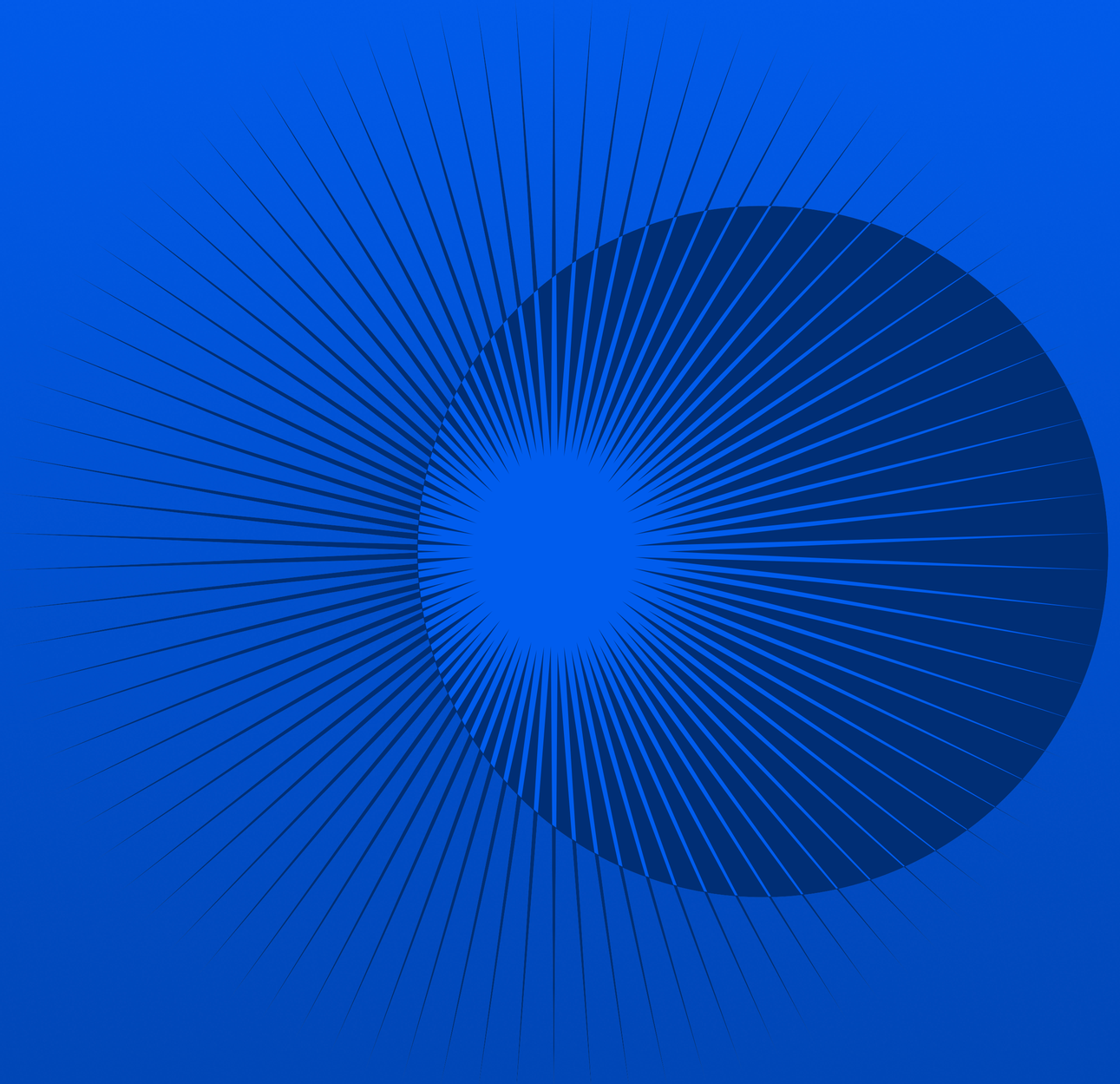
The Giga 2025 report



giga | unicef for every child | ITU

Content

Giga in Review 2025

Foreword

Giga has achieved significant scale and consolidation in 2025 advancing its mission to connect every school worldwide to the internet. We have built on foundations laid during our first five years and accelerated our reach and impact.

