Strategic Digital Regionalism as an emerging trend in India's Neighbourhood First Policy

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Abstract

The study examines growing importance of regional digital connectivity within South Asia and India's initiatives under the Neighbourhood First Policy within broader global developments. The comparative analysis of regional digital frameworks of ASEAN, the African Union and the EU's Digital Single Market has been conducted to identify important patterns of institutional cooperation, cross-border interoperability, and shared digital infrastructures. The study proposes the concept of Strategic Digital Regionalism, which integrates liberal institutionalism, soft-power dynamics, and geoeconomic logics to understand the reasons behind the investments by states in cross-border digital public goods. Empirically, the paper reviews India's major digital initiatives, including UPI linkages, NKN extensions, BBIN trade digitalisation, BIMSTEC ICT cooperation, and the South Asia Satellite. The observations of the study are that digital connectivity not only enhances trade, mobility, and service delivery, but also deepens interdependence and mutual trust in a region characterised by political sensitivities. The paper also proposes policy options to strengthen South Asia's digital ecosystem through inclusive, interoperable, and resilient frameworks.

Keywords: Regional Digital Connectivity; Neighbourhood First Policy; South Asia; Digital Economy; Cross-border cooperation

Introduction

Regional cooperation in South Asia can be enhanced through Digital connectivity. It refers to setting up a cross-border digital infrastructure, services, standards, and regulations, which allow countries to exchange data, services, information, standards, regulations and a system of governance that allows countries to operate on digital platforms, make payments, and integrate digitally. As the historical animosities and political tensions have weakened physical integration of the region, which includes transport, trade corridors, the digital connectivity has emerged as an important arena of regional cooperation and integration in South Asia.

South Asis is economically one of the least integrated regions in the world, accounting for less than five percent of intra-regional trade (World Bank, 2020). This low growth of internal trade is primarily due to the strict regulations and border controls, which restrict cross-border movements, including the transportation of goods through vehicular movements.

Digital connectivity can address this problem by creating financial connectivities, digital services and enhanced regulatory harmonisation. Unlike physical infrastructure, such as roadways and pipelines, digital connectivities require less investment, can be adopted by multiple countries simultaneously, and are not affected by territorial and border disputes. It can also lower the transaction costs, create a new digital entrepreneurship class, increase tourism, easy remittances system and a new regional value chains.

Review of Literature

Digital connectivity provides opportunities for the countries in the region to diversify and strengthen their economies. This will also enable them to have stronger interactions between physical, digital and knowledge spheres (Knight, 2015). Gaspard and Baker (2022) study highlights that regional partnerships and shared infrastructure, including joint broadband projects and intergovernmental coordination, are crucial for lowering costs and expanding access. It concludes that regional cooperation strengthens governance capacity, enabling innovation, resource pooling, and more sustainable connectivity solutions in sparsely populated areas. De et al. (2024) argue that a strong digital connectivity requires harmonised regulations, interoperable digital infrastructure and improved digital skills across member states. Regional digital connectivity can boost inclusive growth by linking underserved areas to markets, services, and opportunities but at the same time building infrastructure alone is insufficient. The member countries must also strengthen digital skills, regulation, and institutional capacity to benefit equally. Without coordinated regional and national policies, digital expansion may widen, rather than close, existing economic and social gaps (Beylis et al., 2024). Emre and Miktus(2019) argue that fragmented national policies slow digital integration, whereas regional bodies can promote shared standards and interoperable infrastructure. It is also essential for creating an integrated market. The harmonised digital strategies, shared standards, and coordinated policy frameworks across countries can also enhance collective progress toward SDG Agenda 2030 (Shirin and Masiero. 2025).

Chen (2017, 2019) argues that digital connectivity includes the data connectivity, logistics, financial connectivity, and seamless links between the cyberspace and the physical parts of the network. It is also necessary to have a data infrastructure based on common platform and to promote inclusive cybersecurity measures to support digital society at the same time. But it is also a fact that from the regional perspective there needs to have a comprehensive, mutually agreed and balanced development of cybersecurity measures are required. Any absence of the agreed measures in this regard can lead to obstaces of data flows and can lead to increased cost of doing e-commerce activities digitally (Chen, 2020).

Digital networks alongside physical and transport infrastructure can enhances economic growth by improving market access and attracting investments. Digital connectivity also helps bridge regional disparities, facilitating social cohesion by enabling cultural exchange, reducing isolation of remote areas, and strengthening community ties across regions. Strategic investments in regional digital infrastructure are essential for balanced economic development and integrating marginalized regions into broader growth trajectories (Ahmed 2024).

