

Connectivity Initiatives by G20 Countries: Convergence or Divergence?

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Abstract: With the global infrastructure investment gap estimated to be \$15 trillion by 2040, connectivity has become a G20 focus area. G20 has brought out Quality Infrastructure Investment Principles to maximize “the positive economic, environmental, social and development impact of infrastructure.” Action on connectivity is gaining pace among G20 members with Australia, China, EU, India, Japan, Russia and US having started, or being part of one or more, major international connectivity programmes. This paper finds the emergence of two connectivity models – one mainly followed by China, according primacy to expeditious project development, and the other, a rules-based model championed chiefly by the EU, the US and Japan. Though there is a divergence and competition in the approaches, G20 members have shown interest in cooperation to take forward several connectivity projects. However, since the differences in connectivity standards and models could lead to interoperability-related issues, this paper argues that G20 members will have to consider multilateral solutions including by framing and updating common standards as well as developing compliance-related mechanisms. Taking into account the SDGs and the Paris Agreement, it is vital for G20 to help mobilize sustainability-themed funds and promote people-centric PPPs. G20 should also help reduce or eliminate losses and waste in public investment in infrastructure by ensuring strong governance systems. Moreover, G20 should help rope in greater support for the India-led Coalition for Disaster Resilient Infrastructure, given the vital aspect of incorporating disaster resilience in connectivity projects to prevent/reduce losses due to natural disasters.

Introduction

Action on connectivity based on the G20 Principles for Quality Infrastructure Investment is gathering steam among the members comprising 20 leading economies of the world. This development comes even as the COVID-19 pandemic has resulted in lockdowns and stringent mobility restrictions. However, these curbs have only evoked the need for greater connectivity, albeit in the

digital mode, to link people locally and internationally, maintain vital interactions and keep communication lines open in various crucial fields such as health, education and finance (Khan, 2021).

India and the European Union (EU) - both G20 members - recently became the latest parties within the G20 to enter into a bilateral connectivity partnership (Govt. of India, 2021). India and the EU

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along with other G20 members such as Australia, China, Japan, Russia and the US have already started, or are part of one or more, major international connectivity programmes. Their heightened interest in connectivity is understandable as the global infrastructure investment gap is estimated to be around a whopping \$15 trillion by 2040 (GI Hub)¹. With increasing instances of 'connectivity diplomacy' (Suryanarayana, 2018) initiated by G20 members, the connectivity programmes of these countries have the potential to help bridge this investment gap, thereby assisting in bringing down the cost of interactions. They can also narrow the 'connectivity divide' seen especially in the developing world (Chohan and Hu, 2020). These initiatives can lead to the formation of various physical and virtual networks that are local, regional and global. Within the infrastructure space, better connectivity leads to greater supply chain efficiency, network resilience as well as productivity and growth, resulting in closer economic integration. Chaturvedi, Prakash and Dash (2020) capture these various dimensions of connectivity spillover effects in the Asia-Africa Growth Corridor (AAGC) from a 'growth triangle' perspective.

While there are benefits, including those mentioned above, infrastructure connectivity - if not properly designed - can have adverse effects on public health, security and environment (OECD/World Bank, 2019). 'Hyper-connectedness' or the intricate global interconnectedness of infrastructure enables acceleration of the globalisation process. However, there are also dangers stemming from it due to 'connectivity-wars' - or instances where an influential economy takes advantage of the hyper-connectedness by weaponizing it as a show of power against a nation or group of nations, and causing disruptions in trade, transport, finance,

investment, internet and movement of people (Leonard, 2016; EIU, 2014). Moreover, the connectivity programmes of powerful economies can also result in such initiatives becoming unsustainable debt-traps for borrower developing countries that get into lopsided connectivity agreements with rich nations (Ferchen and Perera, 2019). 'Connectivity wars' and 'debt-traps' can lead to nations opting for greater independence in their connectivity strategies and finding ways out of 'hyper-connectivity' to ensure that their sovereignty is uncompromised.