Giga expanded engagement across 47 countries and territories, with many more in the pipeline. We intensified work and activities out of our global headquarters in Geneva which hosts the Giga Connectivity Centre, with a focus on capacity development, financing and procurement while our Technology Centre in Barcelona continues to develop and refine open-source tools that facilitate school connectivity.

Meanwhile, as technologies such as artificial intelligence (AI) accelerate, globally 2.2 billion people are still offline and digital disparities are deepening, driven by differences in internet speed and reliability, affordability of service and devices, and digital skills.

School connectivity plays a vital role in closing the digital divide by ensuring that the next generation develops the skills needed to access emerging opportunities, bridging the gap between well-resourced and underserved communities

In short, school connectivity is not just about education – it's about equity, empowerment and social progress.

"When schools and communities are offline, the benefits of connectivity – including of emerging technologies like AI – cannot be shared equitably, making Giga's work helping governments to connect schools a critical first step to upending the global learning crisis and equipping learners with the information and opportunity to shape their future." Alex Wong, Giga Co-Lead.

When a school gets connected it means access to digital tools and resources. To national, quality digital content and digital education administration services. And to a broader curriculum, able to support children with special learning needs, for example – delivering flexible, collaborative learning.

"This is why connecting schools really matters. Because done right, schools become catalysts for future-ready learning, digital skills, innovation and inclusive socio-economic development." Christopher Fabian, Giga Co-Lead.

These efforts translate into real impact on the ground. In Ampara, Sri Lanka, according to one school principal, connectivity has helped enhance the learning experience and increased school attendance to between 80 and 90 per cent. At the Holy Family school in Leribe, Lesotho, girls in the tenth grade are learning database creation on their own computers in information and communication technology (ICT) lessons. Research shows that a 10 per cent increase in school connectivity correlates with more than a 1 per cent rise in GDP per capital.

Schools also serve as gateways to wider community connectivity – fuelling entrepreneurship, financial inclusion, and access to digital public services. In Villanueva, Honduras, for example, more than 40 schools are connected through Giga's community contribution model, where local businesses piggyback on school connectivity and reinvest profits to help cover internet costs.

Through our core action areas of map, model, finance and contract, underpinned by capacity development, and supported by our suite of open-source tools, Giga helps governments move from policy to delivery – aligning school connectivity with national education, connectivity, and digital transformation goals.

By combining data, open-source technology, innovative financing models, sustainability planning, and local capacity development, we can foster long-term, system-wide change.

Because once connectivity is in place, the focus expands – to digital transformation in education, from AI-enabled classrooms to public digital learning platforms – advancing the fundamental right to education.

Our task ahead remains urgent. Millions of schools are still offline, and the pace of technological change is only accelerating. But it is achievable. By working together through targeted and sustained efforts, tools and partnerships – we can get there.

Giga will continue to support governments to connect all schools to the internet, advancing the Global Digital Compact commitment to connect all schools and hospitals to the internet by 2030 – a key part of the United Nations Pact for the Future.

This effort draws on strong partnerships across the public and private sectors, multilaterals, research institutions, and technology partners – combining data, tools, financing approaches, and operational guidance to accelerate implementation at country level.

We are counting on your support to ensure every child and young person benefits from the opportunities opened up by digital transformation in education.

Christopher Fabian and Alex Wong
Giga Co-Leads

1.

Key achievements and impact highlights

2.2M

Schools mapped

47

Countries engaged with Giga

135k

Schools reporting
real time connectivity

54

Countries with mapping support

25

Countries with early interest

9

countries have completed infrastructure mapping and modeling to foster effective school connectivity

21

additional countries have been engaged to advance the infrastructure mapping and analysis efforts.