Ladu et al. (2023) highlights that digital connectivity allows regions to overcome traditional spatial barriers and territorial boundaries. It requires regional coordination in planning broadband networks, standardising digital platforms, and integrating digital spatial policies. Through inter-regional cooperation, digital services can be delivered equitably, ensuring that peripheral areas benefit alongside other centres. But at the same time the study by Tranos et al. (2024) argues that digital connectivity still reflects spatial and regional disparities, meaning physical geography shapes network patterns. It emphasises that coordinated regional planning and cooperation are essential to ensure equitable access and integration. Strengthening regional digital linkages can enhance economic cohesion, knowledge sharing, and inclusive growth across areas.

Although existing studies show that digital connectivity can enhance economic growth, improve governance, and strengthen regional cooperation, most of the literature focuses on global or cross-regional experiences rather than South Asia. Scholars highlight the importance of shared infrastructure, harmonised regulations, interoperable systems, and coordinated policy frameworks, but there is limited examination of how these elements function within South Asian region within its unique political, economic, and institutional environment. There is also a little analysis of how India's digital initiatives under the Neighbourhood First Policy contribute to building regional digital integration. By comparing the global-regional, South Asian and India's Digital Connectivity initiatives under Neighbourhood First policy, and understanding the status and gaps, the study attempts to address the research gap.

Theoretical framework

India's digital initiatives under the Neighbourhood First Policy can be theorised through three main IR frameworks, i.e. (i) liberal institutionalism, (ii) Soft power and Constructivism and (iii) Geoeconomics and Strategic Regionalism. Liberal institutionalism provides a framework to understand digital connectivity as an important tool to provide regional public goods which requires interstate operability. Keohane (1984) argues that the institutions play a critical role in providing guidelines for cooperation among the countries without a hegemon removing uncertainty and reduction in transaction costs. This cooperation includes digital infrastructure, cross-border fibre networks, regional data standards, interoperable payment systems, etc. maintained by the institutions. Olson (1965) highlights that institutional mechanisms are essential for sustaining regional digital initiatives. Ostrom's (1990) concept of polycentric governance further explains how digital commons, like regional IXPs, shared spectrum management, or cybersecurity coordination, can be governed through layered, multi-actor arrangements. Regime theorists such as Krasner (1983) emphasise that rules, norms, and procedures help stabilise cooperation, while Haas (1992) shows that epistemic communities of ICT experts generate cross-border technical standards that underpin connectivity. Slaughter (2004) adds that networks of regulators, rather than states alone, manage transnational digital issues such as digital payments, cyber norms, and telecom regulation.

Soft Power and Constructivism provide a lens to explain how states use digital connectivity to shape regional cooperation. Joseph Nye (2004) defines soft power as the ability to influence others through cooperation rather than coercion. Digital infrastructure, digital public goods, and technological standards function as channels of such influence. Constructivist scholars, like Wendt (1999), argue that identities, norms, and shared ideas shape state behaviour. Digital connectivity, when framed as a shared regional aspiration, such as "digital inclusion," "open digital borders," or "data for development" creates an environment that pushes states toward cooperative behaviour. Acharya (2014) further shows that regional norms emerge through local interactions, suggesting that digital norms in South Asia, ASEAN, or the Indo-Pacific, such as cybersecurity cooperation, cross-border data governance, and regional digital standards are constructed through social processes rather than imposed externally. Soft-power tools like digital training programmes, capacity-building centres, and technology grants help states build trust and shape regional digital identities. Constructivism explains how these practices eventually create a shared understanding of "regional digital community," while soft power explains why states willingly participate.

Geoeconomics and Strategic Regionalism uses a power-centred explanation for why states invest in regional digital connectivity. Luttwak (1990) conceptualises geoeconomics as the use of economic instruments to achieve geopolitical goals, digital infrastructure like such as fibre-optic corridors, data centres, 5G networks, and digital payment systems have has become a strategic tool for shaping regional influence. States invest in cross-border digital links not only for economic efficiency but also to expand their technological footprint, secure supply chains, and set regional standards that align with their strategic interests. Hettne and Soderbaum (2000), highlights how regions are deliberately constructed by powerful states to advance political and economic goals. In this view, digital corridors and cyber connectivity initiatives are instruments to architect regional spaces suited to national strategic priorities. Baldwin's (2016) argument that power increasingly flows through "networks and rules" underscores how setting digital standards, cybersecurity norms, and data governance principles becomes a key arena of regional strategic competition.

