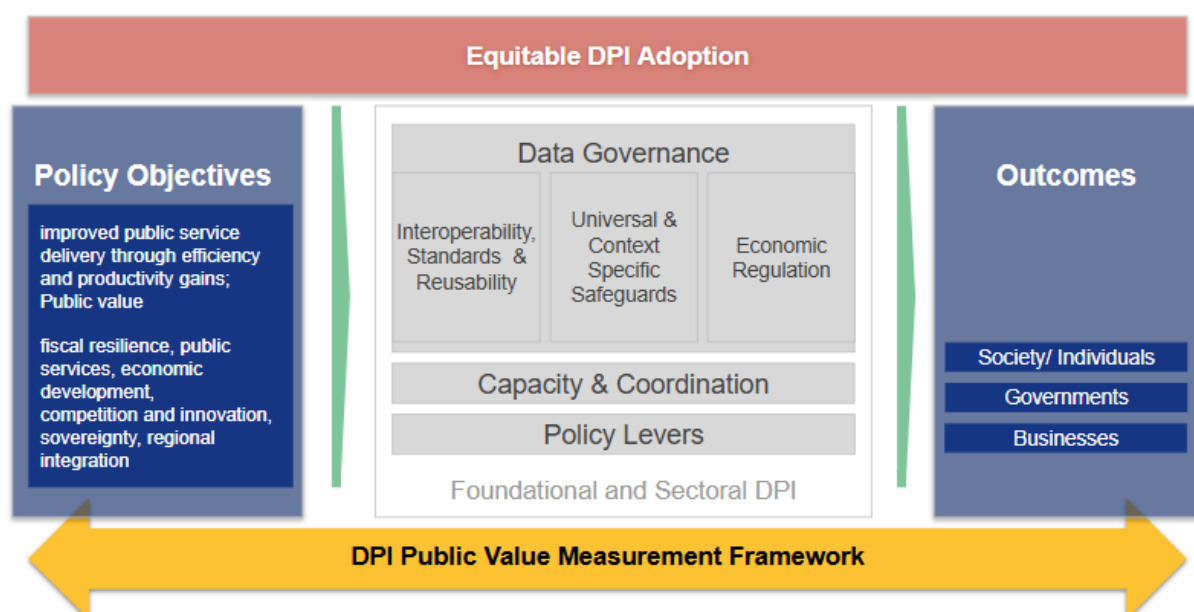


Annexure 3: Guidelines for Integrated Governance of DPI

Digital public infrastructure (DPI) requires enabling governance arrangements that reflect its cross-sectoral and foundational nature in support of strategic national/developmental outcomes. The integrated governance guidelines developed under South Africa's Presidency build on and consolidate the progress made on DPI under the Indian and Brazilian G20 presidencies by filling the data governance gap for DPI identified previously by the G20.

DPI should not be treated as a standalone technical intervention, but rather as a foundational infrastructure that enables broader developmental objectives, such as inclusive access to services, resilient public institutions, and locally driven innovation. Its governance must therefore enable the rollout of foundational broadband, digital ID, financial payment and data exchange systems, so that they can be equitably accessed across society, and integrated into sectoral use cases that produce social value outcomes beyond efficiency.

This annex to the Ministerial Declaration of the Digital Economy Working Group provides an approach to integrated governance identified as a central to the successful operationalisation of DPI systems - aligning digital infrastructure with public purpose and as a driver of equitable and sustainable development across society, government, and the economy.



ANNEXURE 3: GUIDELINES FOR INTEGRATED GOVERNANCE OF DPI

The following sections present the core elements of an integrated governance framework for DPI, building on prior G20 frameworks and governance principles.

Each section provides practical guidance for operationalising integrated, cross-sectoral DPI. Together, these components establish the institutional and regulatory foundation necessary to govern DPI as shared, inclusive, and resilient public infrastructure that can be adapted to the needs and context of different countries.

1. DATA GOVERNANCE

Data governance is a foundational component of DPI governance, encompassing the policy, institutional and regulatory frameworks that ensure data is accessed, used and shared in ways that are rights-preserving, equitable and just enabling both public and particularly local, private value creation. Core functions of an integrating framework – such as data standardisation, interoperability, safeguards, and economic regulation – must be enacted through transparent and accountable institutions to enable the competitive and inclusive delivery of DPI and the fair participation of local industry. The following sections elaborate on these core dimensions of data governance in more detail.