21

government officials from Mozambique, Namibia, South Africa, and Tanzania took part in a Government Technology Exchange Programme (GTEP).

128

delegates from 52 countries strengthened their capacity on different aspects of delivering school connectivity through five Giga Learning Hub trainings (online and in person) delivered via the ITU Academy.

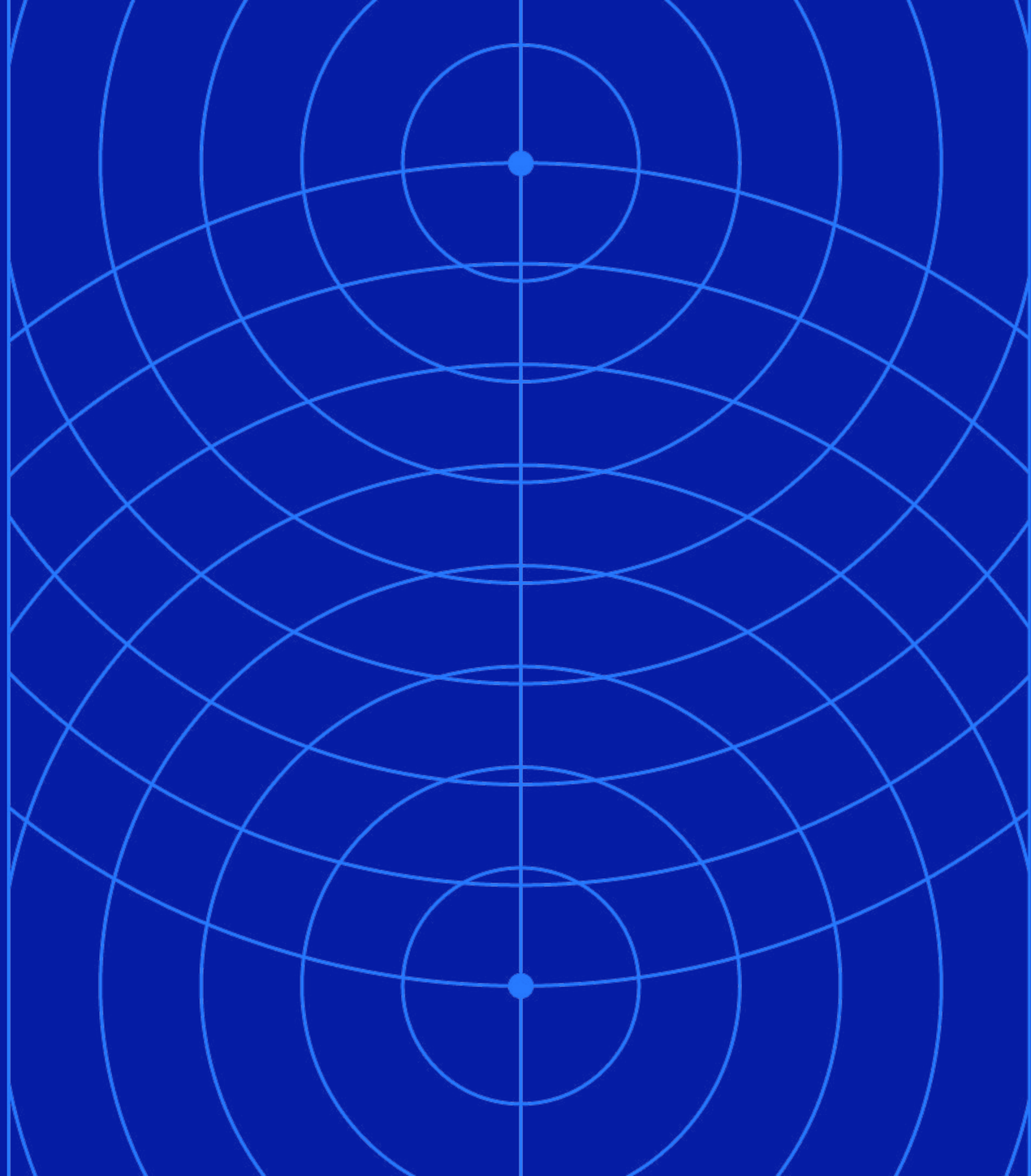
250

delegates from 42 countries participated in a Giga Connectivity Forum.