From these three theoretical frameworks, digital connectivity as a regional cooperation through rules, institutions and coordination through institutions, as a soft power to create shared norms, identities and narratives can be bound together to propose a combination of these three theories, the concept of Strategic Digital Regionalism. It reflects a synthesis, i.e. digital projects are simultaneously strategic, institutionally coordinated, and normatively constructed across a region. It provides an integrated framework to analyse India's digital connectivity initiatives by combining geoeconomics, liberal institutionalism, and constructivism. It argues that India uses digital infrastructure as a strategic tool to shape regional alignments, while simultaneously building institutions, rules, and interoperable standards that enable sustained digital cooperation with neighbouring states. At the same time, India promotes shared digital norms, identities, and soft-power narratives like openness, inclusivity, and digital public goods—to cultivate trust and legitimacy. SDR therefore captures how digital connectivity functions not merely as technical development but as a hybrid mechanism of power projection, institutional coordination, and norm-building. This makes it a comprehensive lens for understanding India's Neighbourhood First digital initiatives.

Objective of the study

This study examines the patterns of regional digital connectivity across the world to identify the current state, gaps, and institutional limitations of digital cooperation in the South Asian sub-region (SAARC, BIMSTEC, BBIN and bilateral initiatives). It evaluates India's digital connectivity measures under the Neighbourhood First policy including DPI diplomacy, cross-border fibre and satellite links, UPI/fintech interoperability, and digital trade facilitation and applies the hybrid theoretical framework of Strategic Digital Regionalism to explain how India uses digital public goods to build interdependence, project influence, and shape regional norms. The study further compares global models, South Asian initiatives, and India's bilateral/subregional approaches to identify strengths and weaknesses, and it assesses opportunities, constraints, and concrete policy options for advancing interoperable, inclusive, and secure regional digital integration. It also offers recommendations for institutional reform, regulatory harmonisation, capacity building, and multilateral cooperation to strengthen South Asia's digital system under the Neighbourhood First policy.

Methodology

This study adopted a comparative analytical framework to evaluate regional digital connectivity initiatives across three levels: global regional, South Asia including subregional initiatives, and India's Neighbourhood First digital connectivity projects. The comparison is structured around a set of common analytical dimensions, i.e. institutionalisation, policy harmonisation, infrastructure development, market integration, funding mechanisms, inclusivity, and geopolitical orientation. These categories are derived from established approaches in comparative regionalism and digital governance studies, which emphasise the need to assess both the formal structures of regional cooperation and the functional outcomes of connectivity initiatives.

By comparing these three layers, one identify the differences in adoption, objectives, achievements and laggings. This structured comparison also provides the analytical basis for developing the conceptual framework of Strategic Digital Regionalism, which synthesises insights from liberal institutionalism, geoeconomics, and soft-power perspectives to explain India's approach to regional digital connectivity.

Digital connectivity as a model for regional cooperation

The digital connectivity as a tool for regional cooperation across the world presents a framework to enhance cooperation. In Africa, the Inclusive Digitalisation in Eastern and Southern Africa supported by the World Bank and Common Market for Eastern and Southern Africa (COMESA) is intended to expand digital access, provide digital services and improve cross-border cooperation in the region (World Bank, 2023). This programme also focuses on reducing the digital divide by improving internet connectivity, digital skills training, and promoting policies that allow data to flow across borders (COMESA, 2022). Important objective of the programme is to help countries to build interoperable digital systems so that services such as e-payments, digital IDs, and e-government platforms can work across member states. This will make trade easier, reduce transaction costs, and increase transparency (World Bank, 2023). The initiative also encourages digital entrepreneurship by supporting small and medium enterprises and helping them adopt new technologies (COMESA, 2022).

To connect and strengthen digital links between Central Asian countries and Europe, the Team Europe Digital Connectivity Initiative under the EU's Global Gateway strategy was initiated by focusing on expanding fiber-optic backbone networks for improving cross-border data flows so that to support the development of digital public services across Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan. This initiative also included cybersecurity cooperation, data protection standards, and regulatory harmonisation, which are essential for regional integration, enabling smoother trade, regional cooperation, and digital transformation (European Commission, 2022; EU Global Gateway, 2023).

At ASEAN level the ASEAN Digital Masterplan (ADM) 2025 was initiated to strengthen cross-border digital trade, data governance, and cybersecurity, for countries to work together on digital connectivity including on e-payments, digital IDs, and smart cities. The initiative is also working on harmonising digital regulations and encouraging collaboration between governments, industries, and academic institutions (ASEAN, 2020; ASEAN Secretariat, 2021).