Governments are encouraged to:

- Establish comprehensive legal and institutional frameworks for data governance that uphold human rights, including privacy and personal data protection, dignity, non-discrimination, and the rule of law.
- Promote the non-excludability characteristics of public goods through the development of data commons, encouraging open standards, open APIs, and interoperable systems that enable data to be reused across sectors while respecting safeguards.
- Exercise the principle of national sovereignty enables safe and secure data sharing by setting national data standards that are aligned with regional and international frameworks and standards to support both domestic and cross- border data flows.
- Support inclusive and participatory data governance through institutional coordination, multi-stakeholder engagement, and mechanisms for transparency, accountability, grievance redress and to build public trust.

A robust approach to data governance also entails mitigating potential harms, such as surveillance, exclusion, or monopolisation - by embedding proportionality, transparency, and democratic oversight into the design and implementation of DPI systems. By framing data governance within the broader social contract with citizens, governments can ensure that data

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infrastructure is aligned with development objectives and fosters equitable public and private value creation.

1.1. Interoperability, Standards and Reusability

Interoperability, open standards and specifications and reusability are essential to DPI, enabling systems to function as shared, scalable infrastructure. Interoperability depends on national standards that support seamless data exchange across sectors, government levels, and society, while also aligning with regional and global frameworks to facilitate cross-border flows. Interoperability allows digital systems to communicate and exchange data seamlessly across sectors, levels of government, and jurisdictions. Reusability ensures that core components can be applied across multiple use cases and service domains.

Together, these attributes reduce duplication, promote innovation, and lay the groundwork for scalable solutions that can evolve with increasing demands.

Governments are encouraged to:

- Support interoperability through policy and regulation, that define according to international standards for core DPI layers, aligned with national, regional, and global systems.
- Promote and use open standards, specifications and protocols to foster innovation, avoid vendor lock-in, and ensure fair participation by public and private actors.
- Design DPI components as modular, reusable building blocks; enabling replication across services and sectors.
- Measure adoption across industries, government agencies and citizenry to assess whether DPI systems are achieving scalable deployment and systemic uptake.

1.2. Universal and Context-Specific Safeguards

Safeguards against human rights violations and other online and offline harms are essential to ensure that DPI upholds public trust, prevents harm and supports inclusive outcomes. Universal safeguards refer to baseline protections that apply across all DPI contexts, such as privacy and personal data protection, accountability, and non-discrimination. Context-specific safeguards address risks arising from specific national, social, or technological environments.

These safeguards enable DPI to deliver benefits while mitigating the risk associated with exclusion, misuse or rights violations.

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Largely, these safeguards are conceptualised as protection of individual rights and as such data governance currently fails to recognise both the collective harm that occurs to categories of people or the more systemic harm that arises either from large-scale exclusion or discrimination in data-driven applications or decision-making. Digital identity and automated decision-making are particularly susceptible, requiring attention to structural exclusion, human development gaps, and the need for analogue or opt-out alternatives.

Governments are encouraged to:

- Strengthen legal and regulatory frameworks that uphold fundamental rights across all DPI layers, ensuring the protection of privacy and personal data, and the right to access information in a secure and accountable manner.
- Define inclusive design and implementation standards that address systemic inequalities and support safe, accessible, and rights-respecting services.
- Create redress mechanisms to ensure accountability, enforce regulations and provide public recourse in cases of harm or exclusion.
- Uphold data sovereignty by ensuring that data generated within national borders is governed according to local laws, with clear policies on data ownership, cross-border data flows, and the protection of citizens' digital rights.

1.3. Economic Regulation

Two aspects to economic regulation should be considered in any integrated governance framework for DPI.

First, data constitutes a critical input for downstream activities in the digital economy and underpins the public value creation of DPI. There is an economic rationale for regulating the availability, accessibility, usability, and integrity of data to enable efficiency in public service delivery, which can shape local markets but also foster greater local private value creation.

