneficiaries.

<sup>&</sup>lt;sup>2</sup> Critical Technology Tracker Report. (2024). Australian Strategic Policy Institute. See Appendix 1: Top 5 countries visual snapshot (2019–2023)

<sup>&</sup>lt;sup>3</sup> Government's case for (a) intervening in the private investment market (b) restricting use of RDIF's taxpayer funds to R&D/RDI-intensive technologies (c) a flexible, but rigorous, definition of exactly what such technologies are – see below.

failure points in technology development, and the uncertainties accompanying such failure. This affects both innovators and investors.

- 2.2. Risks affecting innovators. For innovators, the aforesaid failure points and uncertainty impinge on every stage of R&D scaling, including (a) product development, challenged by untested functionality and architectures of novel technologies; through (b) production, complicated by undefined value chains, immature supply networks, and the absence of established technical or regulatory standards; to (c) marketing and adoption, hampered by unpredictable user behaviour and market readiness for new technologies. These risks collectively impact cashflow volatility, escalating the risk of enterprise failure, especially for early-stage firms.
- 2.3. <u>Risks affecting investors.</u> The novelty and uncertainty of RDI also limits the availability of conventional risk assessment frameworks typically used by private investors such as those underpinning capital asset pricing models in more mature domains. Equally, investors can find their understanding of scientifically complex RDI-based projects limited, relative to that of the innovators seeking their investment.

This information asymmetry creates uncertainty for private investors in evaluating the viability of investments in RDI-intensive technologies, and deterring principal-agent problems such as adverse selection (innovators understating their technologies' risks to seek under-priced capital) and moral hazard (investees misusing funds for purposes other than innovation financing). This impacts investors' cashflows and returns, deterring the private investment essential to long-term scaling of RDI.

- 2.4. RDIF Solutions. RDIF addresses these challenges by
  - (i) <u>Financially supporting eligible entities developing RDI-intensive</u> technologies with capital at:
    - (a) developmental stages (Technology Readiness Level 4 and above) conducive to scaling R&D;
    - (b) rates sufficiently low to survive failure risk; and
    - (c) tenures adequately long to recover from failure, and sustain R&D's extended gestation periods;
  - (ii) Routing these funds via Second Level Fund Managers, which would also include private investors, at rates low enough to limit their risk when

investing in RDI-intensive technologies. This blended financing approach familiarises India's private investors with emerging technologies, to:

- (a) reduce investment uncertainty; and
- (b) mobilise private capital to R&D at large scales over the long term.
- **3. Objectives.** RDIF is set up with the following objectives:
  - 3.1. Encourage the private sector to scale up RDI in sunrise domains and in other sectors relevant for economic security, strategic purpose, and self-reliance;
  - 3.2. Finance transformative projects at higher levels of Technology Readiness Level (TRL) of 4 and above.
  - 3.3. Support acquisition of technologies which are critical or of high strategic importance;
  - 3.4. Facilitate setting up of a Deep-Tech Fund of Funds.

RDIF's Investment Policy framework is designed with the intention to achieve the aforesaid objectives.

- **4. Encouraging the Private Sector to Scale Up RDI:** *Access to Funding.* To encourage private sector scaling of RDI, RDIF shall:
  - 4.1. Make funds available to Eligible Technology Entities (as defined in Para 6 below) including startups scaling up R&D from TRL 4 onward:
    - (i) Through financing or refinancing<sup>4</sup> via (a) long-term loans (including optionally convertible debt), which are expected to be unsecured (b) equity, especially in the case of startups (c) a combination of both;
    - (ii) With patient capital at low rates so as to moderate the risks and sustain the extended gestation periods of scaling up R&D;
    - (iii) But not via grant financing or short-term loans.
  - 4.2. Channel these funds via Second Level Fund Managers (SLFMs), which shall include:

<sup>&</sup>lt;sup>4</sup> "The RDI Scheme aims to provide long-term financing or refinancing with long tenors at low or nil interest rates to spur private sector investment in RDI." https://www.pib.gov.in/PressReleseDetail.aspx?PRID=2141130

- (i) Alternative investment funds (AIF)
  - a. These may also include AIFs which themselves invest in units of other AIFs as permitted in the Securities and Exchange Board of India (Alternative Investment Fund) Regulations, 2012. Such an AIF would be referred to as a Fund of Funds. In such cases, these Funds of Funds shall ensure that any daughter AIFs to which it contributes RDIF funds (a) shall not themselves invest RDIF funds in units of other AIFs (b) shall themselves comply with all provisions specified for, and be treated as, SLFMs in the Implementation Guidelines.
- (ii) Development finance institutions (DFIs);
- (iii) Non-banking finance corporations (NBFCs), and
- (iv) Focused research organisations (FROs);
- 4.3. Provide these funds to SLFMs as:
  - (i) Contributions to AIFs, typically via purchase of units in Schemes of AIF Trusts;
  - (ii) Loans, at low rates with extended tenors.
- **5. Sunrise Domains:** *RDIF Priority Sectors.* To achieve Government of India objectives in targeting sunrise domains, RDIF shall fund Eligible Technology Entities as defined in Para 6 below:

#### 5.1. In sunrise sectors:

- (i) Energy security and transition, and climate action;
- (ii) 'Deep Technology' including quantum computing, robotics, and space;
- (iii) Artificial Intelligence and its application to Indian problems, including in agriculture, health, and education;
- (iv) Biotechnology, biomanufacturing, synthetic biology, pharmaceuticals, and medical devices;
- (v) Digital economy, including digital agriculture;

#### 5.2. In other sectors:

- (i) Technologies whose indigenization is important for strategic reasons or for economic security and Atmanirbharta;
- (ii) Any other sector or technology deemed necessary in the public interest;
- 5.3. <u>In sectors updated</u> to these lists with the approval of the RDIF Empowered Group of Secretaries (EGoS), on the recommendation of the ANRF Executive Council;
- 5.4. <u>In a manner</u> that supports entire industry sectors in scaling R&D, from laboratory-tested components to manufactured products and proven systems. RDIF will achieve this by methodically targeting funding to companies working across the entire value network involved in transitioning R&D from laboratory to commercialisation. This will help create new industries, or transform existing ones, around Indian RDI.

#### 6. Eligibility Criteria for Receiving RDIF Funds via SLFMs.

- 6.1. RDIF funds shall be provided by SLFMs exclusively, at the time of investment by the SLFM<sup>5</sup> to **Eligible Technology Entities**, which:
  - (i) Are defined as any legal entity registered in India, and duly incorporated and governed under the applicable laws of India (including the Companies Act, 2013, the Indian Partnership Act, 1932, the Limited Liability Partnership Act, 2008, etc.: this to include startups as defined in the Department for Promotion of Industry and Internal Trade Notification G.S.R. 127(E) dated 19 February 2019, as may be modified from time to time); with principal place business/operations in India; engaged in developing RDI-intensive technology at Technology Readiness Level 4 and above,

<sup>&</sup>lt;sup>5</sup> The objective of this section is to achieve strategic autonomy and a product economy for India. It therefore ensures that controlling stakes remain with resident Indian citizens, so that RDIF-funded companies and technologies are not acquired by those outside India, in a manner that undermines this objective. Equally, the section allows for Indian companies to raise foreign direct investment, to scale to globally-competitive standards consequent to RDIF funding.

