Maximum Governance, Minimum Government

A Consolidated Framework for Indian Ministerial Restructuring

This document consolidates the full set of restructuring proposals developed so far, updated to reflect the latest refinements: an independent Prasar Bharati on the NHK/BBC model, UIDAI's transfer to the Ministry of Home Affairs, a Public Prosecution Service under the Ministry of Law and Justice, a Ministry of Finance rebuilt on the Japan–Korea–Singapore–US Treasury model, a Ministry of Commerce and Industry (DPIIT) rebuilt on Japan's METI model, a Singapore-style split between digital policy and digital delivery (PMO Office of Digital Government, Ministry of Media Development & Information, and the Digital India Corporation as India's GovTech equivalent), and the split of the Indian Forest Service into a production-forestry service and a national park/wildlife service.

Note: This is a policy design exercise exploring institutional models, not a proposal describing any actual or pending Government of India decision.

1. Ministry of Education & Science

Concept: merge the Ministry of Education (MoE) and the Ministry of Science and Technology (MoST) into a single pipeline running from K-12 through higher education into advanced industrial research.

1.1 Core Departments

Department of School Education and Literacy (from MoE)

Department of Higher Education (from MoE)

Department of Science and Technology (DST) (from MoST)

Department of Biotechnology (DBT) (from MoST)

Department of Scientific and Industrial Research (DSIR) (from MoST)

1.2 Regulatory & Funding Agencies

University Grants Commission (UGC)

All India Council for Technical Education (AICTE)

Anusandhan National Research Foundation (ANRF)

National Testing Agency (NTA)

Central Board of Secondary Education (CBSE)

National Council of Educational Research and Training (NCERT)

National Council for Teacher Education (NCTE)

1.3 Innovation & Technology Transfer Boards

Technology Development Board (TDB)

Biotechnology Industry Research Assistance Council (BIRAC)

MoE's Innovation Cell (MIC)

National Innovation Foundation (NIF)

Technology Information, Forecasting and Assessment Council (TIFAC)

1.4 Premier Institutions & School Systems

Institutes of National Importance: IITs, NITs, IIITs, IISERs, IIMs

Central Universities (Delhi University, JNU, BHU, etc.)

Kendriya Vidyalaya Sangathan (KVS)

Navodaya Vidyalaya Samiti (NVS)

Eklavya Model Residential School

National Institute of Open Schooling (NIOS)

1.5 National Laboratories & Autonomous Research Institutes

Council of Scientific and Industrial Research (CSIR) — 37 national labs

Indian Association for the Cultivation of Science (IACS), Kolkata

Raman Research Institute (RRI), Bengaluru

Bose Institute, Kolkata

Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST)

Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)

Science academies: INSA, NASI

2. Digital Governance Architecture

Following Singapore's separation of policy leadership from operational delivery, digital governance is split three ways: strategic coordination at the PMO, policy and legislation at a dedicated ministry, and engineering delivery at an executive technology agency.

2.1 Prime Minister's Office — Office of Digital Government

A PMO-level coordination office, not a ministry, responsible for whole-of-government direction:

National digital transformation strategy

Digital government standards and enterprise architecture

AI adoption across ministries

Digital public infrastructure (DPI) governance

Cross-ministerial digital projects and performance monitoring

Coordination of flagship digital initiatives

2.2 Ministry of Media Development & Information

The political ministry, merging the current Ministry of Communications, MeitY, and the Ministry of Information & Broadcasting's policy functions:

Digital government policy

Telecommunications policy and spectrum

Digital economy and AI policy

Cybersecurity policy

Media and broadcasting policy

Open government data policy

Digital identity policy is carved out of this ministry and placed with Home Affairs — see 2.5 below.

2.2.1 Core Administrative Departments

Department of Digital Infrastructure & Telecommunications: 5G/6G spectrum, semiconductor manufacturing, broadband rollout (from DoT and MeitY's electronics manufacturing division).

Department of Digital Economy & e-Governance: software, AI, and digital public infrastructure (from MeitY).

Department of Media & Public Communications: public broadcasting policy and content regulation (from I&B;).

Department of Postal Services: e-commerce logistics and rural digital banking (from the Department of Posts).

2.2.2 Single Mega-Regulator — Infocomm Media Regulatory Authority

TRAI's regulatory function and I&B;'s broadcast/content directives merge into one converged regulator — modelled on Singapore's IMDA or the US FCC — covering network operators (Jio, Airtel), broadcasters (Star, Zee), and digital platforms (Netflix, YouTube) under a single compliance framework.

2.3 Digital India Corporation (DIC) — India's GovTech Equivalent

Rather than standing up a new executive agency, the existing Digital India Corporation is converted directly into India's GovTech-equivalent — shifted from a strategic-advisory company into a centralised engineering powerhouse, statutorily empowered under the Ministry of Digital Development & Information and working directly with the PMO's Office of Digital Government.

2.3.1 Structural changes required

Consolidate tech mandates: grant DIC statutory authority over all government IT infrastructure, removing fragmented agency-by-agency procurement.

Build in-house engineering: shift from outsourcing to private vendors toward hiring internal software engineers, data scientists, and product managers as career civil technologists.

Create an agile product unit — "DIC Labs": an internal incubation team modelled on Singapore's Open Government Products (OGP), bypassing traditional RFP tenders to build open-source tools and test them directly with citizens.

Standardise whole-of-government architecture: empower DIC to enforce uniform UI/UX standards, security protocols, and data-sharing APIs across every ministry and state department.