In the African Union, African Union's Digital Transformation Strategy (DTS) 2020–2030, initiated at the continental level to help African countries use digital technology for economic

growth, e-governance, and social development. The strategy aims to create a single African digital market by improving internet access, reducing digital divides, and helping all citizens, especially women, youth, and rural communities, benefit from technology. It focuses on expanding affordable broadband, building strong digital infrastructure, and improving data protection and cybersecurity across countries (African Union, 2020). It also highlights the importance of developing digital skills and creating more jobs in the technology sector to support Africa's growing youth population (African Union Commission, 2021) to support the African Continental Free Trade Area (AfCFTA) and strengthens Africa's position in the global digital economy.

At the European Union, the Digital Single Market (DSM) is an initiative that aimed to make all EU countries function like one large digital space where people, companies, and governments can use online services without barriers. Launched in 2015, it focuses on removing restrictions to digital trade, improving access to online goods and services including cross-border e-commerce, and ensuring fair rules for businesses and consumers across the region (European Commission, 2015). It also facilitates high-speed internet, 5G networks, cloud computing, and data-sharing systems that work across countries (European Commission, 2017).

In Latin America, the Regional Digital Market initiative developed through Mercosur and the eLAC process, is to harmonise digital regulations, expand broadband connectivity, and support digital trade among member countries so that businesses and citizens can benefit from a shared digital space. The initiative promotes common standards for e-commerce, digital payments, cybersecurity, and data protection to make online activities smoother across borders (ECLAC, 2020). Mercosur countries including Argentina, Brazil, Paraguay, and Uruguay are working to coordinate rules for digital services and reduce barriers to cross-border online trade more accessible to small and medium enterprises (SMEs) (Mercosur Secretariat, 2021).

Table 1: Major Regional Digital Connectivity Initiatives across the Regions

Initiative / Project/ Year	**Region / Scope**	**Objective**
IDEA – Inclusive Digitalization in Eastern and Southern Africa (World Bank / COMESA) 2023	Eastern & Southern Africa	Expands broadband infrastructure, promotes affordable internet, strengthens digital skills, and supports cross-border digital services to build a more inclusive regional digital market.
Team Europe Digital Connectivity Initiative – Central Asia (EU Global Gateway) 2022	Central Asia	Enhances secure digital infrastructure, supports data governance, improves connectivity with Europe, and reduces dependency on single-country digital systems for stronger regional cooperation.
ASEAN Digital Masterplan 2025 2021	Southeast Asia	Provides a roadmap for harmonising regional digital standards, improving cybersecurity, supporting digital trade, and enabling a connected, innovative ASEAN digital community.

African Union – Digital Transformation Strategy (DTS) 2020–2030 2020	Africa (continent-wide)	Aims to create a single African digital market by improving broadband access, fostering digital skills, promoting e-government, and aligning national digital policies across countries.
European Union – Digital Single Market (DSM) 2015	European Union	Removes digital trade barriers, strengthens data protection rules, enables cross-border e-commerce, and builds shared digital infrastructure for a unified European digital economy.
Latin America – Regional Digital Market (Mercosur / eLAC) 2018	Latin America	Harmonises digital regulations, supports cross-border e-commerce, improves broadband access, and promotes regional cooperation in digital innovation and data governance.

Source: World Bank (2023); COMESA (2022); European Commission (2022); ASEAN (2021); African Union (2020); European Union (2015); Mercosur (2020); UN ECLAC (2018).

These regional digital initiatives across the different regions around the world provides a framework for South Asia to adopt cross-border digital cooperation. They also explain how shared digital standards, interoperable platforms, and regional broadband corridors can boost trade, mobility, and connectivity between the countries (UNESCAP, 2021; World Bank, 2022; De et al., 2018). For India, they provide a framework for shaping regional digital public goods, such as digital payments, cross-border e-governance, cybersecurity cooperation, and digital capacity-building under its Neighbourhood First Policy.

These initiatives also align with the Strategic Digital Regionalism, which argues that digital connectivity is a tool of influence and integration. As countries depend on shared digital platforms, one leading country can emerge as a provider of digital public goods in its neighbourhood. The connectivity can also contribute to creating a stable, integrated region deepen interdependence and strengthen trust (UNCTAD, 2021). The relevance of these initiatives demonstrates the possibilities of adopting the same mechanisms in the context of South Asia also, particularly in India's neighbourhood. Digital Connectivity Initiatives in India's Neighbourhood.