- (ii) Are under the control<sup>6</sup> of resident Indian citizens<sup>7</sup>, as defined in the Department for Promotion of Industry and Internal Trade (DPIIT)'s Consolidated FDI Policy (2020);
- (iii) Have their registered global headquarters in India. This ensures that global revenues and profit would be consolidated under the Indian-registered entity.
- 6.2. Eligible Technology Entities receiving RDIF funds shall, for all Intellectual Property Rights (IPRs)<sup>8</sup>, as defined in applicable Indian law and rules, developed as a consequence of RDIF funding:
  - (i) Register such IPR in India, under applicable Indian law and rules;
  - (ii) Retain ownership of such IPR, for the term of the IPR (i.e. the period for which the IPR is valid) under applicable Indian law.
- 6.3. Eligible Technology Entities receiving RDIF funds shall comply with applicable Government of India rules and directions related to security, export control<sup>9</sup>, foreign acquisition or control, and other strategic concerns.
- 6.4. Many of the technologies developed by RDIF will offer new capabilities relevant to Government agencies e.g. under Aatmanirbhar Bharat. RDIF shall proactively reach out to Government of India agencies concerned, to inform and coordinate with their decision-making in this regard.

#### 7. Financing Transformative Projects.

<sup>6</sup> DPIIT Consolidated FDI Policy 2020 Section 2.1.8: "'Control' shall include the right to appoint a majority of the directors or to control the management or policy decisions, exercisable by a person or persons acting individually or in concert, directly or indirectly, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements. For the purposes of Limited Liability Partnership, 'control' will mean right to appoint majority of the designated partners, where such designated partners, with specific exclusion to others, have control over all the policies of the LLP."

<sup>&</sup>lt;sup>7</sup> DPIIT Consolidated FDI Policy 2020 Section 2.1.45: "'Resident Indian Citizen' shall be interpreted in line with the definition of 'person resident in India' as per FEMA, 1999, read in conjunction with the Indian Citizenship Act, 1955."

<sup>&</sup>lt;sup>8</sup> All applicable Indian laws, rules, and guidelines would apply. IPR include patents, trademarks, registered designs, copyrights and layout design of integrated circuits. For example, these would include but not be limited to: The Patents Act, 1970, as amended by the Patents (Amendment) Acts of 1999, 2002, and 2005; The Semiconductor Integrated Circuits Layout-Design Act, 2000; The Protection of Plant Varieties and Farmers' Rights Act, 2001; The Designs Act, 2000; The Trade Marks Act, 1999; The Copyright Act, 1957; and others. The descriptive list, designed to comprehensively cover the results of RDI funding, derives from Government of India precedent from the Department of Telecommunications' Telecom Technology Development Fund.

<sup>&</sup>lt;sup>9</sup> Including the Special Chemicals, Organisms, Materials, Equipment, and Technologies (SCOMET) list overseen by the Director General of Foreign Trade (DGFT).

- 7.1. <u>Funded Projects.</u> SLFMs shall utilize RDIF capital for projects advanced by Eligible Technology Entities from TRL 4 or higher. Project selection shall be carried out by the SLFMs, strictly within the sectors and project types defined in the RDIF mandate and fund allocation.
- 7.2. <u>Funding Limit.</u> The financing under the scheme shall be limited to not more than 50 per cent of the total assessed cost of the project. The balance financing should be arranged by the project proponent from self or commercial sources. In exceptional types of projects/ sectors, the financial limit for government share in financing can be relaxed with the approval of the EGoS.
  - (i) <u>Loan.</u> For Eligible Technology Entities receiving debt funding (via loan or optionally convertible debt) from the SLFM, this shall be calculated as 50% of the project cost, as specified in a proposal for achieving clearly-defined deliverables and outcomes of a project.
  - (ii) <u>Equity</u>. For Eligible Technology Entities receiving funding via equity or equity linked instruments from the SLFM, this shall be calculated as 50% of the value of each funding round. This value would be considered when it constitutes the entire cost of achieving the objectives proposed at the time of raising the funds. At every stage of funding, RDIF funding will remain 50%.

<u>Note</u>: Once the project (in case of loan) or objectives (in case of equity financing) have been completed, the Eligible Technology Entities may be eligible for RDIF funds for follow-on projects / objectives.

#### 8. Research, Development, Innovation.

8.1. RDIF funds shall only be used to support RDI-intensive technologies, which<sup>10</sup>

- (i) are generally based on advances in science and engineering innovation;
- (ii) typically have high uncertainty (and consequent failure risks) in functionality, adoption, production, standards / architecture;
- (iii) may entail investment in scientific or engineering R&D before product development.

<sup>&</sup>lt;sup>10</sup> The characteristics derive from Murray et al's work at the Massachusetts Institute of Technology (MIT), Day and Schoemaker's work at the Wharton School, Kolev et al's work at the USPTO, Rogers' work at the University of New Mexico, Auerswald and Branscomb's work at George Mason University and IBM, Swati Chaturvedi at Propel (X), among others. These are definitive authorities in the fields of emerging technologies, Deep Tech, and early-stage technology development and entrepreneurship. (Swati Chaturvedi is responsible for first coining the term 'Deep Tech' in 2015.) The characteristics remain consistent with global government initiatives.

8.2. Ministries of the Government of India seeking inclusion of a specific technology under the Scheme shall submit their proposals to the DST for consideration by the EC ANRF, which shall thereafter be recommended to EGoS for final approval.

<u>Note</u>: RDIF will not fund low-end technology projects or what is generally perceived as "routine" R&D. The Executive Council may modify these characteristics and conditions as it deems fit.

- **9. Markets.** RDIF may also strive to target markets that:
  - 9.1. Possess strong demand, driving early adoption;
  - 9.2. Are highly scaled globally, expanding adoption;
  - 9.3. Promise high compounded annual growth.
- **10.Selection of SLFMs.** Selection of SLFMs shall be in accordance with the SLFM Selection Guidelines (Part D).
- 11. Limits to RDIF Financial Contributions to SLFMs: Contribution to AIFs.
  - 11.1. To encourage private investment in RDIF Priority Sectors and RDI-intensive technologies: RDIF shall contribute to AIFs as a percentage of aggregate capital as may be determined by the Executive Council; this percentage reflecting the AIFs' focus on RDI-intensive technologies and RDIF Priority sectors, so as to enable increased RDIF funding to these technologies and sectors. RDIF-funded Funds of Funds shall contribute RDIF capital to AIFs via the same approach as above.
  - 11.2. <u>RDIF Funds Exclusive to RDI-intensive technologies and Priority Sectors</u>. Across all categories above, SLFMs shall invest all funding contributed by RDIF only in Eligible Technology Entities that focus on (a) RDI-intensive technologies, as defined in Para 8 above (b) RDIF Priority Sectors, as defined in Para 5 above.
  - 11.3. The Executive Council may mandate a minimum contribution by SLFMs from private funds to RDIF priority sectors and RDI-intensive technologies, alongside the use of RDIF capital for these purposes; should this be deemed fit.