Taking these concerns into account, the G20's Quality Infrastructure Investment Principles look at maximizing the positive economic, environmental, social and development impact of infrastructure (Govt. of Japan, 2019).² The G20 was also instrumental in launching the Global Infrastructure Connectivity Alliance (GICA) in 2016.³ The GICA aims to support global linkages between communities, economies, and nations through transport, communications, energy, and water network through sharing of knowledge and information on trends and financing, providing mechanisms to spot trends as well as to map connectivity initiatives and their performance. It also helps in formulating solutions to narrow the global infrastructure connectivity gaps (GICA website).

Even as these collaborative efforts are shaping up, connectivity is becoming 'geo-politicized'. A scrutiny of various connectivity initiatives reveals two clear models - one mainly followed by China, according primacy to expeditious project development, and the other, a rules-based model pushed chiefly by the EU, the US and Japan. In this context, this paper looks at the Belt and Road Initiative (BRI) model and its alternatives, the connectivity-related competition and cooperation

among G20 economies as well as their global impact and implications.

Two Emerging Connectivity Models

Some of the leading cross-border connectivity initiatives that are led by one or more G20 countries include the Belt and Road Initiative (BRI) (China), Partnership for Quality Infrastructure in Asia (PQI) (Japan), EU-Japan Partnership on Sustainable Connectivity and Quality Infrastructure, Trans-European Transport Network, EU-China Connectivity Platform, Asia-Africa Growth Corridor (AAGC) (India and Japan), International North South Corridor (INSTC) (India and Russia), Australia-Japan-US cooperation for infrastructure investment in the Indo-Pacific, and the programme to connect China's BRI with the Russia-led Eurasian Economic Union (EAEU) (Nair, 2020). In addition, the US has initiated the Blue Dot Network and a related certification process on the basis of 'quality infrastructure principles as set out in the G20 Principles for Quality Infrastructure Investment, the G7 Charlevoix Commitment on Innovative Financing for Development and the Equator Principles' (US Department of State website on Blue Dot Network). The EU and the Quad alliance members (the US, India, Japan and Australia) have been trying to develop 'high-quality' and 'innovative' physical and digital connectivity initiatives that accommodate 'inclusiveness, democratic norms and healthy lending practices' (Heydarian, 2021; Lee, 2021; Sajid and ul Khaliq, 2021; Reuters, 2018).

Launched in 2013, BRI is a mega connectivity project covering as many as 140 countries across Asia, Africa, Europe and South America (as of January 2021). However, the project felt the impact of COVID-19 pandemic with Chinese

investments declining by 54 per cent year-on-year to \$47 billion in 2020. In 2020, maximum investments went to Asia (54 per cent), followed by Africa (27 per cent), South America (8.86 per cent) and Europe (8.6 per cent). BRI investments from 2013 to 2020 showed that in each year the highest share of investments went to infrastructure sector, especially to energy and transport, followed by metals and real estate. Interestingly, within the energy sector, renewables (hydro, wind and solar power) are garnering an increasing share in overall investments - up from 35 per cent of BRI investments in 2017 to 56 per cent in 2020. BRI investments are dominated by the Chinese State-Owned Enterprises (SOE). To be truly successful in promoting sustainable connectivity in the long term, the BRI project has to shift its focus to environment-friendly, socially conscious and financially viable projects with greater international collaboration and private sector participation. Such an approach can help reduce various risks including those related to debt servicing. Steps being taken in this regard include the Green Investment Principle (GIP) initiative. The GIP is aimed at greening BRI investments by incorporating sustainability into corporate governance, promoting the usage of green financial instruments, ensuring disclosure of environmental information, increasing the understanding of Environmental, Social and Governance (ESG) risks, and enhancing the adoption of green supply chain management, among others (Wang, 2021).