Regional Digital Connectivity in South Asia

Though South Asia is still in the process of establishing a comprehensive cross-border digital connectivity at the regional level, a few regional or sub-regional initiatives were taken, namely, (i) SAARC ICT Development Programme, which focus on e-governance, cyber cooperation, and digital capacity building (ii) BIMSTEC ICT & Digital Economy Cooperation, which plans for regional data centres, digital trade, cyber governance, and digital infrastructure corridors, (iii) BBIN (Bangladesh-Bhutan-India-Nepal) Digital Transport & Trade Connectivity for digitisation of customs, trade systems, and cross-border logistics, (iv) India-Nepal UPI Linkage & Digital Payments Connectivity, which is termed as a first cross-border interoperable digital payments system in South Asia, (v) SAARC Satellite, which provides for a regional digital communication links for education, communication, disaster management to the member

countries and (vi) India's Digital Public Infrastructure (DPI) Diplomacy for interested countries in creating Aadhar like ID models, digital payments and API architecture with neighbours.

Table 2: Status of Regional Digital Connectivity Initiatives in South Asia

Initiative / Project	Objective & Purpose	Initiated By	Nodal Country	Current Status
SAARC ICT Development Programme Launched in 2004 (renewed periodically)	Promote regional cooperation in e-governance, cyber capacity building, ICT skills, and digital inclusion across SAARC countries.	SAARC Secretariat	Collective (but India leads most ICT support)	Slow progress due to political constraints; minimal regional implementation.
BIMSTEC ICT & Digital Economy Cooperation Initiated in 2018 (BIMSTEC Master Plan 2030)	Develop regional digital economy frameworks, cross-border data centres, digital trade norms, cybersecurity cooperation, and digital infrastructure corridors.	BIMSTEC Secretariat	Collective (India as lead country for "Security" & Digital initiatives)	Active but slow progress; projects under development.
BBIN Digital Transport & Trade Connectivity Launched in 2015 (BBIN MVA framework)	Digitalisation of customs, cargo tracking, trade facilitation, and unified cross-border logistics through a common digital platform.	Bangladesh, Bhutan, India, Nepal	India	Progressing, Bhutan observer status; digital trade systems integration ongoing.
India-Nepal UPI Linkage & Digital Payments Connectivity Agreed in 2023	Enable interoperable real-time digital payments (UPI) across borders for remittances, travel, and trade.	Government of India & Nepal Rastra Bank	India	Operational and expanding.
India's Digital Public Infrastructure (DPI) Diplomacy	India shares (digital ID, payments, eKYC, DigiLocker, APIs) with neighbouring countries; build interoperable	Government of India & MEA	India	Active, supported by NASSCOM, NDHM, MOSIP; adoption in multiple countries.

Rolled out in 2021	regional digital governance.			
SAARC Satellite (GSAT-9) Launched in 2017	Provide South Asian states with digital communication links for telemedicine, education, weather forecasting, and disaster management.	ISRO / Government of India	India	Operational; Pakistan opted out; used by 7 SAARC countries.

Sources: SAARC Secretariat (2016); Rahman (2019); BIMSTEC Secretariat (2018); Panda (2020); World Bank (2020); De (2021); NPCI (2023); Dahal (2024); MeitY (2023); Khera (2022); ISRO (2017); Pant & Passi (2017).

Table 2 above provides the initiatives and status of digital connectivity initiatives at the regional and bilateral level in South Asia. These initiatives are mostly confined to limited activities and are dominated by bilateral or sub-regional. At the same time these initiatives together are in the process of developing an ecosystem of creating digital public goods including payment linkages, trade facilitation and communications that goes along with India's Neighbourhood First policy goals. They are also intended to develop technical interdependence. The SAARC ICT programme provides a formal regional forum and working-group architecture for e-governance and capacity building, but political constraints have limited full implementation (SAARC Secretariat). The BIMSTEC also has included ICT, digital trade and digital infrastructure as an agenda to enhance the multilateral digital cooperation across the Bay of Bengal littoral countries. At the sub-regional level the BBIN cooperation as part of the transport and trade connectivity are also digitalising the customs stations, cargo tracking systems, single-window paperless activities etc. The South Asia Satellite (GSAT-9) launched by India is also part of the digital connectivity initiative at the regional level for telecom, disaster management, and education services among the member countries. This indicates that the space technology has also emerged as part of regional public goods.