- **12. Limits to RDIF Financial Contributions to SLFMs:** Loans. The maximum limit on capital that RDIF would provide to SLFMs via loan mode may be determined by the Executive Council.
- **13.Acquisition of technologies which are critical or of high strategic importance.** Financing of acquisition of technologies that are critical or of high strategic importance shall also be permissible. Acquisition must occur within the context of a wider project that translates to the development of a product.
  - 13.1. The definition of criticality and strategic importance shall be recommended by the Executive Council for the approval of EGoS.
  - 13.2. The total financing from an SLFM from RDIF funds for such acquisition should not exceed the percentage limit, as may be prescribed by the Executive Council, of the total funds allocated to that SLFM.
  - 13.3. Such a limit shall not apply in cases where an SLFM is constituted exclusively for acquisition.
- 14. Encouraging the Private Sector to Scale Up RDI: Comprehensive Derisking Partnerships. To maximise success in scaling Indian private sector RDI:
  - 14.1. RDIF will form outreach, awareness and information partnerships with Government agencies procuring and adopting technology, particularly in strategic domains.
  - 14.2. RDIF will ensure such agencies are informed about the Indian technological capabilities being advanced by its funding, that may be relevant to their needs and procurement plans.
  - 14.3. Equally, RDIF will inform SLFMs and their final investee companies and startups about such agencies' requirements, informing their R&D scaling.
  - 14.4. Such coordination will follow an open, transparent, equitable approach.
  - 14.5. RDIF will also form such partnerships with public institutions and organisations containing research equipment and other technology derisking facilities which Indian RDI-intensive technology innovators may find essential.

#### 15. Exceptions and Exclusions.

15.1. RDIF shall not finance next generation labs for pre-commercial R&D. However, the cost of setting up such labs may form part of larger proposals to be financed as a project by RDIF.

- 15.2. RDIF shall not finance RDI by government entities and central public sector enterprises (CPSEs), unless they are involved in strategic projects in partnership with the private sector.
- 15.3. RDIF shall not provide grant financing. RDIF shall also not provide short-term loans, which can be met from commercial finance.

#### **Appendix A1: Special Provisions for Strategic Sectors**

- 1. To comply with the Government of India's objectives to scale up RDI for economic security, strategic purpose, and self-reliance: RDIF shall include terms in its contractual agreements with SLFMs.
- 2. These would require SLFMs to include special provisions in their own investment/ loan agreements with Indian companies and startups operating in <u>strategic sectors</u>
  - 2.1. In specific and exceptional situations, related to
    - (i) Times of emergency;
    - (ii) Protection of national interest or when required in public interest;
    - (iii) Health and safety requirements, for Government to act in public interest;
    - (iv) National security reasons;
  - 2.2. RDIF would retain the option, following guidance from the Executive Council, to use RDIF-funded IP or its commercialised forms in the national interest<sup>11</sup>.

<sup>&</sup>lt;sup>11</sup> The vision of the RDIF is to achieve Aatmanirbharta and strategic autonomy. This provision advances this vision.

#### **PART B: Operational Guidelines**

- 1. Background. These guidelines are prepared in accordance with the Research Development and Innovation Fund (RDIF) Investment Policy (Part A). They specify general conditions on which RDIF allocates funds to Second Level Fund Managers (SLFMs) in a manner that complies with the broad objectives set out by the Government of India.
- 2. First Level Custodian or Fund Manager. An Independent Business Unit of the Anusandhan National Research Foundation acts as first-level custodian or fund manager of RDIF, with a separate team that shall specifically manage the fund. This fund shall be in the form of 50-year interest free loan from the Government of India, and act as scheme corpus. The funds to the corpus shall be provided based on the half-yearly net requirement of funds for disbursement to the SLFMs.
- **3. Second Level Fund Managers.** SLFMs refers to entities specified in the RDIF Investment Policy.
- **4. Fund Flow.** Funds from the Consolidated Fund of India (CFI) flow to RDIF through the Department of Science and Technology (DST), and from RDIF to the SLFM for further deployment in private Eligible Technology Entities engaged in scaling R&D, and vice versa, in a manner as specified in the Special Financial Rules of RDIF.
- **5. Investment Streams.** Funds from RDIF to SLFMs to be in the form of the following investment streams:
  - 5.1. Investing via contribution to Alternative Investment Funds (AIFs), including those which invest in units of other AIFs in arrangements referred to in this document as Funds of Funds; and
  - 5.2. Loan financing.

Note: No grants or short-term loans are permissible by RDIF.

- **6. Provisions Specific to AIF Investment Stream.** RDIF contributions in the AIF investment stream shall normally be via purchase of Units in a Scheme of the AIF Trust following the criteria given below:
  - 6.1. Eligible entities.
    - (i) AIFs as defined in Securities and Exchange Board of India (Alternative Investment Fund) Regulations, 2012. These can be existing or new AIFs.
    - (ii) Fund of Funds, which shall in turn invest these funds in units of AIFs.

- 6.2. <u>Investment Principles</u>. RDIF to allocate funds to AIFs through three suggested modes of contribution:
  - (i) <u>Mode 1</u>: RDIF provides capital at an internal rate of return that is lower than the hurdle rate offered by the AIF to private contributors. AIFs would be required to prioritise distributions to RDIF, e.g. by providing RDIF with a higher position in the distribution waterfall.
  - (ii) <u>Mode 2</u>: RDIF provides capital to the AIF at the same hurdle rate and/ or internal rate of return as other contributors. It would receive distributions in pari passu with other contributors to the AIF.
  - (iii) <u>Mode 3:</u> RDIF provides capital at an internal rate of return that is higher than that offered by the AIF to private contributors. RDIF would take a lower position in the distribution waterfall.

#### Notes.

- (i) Details for all Modes may be worked out by the RDIF Management Team. Specific terms and other Modes would be considered by the Executive Council.
- (ii) RDIF-funded Funds of Funds shall contribute RDIF capital to AIFs via the same Modes specified above.
- 6.3. <u>Terms of Allocation of Funds</u>. RDIF to allocate funds to AIFs on the broad terms outlined below. The Executive Council shall modify these terms as needed. RDIF-funded Funds of Funds shall contribute RDIF capital to AIFs on the same terms.
  - (i) <u>Investment Policy</u>. The Investment Thesis (which may be part of the Private Placement Memorandum) of the AIF should align to the greatest possible extent with the RDIF Investment Policy (Part A).
  - (ii) <u>Underlying Investments of SLFMs.</u> Investment by SLFM should be
    - (a) In the form of equity, debt, or a combination of both;
    - (b) In Eligible Technology Entities engaged in developing RDIintensive technology projects at TRL 4 and above, in sectors as per the RDIF Investment Policy (Part A);

- (c) Combining RDIF and private capital in proportions reflecting the alignment of the AIF's and RDIF's focus areas, as specified in the RDIF Investment Policy Para 11.
- (iii) <u>Funding Parameters.</u> The following parameters placed in Table B.1 shall be decided by the Executive Council from time to time. Illustrative example figures are also summarised in Table B.1.