Establish tech talent pipelines: competitive, market-rate tech salaries and specialised public-sector tech fellowships to attract and retain top-tier engineering talent.

2.3.2 Bodies absorbed or deeply integrated into DIC

National Informatics Centre (NIC): its data centres, web-hosting infrastructure, and network backbone are absorbed wholesale, giving DIC direct control of the foundational government cloud.

National e-Governance Division (NeGD): its project-management function and digital-literacy initiatives merge fully into DIC's core operations.

MyGov, DigiLocker, and specialised AI units: brought under one unified execution team rather than run as separate platforms with separate vendors.

MeitY's R&D; societies — C-DAC and SAMEER: absorbed or closely aligned so DIC can draw on localised hardware and software research rather than commissioning it externally.

State-level tech agencies (Webel, Keltron, MahaIT, and equivalents): given direct, mandatory reporting lines into DIC for federal architectural alignment, without necessarily dissolving their state-level identity.

This absorption is what makes DIC a genuine GovTech equivalent rather than a coordinating body: Singapore's GovTech itself was formed by merging several legacy IT agencies, not by adding a new layer on top of them.

2.3.3 Product suite — mapped against Singapore's GovTech

Digital identity & verification (Singpass/CorpPass equivalent): Aadhaar and DigiLocker are expanded and integrated with UMANG into one unified consumer app supporting biometric authentication, high-security digital signatures, private-sector sign-in, and a CorpPass-style corporate identity layer (linked to MCA/e-Biz filings).

Whole-of-government data sharing (APEX equivalent): the National Data Sharing and Accessibility Policy (NDSAP) and API Setu are scaled into a mandatory, government-wide "once-only" data principle — a single API gateway so no citizen submits the same document twice to two different agencies.

Citizen notification & interaction (Postman/FormSG/GovWallet equivalent): Direct Benefit Transfer and Jan Dhan rails are integrated into a central omnichannel communications fabric, alongside a standard agile form-builder so any ministry or panchayat can launch secure public forms without independent vendor procurement.

Consolidated citizen services (LifeSG equivalent): UMANG is re-engineered from a directory of 1,000+ siloed ministry services into a life-event-driven platform — registering a birth automatically generates the birth certificate, opens a DigiLocker record, and schedules immunisations, rather than requiring separate applications.

Government cloud & infrastructure (Government Commercial Cloud equivalent): MeghRaj is upgraded from NIC-hosted physical servers into a dynamic, multi-tenant commercial-cloud procurement layer (AWS/Azure/GCC-style) with automated security compliance for every state department.

Engineering & agile delivery (Open Government Products equivalent): DIC Labs — see 2.3.1 above — is the institutional answer to OGP, an autonomous unit shipping citizen-facing prototypes at Singapore's pace rather than through multi-year tenders.

2.3.4 Governance relationship

PMO Office of Digital Government → sets strategy, standards, and cross-government coordination

Ministry of Digital Development & Information → sets policy, legislation, funding, and statutory authority for DIC

Digital India Corporation (DIC) → absorbs NIC/NeGD/MyGov/DigiLocker/C-DAC/SAMEER, builds in-house engineering capacity, and designs, builds, and operates the platforms and shared technology services listed above

2.4 Agencies Retained or Merged

Digital Public Infrastructure & Security

CERT-In: broadened mandate covering telecom grids and broadcast infrastructure, not just IT networks

NIC (National Informatics Centre): fully absorbed into the Digital India Corporation — see Section 2.3.2 — rather than continuing as a separate body

R&D; and Technology Development

C-DAC and C-DOT: MeitY's supercomputing/software R&D; arm and MoC's telecom R&D; arm merge into a single advanced computing and telematics research institute.

Media, Broadcasting, and Government PR

PIB & MyGov: the government's PR wing (PIB, from I&B;) merges with MyGov (from MeitY) into a unified digital communications unit.

CBFC: the film censor board continues under the media policy wing.

2.5 Prasar Bharati — Independent Statutory Broadcaster

Rather than folding Doordarshan and All India Radio into the ministry's digital delivery teams, Prasar Bharati is instead strengthened as a genuinely independent

public-service broadcaster — structurally closer to Japan's NHK or the UK's BBC than to a government department.

Statutory insulation from ministerial direction on editorial and programming matters, funded through a dedicated licence-fee or parliamentary-grant mechanism rather than discretionary annual budgeting

A Board of Governors with fixed, staggered terms, appointed through an independent selection panel rather than direct executive nomination

Public accountability through a published charter (editorial standards, public-service remit, grievance redressal) reviewed periodically by Parliament, not by the ministry

Operational and technical collaboration with the Digital India Corporation for digital distribution platforms — but governance, editorial control, and funding remain outside the ministry's chain of command

This distinguishes Prasar Bharati's governance model from every other agency in this document: it is deliberately placed outside ministerial control rather than consolidated under one.

2.6 UIDAI — Transfer to the Ministry of Home Affairs

UIDAI (Aadhaar) is moved out of the digital/media ministry entirely and placed under the Ministry of Home Affairs, reflecting its core function as a national identity and internal-security instrument rather than a digital-economy platform.

Aligns Aadhaar governance with other identity and residency instruments already under Home Affairs (passports/immigration coordination, population registers, internal security clearances)

The Digital India Corporation continues to provide the underlying engineering and hosting for the Aadhaar platform (as part of its absorbed DigiLocker/identity stack) under a service-level arrangement, but policy control, authentication-use approvals, and data-sharing rules sit with Home Affairs

Creates a clean separation: Home Affairs decides who may use identity data and for what; the Digital India Corporation operates the systems; the Ministry of Digital Development & Information regulates the broader digital-economy layer that consumes identity verification as a service

3. Ministry of Land, Infrastructure & Transport (MoLIT)

Concept: consolidate Road Transport, Railways, Civil Aviation, Ports/Shipping, and Housing & Urban Affairs into a single function-led ministry, on the model of Japan's MLIT.