Together these initiatives show a pattern: (i) regional technical platforms and common standards (payments, identity, customs IT) are being built mainly through Indian leadership or sub-regional projects; (ii) implementation gaps remain—political trust, regulatory harmonisation and technical interoperability are the main barriers; and (iii) successful, operational projects (e.g., UPI in Nepal, GSAT-9 services) provide practical leverage for deeper regional cooperation under India's Neighbourhood First policy

Regional and Bilateral Digital Connectivity initiatives by India

Neighbourhood first policy of India explicitly talked about digital connectivity as one of the important pillar of its foreign policy. Accordingly India has taken initiatives to develop and support broadband infrastructure including digital linkages via broadband connecting Asia-Pacific Information Superhighway (AP-IS) initiative. This also can be seen as part of National Broadband Mission to improve broadband access across the country with reliable infrastructure opened to be connected to the neighbourhood. As part of it, India is creating an environment for "technology cooperation" which includes facilitating e-governance, digital training, capacity building in cybersecurity to enable the countries across the region to gain from the experience and expertise from India. This technical cooperation can lead to people-to-people

digital interactions, official communications via digital governance platforms, digital public service delivery, bureaucracy training and to help institutionalise digital ties.

Table 3: India's Regional Digital Connectivity initiatives under Neighbourhood First Policy

Initiative	Year Launched	Partner Country / Region	Purpose / Objective
UPI Cross-Border Digital Payments (UPI–Nepal, UPI–Bhutan, UPI–Sri Lanka, UPI–Mauritius)	Between 2021 to 2024	Nepal, Bhutan, Sri Lanka, Mauritius	Enable seamless digital payments, tourism facilitation, financial integration
India Stack / DPI Diplomacy (Aadhaar, DigiLocker, CoWIN, APIs)	2020 to present	Nepal, Sri Lanka, Bangladesh, Bhutan	Share digital public goods; support digital ID, e-governance, public service delivery
Agartala–Akhaura Fibre Optic Link	Launched between 2016 to 2020	Bangladesh	Boost cross-border data transfer & internet connectivity
Bandwidth Sharing with Bangladesh	2018	Bangladesh	Enhance digital connectivity in India's Northeast and Bangladesh
India, Sri Lanka Digital Fintech Integration (UPI-LankaPay)	2023	Sri Lanka	Promote interoperable fintech and digital commerce
India-Maldives E-Governance Project	2019	Maldives	Support digital governance systems, ICT infrastructure
India-Myanmar ICT & E-Governance Support	2015-present	Myanmar	Digital skilling, IT centres, e-office systems
National Knowledge Network (NKN) Cross-Border Links	2015-present	Nepal, Bhutan, Bangladesh, Sri Lanka	Strengthen academic & research collaboration through high-speed networks
Telemedicine & Digital Health Cooperation (e-Arogya Bharati)	2021	South Asian neighbours	Digital health services, remote medical consultation

COVID-19 Digital Collaboration (CoWIN sharing)	2021	Many South Asian states	Vaccine management systems, digital public health logistics
Common Alerting Protocol (CAP) Early Warning System Support	2020 to till now	Nepal, Bangladesh, Sri Lanka	Digital weather alerts, disaster early warning connectivity

Source: MEA (2018, 2021); NPCI (2023); World Bank (2020); BIMSTEC Secretariat (2022); ISRO (2017); MeitY (2023); NKN (2019); India Post (2021); NIC (2020).

India's digital connectivity initiatives under the Neighbourhood First Policy aim to build regional digital public goods, enhance cross-border interoperability, and support economic integration in South Asia. The UPI-based cross-border payment systems with Nepal, Bhutan, Sri Lanka, and Mauritius are part of India's leadership in digital fintech diplomacy, for improving regional financial inclusion and tourism flows (NPCI, 2024). India's Digital Public Infrastructure (DPI) diplomacy, through Aadhaar like ID systems, DigiLocker, and open APIs, aligns with global development models and is increasingly recognised as a scalable framework for low- and middle-income countries (World Bank, 2022). The South Asia Satellite further strengthens regional data and communication capacity for disaster response and tele-education (ISRO, 2017).

Subregional initiatives like BBIN digital trade systems and National Knowledge Network (NKN) cross-border extensions enhance paperless trade, research collaboration, and digital mobility (UN-ESCAP, 2024). These efforts collectively position India as a regional digital anchor, promoting stability, trust, and interdependence which is central to its Neighbourhood First approach.