Table B.1
Example Funding Parameters for Investment Stream 1 AIF

S.	Funding Parameters	Illustrative Example
N	From RDIF to SLFM	
os		Values to be decided by the
	to be decided by the Executive	Executive Council
	Council	
1	Rate of return for Mode 1 Funding	IRR at 5-6%
2	Distribution priority for Mode 1 Funding	RDIF to receive higher priority in
		distributions
3	Rate of return for Mode 2 Funding	As provided by AIF to all contributors
4	Distribution priority for Mode 2 Funding In pari passu with all contributors to	
		the AIF
5	Rate of return for Mode 3 Funding	RDIF to receive IRR higher than
		provided to private contributors
6	Distribution priority for Mode 3 Funding	RDIF to receive lower priority in
		distributions
7	Term	Up to 15 years inclusive of extension
8	Capital Contribution and Investment	As a percentage: per RDIF
	Limits for SLFM (AIFs)	Investment Policy Para 11

#### Notes:

- 1. Internal Rate of Return: the target rate of return offered by the AIF on RDIF capital (the discount rate at which net present value of all cashflows from AIF becomes zero).
- 2. Distributions: RDIF's position in the distribution 'waterfall' where the AIF returns capital to its contributors.
- 3. Fund Term: the lifespan of the AIF. RDIF would prefer extended terms, reflecting the greater patience needed with R&D / RDI-intensive technology investments.
- 4. Capital Contribution and Investment Limit: the amount of capital RDIF would allocate to the SLFM, as a maximum percentage of aggregate capital contributions received by the AIF at every close.

- (iv) <u>Eligible Management Fees</u>. RDIF will accept the following amounts charged by an AIF SLFM:
  - (a) A management fee charged by the SLFM not exceeding 2% per annum (i) of the aggregate Capital Commitment at the beginning of the year, from the initial closing date until the end of the Commitment Period (ii) of the actual invested capital, if it is lesser than the committed capital, or as a percentage of the underlying value of the assets under management (AUM) of the fund, after the end of the Commitment Period;
    - (b) Carried Interest not exceeding 20% of the AIF SLFM's distributions after return of capital, hurdle rate, and catch-up;
    - (c) As may be decided by the Executive Council as the case may be from time to time. These terms would also be applied by RDIF-funded Funds of Funds to AIFs to which they contribute, i.e. daughter AIFs.
- (v) <u>Drawdowns.</u> RDIF to make Capital Commitments to the AIF SLFM within a period from the date of a Drawdown Notice issued by the AIF SLFM as mentioned in the Special Financial Rules of RDIF.
- **7. Provisions Specific to Loan Financing Investment Stream.** RDIF to provide loan financing to eligible SLFMs listed below.
  - 7.1. Eligible entities. RDIF to provide loan financing to
    - (i) Focused Research Organisations;
    - (ii) Development Finance Institutions;
    - (iii) Non-banking finance corporations (NBFCs).
  - 7.2. <u>Investment Principles</u>. RDIF to fund eligible SLFMs listed in 7.1 above through low-interest debt on concessional terms. These will include lower rates, over longer tenors, than offered by private contributors.
  - 7.3. <u>Terms of Allocation of Funds</u>. RDIF would invest on the broad terms outlined below. The following terms shall be decided by the Executive Council from time to time. Illustrative example figures are summarised in Table B.2.

- (i) <u>Investment Policy</u>. RDIF contributes to eligible SLFMs listed in 7.1 above which have technology commercialisation objectives aligned with RDIF's Investment Policy (Part A).
- (ii) <u>Underlying Investments of SLFMs.</u> RDIF contributes to eligible SLFMs listed in 7.1 above which shall, in accordance with applicable law and regulation, invest:
  - (a) In the form of equity, debt (including optionally convertible debt), or a combination of the equity and debt;
  - (b) In Eligible Technology Entities engaged in developing RDIintensive technology projects at TRL 4 and above, in sectors as per the RDIF Investment Policy (Part A).

However, RDIF does not provide grant funding.

(iii) <u>Funding Parameters.</u> The following parameters placed in Table B.2 shall be decided by the Executive Council from time to time. Illustrative example figures are also summarised in Table B.2.

Table B.2
Funding Parameters for Investment Stream 2 Loan Financing

S.	Funding Parameters	Illustrative Example		
Nos.				
		Values to be decided by Executive		
		Council from time to time		
1	Interest Rate	Low; for strategic projects, these may be		
		retained even at 1-2%.		
2	Tenor	Up to 20 years.		
3	Capital Contribution and	RDIF contributions in the loan mode will be		
	Investment Limits   limited only by the Executive Council.			
4	Tranches	Funding shall be released in tranches		
		depending on the underlying investment		
		requirement of the SLFM. Annually every		
		SLFM shall provide an estimate of their		
		annual money requirement and it will be		
		released by RDIF as and when required.		
		The quarterly estimated drawdowns from		
		the RDIF to SLFMs shall be honoured in 30		
		days.		
5.	Lock-in period	10-15 years, subject to pre-payment being		
		permitted without penalty.		

- (iv) <u>Eligible Management Fees.</u> RDIF will accept a management fee charged by the SLFM not exceeding 1% per annum of the total amount of the loan provided by RDIF to the SLFM.
- **8. General Provisions to Ensure RDIF Mandate.** RDIF funds shall be used exclusively for the core purpose for which Government has established RDIF. To ensure that the low-interest financing fulfils the Budget mandate to encourage the private sector to significantly scale up research and innovation in sunrise domains, RDIF shall ensure the following general provisions across all Investment Streams:
  - 8.1. <u>Reports and Information from SLFMs to RDIF.</u> RDIF requires from all SLFMs, in a format to be approved by the Executive Council and adapted to the specific requirements of each Investment Stream:
    - (i) Reports within 60 days of the end of every six-month period, from the date of execution of the Contribution/ Investment / Loan agreement between RDIF and the SLFM: including unaudited financial statements of the SLFM, and status reports on the SLFM's investments (including investee companies, technologies, sectors, and other criteria defined by the RDIF Investment Policy);
    - (ii) Annual reports within 90 days of the conclusion of every fiscal year including audited financial statements and annual valuation of the assets of the SLFMs; a statement of account in relation to the units held by RDIF as a contributor; and status reports on the SLFM investments (including investee companies, technologies, sectors, and other criteria defined by the RDIF Investment Policy);
    - (iii) The ability to visit Eligible Technology Entities invested in by the SLFMs to observe performance;
    - (iv) Meetings with SLFM teams for joint review.

Note: RDIF shall retain the right to audit any SLFM via a professional agency.

- 8.2. Reports from RDIF to Executive Council and EGoS. Based on information provided by SLFMs, RDIF shall provide the Executive Council with the following data on an annual basis; this to be further shared with EGoS:
  - (i) Technological advancement: Number of prototypes, proofs-ofconcept, or innovations developed from the funded projects over the years measured relative to the Technological Readiness Level (TRL)

of the projects at the time of sanction. Other relevant parameters such as commercial readiness, market readiness, etc. to be considered as well.

- (ii) Commercialization and Industry Impact: Number of projects leading to market-ready products or collaborations with industries resulting from the funded projects.
- (iii) Catalysing private/commercial capital for R&D: Amount of private capital mobilized at the level of SLFMs or at the project level.
- (iv) Scheme sustainability: Number of projects which make it to commercial stage and the revenue of such units.
- (v) Ability to create project visibility and facilitate exits: Number of projects successfully exited at the end of 5/10/15 years.

<u>Note:</u> Union Cabinet has approved a Design and Monitoring Framework (DMF) placed at Appendix 1. The above data will be used to monitor the Scheme as part of this Cabinet-approved framework.