Increasing public debt levels, lack of adoption of harmonised infrastructure standards as well as inequitable distribution of income gains across all BRI countries are some of those concerns raised in case of BRI projects. There is now a need to ensure that gains from integration through BRI surpass the costs

incurred to build infrastructure. What can also help in this regard are policies to help workers develop a better skill set, boost their social security and improve their mobility (World Bank, 2019).

As against China's project development-based approach, the EU has chosen a rule-based model for its connectivity partnership.⁴ The EU's plan for a 'Globally Connected Europe' also has a geostrategic and global approach to connectivity. It incorporates Connectivity Partnerships with like-minded countries and regions (EU Council, 2021). The EU's major connectivity initiatives so far include the Trans-European Transport Network (TEN-T), the 'Partnership on Sustainable Connectivity and Quality Infrastructure' with Japan (in September, 2019) as well as the Connectivity Partnership with India (in May, 2021). It is also looking out for more partners in Indo-Pacific, Asia, Africa and Latin America. The countries on the EU's radar include South Korea, Russia, Turkey, Australia, Taiwan and the US. In the aftermath of COVID-19, the EU is placing greater emphasis on promoting health connectivity in addition to digital connectivity and access. Moreover, the focus areas include interoperability, green transition, social and environmental sustainability and resilience.

Unlike China's SOE-led model, the EU seeks to actively promote private sector involvement in bankable international connectivity projects, even as the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) have a prominent role in the bloc's connectivity strategy. The EU is also looking at presenting the partner nations a credible and sustainable alternative offer for connectivity financing. Further, taking into account the dangers of weaponization of connectivity, including those related to cybersecurity, the EU is keen to ensure the

ethical use of technology with a focus on security and personal data protection in its connectivity initiatives within the EU and overseas. In this regard, it envisages data protection cooperation with ASEAN countries, India, Japan, the US, Australia, Canada, South Korea, as well as New Zealand and others (European Parliament, 2021).

Meanwhile, the US and its G7 partners have launched a global infrastructure initiative 'Build Back Better World' (B3W) with a focus on good governance and high standards (on environment and climate, labour and social safeguards, transparency, financing, construction, anticorruption). The B3W, aiming to help narrow over \$40 trillion infrastructure needs in the developing world, also seeks to build financially, environmentally, and socially sustainable infrastructure (Government of the US, 2021a). Japan's Partnership for Quality Infrastructure (PQI), which took off in 2015, has an Asia focus. It also wants to promote 'quality infrastructure investment' as a global standard. Meeting the quality-related norms on durability, environmental friendliness and disaster-resilience might be costly initially, but as per Japan, such an approach will prove to be cost-efficient in the long-term. This contrasts the low costs of poor-quality infrastructure on completion and its high life-cycle costs. The PQI initiative is being implemented using Japan's Official Development Assistance as well as in collaboration with the Asian Development Bank, in which Japan and the US are the highest shareholders⁵ (Government of Japan, 2015). It envisages a vital role for private sector (See Table 1 for details on the differences between the two main connectivity models).

The size of the connectivity projects differs dramatically under the above-mentioned initiatives. For instance, the