India has collaborated with Nepal's National Payments Interface (NPI) to enable QR-based Unified Payments Interface (UPI) through National Payments Corporation of India (NPCL) International. This partnership will allow Indians to use their UPI apps to make payments in Nepal and Nepalese can use their digital wallets to make payments in India. This facilitates digital transactions across the borders through digital means and helps tourists as well as residents to have cashless transactions instantly. This initiative which started to facilitate person to merchant transactions, now extended to cross-border remittances also. These digital payments also help in reducing transaction costs for cross-border trade. As a result, the UPI merchant transactions in Nepal by recorded more than one lakh in six six-month period after its launch. The inauguration of the "Bangabandhu-Bapu" digital exhibition in collaboration between India and Bangladesh is an example of the evolving digital diplomacy in the region.

As part of greater regional digital and financial integration, India is planning to link its UPI payment services with that of BIMSTEC countries. At the 6th BIMSTEC summit held in April 2025, Prime Minister Modi offered to share its experience in building digital public infrastructure including e-governance platforms, identity systems, UPI methods and proposed a pilot study on how the system can be adopted at the regional level and integrated in the cooperation activities.

These initiatives also help India counterbalance China's digital influence (e.g., Digital Silk Road) by promoting trusted, transparent, and secure digital ecosystems in the neighbourhood. These initiatives strengthen regional resilience, reduce digital divides, and provide lessons for

creating a South Asian Digital Market, which can integrate India's economy with Nepal, Bhutan, Bangladesh, Sri Lanka, and Maldives. Ultimately, they support India's diplomatic goal of building a connected, stable, interoperable neighbourhood that aligns with its Act East, Indo-Pacific, and Digital Public Infrastructure (DPI) leadership.

Comparing Regional Digital Connectivity Initiatives

In order to understand the global, regional and India's Neighbourhood First digital projects will be helpful to highlight differences in institutional strength, policy coordination, and implementation. The following table 4 helps illustrate how South Asia's digital cooperation remains fragmented compared to more advanced regional frameworks, and how India's bilateral digital diplomacy partly bridges these gaps. This comparative overview also provides the empirical basis for analysing India's approach through the lens of Strategic Digital Regionalism.

Table 4: Comparative status of Regional Digital Connectivity Initiatives

Dimension	**Global Regional Initiatives (EU, AU, ASEAN, Latin America, Africa)**	**South Asian / Regional Initiatives**	**India's Neighbourhood First Digital Initiatives**
Level of Institutionalisation	Very high formal regional bodies (EU DSM, AU DTS, ASEAN Digital Masterplan) with strong treaties, funding, monitoring	Low — SAARC stagnation, BIMSTEC emerging, BBIN functional only in specific sectors	Medium — bilateral MoUs, project-based interventions, no regional digital treaty
Scope of Digital Integration	Comprehensive: digital markets, cybersecurity, cross-border data, trade, AI, digital rights	Limited: trade facilitation, ICT training, e-governance, payments, satellite communication	Focused: digital payments, digital ID, broadband, cross-border OFC, DPI sharing
Infrastructure Development	Large-scale and coordinated (EU roaming, AU fibre corridors)	Fragmented, project-specific, funding constraints	Targeted cross-border OFC (India–Bhutan, India–Maldives, India–Lanka), digital public infrastructure
Policy Harmonisation	Strong regulatory alignment (GDPR, ASEAN digital standards, AU strategies)	Weak alignment; regulatory divergence between countries	India-led norms through DPI architecture; no regional regulatory alignment

Funding Mechanisms	Large, institutionally backed (EU Global Gateway, World Bank, AU funding)	Limited; relies on multilateral loans/assistance	Mostly India-funded or co-funded with ADB/World Bank in select cases
Geopolitical Orientation	Regional unity, competitiveness, resisting external digital dominance	Balancing China, India influence; sensitive to power asymmetries	India's strategic interests: countering China, building trust, securing neighbourhood
Market Integration	High (EU DSM), moderate (ASEAN), emerging (AU)	Very low; no digital single market in South Asia	Bilateral or trilateral interoperability; early steps toward payments/data integration
Cybersecurity Cooperation	Formal frameworks exist (EU Cyber Strategy, ASEAN CERT cooperation)	Minimal; some SAARC cyber initiatives not operational	Bilateral CERT agreements, cyber MoUs, capacity building
Success Level / Progress	High progress (EU), moderate (ASEAN), steady (AU), growing (Latin America)	Low progress; political tensions obstruct SAARC, BIMSTEC still evolving	High bilateral success (UPI linkages, OFC projects), growing soft power influence
Driving Logic	Economic integration + digital competitiveness	Developmental + connectivity + political sensitivities	Strategic Digital Regionalism (geoeconomics + soft power + infrastructure diplomacy)

The comparison in Table 4 above shows that while global regions such as the EU, ASEAN, and the African Union have advanced institutional frameworks and coordinated digital policies, South Asia experience fragmented progress due to limited regional mechanisms and political constraints. India's Neighbourhood First digital initiatives ranging from cross-border optical fibre links to UPI payment integration and DPI cooperation are more effective as, bilateral or subregional frameworks for digital connectivity. These projects partially compensate for the weak institutionalisation of SAARC and the slow evolution of BIMSTEC and BBIN. The comparative insights reinforce that India's digital strategy aligns closely with the logic of Strategic Digital Regionalism, where digital connectivity becomes a tool for regional influence, interdependence, and stability.