2. ACT I

The global moment

Why school connectivity matters



The global moment

Why school connectivity matters

When a school is offline, the effects can be far reaching. Students are cut off from critical digital skills, supplementary learning, information, opportunities, and choice.

From enriched curricula and enhanced teaching, to creating a skilled workforce and bringing connectivity into the communities, connected schools can play a transformative role in education, inclusion, and socio-economic development. A connected school should be seen as a catalyst, not a stand-alone intervention.

One central challenge today is whether connectivity can be delivered reliably, sustainably, financed predictably, and managed as part of national systems.

In many countries, schools have been connected through pilots or short-term programmes, often outside core government systems. Connectivity exists, but the financing of the costs is uncertain; data is incomplete, and responsibility for service quality is unclear. As a result, connectivity is difficult to sustain and hard to scale.

The constraint is rarely technical alone. School connectivity typically falls between education policy, telecommunications regulation, and public finance. Where these responsibilities are not aligned, progress slows and delivery remains fragmented.

The joint mandate of UNICEF and ITU addresses this gap. UNICEF brings long-standing engagement with education systems and a focus on equity and delivery at country level. ITU leads on telecommunications policy and regulation. Together, ITU and UNICEF also leverage partnerships with the private sector, civil society, academia, and other key stakeholders to advance Giga's mission.

Giga's role is to help governments treat school connectivity as a public infrastructure and strengthen the conditions required for scale. To do this, Giga extends support in four areas: school mapping, infrastructure modelling and cost analysis, financing, and contracting. This support is anchored on capacity building, which underpins all areas.

Consider a student like 12-year-old Amina whose school does not have internet yet. For her, connectivity is not about speed, platforms, or innovation. It is whether her school is included at all. It is whether digital lessons reach her classroom, whether her teachers can access materials, and whether her education keeps pace with a world that increasingly assumes schools are connected.

Making that possible depends on decisions taken far beyond Amina's school. Governments need to know where schools are and what they lack. Networks need to reach them. Costs need to be affordable and reliable. Giga works to put these conditions in place, so that connectivity reaches schools like Amina's and stays there. Not as a project, but as part of the systems children rely on to learn.