Table 1: Differences between Two Main Connectivity Models

BRI	Alternatives (promoted mainly by the EU, Quad countries and some of their allies)
Largely project development-based approach.	Rules-based model.
Deploys flexible and low-cost ‘soft law’ agreements, or quasi-legal/non-binding obligations, such as Memorandum of Understanding (MoU).	Use of ‘hard law’ tools with a higher contracting cost, but are legally binding and enforceable before any court of law.
Accords primacy to China’s international commercial courts for dispute resolution.	Open to international arbitration.
Relies on informal bilateral primary agreements in the form of MoUs and declarations with BRI partner countries that are quickly entered into.	These legal tools are more time-consuming to be agreed upon than ‘soft law’ pacts.
Primary agreements (MoUs, declarations, etc.) act as the hub; Secondary pacts in the form of contracts (including performance agreements and guarantees, finance agreements as well as land usage contracts) form the spokes. These pacts are supported directly or indirectly by the concerned government(s) to ensure the implementation of BRI projects.	No such ‘hub and spoke’ strategy.
Less emphasis on social, environment, democratic/human/labour rights, governance, quality and ethical elements; Prioritises five elements of cooperation - ‘policy coordination, connectivity facilitation, unimpeded trade, financial integration, and people-to-people bonds.’	Social norms/democracy/human rights/labour rights and environment provisions, governance and ethical norms as well as ensuring ‘high quality’ and sustainability given more importance.
Primarily State-Owned-Enterprises-led model.	Promotes greater private sector participation.
Flexibility and speed of implementation viewed as favourable factors during times of crisis such as the current COVID-19 pandemic.	Rules-based approach takes more time than the ‘soft law’ model; therefore, not advantageous during emergency situations, but considered to be more sustainable from a long-term perspective.
Inadequate transparency makes it difficult to track instances of corruption and anti-competitive practices.	Focuses on eliminating corruption and anti-competitive practices through provisions including those related to disclosure and transparency.
Tends to push China’s preferences in terms of products, services, mechanisms and standards.	Accommodates most interests of signatory parties to ensure a win-win outcome.

Source: Author’s compilation from Wang, 2021; Hussain, 2019; Li, 2020; Heydarian, 2021; Lee, 2021; Sajid & ul Khaliq, 2021; Reuters, 2018; European Parliament, 2021; Government of the US, 2021a; Government of Japan, 2015.

PQI initiative (of around \$200 billion) is smaller compared to the scale of BRI (estimated to be between \$1-8 trillion). There were also instances of competition between China and Japan for the same project as was seen in the case of a high-speed rail project linking Jakarta and Bandung in Indonesia, which China grabbed as it was able to offer Indonesia better terms cost-wise. Though Japan is known for its superior quality, China had the edge with greater allocation of financial resources for connectivity and its more agile decision-making ability. However, the danger here is that such collision of interests can lead to a 'race to the bottom' in terms of quality, costs, standards as well as contract terms and conditions (Pascha, 2020). The ideal way out is to ensure healthy competition and cooperation to promote quality and interoperability.

Convergence or Divergence?

The COVID-19 pandemic-triggered global crisis has critically hit global Foreign Direct Investment (FDI) flows including new infrastructure investment projects in developing countries. Most countries have laid focus on physical, digital and green infrastructure in their recovery investment plans. Significantly, it was seen that the lockdowns and the related mobility curbs accelerated the 'demand for digital infrastructure' across the world (UNCTAD, 2021). There are 3.6 billion people with no connectivity, and 'digital divide' is seen in developing and developed countries. As per a study led by the International Telecommunication Union (ITU), investments to the tune of \$428 billion are required to achieve universal, affordable broadband by 2030 in all countries. Noting that the rate at which people are being connected has slowed down significantly, the ITU has called for initiatives such as Saudi

Arabia's Connecting Humanity by 2030 to help achieve universal (digital) connectivity by 2030 (Zhao, 2020). International Labour Organization recently observed that countries with the highest levels of connectivity along with greater fiscal room and vaccine access have better chances of bouncing back to pre-pandemic GDP levels (ILO, 2021).

Varying levels of connectivity seen among nations is likely to result in further widening the connectivity divide and an uneven recovery. Despite several connectivity initiatives prior to the COVID-19 pandemic outbreak, the benefits flowing from them were unevenly distributed, in turn, resulting in connectivity divides and triggering the need for inclusive and sustainable connectivity. Therefore, in this digital era, technology firms need to come up with more innovative solutions using disruptive technologies such as Artificial Intelligence, blockchain, drones and data analytics. Further, crucial in this context are efforts to strengthen cross-border and cross-sector institutional cooperation for infrastructure connectivity projects as well as build interconnections between nations with the help of multilateral finance institutions (GICA, 2018).