- 8.3. Reporting from RDIF to SLFMs. RDIF shall periodically share with all SLFMs, a list of all SLFMs and the Eligible Technology Entities in which they have invested. This would be used by SLFMs to ensure that its own financing does not drive RDIF funding above the limit in Part A Para 7.2.
- 9. Conflict of Interest. RDIF shall take measures, including but not limited to the disclosure of interests and information and structuring of its decision-making processes, to remove the possibility of conflict of interest amongst any RDIF employees or personnel, involved in any decision related to the provision and use of RDIF funds.

#### PART C: Funding Guidelines to be followed by SLFMs

- Selection of Projects aligned with RDIF Investment Policy. SLFMs receiving RDIF funding shall
  - 1.1. Invest exclusively in Eligible Technology Entities
    - (i) As mentioned in Para 6 of RDIF Investment Policy (Part A);
    - (ii) Focused and deriving value from RDI-intensive technologies, as defined in Para 8 of RDI Investment Policy (Part A);
    - (iii) Developing technologies for sectors as specified in the RDIF Priority Sectors list in Para 5 of the RDIF Investment Policy (Part A), as amended from time to time.
  - 1.2. Consider readiness parameters such technology readiness, commercial readiness, market readiness as appropriate.
- 2. Investment Committee of SLFMs. SLFM Investment Committees (IC) shall have a structure and composition that comply with the guidelines outlined in Appendix C1. SLFMs shall consequently decide members of the IC in compliance with these guidelines.
- **3. Funding Limit.** As mentioned in Para 7.2 of the RDIF Investment Policy (Part A). SLFMs shall verify if a project (in loan mode) or a company including startup (in equity mode, for a specific objective) is already receiving RDIF funding via a separate channel. If so, they shall ensure that their own financing does not drive RDIF funding above the limit in Part A Para 7.2.
- **4. Optionally Convertible Debt.** SLFMs may provide Eligible Technology Entities with optionally convertible debt (OCD). The SLFM may retain the right to convert a suitable percentage of the debt to equity at an occasion, time and value that may be mutually negotiated between the SLFM and the company (including startup).
- **5. Teams.** SLFMs shall seek to invest in teams which possess proven competence in R&D, product development, and management.
- **6. Transmission of Derisking.** RDIF provides SLFMs with financing on concessional terms, in order to support Eligible Technology Entities advancing R&D and RDI-intensive technologies despite the risks these entail. Accordingly, SLFMs shall ensure the following in loan financing:
  - 6.1. Net interest margins i.e. the difference between the interest rate at which any SLFM lends capital to Eligible Technology Entities, and that at which the said SLFM receives funding from RDIF, shall not exceed a maximum limit of 3%. This limit may be modified by the Executive Council.

- 6.2. <u>Tenor</u>. SLFM will ensure that the benefits of the extended tenor of the financing it receives from RDIF are passed on to the company including startup to which it is extending a loan. For example, if an SLFM has been provided with a loan tenor of X years then SLFM will give loan of tenor at least Y, where Y is 75% of X. SLFMs shall not charge a penalty for the pre-payment of principal and/ or interest of a loan.
- 6.3. <u>Moratorium</u>. SLFMs shall provide an adequate moratorium on principal and interest payable from Eligible Technology Entities, which may extend at least up to the beginning of the commercialisation phase as specified in the loan agreement.
- 7. Acquisition of technologies which are critical or of high strategic importance. As mentioned in Para 13 of the RDIF Investment Policy (Part A).
- 8. Mechanisms for SLFMs Providing RDIF Capital in the Form of Debt, With No Private Contribution. In cases where an SLFM provides debt funding financed entirely by RDIF, with no contribution from private sources or itself: the SLFM shall establish institutional oversight mechanisms to ensure responsible management of funds. The SLFM shall establish rigorous and frequent reporting arrangements to provide RDIF with a clear picture of its investments; on terms to be defined by the Executive Council.
- **9. Management of Conflict of Interest.** SLFMs shall take care to ensure that there is no conflict of interest in the choice of specific projects for financing, given the likelihood of domain experts on its Investment Committee being investors in ideas and companies.
- **10.Exceptions and Exclusions**. As mentioned in Para 15 of the RDIF Investment Policy (Part A).

#### **Appendix C1: SLFM Investment Committee Guidelines**

- 1. Any SLFMs that have RDIF funds shall have Investment Committees (IC) that may contain a mix of technical and financial experts from the private sector, academia, technology, and financial sector as per the basis/ nature of sector and industry. The Investment Committee must be constituted in a way that avoids potential conflicts of interest.
- 2. The team members of SLFM may also be members of the IC.
- **3.** The Executive Council shall not decide nor approve names of members of the IC in any SLFM.
- **4.** No such IC shall have any *ex officio* members from the government.
- **5.** Each SLFM's IC shall vet the selection of specific projects to be funded.
- **6.** SLFM shall take care to ensure that there is no conflict of interest in the choice of specific projects for financing, given the likelihood of domain experts on its IC being investors in ideas and companies.
- **7.** The IC shall function autonomously, without incurring any fiduciary or legal obligations in the event of investment underperformance or losses.
- **8.** The IC shall ensure strategic coherence, fiscal prudence, and alignment with RDIF Investment Policy.

#### 9. Role of IC:

- 9.1. Approve allocations in alignment with RDIF's Investment Policy (Part A);
- Approve all investment and divestment decisions related to RDIF investments;
- 9.3. Select and onboard investee Eligible Technology Entities through a structured and rigorous evaluation process;
- 9.4. Continuously monitor and review performance of investees and portfolio initiatives:
- 9.5. Implement course corrections, as necessary, to enhance the developmental impact and financial return.

#### **PART D: Guidelines for Selection of SLFMs**

- 1. Quality and Cost Based Selection Method. The Union Government has decided that the RDIF shall follow the quality and cost-based selection (QCBS) method to select SLFMs. RDIF adapts QCBS to its mandate, to select SLFMs on the basis of:
  - 1.1. Competence to support Indian startups and companies in scaling up R&D in sunrise sectors, with RDIF funds;
  - 1.2. <u>Ability to spur private investment</u> in scaling Indian R&D (including from more generalised private funds with limited prior experience in R&D / RDI-intensive technologies), leveraging RDIF funds.
- 2. Relative Quality and Cost Weightage in RDIF QCBS. Investment in RDI-intensive technology companies and startups requires specialised skill-sets, owing to the technical, adoption, and agency uncertainties that define emerging technologies. Accordingly, RDIF QCBS prioritises quality in selecting SLFMs. RDIF QCBS allocates: 80% weightage to Quality criteria, and 20% weightage to Cost criteria.
- **3. QCBS Cost Criteria.** Cost criteria in the QCBS methodology aim to maximise cost efficiency in the use of public funds. RDIF adapts this principle to RDIF's mandate to spur private-sector driven research and innovation via concessional financing.
  - 3.1. <u>Cost Score.</u> RDIF QCBS cost criteria is aligned to the investment stream via which RDIF provides funds to SLFMs as follows:
    - (i) AIFs. The RDIF Implementation Guidelines permit SLFMs receiving contributions from RDIF to charge a management fee and carried interest (Para 6 of Part B Operationalisation Guidelines). The QCBS Cost Score would consider <u>management fee and carried interest</u> charged by the SLFM. SLFMs charging lower management fee and carried interest shall have a higher cost score.
    - (ii) Loan financing. Where RDIF provides funds via loans, the cost score shall consider:
      - (a) The interest rate offered by the SLFM to RDIF; the lower the interest, the higher the score;
      - (b) The net interest margin i.e. the difference between the interest rate at which any SLFM lends capital to Eligible Technology Entities,

- and that at which the said SLFM receives funding from RDIF; the lower the margin, the higher the score;
- (c) The management fee charged by the SLFM from the RDIF (subject to a cap of 1% per annum on the amount of the loan requested); the lower the fee, the higher the score.

