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G20
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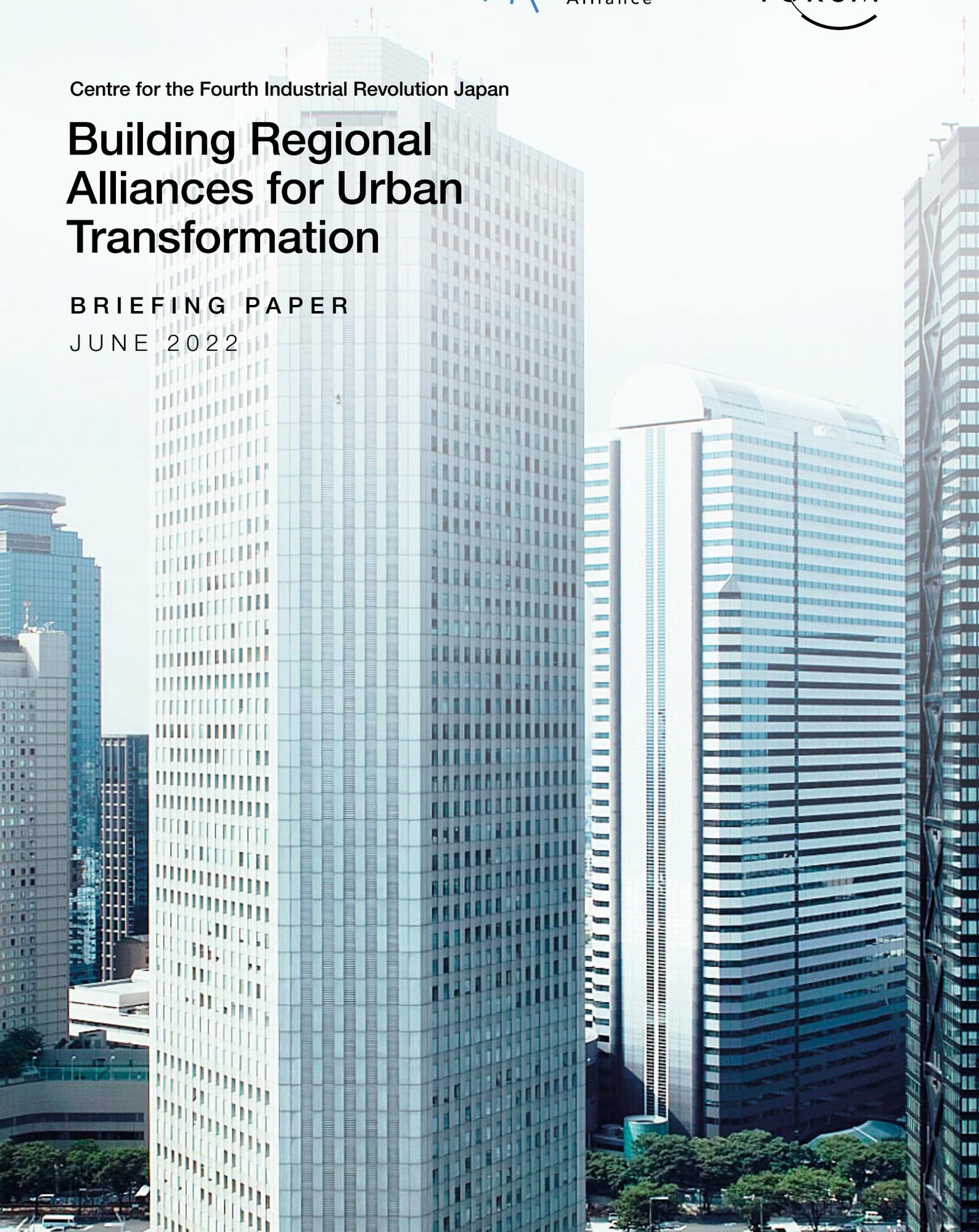


Centre for the Fourth Industrial Revolution Japan

Building Regional Alliances for Urban Transformation

BRIEFING PAPER

JUNE 2022



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Executive summary

The digital transformation of cities is growing rapidly. According to reports, it is estimated that smart city market growth is estimated to exceed 15% per year, with a predicted net market value of \$1.65 trillion by 2026. However, governance is not keeping pace with the speed and scale of this transformation, and this creates risks, as outlined in the World Economic Forum's [Governing Smart Cities](#) white paper. Not only is the right technology required, but it must be accompanied by the know-how on how to govern such digital technologies.