Connectivity policies such as the 'Master Plan on ASEAN Connectivity' in South East Asia aim to enhance regionalization, while BRI is giving shape to a new international area that transcends regional boundaries through a China-centric strategy incorporating physical, digital and technological elements of connectivity as well as geopolitics. The connectivity space is also increasingly becoming competitive in nature with countries and blocs such as Japan, the US and the EU placing emphasis on quality, sustainability, democratic norms and rule of law to distinguish their efforts from

those promoted by China (Godehardt and Postel-Vinay, 2020).

Notwithstanding the rivalries and divergence, there are also increasing efforts to boost connectivity-related cooperation. For instance China looking to harness the China-Europe Railway Express to promote port and shipping cooperation along the Maritime Silk Road and build a Silk Road in the Air (Government of China, 2021). The EU and China have a bilateral Connectivity Platform to enhance synergies between the EU's approach to connectivity, including the Trans-European Transport Network (TEN-T), and China's BRI. This initiative has incorporated an Action Plan, annual meetings, joint studies, expert group meetings, cooperation between the development finance institutions of both the sides as well as cooperation on infrastructure standardization to take forward the implementation process. The focus is on joint development of green and low-carbon transport. Moreover, they aim to ensure proper functioning of key multimodal hubs along EU-China corridors as well as to bridge the missing links on the TEN-T and the EU-China cargo routes (European Commission website; European Commission, 2018).

The EU-China dynamics are changing with the reinvigoration of the US-EU ties following the Biden administration doing away with the confrontationist approach of the previous Trump administration (Anthony, et al., 2021). The US and the EU have now agreed to boost their cooperation on sustainable connectivity and high-quality infrastructure (Government of the US, 2021b). However, it may not be easy for the EU to diverge entirely from China as many EU member countries, owing to their financial resources crunch, are relying on China including finance for infrastructure building. This

process is gaining ground through the '16+1' (later expanded to '17+1') format comprising China, 12 EU member states (the most recent member being Greece) and five Balkan nations. It, however, has rankled the EU due to the strategic implications and adverse impact on the intra-EU unity on China-related policies including on connectivity (Hillman and McCalpin, 2019; Ciurtin, 2019; Witthoef, 2018; European Parliament, 2018).

The EU has now taken a practical approach with regard to BRI by simultaneously collaborating with China as well as offering a rules-based alternative aimed at greater security, transparency and accountability. However, it has its work cut out with China on firming up 'trusted connectivity' strategies i.e., to help build public trust in digital and physical infrastructure and technology (Arha, 2021). As regards the US, it could consider engaging with the China-led Asian Infrastructure Investment Bank (AIIB) that has strengthened its transparency and accountability norms. While the US and Japan are not members of the AIIB, G7 countries (barring the US and Japan), many European countries as well as India and Australia are AIIB members, reflecting the infrastructure financial institution's multilateral outlook (Brattberg and Le Corre, 2019; Sen, 2017; AIIB website). Also, with some leading US private companies collaborating with BRI partners in sectors including power, construction machinery and 'integrated security, logistics, and insurance service solutions' as well as to develop third party market (Sun, 2018; Ping, 2019), BRI could potentially be used as a platform for China-US cooperation (Athari and Ejazi, 2020).

The other major global connectivity player, Japan, is collaborating with India on the AAGC initiative to link India to

Africa and South East Asia. Japan also has a partnership with the US and Australia for greater infrastructure investments in Asia. In a bid to rebalance its ties with China on connectivity projects, it adopted a collaborative approach with regard to a high-speed rail project in Thailand. The consortium implementing the project includes a Chinese railway firm and it is partly financed by Japanese lenders. Japan also has plans with China to jointly develop a Pan-Asia high-speed railway network (Brînză, 2018; Reuters, 2019; Railway Technology, 2019).