3.1 Core Departments (organised by function, not mode)

Department of Land & Urban Development: housing, real estate, and urban planning (from MoHUA).

Department of Surface Transport: Indian Railways Board and MoRTH merged.

Department of Aviation & Maritime: Civil Aviation and Ports/Shipping merged.

Department of Logistics & Multi-Modal Integration: dedicated to PM Gati Shakti — roads, rail, and ports planned as one network.

3.2 National Infrastructure Authority

NHAI, RVNL/IRCON/DFCCIL, CPWD/NBCC, and AAI/IWAI are consolidated into a single statutory infrastructure-execution body, so that land acquired for a highway simultaneously secures right-of-way for rail, freight corridors, and fibre — rather than three agencies competing for the same land.

3.3 Urban Transit & Real Estate

Metro Rail Corporations (DMRC, Maha Metro, etc.) and the Town and Country Planning Organisation merge with the Rail Land Development Authority (RLDA) and suburban rail networks

Unified transit authorities design multi-modal logistics parks and transit-oriented development as a single blueprint rather than separate railway-station and metro-station planning

RLDA works directly with MoHUA's urban planners to monetise prime city-centre railway land

3.4 Regulators and Safety

DGCA and BCAS

Central-level Real Estate Regulatory Authority (RERA)

Commission of Railway Safety (currently oddly parked under Civil Aviation for independence)

National Transport Safety Board: a single NTSB-style investigator and safety-standards body across aviation, rail, road, and waterways.

3.5 Namo Bharat — National Water Infrastructure Agency

Modelled directly on the Japan Water Agency, sitting inside MoLIT rather than the environment ministry — infrastructure and regulation are kept structurally separate.

River basin management and multipurpose dams

Reservoir operation and bulk water transfer

Flood control infrastructure and irrigation canals

Navigation waterways and national water-infrastructure planning

Inter-state river infrastructure and urban bulk water supply

Namo Bharat builds and operates the physical water infrastructure; it does not regulate water quality or ecological health — that sits with the Ministry of Environment & Earth Science's Regional Environmental Offices (Section 4.4), which coordinate with Namo Bharat whenever pollution or ecological issues are detected on a river it manages.

4. Ministry of Environment & Earth Science (MEES)

Concept: merge the Ministry of Environment, Forest and Climate Change (MoEFCC) with the Ministry of Earth Sciences (MoES) into a single science-led environmental authority.

4.1 Core Departments

Department of Environmental Protection

Air quality, water quality, soil pollution, waste management, chemical safety, noise pollution

Department of Climate & Atmospheric Science

Climate policy, meteorology, carbon accounting, climate adaptation

Department of Biodiversity & Protected Areas

National Parks Board, National Institute of Biological Resources, wildlife conservation, ecosystem restoration

Department of Geological & Earth Systems

Geological Survey, seismology, coastal geology

4.2 Indian National Park & Wildlife Service (INPWS)

The wildlife/conservation half of the split Indian Forest Service (see Section 6), placed under MEES and modelled on Singapore's National Parks Board (NParks), the US National Park Service, and the Korea National Park Service.

Responsibilities:

National parks, wildlife sanctuaries, tiger reserves, biosphere reserves, wetlands

Wildlife conservation and biodiversity monitoring

Ecotourism, park interpretation, and visitor management

National Parks Board of India (NPBI): the executing agency for national parks, botanical gardens, urban biodiversity, nature education, protected landscapes, and habitat restoration.

4.3 Real-Time National Environmental Monitoring Network

A nationwide sensor and satellite-integrated monitoring system, with results published on a public dashboard, covering:

PM2.5, PM10, NO_2, SO_2, ozone, CO

River, lake, groundwater, and coastal water quality

Industrial emissions, noise, and radiation monitoring

4.4 Regional Environmental Offices

Modelled on South Korea's Ministry of Environment regional-office structure, giving MEES its own field-level enforcement arm rather than relying solely on state pollution control boards.

Industrial pollution inspection

Water quality inspection and river/lake monitoring

Air monitoring and waste-disposal inspections

Emergency environmental response

Environmental Impact Assessment (EIA) compliance checks

Continuous coordination with Namo Bharat (Section 3.5) whenever pollution incidents or ecological issues are detected on rivers and reservoirs under its management

MEES holds the power to check real-time pollutants nationally and to compel corrective action; Namo Bharat under MoLIT retains the infrastructure — dams, reservoirs, canals, and flood control — that the Regional Environmental Offices monitor.

5. Ministry of Agriculture & Rural Development — Indian Forestry Service

The Indian Forest Service is split into two distinct professional services with different parent ministries and different missions — production forestry versus conservation.

5.1 Indian Forestry Service (IFS)

Parent ministry: Ministry of Agriculture & Rural Development.

Responsibilities:

Production forests and commercial timber plantations

Social forestry and agroforestry

Bamboo mission and forest-based industries

Forest certification, rural forestry development, wood supply chain, forest economics

Works with:

State Forest Development Corporations

National Bamboo Mission

Wood and pulp industries

This service treats forestry as a managed economic resource, operating within environmental law but reporting through the agriculture and rural-development chain rather than the environment ministry.