The G20 Global Smart Cities Alliance was established to tackle this challenge. Assembling the world's smart city policy experts, technology companies, governments and civil society organizations, the Alliance has been working towards the adoption of global policy norms in line with well-established ethical principles.

However, the adoption of such global norms is challenging at a global level. For that reason, the Alliance is working towards the establishment of regional networks, or "Regional Alliances", which support policy implementation at regional, national and local levels.

This paper explains how the G20 Global Smart Cities Alliance is developing Regional Alliances around the world; how it supports the partners and the Centre for the Fourth Industrial Revolution Network to build regional networks that support cities; and how through a new playbook, it intends to scale this model further, creating new networks that can promote initiatives for emerging technologies.

1. Smart Cities Frost & Sullivan Value Proposition, Frost & Sullivan, <https://www.frost.com/wp-content/uploads/2019/01/SmartCities.pdf>; Smart City Market, Global Industry Analysis, Trends, Market Size and Forecasts up to 2026, Infinium Global Research, <https://www.infiniumglobalresearch.com/agriculture/global-smart-city-market>

1

From global to regional alliances

Established in 2019, the G20 Global Smart Cities Alliance promotes policies for the ethical, responsible use of digital technologies in urban environments. These “model policies”, illustrated in Figure 1, are compiled and created by teams of

global experts based on policies that are shown to be well-established and foundational to achieving common guiding principles – privacy, resilience, sustainability, openness and equity.

FIGURE 1 G20 Global Smart Cities Alliance model policies



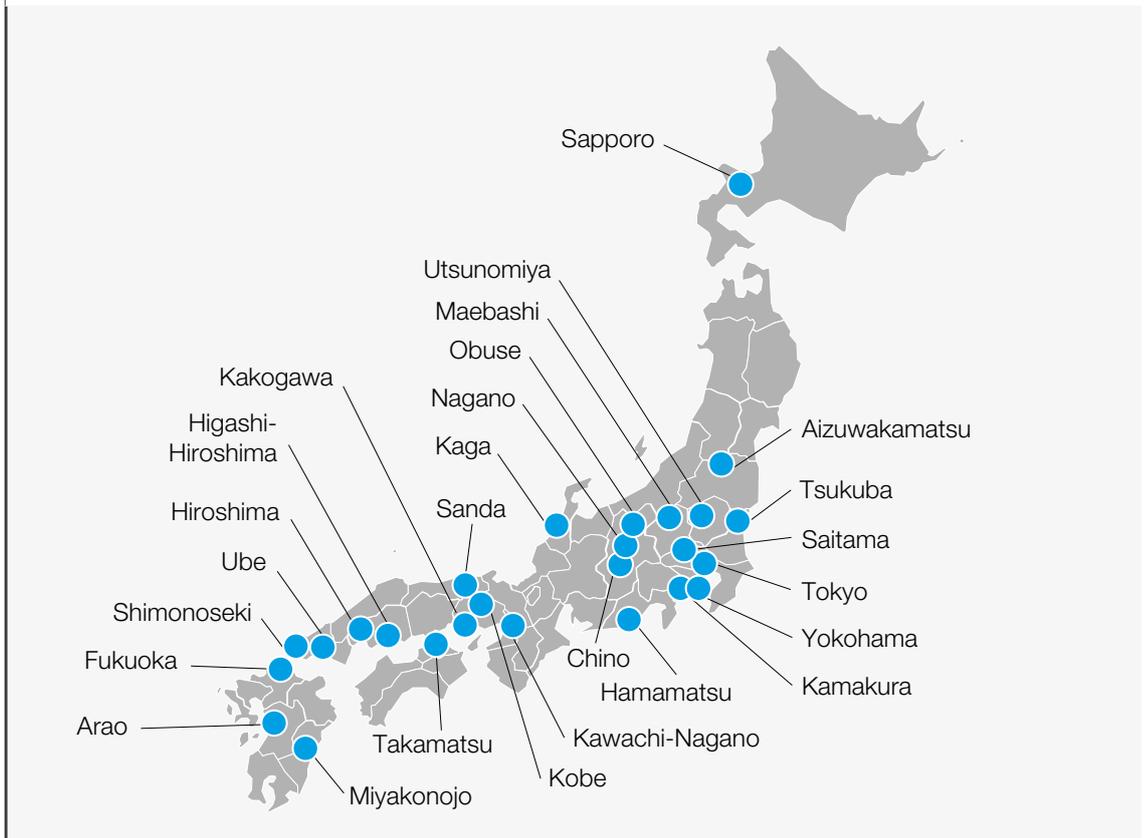
Source: [Governing Smart Cities](#)