Meanwhile, Japan and India, both not part of BRI, are collaborating on developing container terminal at the Colombo port in Sri Lanka. Japan and India (which has initiated the 'Act East Policy') are also looking to jointly develop infrastructure in South East Asia as a response to Chinese influence in the region (Borah, 2021). These instances show how connectivity politics is leading to both competition and collaboration between the leading G20 members.

Way Forward

This paper has analysed various connectivity initiatives of G20 countries and the two main connectivity models that have emerged in that context. It has found that though there is a divergence in the approaches, the countries have also shown interest in cooperation to take forward several connectivity projects. However, given that the differences in connectivity standards and models could lead to interoperability-related issues, G20 members will have to consider promoting multilateral solutions. In this context, there is a proposal before the global community regarding a multilateral rules-based connectivity framework incorporating a 'Code of Conduct', a process to strengthen

connectivity-themed institutions such as the Multilateral Cooperation Center for Development Finance as well as multilateral/plurilateral connectivity forums (Islam, et al., 2019). Reducing connectivity barriers can help boost the global GDP, while enhancing connectivity can improve the inclusiveness within the G20 bloc as well since it can address the challenges being faced by the developing countries within the G20 as well as their Micro, Small and Medium Enterprises owing to the 'connectivity divide'. However, the G20 will have to focus on framing and updating common standards as well as in developing compliance-related mechanisms (Kalkan, 2014).

Development of cross-border connectivity assets has gained importance due to their vital role in enhancing regional connectivity, a focus area of the G20 Development Working Group. However, building such assets requires closer coordination between the countries involved to: (i) mitigate various risks including political; as well as to (ii) prevent time and cost overruns on account of delays including due to the differences in standards, unexpected complications and difficulties in obtaining regulatory clearances. Also important are robust governance and monitoring mechanisms, sharing of benefits in an equitable manner (GI Hub and Ramboll, 2021). Besides, what can help are: (i) development and incorporation of common sustainability norms and approaches across the life-cycle of projects and in the connectivity-related decision-making mechanisms of the governments; (ii) promotion of Public Private Partnerships (PPP) through a stable and high quality legal and regulatory framework; as well as (iii) backing dispute resolution mechanisms, ideally at the 'international level', that are proven to be efficient and independent (OECD, 2020).

It is also important for the G20 to follow up on the G7's initiative post- COVID-19 outbreak aiming to build on its \$12 trillion package that includes investments in secure and quality infrastructure for clean and green growth. In order to ensure proper functioning and long-term sustainability of connectivity initiatives, it is essential to not only strengthen local capacities, but also facilitate investments from responsible and market-based private sector players. In this context, the G7 plans to enhance support for initiatives such as Climate Investment Funds, InsuResilience Global Partnership and Risk-Informed Early Action Partnership (or REAP - on 'early action, disaster risk and insurance'), Glasgow Finance Alliance for Net Zero and the Financing for Development in the Era of COVID-19 and Beyond Initiative - all taking forward the concept of quality and sustainable infrastructure investments as well as "in line with" the Addis Ababa Action Agenda on Financing for Development (Government of the US, 2021c).

However, the difficulty in attracting private sector investment persists especially in developing countries where around 90 per cent of infrastructure investment was made by the public sector. Taking into account the Sustainable Development Goals (SDG) 2030 agenda and the Paris climate agreement, it is vital to mobilize sustainability-themed funds, including pension funds, sovereign wealth funds, private equity funds and impact investment. It is also crucial to ensure collaborative efforts between private and public sector investors (through people-centric Public Private Partnerships) as well as between private sector and regional/multilateral financial institutions at the local, regional and global levels. In this regard, firming up strong institutional and regulatory

frameworks with transparency (including in the bidding process), legal stability, and predictability as well as setting up a multilateral coordination and cooperation mechanism for collaborative investment promotion strategies could boost the confidence of private sector investors (UN, 2020). It is also important to fortify the G20-initiated Global Infrastructure Facility (GIF), which has over 100 advisory engagements in more than 50 countries and facilitating a total investment of \$74 billion including private investments worth \$51 billion as of August 2021 (GIF website).