Note. Specific terms would be approved by the ANRF Executive Council.

- (iii) Nomination basis. QCBS cost criteria shall not apply to SLFMs that are (a) statutory organisations (b) public institutions (c) academic/research/non-profit organisations wholly funded by the Government of India or State Governments. Such SLFMs shall be appointed on the basis of nomination by the EGoS, on the recommendation of the ANRF Executive Council. For (b) and (c) above, such nomination could be guided by Quality criteria tailored to the technology, sector, or innovation function in which the SLFM specialises.
- 4. QCBS Quality Criteria for Commercial SLFMs (AIFs, DFIs, NBFCs). To select AIFs most competent to support Indian RDI-intensive technology startups and companies in scaling up R&D in sunrise sectors with RDIF funds, RDIF applies the following QCBS Quality Criteria, evaluated by the Executive Council (summarised in Table D.1 with example measures, to be selected as appropriate by the Executive Council).
  - 4.1. Global practices in technology investment sector. QCBS Quality Criteria for selecting SLFMs reflects global practices widely followed in the private technology investment sector. These prioritise the SLFM Management Team's professional calibre, evaluated by the Executive Council on the advice of the Expert Advisory Committee.
  - 4.2. Part A | General Competence: Managing Investments and Operational Risks for Scaled Returns. The Executive Council assesses the core competence of the SLFM team in building consistently successful investment portfolios. This shall be irrespective of the extent of the SLFM's RDI-intensive technology focus, allowing more general funds to also participate and apply to RDIF. The evaluation may consider:
    - (i) <u>Fund Management Team Competence</u>: General capability of the SLFM team in managing investments and operational risks, investee entities in the technology sector (irrespective of RDI-intensive technology specialisation).

- (a) For AIFs, this will consider the professional capabilities of Partners, the Investment Committee, and the Advisory Board of the SLFM; and their skillsets in managing founder teams, emerging technologies and products, finance and investment, and resourcing and support networks.
- (b) For DFIs and NBFCs, this will consider the organisation's credentials and management team experience.
- (ii) <u>Demonstrated Track Record of Investment Management Competence:</u>
  The SLFM team's success and consistency in delivering prior Funds, through repeatable processes, robust execution, and effective risk management.
- 4.3. Part B | R&D and RDI-Intensive Technology Focus: Orientation and Competence to Execute RDIF Mandate. The evaluation may consider the SLFM's ability to execute RDIF's mandate for India's RDI-intensive Eligible Technology Entities. The SLFM's track record demonstrating these competences does not need to have exclusively been in RDI-intensive technologies. Competences shown in other technology investments would also be considered.
  - (i) <u>Investment Thesis (which may be part of the Private Placement Memorandum)</u>: alignment with RDIF Investment Policy (Part A).
  - (ii) <u>Track Record in R&D Scale Up and RDI-Intensive Technology Competence</u>: the SLFM's demonstrated competence with the high-uncertainty investments characterising RDI-intensive technologies at the TRLs concerned; including its ability to manage the complexities of technology stage / maturity, advanced science bases, and 'hockeystick' valuation growth (long low period, followed by exponential increase) characterising emerging technologies;
  - (iii) <u>Track Record in Investment Sizes for R&D Scale Up</u>: the SLFM's demonstrated competence with the larger size of investments needed to scale-up R&D. This prior SLFM track record does not need to have been in RDI-intensive technologies, but would involve similar investment values ('ticket sizes').
  - (iv) <u>Track Record in Patience with Capital</u>: the SLFM's demonstrated commitment to endure the long gestation periods required to scale R&D and RDI-intensive technologies. This prior SLFM track record does not need to have been in RDI-intensive technologies, but would involve similar investment values ('ticket sizes').

(v)	Absorption and Utilisation Capacity. The SLFM would be evaluated for its ability to effectively invest capital contributions received, in private investees.

Table D.1 | Quality Selection Criteria for Commercial SLFMs

S.	Selection Criteria	Measures	Weight	Score
Nos.	( <u>Options</u> , to be selected for respective cohort by Executive Council)	( <u>Examples</u> , to be selected by Executive Council)	(Set by Executive Council) Example values:	(TBD by Executive Council) Example values, to be kept constant across cohorts:
	·	neral Competence: Managing Investments and Operational Risks for Scaled Returns <u>e options</u> listed below, as deemed fit by the Executive Council on advice of the Expe		nmittee.)
1	Fund Management Team Competence: General capability of the SLFM team in managing investments and operational risks, investees in the technology sector (irrespective of R&D/ RDI-intensive technology specialisation)  For AIFs:	Qualitatively assessed and scored, based on expert evaluation of (for example)  - Team profiles  - Successful scaling of operations at technology firms or prior fund investees  1. AIFs: Teams, for  - experience leading deals and exits for technology firms;  - successful scaling of operations at technology firms;  - ability to build strong teams with low attrition;  - ability to build strong processes for consistent investment performance and risk management;		

	Destructional techniques of	to the control of the	
	Professional background of	- track record of having raised third party capital.	
	General Partners and Principals (or		
	equivalent): successful investors,	Note. These would normally be evaluated for the Fund organisation. In cases where a	
	founders, managers, technologists.	new Fund is being established, these may be evaluated for the individuals forming the	
		new Fund.	
	Skillsets: expertise, experience,		
	and success related to (for	2 <u>DFIs / NBFCs</u> : organisation's	
	example)	- credentials	
	<ul> <li>Managing founder teams,</li> </ul>	- management team and board: track record and experience	
	to ensure robust teams,	- experience in RDIF Priority Sectors	
	scaled operations, and	- project financing experience: manufacturing, working capital.	
	strong returns		
	<ul> <li>Emerging technologies</li> </ul>	3. In common across AIFs, DFIs, NBFCs:	
	<ul> <li>Product management</li> </ul>	- Key personnel's track record related to functions such as deal-sourcing, due	
	<ul> <li>Finance and investment</li> </ul>	diligence / evaluation, portfolio management, exits;	
	- Building and maintaining	- Combined team (including advisory boards) for domain expertise in technologies /	
	mentoring networks	sectors;	
	For DFIs: organisation's		
	credentials and management team	4. Where quantitative criteria are considered essential, the following may be explored:	
	experience.	1. Combined number of person-years of experience in technology and investment, in	
		RDIF	
		- Priority sectors, in India	
		- Technology Readiness Levels / venture development stages	
		Total number of funds from which successful exits have taken place	
		3. Internal rates of return (IRR) / distribution to paid-in capital (DPI) across previous	
		Funds: mean values; standard deviations (to verify consistent performance)	
		4. Number of years that Fund Management Team have worked together	
2	Demonstrated Track Record of	Net Internal Rate of Return (IRR) over	
	Investment Management	- last two Funds (for AIFs) or	
	Competence. Success and	- the last 10 years (for DFIs / NBFCs) (annualised return of Fund to LPs)	
	consistency in delivering prior		
	Funds, through	AND / OR	