Each model policy provides a blueprint for how a policy might be formulated. But the G20 Global Smart Cities Alliance recognized at an early stage that any model would need to be heavily reworked to fit a local context. Implementation at the local level requires accounting for a variety of differences, including language, governance structure, governance process, technical capacity and more. For this reason, the Alliance complemented the creation of this policy roadmap with the creation of regional networks, which would create networks of city governments and experts based around regional and national

communities that could understand and account for the adaptations that would be required more locally.

This activity began in 2019 with networking and community-building by the Forum's [Centre for the Fourth Industrial Revolution \(C4IR\) Japan](#). Beginning with several cities meeting regularly in Japan to share knowledge on use cases and policies, the Japan community had grown to 26 cities by the start of 2022, and frequently hosts workshops, city visits and national summits. This model proved popular among both city officials and the Forum's broader community.

FIGURE 2 Japanese cities involved in the C4IR Japan city community



Source: G20 Global Smart Cities Alliance Japan



Photo from the Global Smart Cities Alliance Japan meeting in April 2022.

Recognizing the needs for this more localized engagement across the G20 Global Smart Cities Alliance, the Forum announced in April 2021 the creation of two more [regional networks in Latin America and India](#), which would be modelled on the approach in Japan. As in Japan, where C4IR

Japan acts as the secretariat for the Japan city community, the networks in Latin America and India would be managed by C4IR Colombia and C4IR India, respectively, with support from Deloitte as a Forum Partner.

FIGURE 3 | Policy implementation progress sharing during community meetings from Alliance cities in Latin America

Cities	ICT Accessibility	Cyber Accountability	Cyber Resilience	Privacy Impact Assessment	Open Data	Open Contracting	Dig Once
Cali	X						
Duitama	X				X		
Rionegro					X		
Mexico City		X			X	X	
Córdoba		X			X		
Piura					X		
Bogotá				X	X		
Brasilia				X			
Medellín				X			
León							
Buenos Aires							
Total	2	2	0	3	6	1	0

Cities	Policy selection	Develop statement of intent	Develop a work plan	Follow up on the adoption of the policies
Mexico City				New!
Medellín				
Bogotá			New!	
Córdoba Reactivation				New!
Buenos Aires				
Brasilia				
Duitama			New!	
Piura		New!	New!	
Cali		New!	New!	
Rionegro		New!	New!	
León Observer				

Activity completed
 Activity in progress
 Activity to be developed
 We scheduled a call with Mexico city to discuss the workshop with the experts and to present a success case on open contracting

Source: G20 Global Smart Cities Alliance LATAM

As of May 2022, these three networks have been engaged with more than 40 cities, and through workshops and peer-learning sessions, they are providing practical guidance and support to city governments on how to reach the benchmarks set by the policy roadmap of the G20 Global Smart Cities Alliance. However, while these three networks collectively cover a large portion of world's

cities, the Alliance must create more networks to extend this level of support, particularly in those regions that are urbanizing rapidly. To facilitate this expansion, the Alliance commissioned Deloitte to produce a “playbook” that would set out the planning, development and operating steps of a Regional Alliance.

2

A playbook for building a Regional Alliance

The Regional Alliance playbook gives the Centre for the Fourth Industrial Revolution Network (and other partners) guidance on establishing their own

regional network. It compiles the steps needed to establish a Regional Alliance based on the experiences of Japan, India and Latin America.