At the same time these global and digital initiatives with their experiences create benchmarks, models and standards that India can adapt and implement in South Asia as part of its Neighbourhood First policy. First, they explains how digital connectivity like cross-border

payments, digital public infrastructures, e-governance platforms, and satellite communication, can become part of regional public goods, which supports India's efforts to deliver similar services (UPI, Aadhaar-like ID systems, South Asia Satellite) to its neighbourhood. Second, these initiatives highlight the importance of interoperability, shared data frameworks, regulatory harmonisation, and digital trade corridors, which directly corresponds to India's goal of promoting cross-border connectivity with Nepal, Bhutan, Bangladesh, Sri Lanka, and the BIMSTEC region.

Third, these global models help India with the idea of Strategic Digital Regionalism, where digital tools can deepen political trust, economic interdependence, and regional stability. Finally, India uses digital diplomacy through DPI exports, cross-border fintech, and shared digital standards to build goodwill, strengthen partnerships, and reinforce its leadership role in the region. In this sense, global digital initiatives act as comparative templates and policy catalysts, strengthening the logic behind India's digital-led regional cooperation approach.

Opportunities and Policy Options

India's Neighbourhood First Policy creates significant opportunities to deepen regional cooperation through digital connectivity, particularly by leveraging India's digital public infrastructure capabilities and expanding cross-border digital systems. The most immediate opportunity lies in scaling interoperable digital platforms across neighbouring countries, following the success of India-Nepal UPI linkage and India-Sri Lanka digital payments collaboration. Research shows that DPI-based cooperation fosters trust, institutional resilience, and long-term policy alignment among partner countries (Madon & Masiero, 2025). Through platforms such as Aadhaar-based identity systems (via MOSIP), CoWIN, DigiLocker, and UPI, India can position itself as a regional provider of digital public goods, enabling countries to modernise their governance and financial systems at lower cost (Mehta, 2022).

Another major opportunity is strengthening digital trade and digital economy integration in South Asia. Projects such as BBIN customs digitisation, cross-border e-logistics, and electronic cargo tracking can significantly lower trade barriers, improve transparency, and support regional value chains (Ahmed, 2024). India's ongoing fibre connectivity projects with Bhutan, Nepal, Bangladesh, and Sri Lanka also create the foundation for a regional broadband backbone, essential for secure data flows and digital service delivery (De, 2020).

A third opportunity lies in creating regional standards and cooperative mechanisms for data protection, cyber governance, and digital payments. Scholars note that harmonised rules are critical for cross-border services, digital financial inclusion, and trust-building between neighbouring states (Alper & Miktus, 2023). India can lead this process by spearheading a South Asian Digital Cooperation Framework under BIMSTEC or BBIN, given the stagnation of SAARC.

Policy options include: (1) formalising DPI-sharing agreements; (2) co-developing cybersecurity protocols and CERT cooperation; (3) establishing regional digital skills missions; (4) expanding cross-border fibre and satellite links; and (5) integrating South Asian countries into global initiatives such as the EU Global Gateway or World Bank digital programmes (World Bank, 2023). Overall, digital connectivity offers India a strategic, low-cost, high-impact pathway to deepen regional integration and reinforce interdependence under Neighbourhood First.

Conclusion

Within India's Neighbourhood First Policy, digital initiatives serve dual purposes: they provide essential public goods to neighbouring states while reinforcing patterns of trust, interdependence, and policy alignment. These initiatives lower transaction costs, bridge institutional gaps, and create shared technological standards that can gradually soften geopolitical frictions. However, their long-term impact will depend on sustained political commitment, regulatory harmonisation, and the ability to institutionalise cross-border digital public infrastructure.

Overall, digital connectivity does not replace traditional diplomacy but complements it by offering functional entry points for cooperation. As South Asia transitions toward a more networked regional architecture, India's leadership in digital public goods and interoperable systems holds significant potential to shape a more integrated neighbourhood.

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