5.2 The Conservation Half of the Split

The wildlife, national-park, and biodiversity half of the old Indian Forest Service becomes the Indian National Park & Wildlife Service under MEES — see Section 4.2 above. The split mirrors how Singapore separates commercial land-use agencies from NParks, and how the US separates the Forest Service (Department of Agriculture) from the National Park Service (Department of the Interior).

6. Ministry of Law and Justice

6.1 Unified Land Registry — Conclusive Titling

Transferring land registry functions from the executive (Ministry of Rural Development / State Revenue Departments) to the judiciary shifts India from Presumptive Titling to Conclusive Titling (the Torrens System), in which the registry itself judicially guarantees ownership.

Reorganising the core departments

Department of Land Resources (DoLR): severed from the Ministry of Rural Development and reconstituted as a core department under the Ministry of Law and Justice.

Sub-Registrar Offices (SROs): elevated from executive stamp-duty collectors to Judicial Land Registries, with registrars elevated to judicial officers who verify a clear chain of title before authorising transfer.

Merging courts and revenue boards

Judicial Land Tribunals: merge the executive mutation powers of State Revenue Departments (Tehsildars) with the adjudicatory powers of Civil Courts into a single specialised tribunal handling the entire lifecycle of a property title.

Digital infrastructure — Bhu-Aadhaar

The Digital India Land Records Modernization Programme (DILRMP) already assigns each parcel a 14-digit Unique Land Parcel Identification Number (ULPIN). Under judicial control, the DILRMP database becomes the legally binding National Land Ledger: once a citizen's name is linked to a ULPIN, ownership becomes absolute, and a state indemnity fund compensates any owner harmed by a state error on the ledger.

Immediate benefits

Plugs the litigation drain: property disputes account for roughly two-thirds of India's civil litigation, and verified-title registration removes fake registries and duplicate sales at the source

Frictionless credit delivery: banks can lend against a state-guaranteed ULPIN almost instantly rather than conducting weeks of title due-diligence

6.2 Public Prosecution Service

A new department under the Ministry of Law and Justice, modelled on Japan's Public Prosecutors Office and China's Public Prosecution Service — a unified, professionally independent prosecutorial cadre distinct from the police and from the executive-appointed Public Prosecutor system currently used at the district level.

A dedicated all-India prosecution cadre recruited and promoted on its own service track, rather than being appointed piecemeal by state governments

Functional separation from the police: prosecutors, not investigating officers, decide whether to file charges and how to run a case in court

A hierarchical structure — District Public Prosecutors, State Directorates of Prosecution, and a national Directorate of Public Prosecution — mirroring Japan's Local/High/Supreme Public Prosecutors Offices

Prosecutorial discretion guidelines published centrally, to bring consistency to charging decisions and plea arrangements across states

Coordination with the CBI and state police for major and economic-offence cases, without the prosecution service itself sitting inside the police hierarchy

This keeps the judicial land registry (6.1) and the prosecution function (6.2) as two structurally separate departments within the same ministry — one civil/administrative in character, the other criminal-justice in character.

7. Ministry of Finance

Restructured on a composite model drawing on Japan's Ministry of Finance, South Korea's Ministry of Economy and Finance, Singapore's Ministry of Finance, and the US Department of the Treasury — separating fiscal policy, revenue administration, financial-sector oversight, and international finance into distinct bureaus reporting to one minister, rather than the current more diffuse arrangement across DEA, DoR, DIPAM, and the Department of Financial Services.

7.1 Budget & Fiscal Policy Bureau

Modelled on Japan's Budget Bureau and Korea's Budget Office function.

Union Budget preparation and fiscal-deficit management

Medium-term fiscal policy and public-expenditure review

Centre–state fiscal transfers, in coordination with the Finance Commission

7.2 Revenue & Tax Policy Bureau

Modelled on Japan's Tax Bureau and the US Treasury's Office of Tax Policy, absorbing the current Department of Revenue's policy functions (CBDT and CBIC continue as operational tax-administration bodies under this bureau).

Direct and indirect tax policy design

GST Council secretariat support and coordination

Tax treaty negotiation and international tax policy

7.3 Financial Sector & Markets Bureau

Modelled on Japan's Financial Services Agency liaison function and Singapore's MOF financial-sector policy arm, absorbing the Department of Financial Services' policy role (bank/insurance/pension regulators — RBI, IRDAI, PFRDA, SEBI — remain independent regulators, but sector policy and legislation are coordinated here).

Banking-sector policy, public-sector bank capitalisation and governance

Insurance and pension-sector policy

Capital markets policy coordination with SEBI

Financial inclusion strategy

7.4 International Finance Bureau

Modelled on Japan's International Bureau and the US Treasury's Office of International Affairs.

Sovereign external borrowing and multilateral development bank relations (World Bank, ADB, AIIB, NDB)

Currency and exchange-rate policy coordination with the RBI

G20 finance track and bilateral economic dialogues

7.5 Public Assets & Investment Bureau

Absorbing DIPAM's disinvestment and asset-monetisation function, modelled on Singapore's Temasek-style sovereign asset oversight (though Temasek itself is a separate holding company, not a ministry department).

Strategic disinvestment and privatisation policy

Public-sector enterprise capital restructuring

National asset monetisation pipeline

7.6 Customs & Border Revenue

Modelled on the US Customs and Border Protection's revenue function and Japan's Customs and Tariff Bureau — continuing under CBIC's operational control but reporting through the Revenue & Tax Policy Bureau for policy purposes.