Second, policies and institutional mechanisms must be in place to manage potential negative spillovers from DPI and support inclusive economic development. While the first round of DPI focused on the positive spillovers – such as network effects arising from integrated infrastructures, efficiency gains and positive market shaping - there is now a need to address concerns around DPI dominance and market regulation. This is essential not only to mitigate risks but also to ensure positive competitive and consumer welfare outcomes. Achieving these objectives will require coordination between different sectoral regulators - telecommunications, information, finance – as well as competition authorities to ensure that DPI fosters competitive markets, equitable innovation, and positive outcomes for consumers.

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Governments are encouraged to:

- Promote clear institutional mandates and roles for public institutions responsible for regulation of DPI layers, including roles for independent regulatory authorities and standards bodies—such as information regulators, national statistical offices, competition authorities, and consumer affairs bodies
- Design regulatory frameworks that promote fair competition and equitable local economic participation, ensuring that public and private providers can participate fairly in delivering DPI-enabled services, and that safeguard consumer rights, particularly in digital finance and data usage.
- Develop governance frameworks for equitable participation in DPI that include the right to benefit from one's data and avoid harm; right to access and port one's data; right to appropriate representation in data; and right to govern data and data-based systems.

2. CAPACITY AND COORDINATION

Effective governance of DPI depends on strong institutional capacity and mechanisms for cross-sector coordination, as DPI must be used by several actors. As such, it demands new forms of administrative capability, budgetary planning, and horizontal alignment across ministries and public institutions.

Governments are encouraged to:

- Develop collaborative and coordinated institutional and interjurisdictional mechanisms to align DPI implementation across foundational systems and sectoral applications, recognising that such efforts may require adapted governance models in settings where cross-sectoral coordination presents institutional challenges.
- Ensure that relevant ministries and public agencies, particularly in Finance, ICT, Planning, and Social sectors, have clearly defined roles and adequate capacity to oversee DPI systems.
- Strengthen institutional capacity at national and subnational levels to deploy and govern DPI systems - supporting job creation, attracting investment, and driving adoption.
- Engage subnational decentralised levels of government where relevant, ensuring that local bodies have both the mandates and capabilities to adopt, integrate and align DPI with local service delivery priorities.
- Partner with civil society and community-based organisations to improve uptake, trust, and awareness of digital services among underserved groups.

3. POLICY LEVERS

Policy levers are the tools through which governments facilitate coordination and scale DPI across foundational and sectoral domains. These include legal mandates, funding mechanisms, administrative rules, and programmatic incentives that embed DPI into public service delivery and institutional routines.

Governments are encouraged to:

- Ensure access and promote the use of foundational DPI infrastructures and Components across public services to ensure equitable and inclusive access to DPI.
- Use administrative directives and enabling policies to drive DPI adoption within sectors associated with the intended policy objectives, while ensuring transparency and accountability in the implementation process.
- Align public procurement and budgetary allocations to prioritise DPI-compliant systems.
- Ensure safeguards are in place to prevent exclusion and support equitable access to DPI-enabled services
- Govern access to quality data, portability of data by customers and workers, open data, interoperability and fair competition to enable local participation in DPI by local firms, MSMEs, researchers, entrepreneurs and startups
- Design foundational policy instruments that enable DPI to function effectively - including but not limited to: consent artefacts, open API policies, interoperability standards, regulatory sandboxes, incentives for local government adoption, and data sharing frameworks.

4. CONCLUSION

These guidelines are intended to support governments in building transformative DPI aligned with their national strategic priorities and development goals. By adopting integrated governance approaches, countries can ensure that DPI delivers its full potential—not only as a technical solution, but as a foundation for public value creation, institutional trust, and long-term economic inclusion.

The integrated governance framework must be applied across the entire lifecycle of DPI, from design and development to deployment, evolution and maturity. Implementation will necessarily reflect national circumstances, but shared principles – grounded in rights, equity, and openness – can support coherence, interoperability, and coordination across sectors and actors. When

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governed effectively, DPI becomes an instrument for strengthening fiscal resilience, improving service delivery, fostering innovation and competition, and promoting regional integration.

By linking governance with clearly defined policy objectives and outcomes, and by embedding accountability mechanisms to measure progress from strategy to delivery, countries can ensure that DPI serves as an inclusive and sustainable pillar of digital transformation.

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