

DPI 2.0: The Subsidiarity Layer

Executive Briefing — A Governance Routing Protocol for India Stack

The Problem: Governance Latency

India has built world-leading digital infrastructure — Aadhaar, UPI, DEPA, ONDC. What it lacks is the governance routing layer that determines where decisions should be made and how resources should flow. The result: a hyper-efficient digital plumbing system serving a centralized governance architecture that cannot match the variety of 1.4 billion people across 28 states.

The cost is measurable. In the 2018 Kerala floods, central relief reached many districts only after 72+ hours (CAG Audit Report No. 15 of 2021). In the 2024 Wayanad landslides, NDRF deployment required central authorization while local knowledge of vulnerable populations remained inaccessible to formal systems. Governance latency is not an abstraction. It is counted in lives lost.

The Solution: Precision Routing on India Stack

DPI 2.0 adds a **governance routing layer** on top of India Stack. The **Global Subsidiarity Index (GSI)** is a diagnostic algorithm that identifies the optimal governance scale — national, state, district, or community — for any given problem. Phase 1 applies it to **disaster response**, the domain where latency is most lethal and the political sensitivity is lowest.

The GSI uses specific indicators (event magnitude from IMD, state capacity from SDMAs, vulnerable population density from Census/NFHS, infrastructure damage from ISRO satellite imagery) to produce routing recommendations that update every 6 hours as conditions change. It does not replace political decision-making — it provides the diagnostic layer that makes routing decisions evidence-based.

Three-Layer Architecture

Layer	Component	Function
1. Sensor	Civic Value Registry	Voluntary registry making informal economic capacity visible. Aadhaar optional — phone+PIN primary auth. Cannot be used for welfare exclusion or taxation. ZK-proof protected.
2. Diagnostic	GSI + Routing Protocol	6 disaster-specific indicators with thresholds. Routes resources to national/state/district/community level. Re-diagnoses every 6 hours. Built on NDMA, IMD, CWC, ISRO data.
3. Integration	India Stack Layer 2	Sits on top of UPI (no value processing), DEPA (user-controlled data), DigiLocker (proof storage), ONDC (reputation portability). Not a financial product.

What the Center Gains

This is not a political argument for decentralization. It is a technical solution to measurable problems. The center gains: **measurable reduction in disaster mortality** (visible outcomes, electoral credit), **strategic visibility into the informal economy** (85% of employment currently invisible to GDP metrics), and **improved welfare delivery metrics** (better targeting, reduced leakage). DPI 2.0 makes the center more effective, not less powerful.

DPI 2.0 is designed to be scientifically disprovable. If Phase 1 shows that GSI routing does not reduce disaster response latency compared to existing processes, the hypothesis is falsified — and India gains its first rigorous empirical study of governance routing in disaster response.

Implementation: How It Deploys

Phase 1: Disaster Response (12–18 Months)

Element	Specification
Pilot states	Odisha (BJP since 2024; best-in-class disaster management; cyclone-prone) + Gujarat (BJP; strong admin capacity; earthquake/cyclone vulnerability). Both center-aligned — removes partisan optics.
Partners	EkStep Foundation (technical architecture) + NDMA (data access, operational integration) + NITI Aayog (policy authority) + local civic-tech builders
Cost	■ 20–32 crore over 18 months. No new budget required — fundable via NDMA innovation budget, PM-STIAC, NDRF research allocation, or philanthropic matching.
Primary access	Smartphone app (Android/iOS) with USSD fallback. 22 scheduled languages. Voice prompts for low-literacy users.
Authentication	Phone + PIN (primary). Community vouching (secondary). Aadhaar optional — explicitly not required. Addresses welfare exclusion concerns.

Success Metrics (Phase 1)

Metric	Baseline	Target
Disaster response latency	72+ hours (CAG Audit)	<24 hours for GSI-routed resources
Vulnerable population coverage	No baseline (invisible)	80% of identified populations reached
Informal worker registry	0 in formal systems	100,000 voluntarily registered
NDMA integration	None	GSI outputs in NDMA operational planning

Expansion Path

Phase 2 (Years 2–3): GSI applied to welfare delivery — PM-KISAN, NFSA, MGNREGA targeting. Pilot states expanded to Tamil Nadu and Uttar Pradesh for bipartisan demonstration. Civic Value Registry integrated into welfare eligibility (with exclusion safeguards).

Phase 3 (Years 4–5): Agricultural policy routing. Ministry of Agriculture integration. ONDC market access via reputation scores. State-level agricultural extension redesign.

Privacy and Safeguards

DPI 2.0 inherits India Stack's data sovereignty principles. Aligns with *Puttaswamy v. Union of India* (2017). Zero-knowledge proofs: users prove reputation thresholds without revealing transaction history. No central repository. Voluntary participation. DEPA-based consent. **Non-negotiable constraint:** the Civic Value Registry cannot be used for welfare exclusion or taxation enforcement — coded into the protocol with independent oversight.

Next Steps

Month 1–2: Technical validation workshop; GSI indicator refinement with NDMA and EkStep.

Month 3–4: Pilot state engagement — Odisha and Gujarat SDMAs, NITI Aayog.

Month 5–6: Smartphone prototype + USSD fallback; authentication pathway testing.

Month 7–12: Pilot deployment with metric tracking.

Month 13–18: Independent evaluation + scaling blueprint.

The plumbing is ready. The intelligence is ready. It is time to route.

Contact: bjornkennethholmstrom@gmail.com | Full specification: DPI 2.0 v0.3 | Designed for India Stack