Customs tariff policy and trade-facilitation administration

Anti-smuggling and revenue-fraud enforcement

8. Ministry of Trade and Industry (METI Model)

The Department for Promotion of Industry and Internal Trade (DPIIT) and the Ministry of Commerce & Industry's other functions are restructured on the model of Japan's Ministry of Economy, Trade and Industry (METI) — a single ministry spanning industrial policy, trade policy, energy resources, and small-enterprise support, rather than industry, energy, and MSMEs sitting in separate ministries as they largely do today.

8.1 Economic and Industrial Policy Bureau

Overall industrial strategy, national manufacturing policy, and the Production-Linked Incentive (PLI) framework

Industrial statistics and economic analysis

Competitiveness policy and structural-adjustment support for declining sectors

8.2 Trade Policy Bureau

Bilateral and multilateral trade negotiation (FTAs, WTO)

Export promotion and trade-remedy measures (anti-dumping, safeguards)

Coordination with the Ministry of External Affairs on economic diplomacy

8.3 Manufacturing Industries Bureau

Sector-specific industrial policy: automobiles, electronics, machinery, chemicals, textiles

Industrial standards and quality-control coordination with the Bureau of Indian Standards

Special Economic Zones and industrial-corridor development

8.4 Commerce and Digital Economy Bureau

Domestic commerce policy and retail/e-commerce regulation

Consumer-facing digital-commerce policy (coordinating with the Ministry of Digital Development & Information on platform regulation)

Ease of Doing Business reform and single-window clearance systems

8.5 Agency for Natural Resources and Energy

Modelled directly on METI's Agency for Natural Resources and Energy — absorbing core energy-policy functions currently split across the Ministry of Power, Ministry of Petroleum & Natural Gas, and Ministry of New & Renewable Energy.

Energy security policy: oil, gas, coal, and strategic petroleum reserves

Power-sector policy and grid planning

Renewable-energy policy and the energy-transition roadmap

8.6 Small and Medium Enterprise Agency

Modelled on METI's SME Agency, absorbing the current Ministry of MSME.

MSME credit and formalisation policy

Cluster development and industrial-estate support

Startup and small-manufacturer technology-adoption schemes

8.7 Patent Office / Intellectual Property Bureau

Modelled on the Japan Patent Office's placement within METI — the Indian Patent Office, Trademarks Registry, and Copyright Office (currently under DPIIT and the Ministry of Commerce) continue under this ministry rather than being split off.

Patent, trademark, design, and copyright administration

IP policy coordination with trade negotiations (TRIPS-plus commitments, pharmaceutical IP policy)

9. Institutional Consolidation Map

The sections above establish which ministry owns which function. This section goes one level deeper: which of India's existing autonomous bodies, institutes, and boards physically merge into which new super-institutions, ministry by ministry — reducing a long tail of narrowly-scoped bodies into a smaller number of mission-oriented institutions, on the consolidation model used by South Korea and Japan.

9.1 Ministry of Environment & Earth Science (MEES)

9.1.1 National Institute of Biological Resources

Modelled on South Korea's National Institute of Biological Resources.

Merges the Botanical Survey of India (BSI) and the Zoological Survey of India (ZSI)

Divisions: Botany, Zoology, Genetics, Biodiversity Database, Taxonomy, DNA Barcoding, National Biodiversity Information Centre

9.1.2 National Institute of Environmental Science

Merges the National Environmental Engineering Research Institute (currently under CSIR), the Environmental Information System (ENVIS), the Centre for Mining Environment, the Centre for Environmental Management of Degraded Ecosystems, and the Centre of Excellence in Environmental Economics

Research divisions: Air, Water, Soil, Waste, Environmental Chemistry, Environmental Economics, Environmental Technology

9.1.3 National Parks Board of India

Merges the National Tiger Conservation Authority, the Central Zoo Authority, the National Zoological Park, and the National Board for Wildlife

Also absorbs the National Biodiversity Authority and the Wildlife Crime Control Bureau

Takes direct management of National Parks, Wildlife Sanctuaries, and Biosphere Reserves — this is the executing agency underneath the Indian National Park & Wildlife Service described in Section 4.2

9.1.4 National Institute of Ecology

Merges the G.B. Pant National Institute of Himalayan Environment, the Centre for Ecological Sciences, SACON (Sálim Ali Centre for Ornithology and Natural History), and the Tropical Botanic Garden & Research Institute

Research areas: Ecology, Wetlands, Mountains, Forest Ecology, Birds, Climate Adaptation

9.1.5 National Chemical Safety Centre

Merges chemical-safety functions, hazardous-waste laboratories, and chemical-accident response capacity currently scattered across CPCB and state bodies

9.1.6 National Environmental Human Resources Development Institute

Merges environmental training programmes, pollution-control training, and the environmental administration academy into one training institute — see also Section 9.7 below

9.1.7 National Environmental Monitoring Agency

Merges the CPCB monitoring network with air, water, noise, and satellite environmental monitoring into the single real-time monitoring body described in Section 4.3

9.1.8 Earth Science and Marine Environment (retained, coordinated under MEES)

The current Ministry of Earth Sciences' agencies continue largely intact but are coordinated as one Earth Systems Sciences Council under MEES, rather than merged into a single body:

India Meteorological Department, Bharat Forecast System, Indian Institute of Tropical Meteorology, National Centre for Medium Range Weather Forecasting

National Centre for Seismology, Earthquake Risk Evaluation Centre

National Centre for Polar and Ocean Research, National Institute of Ocean Technology, National Centre for Coastal Research, National Centre for Earth Science Studies

Indian National Centre for Ocean Information Services, Indian Tsunami Early Warning Centre, Centre for Marine Living Resources & Ecology

Drawing on the Korean Ministry of Oceans and Fisheries model, MEES additionally takes on marine-environment policy: marine spatial planning, marine conservation and ecology, coastal-ecosystem restoration, marine pollution control, and climate-and-ocean research — kept distinct from the fisheries and shipping functions that sit with MARD and MoLIT respectively.