TABLE 1 Playbook overview

Table of contents	Usage
1. About G20 Global Smart Cities Alliance	Learn about the overview of G20 Global Smart Cities Alliance
2. Important points for Regional Alliance establishment and expansion	Learn about the key tasks to be performed for each phase of Regional Alliance establishment and expansion
3. Standard communication	Learn about the key rules and principles to follow when communicating with cities and experts
4. Community management	Learn about tasks to be performed on cities and government, and experts in the Regional Alliance
Appendix I-IV	Learn about the details and examples of tasks to be performed on Regional Alliance establishment and expansion

The playbook provides comprehensive explanations of key tasks to be performed at each phase of the Regional Alliance activity. These tasks are split into

four phases: preparation, launch, operation and expansion, with examples given from activities in Japan, India and Latin America.

FIGURE 4 Phases and key Regional Alliance activities



Source: G20 Global Smart Cities Alliance Japan

The preparation phase focuses on identifying and recruiting target cities for a city community, and target experts for an expert community. For example, the playbook explains how experts can be invited to sign a letter of intent to ensure their strong commitment, based on the approach taken by the Latin America Smart Cities Alliance.

In the launch phase, formulating key milestones and building its tracking progress is vital. In the Japan community, while community meetings are held on a monthly basis, the community also runs bi-yearly conferences. To ensure a Regional Alliance has enough capacity to host such a variety of events, deliberate planning is required.

In the operation phase, key tasks and tips are outlined according to the different methods of community operation. Although the community in Japan and Latin America primarily adopts the format of community meetings, the community in India

has set up working groups depending on the cities' needs and interests, with learning sessions and webinars tightly organized around these interests.

In the expansion phase, identification and review of the achievements and issues related to the Regional Alliance's activities and initiatives is of paramount importance. In Japan, C4IR Japan compiled a document to marshal the benefits and achievements based on the experience with the first cohort cities (14 cities). As a result, the review led to an easier recruitment process for the second cohort cities (12 cities).

The playbook will be reviewed regularly, adding on the experiences in other regions to improve the breadth and depth of the content. The alliance hopes that the utilization of the playbook will assist the launch and operation of the Regional Alliance across the globe, thus improving the take-up of model policies and other technology governance measures.



Looking ahead – Regional Alliances for the Fourth Industrial Revolution

The Regional Alliance model was developed to support the implementation of better technology governance in cities. It is a response to the localized nature of smart city governance and implementation. However, the importance of local adaptation is not limited to smart city governance.

Other types of initiatives, which may not be typically ascribed to the smart city sector, can benefit from the key features of a Regional Alliance:

- *Relationships with policy-makers built on trust* – policy-makers that may ordinarily be wary of approaches by technology vendors are reassured by convening in a neutral space where entry is restricted and moderated.
- *Peer learning* – community members learn from others that have similar challenges and contexts.
- *Local to global expert networks* – combining local, regional and global networks provides access to world class expertise as well as the local experts needed for local implementation.
- *Local to national, regional and global visibility* – the visibility of being part of a regional and global alliance provides a platform for local leaders and stakeholders to promote their efforts to a broader audience. It also allows national, regional and global communities to learn quickly from local results, and this in turn means that initiatives can scale (or fail) more quickly.

Taken together, these features mean that initiatives with a significant element of local implementation and/or local regulation or governance can benefit from a Regional Alliance. For example, initiatives focused on public health transformation can benefit from many of the features of a Regional Alliance.

For this reason, the future vision of the G20 Global Smart Cities Alliance is to coordinate with other C4IR and partner initiatives such as healthcare or mobility, to apply the Regional Alliance model in other fields, going beyond its origins within the alliance.

Partners interested in developing or supporting the G20 Global Smart Cities Alliance, or its effort to develop regional networks around the world, are encouraged to contact Rushi Rama, Smart Cities Lead, Internet of Things and Urban Transformation, World Economic Forum, at rushi.rama@weforum.org, or visit the website at <https://globalsmartcitiesalliance.org>.

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