- Repeatable processes
- Robust execution
- Effective risk management

2. Multiple on Invested Capital (MOIC) over previous two Funds (for AIFs) (what multiple of the invested money was actually returned)

#### AND/ OR

- 3. Distributions to Paid-In Capital (DPIC) over
  - last two Funds (for AIFs) (realised returns cash actually distributed to LPs)
  - last 10 years (for DFIs / NBFCs)

#### AND/ OR

4. Yield on Loans or Portfolio Yield over previous two funds (for debt AIFs) (average interest rate earned on the outstanding loan portfolio, measuring income generated from Debt AIF's investments)

#### AND/OR

5. Vintage Year Performance (AIF's performance against other funds in the same First Close year)

#### AND/OR

6. Default Rates or Non-Accrual Loans (for debt AIFs, DFIs, NBFCs) (percentage of loans in portfolio that are unable to make repayments as scheduled – as a measure of robustness of execution and risk management)

#### AND/ OR

7. Recovery Rates (for, DFIs, NBFCs) (percentage of the principal and accrued interest amounts recovered from loans that are in default e.g. via liquidation of assets, etc. – measuring robustness of SLFM's measures against downside.

	Part B   R&D and	d RDI-Intensive Technology Focus: Orientation and Competence to Execute RDIF Man	ndate	
	(RDIF may select <u>any or more of the</u>	options listed below, as deemed fit by the Executive Council on the advice of the Exp	ert Advisory Comm	ittee.)
3	Investment Thesis (which may be part of the Private Placement Memorandum): alignment with RDIF Investment Policy.	Qualitatively assessed and scored, based on expert evaluation against RDIF Investment Policy criteria. Scoring would take place against  1. Alignment with RDIF R&D / RDI-intensive technology and Priority Sectors		
	RDIF IIIVestillerit Folicy.	- Focusses only on R&D / RDI-intensive technology and only in RDIF Priority Sectors (Score A)		
		- Focusses only on R&D / RDI-intensive technology in RDIF Priority Sectors plus other Sectors (Score B)		
		- Focusses on R&D / RDI-intensive technology and other sources of value in RDIF Priority Sectors plus other Sectors (Score C)		
		Based on the scale adopted by the Executive Council, the final value of A, B, and C shall be decided. However, A > B > C shall be maintained.		
		Technology maturity ranges specified in the RDIF Investment Policy (TRL 4+)		
		3. Venture development stage (laboratory spin-out to production)		
	Track Record in R&D Scale Up and RDI-Intensive Technology Competence.  Demonstrated competence with the high-	While Indian AIFs / DFIs / NBFCs have limited experience with R&D-intensive RDI-intensive technology, Fund Management teams that have achieved the following would be highly scored:		
	uncertainty investments characterising RDI-intensive	At least <b>one</b> exit from an RDI-intensive technology firm:		
	technology – at the TRLs concerned.	AND/OR		

		At least <b>two</b> prior investments in RDI-intensive technology firms.	
	This would include technology		
	stage / maturity, advanced science		
	bases, 'hockey-stick' valuation		
	growth (long low period, followed by		
	exponential increase).		
_	Total Describing to the second Circumstance of	Till to Oir view view Free to (for AIF)	
5	Track Record in Investment Sizes	Ticket Sizes in previous Funds (for AIFs) or across the previous five years (for DFIs /	
	for R&D Scale Up. Demonstrated	NBFCs):	
	competence with the size of investments needed to scale-up	1. Average value across previous Funds (for AIFs) or across the previous five years (for	
	R&D.	DFIs / NBFCs): indicating general familiarity with managing investment ticket sizes in the	
	Nab.	RDIF's target range;	
		TYDII 3 target range,	
		2. Modal value across previous Funds (for AIFs) or across the previous five years (for	
		DFIs / NBFCs): indicating consistent ability to manage these ticket sizes	
		, , , , , , , , , , , , , , , , , , , ,	
		3. Trends (longitudinal) across previous two Funds (for AIFs) or across the previous five	
		years (for DFIs / NBFCs).	
6	Absorption and Utilisation	Percentage of previous Fund committed to investees.	
	Capacity. Ability to effectively		
	invest capital contributions		
	received, in companies including		
	startups.		

- 5. QCBS Quality Criteria for Focused Research Organisations. Focused research organisations (FROs) are defined by a specialised focus on particular technologies, sectors, or innovation functions. In India, they are typically attached to public academic or research institutions. Reflecting their institutional nature and specialised functions, RDIF
  - 5.1. Selects FRO SLFMs on the basis of nomination by EGoS, on the recommendation of the Executive Council;
  - 5.2. Supports such nominations with competitive quality-based selection criteria that are tailored to the specific requirements of technology, sector, or innovation function concerned;
    - Except for statutory / autonomous institutions of the Government of India, which may be directly nominated by the EGoS, on the recommendation of the Executive Council.
- **6. Selection Process.** RDIF executes QCBS through the following process. This presumes (a) a 15-year cycle of investment and returns, to be repeated across RDIF overall 50-year lifespan, and (b) a 6-year commitment period from Year 1 to Year 6 of each cycle.
  - 6.1. Step 1: Notice Inviting Applications and Bid Submission. RDIF releases Notes Inviting Applications (NIAs) to become SLFMs from Year 1 to Year 6 of its first cycle. Following a cohort-based approach (at a frequency to be decided by the RDIF), these are released periodically during each financial year.
    - (i) NIA Formulation. The RDIF shall draft NIAs to reflect
      - (a) Sectors, sub-sectors, and types of projects (not specific projects by SLFMs) approved by the EGoS, and updated in the RDIF Investment Policy;
      - (b) Quality criteria as listed above;
      - (c) Cost criteria as listed above.
    - (ii) <u>NIA Publication</u>. RDIF must maximise awareness of its NIAs in an open and transparent process, including via public advertisement and upload to its public digital channels.
      - (a) Simultaneously, the RDIF may ensure that the most competent Indian SLFMs are available for consideration.

- (b) RDIF may proactively reach out to highly-regarded AIFs, focused research organisations (FROs), development finance institutions (DFIs), and non-banking finance corporations (NBFCs), to encourage their application to the open NIA process
- (iii) <u>Bid Submission.</u> Organisations interested in becoming RDIF SLFMs provide bid documents details to the RDIF in bid documents. These shall include
  - (a) Due diligence information as may be specified by the RDIF, including supporting documents (such as Indentures of Trust for the AIF Trust, Articles of Association and Memoranda of Agreement for Investment Managers, etc.);
  - (b) Quality criteria template information as selected by the RDIF from the options provided above, including supporting documents;
  - (c) Cost criteria template information following the specification above;
  - (d) Any other information as advised by the Expert Advisory Committee.
- 6.2. <u>Step 2: Screening and Investment Memorandum Preparation by RDIF.</u> The RDIF shall:
  - (i) Conduct a detailed verification, review, and analysis of the Bid Documents, and all supporting material; seeking clarification or additional information where needed from applicants;
  - (ii) Screen applications for basic compliance with NIA information and due diligence requirements;
  - (iii) For those Bids clearing such screening: drafts Investment Memoranda summarising key details (and seeking clarification where needed from applicants) from the verification and review;
  - (iv) Provide these Investment Memoranda accompanied by supporting Bid Documents to the Executive Council for its consideration along with the specific advice of the Expert Advisory Committee, if any.
- 6.3. Step 3: Evaluation and Recommendation by the Expert Advisory Committee. The Expert Advisory Committee may invite applicants to make presentations on their suitability for RDIF funding.
  - (i) The Expert Advisory Committee evaluates and scores the suitability of applicants, and recommend SLFMs for selection, on the basis of:

- (a) Cost, following broad criteria outlined above;
- (b) Quality, following broad criteria outlined above.
- (ii) The Executive Director, RDIF shall document the recommendations of the Expert Advisory Committee regarding the selection process and submit them to the Executive Council for its consideration.
- 6.4. <u>Step 4: Executive Council Recommendations</u>. The Executive Council, after due deliberations on the submitted proposals, may recommend a list of SLFMs to EGoS for final approval.
- 6.5. <u>Step 5: EGoS Approvals.</u> EGoS shall consider the recommendations of the Executive Council and record its decisions and approvals accordingly.
- 6.6. Step 6: Provisional Letter of Intent and Contribution/Loan Agreement.
  - (i) To support SLFMs in raising further private capital for RDI-intensive technology investment, the RDIF shall issue a Provisional Letter of Intent to the SLFM within a reasonable time-period.
  - (ii) Upon receipt of the Contribution/ Loan Agreements executed by the SLFM with private investors, the RDIF shall, within a reasonable time-period, finalize and execute its own Contribution/ Loan Agreement with the SLFM.

#### Appendix 1

#### **Design & Monitoring Framework**

#### Research, Development, and Innovation (RDI) Scheme

#### As Approved by Union Cabinet

#### Impact the scheme is aligned with:

To mobilize private investments in R&D sector and thereby increase the total investment in R&D from present (~0.65%) to more than 1% (world average being ~2.7%).

Enhanced Indian research and innovation ecosystem in priority sectors, aligned with the vision of recent Union Budgets and India's long-standing R&D/STI Policies, focusing on technological advancement for *Atmanirbhar* Bharat.

RESULTS CHAIN	PERFORMANCE INDICATORS WITH TARGETS AND BASELINES	DATA SOURCES AND REPORTING MECHANISMS	RISKS	
Outcome Innovation performance and global ranking, Productivity growth, Economic Impact including high-tech exports, increased development, piloting, and commercialization of indigenous R&D solutions in strategic and emerging technology sectors.	1. Change in India's ranking in the Global Innovation Index (GII) published by the World Intellectual Property Organization (WIPO)  2. Changes in Total Factor Productivity linked to innovation including the diversity of the number of projects in sunrise sectors supported annually and aligned with national priorities  3. Direct and indirect jobs created in innovation and high-tech sectors  4. Participation of skilled Indian diaspora (reverse brain drain) attracted into the underlying investee entities of RDIF  5. Enhanced national strategic autonomy in critical sectors and technologies  6. Strengthening of domestic supply chains and reduced import dependency  7. Contribution to improved health and social indicators through innovation-led solutions  8. Improvement in the overall R&D ecosystem in India: Improvement in India's	SPF to create digital system for providing data on the following points: -  1. Project progress reports;  2. TRL assessments by technical committees  3. MOUs, partnership agreements,  4. Fund disbursement records  5. Patent records data;  6. Tracking companies and their products being launched with technologies emerging out of RDI funding	1. High risk of financing including high chances of failure of technologies and companies leading to potential loss of capital.  2. Long gestation periods for maturity of technologies and low TRL maturity  3. Ability to attract top talent from private sector, Indian diaspora overseas etc. as well as managing the conflict of interest in such cases  4. Possibility of private sector funds/companies being concerned in availing investments from 100% government owned funds  5. Multiple stages of funding requirement even in situations where desired outcomes are not achieved.	

	rank in indices related to	6. In Deep Tech,
	research development	failure of
Output	Financial parameters:     Amount sanctioned from     1st level custodian to 2 <sup>nd</sup> level manager annually;	companies between Seed stage to Series A funding is 95%. 7. Low private sector
	b) Downstream investment commitment by 2 <sup>nd</sup> level fund manager to the individual project	participation in co- funded R&D projects 8. Delays in fund
	c) IRR of the underlying funds/investments	disbursal due to delay in identification of
	Giving impetus to the R&D ecosystem: Number of projects supported annually, total and sector wise	projects  9. Weak IP protection and commercialization pathways  10. Lack of accessible
	3. Intellectual Property (IP) Generation: Number of patents, copyrights, or other IP assets registered annually from the funded projects (benchmarked against Industry average for patent filings in the specific science and technology domain)	datasets 11. Ethical concerns and data privacy
	4. Technological Advancement: Number of prototypes, proof-of- concepts, or innovations developed from the funded projects over the years measured relative to the Technological Readiness Level (TRL) of the projects at the time of sanction. Other relevant parameters such as commercial readiness, market readiness etc. to be considered as well.	
	5. Commercialization and Industry Impact: Number of projects leading to market-ready products or collaborations with industries resulting from the funding projects.	
	6. Catalysing private/commercial capital for R&D: Amount of private capital mobilized at the level of 2 <sup>nd</sup> level	

	Fund Manager(s) or at the project level.				
	7. Scheme sustainability: Number of projects which make it to commercial stage and the revenue of such units				
	8. Ability to create project viability and facilitate exists: Number of projects successfully exited at the end of 5/10/15 years				
	Key Activities	Milestones			
1. Scheme at	pproval by the competent authority	T0			
2. Preparatio including t selection of by 1st level broad para	<ol> <li>Preparation of detailed operational guidelines for the scheme including the process to be followed for selection of the projects, selection of 2<sup>nd</sup> level fund managers, type of funding to be provided by 1<sup>st</sup> level custodian to different typed of 2<sup>nd</sup> level fund manager, broad parameters for type of funding from 2<sup>nd</sup> level fund manager to individual projects by Q1 of FY25-26</li> </ol>				
<ol><li>Preparatio implement</li></ol>	n of Liberalized Financial Rules for scheme ation	T2 = T0 + 8 weeks			
4. Scheme La	aunch	T3 = T1 + 4 weeks			
5. Formation	5. Formation of Special Purpose Fund (SPF) within ANRF				
6. Putting in լ	place an independent business unit	T5 = T0 + 15 weeks			
	7. Setting-up a digital mechanism for tracking the financial and technical parameters of performance of the projects				
8. Selection a	8. Selection and approval of 2 <sup>nd</sup> level Fund Managers				
9. Formation	of 2 <sup>nd</sup> Level Fund	T8 = T6 + 4 weeks			
	<ol> <li>Staffing of 2nd-Level Fund Managers and formation of Investment Committees</li> </ol>				
11. Scheme O	11. Scheme Outreach				
12. Release of	f Funds from CFI to SPF	T11 = T6 + 2 weeks			
Inputs					
<ol> <li>Rs 1 lakh crore budgetary allocation over a period of 6 years</li> <li>Rs 20,000 crore budgetary allocation for FY 2025-26</li> <li>Staff for the SPF</li> </ol>					

3) Staff for the SPF



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