9.2 Ministry of Agriculture & Rural Development (MARD)

9.2.1 Indian Forestry Research Institute (expanded ICFRE)

Merges the Indian Council of Forestry Research and Education, the Forest Survey of India, the Directorate of Forest Education, and the Indira Gandhi National Forest Academy

Research divisions: Forestry, Timber, Bamboo, Agroforestry, GIS, Forest Economics

9.2.2 National Forestry Development Corporation

Merges the National Afforestation & Eco-Development Board and the Andaman & Nicobar Islands Forest & Plantation Development Corporation

Responsibilities: commercial plantations, carbon forests, afforestation, and timber plantations — the commercial arm of the Indian Forestry Service described in Section 5.1

9.2.3 National Forestry University

Merges the Indian Institute of Forest Management with existing forestry training institutes, including the Indian Plywood Industries Research and Training Institute

9.2.4 Department of Fisheries & Aquaculture

Modelled on South Korea's Ministry of Oceans and Fisheries, this becomes MARD's dedicated fisheries department, covering:

Fisheries policy, fisheries resource policy, and fisheries science & technology

Aquaculture policy and the aquaculture industry

Fisheries welfare, cooperatives, marketing, and processing

Deep-sea fisheries, fishing-village development, and fishing-vessel safety policy

Local fishing harbours (larger commercial ports remain with MoLIT's ports function — see 9.3)

9.2.5 National Agriculture Quality Standards Authority (NAQSA) — Replacing AGMARK

AGMARK, in its current form, is too narrow for a ministry spanning agriculture, forestry, and fisheries. NAQSA replaces it with a comprehensive national standards system modelled on Japan's JIS (Japanese Industrial Standards) and Korea's KS mark, dedicated specifically to agriculture, forestry, fisheries, and food.

Absorbs AGMARK and the Directorate of Marketing & Inspection (DMI), along with existing national grading and agricultural certification functions

Certification mark: National Agriculture Quality Standards (NAQS) becomes India's official certification mark for these sectors, replacing AGMARK — parallel to how JIS functions in Japan and KS functions in Korea, but scoped specifically to biological and agricultural products.

Division of labour with BIS: the Bureau of Indian Standards remains India's standards body for industrial, engineering, electronics, construction, and consumer goods; NAQSA becomes the specialised standards authority for agriculture, forestry, fisheries, and livestock, avoiding overlap between the two.

NAQSA divisions:

Crop Standards, Horticulture Standards, Livestock Standards, Dairy Standards

Fisheries Standards, Forestry & Timber Standards, Organic Agriculture Standards

Agricultural Machinery Standards, Laboratory Accreditation, Inspection & Certification

Sector-specific certification marks beneath the NAQS umbrella:

NAQS Crop — crops and horticulture

NAQS Livestock (brand name: KAPE) — animal and livestock products, evaluated by the National Animal Products Quality Evaluation Authority below

NAQS Fisheries — fish and aquaculture

NAQS Forestry — timber, bamboo, and forest products

9.2.6 National Animal Products Quality Evaluation Authority (NAPQE / "KAPE India")

Modelled directly on South Korea's Korea Institute for Animal Products Quality Evaluation (KAPE) — a specialised public institution that evaluates and certifies livestock-product quality, rather than regulating the entire livestock sector. NAQSA sets

the livestock standard; this authority implements it through inspection, grading, and certification.

Responsibilities:

Carcass and meat-quality grading across beef, buffalo, pork, poultry, goat, and sheep

Milk quality certification, egg quality grading, wool grading, and leather raw-material grading

Livestock traceability, animal identification systems, and a national livestock information database

Slaughterhouse inspection, cold-chain quality certification, and animal-product export certification

Animal welfare auditing where required by standards

This creates a clean division within MARD's quality system: NAQSA (standards-setting, umbrella body) sets the rules; NAPQE/KAPE India and its sister evaluation authorities (crops, fisheries, forestry products) do the inspection and certification against those rules — mirroring how Korea separates standards bodies from sector-specific certification agencies.

9.3 Ministry of Land, Infrastructure & Transport (MoLIT)

9.3.1 Namami Bharat — expanded

Building on the Namo Bharat / Japan Water Agency concept in Section 3.5, the full consolidation absorbs a wider set of existing bodies:

National Mission for Clean Ganga, Central Water Commission, Central Ground Water Board, National Water Development Agency

Dam Safety Authority, Flood Forecasting functions, and the various River Basin Authorities

Functions: dams, reservoirs, rivers, canals, flood control, bulk water, and river-basin planning — with environmental regulation of these same rivers remaining with MEES's Regional Environmental Offices (Section 4.4), not with Namami Bharat itself.

9.3.2 Ports & Shipping

Drawing on Korea's Ministry of Oceans and Fisheries, MoLIT absorbs national port and shipping functions into a National Port Authority alongside the existing Airports Authority-style National Infrastructure Authority (Section 3.2):

Port development, port investment, port technology, and port safety

Coastal shipping, shipping logistics, and maritime transport

Navigation systems, smart ports, smart shipping, and maritime traffic management

Seafarer policy

Larger commercial ports sit with MoLIT's National Port Authority; small local fishing harbours remain with MARD's Department of Fisheries & Aquaculture (Section 9.2.4) — a deliberate split between commercial maritime infrastructure and rural fishing-community infrastructure.