Another vital aspect that should be mainstreamed in G20 discussions is to efforts to find ways to reduce or eliminate losses and waste in public investment in infrastructure through strong governance systems with appropriate checks and balances that helps in efficient planning, implementation and evaluation and appraisal of projects. It was found that on average, more than one-third of the resources spent on creating and maintaining public infrastructure are lost because of inefficiencies and that on average, better infrastructure governance could make up more than half of the observed efficiency losses. In this regard, there is a need to strengthen existing initiatives such as the IMF's Public Investment Management Assessment framework to help countries assess their infrastructure governance institutions as well as the IMF-World Bank PPP Fiscal Risk Assessment Model to assist countries in assessing the potential fiscal costs and risks assumed by the government as well as the potential mitigation measures (Schwartz, et al., 2020).

Finally, it is important for G20 to help rope in greater support for the India-led Coalition for Disaster Resilient Infrastructure (CDRI), given the vital

aspect of ensuring that connectivity projects incorporate disaster resilience. The CDRI's current list of 31 members (countries and organizations, as of 15 June, 2021) includes the US, the EU and Australia as well as ADB and World Bank (CDRI website). The focus on disaster resilient infrastructure is important as losses from natural disasters worldwide in 2020 were worth \$210 billion, up from \$166 billion in the previous year (Munich RE, 2021). Also, it was estimated that the overall net benefit of investing in the resilience of infrastructure in developing countries would be \$4.2 trillion over the lifetime of new infrastructure (Hallegatte, et al., 2019). International cooperation is also essential to effectively address global challenges including the damage caused to infrastructure on account of natural hazards due to climate change. What can help in this regard is the CDRI, which is a multilateral system promoting the development and long-term benefits of disaster resilient infrastructure (CDRI, 2021).

Endnotes

1. In order to cater to the infrastructure investment-need estimated to touch \$97 trillion by 2040.
2. The G20 Quality Infrastructure Investment Principles encourage transfer of advanced technology and know-how on voluntary as well as mutually agreed-upon terms, and consensus-based enhanced accessibility to infrastructure and its national, regional and global connectivity. As per the Principles, infrastructure building should also consider the need to improve economic efficiency, in addition to embedding environmental considerations and resilience against disasters. Moreover, the Principles advocate improved governance through open, sustainable and transparent procurement, financing practices and anti-corruption norms. They also emphasise the need for

taking into account the borrowing nation's "financial, fiscal and debt sustainability" during the infrastructure development process (Govt. of Japan, 2019).

3. The GICA has its Secretariat in Singapore "hosted by the World Bank Hub for Infrastructure and Urban Development in Singapore".
4. According to the EU, "a global Connectivity Strategy must utilise a sustainable and rules-based Approach", "having regard to the UN 2030 Agenda for Sustainable Development (2015) and the Addis Ababa Action Agenda on Financing for Development (2015), as well as the G20 Principles for Quality Infrastructure Investment (2019) and Roadmap to Infrastructure as an Asset Class (2018)". It must also ensure 'secure 5G deployment'. Moreover, "it must address new and urgent challenges such as global health and security, hybrid threats, terrorism and poverty". In order to avoid 'adversarial camps or complete fragmentation', the EU is keen that connectivity is 'promoted as a principle that seeks cooperation wherever necessary and possible'. The EU wants its connectivity strategy to "create shared benefits, guarantee reciprocal market access, and prevent one-sided dependencies or debt traps, which jeopardise the autonomy of the participating countries, and should be conducted with mutual respect." As per the EU, its connectivity projects should be based on "human rights, the rule of law, democracy, solidarity against discrimination, sustainability, inclusiveness, transparency on social justice, a level playing field, reciprocity and adherence to rules-based multilateralism," and reinforcing the EU's international role as a norm-setter (European Parliament, 2021).
5. See <https://www.adb.org/work-with-us/investors/credit-fundamentals#accordion-0-4>

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