9.4 Ministry of Media Development & Information

Confirms and extends the Digital India Corporation consolidation in Section 2.3: DIC absorbs the National Informatics Centre, MyGov's technology operations, and the government cloud, alongside NeGD, DigiLocker, C-DAC, and SAMEER as already described.

9.5 Ministry of Education, Science & Innovation

9.5.1 SPARK

SPARK (Science, Partnerships, Applied Research & Knowledge) is the agency that helps translate research and innovation into economic growth, public services, startups, and societal benefit — the technology-transfer and commercialisation bridge between the lab and the market. It merges bodies currently scattered across MoE and MoST:

MoE's Innovation Cell (MIC)

Technology Information, Forecasting and Assessment Council (TIFAC)

Technology Development Board (TDB)

National Innovation Foundation (NIF)

Biotechnology Industry Research Assistance Council (BIRAC)

9.5.2 National Research Council

Consolidates research-funding functions currently split across the Anusandhan National Research Foundation (ANRF) and other major competitive grant programmes into a single funding body, comparable to the US NSF or Korea's National Research Foundation.

9.5.3 ASTRA — Advanced Science and Technology Research Agency

ASTRA is modelled on the UK's Advanced Research and Invention Agency (ARIA) and the US's DARPA/ARPA-E family of agencies — a small, high-autonomy body funding high-risk, high-reward research that conventional peer-review funding (the National Research Council, Section 9.5.2) is structurally too conservative to back.

What distinguishes ASTRA from SPARK and the National Research Council:

SPARK: commercialises and diffuses research that already exists — technology transfer, startup support, industry partnerships.

National Research Council: funds investigator-led research through conventional competitive, peer-reviewed grants.

ASTRA: funds programme directors, not proposals — a small number of empowered leaders with multi-year budgets and the mandate to pursue speculative, high-variance bets (moonshot science and deep-tech) that would not survive a conventional grant-review process.

Design features carried over from ARIA/DARPA:

Small, flat organisation with a handful of empowered programme directors rather than a large standing bureaucracy

High tolerance for failure — most programmes are expected not to pan out, in exchange for the few that do having outsized impact

Fixed-term programme directors recruited from outside government, given real budget authority, and rotated out after a few years to keep the agency intellectually fresh

Exemption from standard public-procurement and grant-review timelines, to allow it to move at start-up speed

Focus areas set thematically (e.g., climate/energy moonshots, frontier AI safety and capability, biotechnology, quantum, advanced materials) rather than tied to any single existing ministry programme

ASTRA sits alongside SPARK and the National Research Council under the Ministry of Education, Science & Innovation, but is deliberately insulated from their governance processes — the entire point of the ARIA/DARPA model is that it cannot be run like a normal research-funding body.

9.6 Ministry of Trade & Industry

9.6.1 National Industrial Development Agency

Merges Invest India, Startup India, the National Industrial Corridor Development Corporation (NICDC), and existing industrial-cluster development programmes into a single investment-promotion and industrial-development body, sitting alongside the METI-style bureau structure in Section 8.

9.7 Cross-Cutting National Training Academies

Rather than each new institute running its own training wing, sector-specific civil-service training is rationalised into a small number of national academies:

Environmental Academy: environmental-officer training, pollution-control training, and wildlife-management training (feeds the National Environmental Human Resources Development Institute, Section 9.1.6)

Forestry Academy: forest-officer training, plantation management, timber-industry training, and forest GIS (feeds the National Forestry University, Section 9.2.3)

Digital Government Academy: NIC-legacy training, cybersecurity, AI in government, and digital-transformation training for civil servants across all ministries (feeds the Digital India Corporation, Section 2.3)

10. Human Capital & Governance Reforms

Institutional consolidation alone does not fix throughput and incentive problems inside education, the civil service, and skilled professions. This section addresses those directly: a single, twice-yearly national entrance examination; a restructured examination authority to run it; compensation reform for doctors and scientists; consolidated "mega schools"; growth-linked metrics for field civil servants; and a talent-repatriation programme for researchers abroad.

10.1 A Single, Biannual National Entrance Examination

India currently runs a proliferation of separate university-entrance examinations — JEE, NEET, CUET, UGC-NET, and various state-level exams — each with its own cycle, syllabus emphasis, and single annual sitting. This proposal merges them into one unified national entrance examination, on the model of China's Gaokao or Korea's CSAT (Suneung), but run twice a year rather than once.

Why twice a year, unlike Gaokao or CSAT:

A single annual sitting means a student who underperforms, falls ill, or has a family emergency on exam day loses a full year before they can try again. Two sittings a year cut that worst-case wait from twelve months to about six.

It also allows the university calendar itself to run two intakes a year (Section 10.1.2), so total system throughput increases without adding seats — a student who just missed a cutoff in one cycle can retake and join the very next semester rather than sitting idle for a year.

10.1.1 Structure

One unified exam replaces JEE, NEET, CUET, and CLATas the entry gateway into undergraduate and postgraduate higher education, with subject-specific papers/streams sat within the same overall examination window (engineering and medicine retain distinct subject papers, but under one administering exam rather than three separate agencies and three separate calendars)

Two sittings a year, timed to feed two semester intakes: a Spring-intake sitting and a Fall-intake sitting

A common national merit list and cutoff-setting process per sitting, so state and central institutions draw from the same ranked pool rather than running parallel admission cycles

10.1.2 Two-Semester Academic Calendar

The exam calendar is built around two full semester intakes a year rather than one, so that a student who was not ready — or not admitted — for one intake has a real second entry point six months later rather than a lost year.

The Fall-semester entrance exam is held in June or July — timed so that by the time Fall-intake students are ready to join, Spring-intake students are already in their second semester, keeping the two cohorts staggered rather than overlapping in the same first-year seats

Because the two intakes are offset by six months, the same campus infrastructure, hostels, and faculty effectively serve two overlapping but distinct cohorts across the year, improving capacity utilisation without doubling physical infrastructure

10.2 Restructuring the National Testing Agency

The National Testing Agency is rebuilt into a body with the scale and statutory authority of Korea's Korea Institute for Curriculum and Evaluation (KICE, which runs the CSAT) or China's National Education Examinations Authority (NEEA), rather than continuing as a conduct-only agency for a fragmented set of exams.

Sole statutory authority for designing, administering, and grading the unified biannual entrance examination described in 10.1

An in-house psychometrics and item-bank division — modelled on KICE — so question design, difficulty calibration, and year-on-year comparability are handled internally rather than outsourced

A dedicated security and integrity wing for exam-centre standardisation, anti-leak protocols, and biometric verification, reflecting the scale of leak-prevention infrastructure China's NEEA runs for the Gaokao

Direct data pipelines into the unified merit list and into university admission systems, removing the manual reconciliation currently needed across JEE/NEET/CUET/UGC-NET's separate result formats

This restructured NTA sits under the Ministry of Education, Science & Innovation, working alongside SPARK, the National Research Council, and ASTRA (Section 9.5), but with a distinct testing-and-assessment mandate rather than a research-funding one.

10.3 Compensation Reform for Doctors and Scientists

Public-sector doctor and scientist compensation is benchmarked against US compensation on a purchasing-power-parity (PPP) basis, rather than against nominal domestic pay scales alone — the same logic India already applies informally when discussing brain drain, made explicit as a pay-policy anchor.

Government Medical Officer, specialist, and senior-scientist pay scales are indexed to a PPP-adjusted fraction of equivalent US public-sector and academic-medicine compensation, reviewed on a fixed cycle rather than left to ad hoc pay commissions

Research-track scientists in CSIR labs, ICMR institutes, and central universities receive a comparable PPP-indexed research-track scale, distinct from general civil-service pay scales, so scientific careers are not capped by unrelated administrative-grade ceilings

Explicit objective: narrow the PPP-adjusted compensation gap that currently drives doctors and scientists to emigrate or move to the private sector, without requiring nominal parity with US dollar salaries

10.4 Mega Schools — Consolidating State-Aided and Government Schools

State-government-aided and state-government schools are merged into larger, better-resourced "mega schools," on the consolidation model China has used to close small, under-resourced rural schools in favour of larger, fully-equipped campuses.

Consolidation:

Small, under-resourced aided and government schools within a feasible commuting radius are merged into single larger campuses, each built out with the full range of facilities a well-resourced Chinese public school carries — laboratories, libraries, sports infrastructure, cafeterias, and boarding options where distances require it

Teacher autonomy:

Teachers are given flexibility to manage class scheduling and a defined portion of the curriculum within the national framework, rather than following a fully centrally scripted timetable

Teachers are removed from non-teaching administrative duties — election duty, census duty, routine data-entry tasks — that currently consume classroom time; they may still be deployed for genuinely minor, low-time-cost administrative tasks, but not as a routine substitute teaching staff for state bureaucracy

10.5 Growth-Linked Metrics for Field Civil Servants

District Magistrates, Sub-Divisional Magistrates, and Tehsildars are evaluated against measurable local economic and development metrics, on the model of the cadre-evaluation system China has used to link local-official promotion to GDP growth and development outcomes in their jurisdiction.

Formal scorecards tracking district/sub-division-level indicators: local GDP growth, industrial investment attracted, infrastructure project completion rates, ease-of-doing-business indicators, and social outcome measures (health, education, sanitation coverage)

Promotion and posting decisions for DMs, SDMs, and Tehsildars weight these scorecards alongside traditional seniority and examination-based criteria, rather than relying on seniority and generalist rotation alone

Published, comparable district-level dashboards so performance is visible across the cadre, not just to the reporting officer

This is the most institutionally sensitive proposal in this document — China's cadre-evaluation system also carries well-documented downsides (metric-gaming, short-termism, data manipulation at the local level), which any Indian adaptation would need explicit safeguards against: audited, third-party-verified data sources rather than self-reported local statistics being the most important one.

10.6 Talent Repatriation Initiative

A dedicated programme to recruit Indian-origin researchers and scientists from abroad back into Indian institutions, modelled on China's Thousand Talents Plan — funded joint appointments, startup research grants, and direct placement alongside existing faculty rather than standalone recruitment with no integration path.

Competitive, PPP-benchmarked compensation packages (tying back into Section 10.3) plus dedicated relocation and lab-startup grants for returning researchers

Joint-appointment structures pairing returning researchers with existing faculty in the same department, rather than parachuting them in as isolated stars — the explicit goal being knowledge transfer into the existing faculty base, not just headline recruitment

Fast-track access to ASTRA (Section 9.5.3) and National Research Council funding for returning researchers' first few years, reducing the usual multi-year grant-ramp-up delay

Coordination with SPARK (Section 9.5.1) so returning researchers with commercially viable work have an immediate technology-transfer and startup-support pathway

11. Consolidated Summary

This document is a working synthesis of the design conversation to date and will need further detailing — legislative vehicles, transition sequencing, and cadre-management implications — before it could function as an actual implementation blueprint.