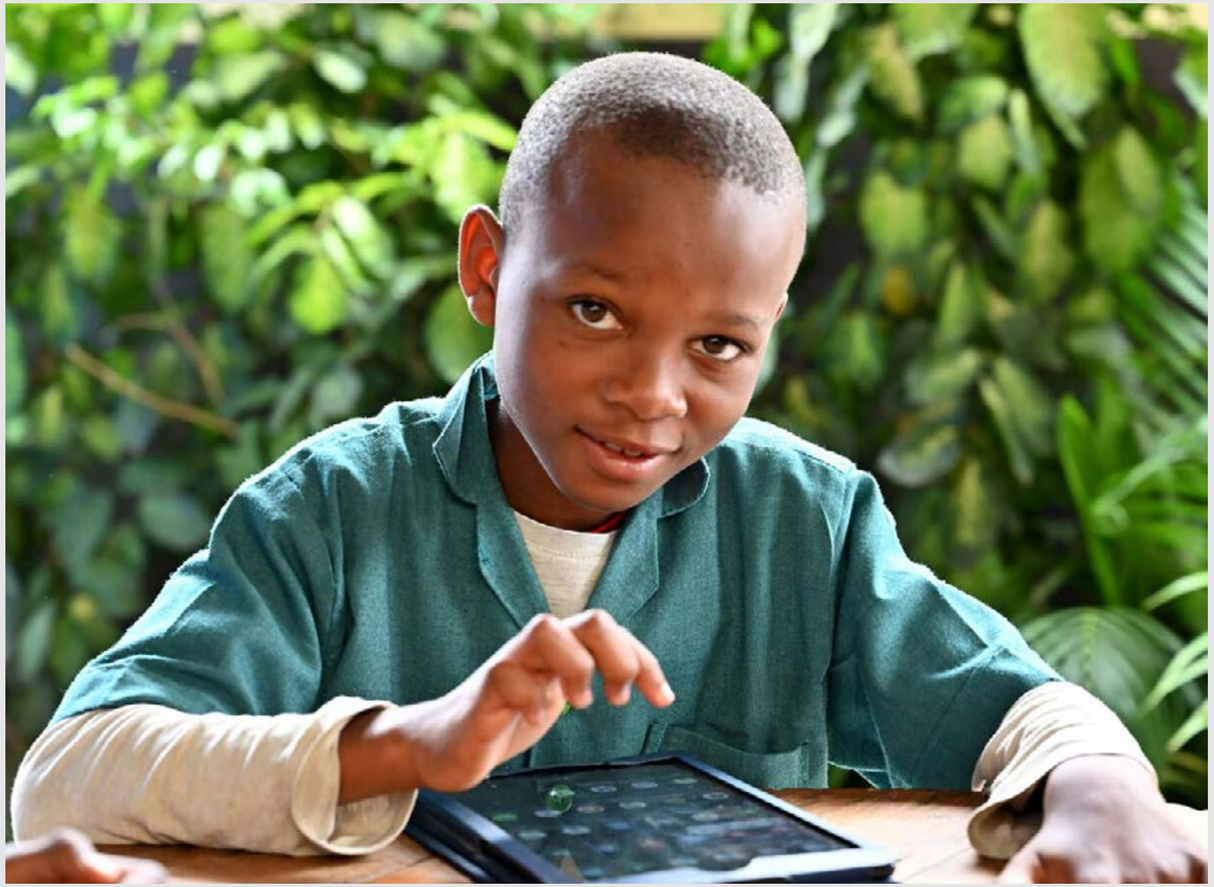
From remote schools to real-time monitoring

How Namibia is strengthening oversight and reliability of school connectivity

It is mid-morning in Putuavanga Senior Secondary School, a rural school tucked away in Namibia's Kunene region in the far north of the country. The school sits against a backdrop of open land and distant hills, a reminder of just how remote this part of Namibia is. Yet despite the isolation, there is a quiet sense of determination among the learners who file into their classrooms, their aspirations stretching far beyond their immediate surroundings.

Putuavanga may be far from the country's urban centres, but the learners here are anything but disconnected from ambition. Many speak confidently about their futures, careers they hope to pursue, and worlds they want to explore. For them, education is not just a daily routine, but a bridge to opportunities they know exist beyond their community.

Internet connectivity remains one of the biggest obstacles standing between these dreams and reality. Namibia's vast geography makes access to reliable internet a persistent challenge, particularly in rural areas. The divide between urban and rural schools remains stark. According to the Ministry of Education, Arts and Culture, 1,300 schools across the country are connected to the internet, while 671 still do not have access.



Grace Kashima, Deputy Director of Vision IT at the Ministry, says connectivity is central to the future of education in Namibia. “Internet connectivity is very important, especially in our schools, because it allows for equitable access to online content for all our learners,” she explains. “We are in a phase where we are transforming education in terms of digital transformation, and with that it requires online content and online platforms. We want our learners to be able to use their ICT skills.”

To monitor internet connectivity in the schools throughout Namibia, Ms. Kashima uses Giga Meter, a real time monitoring app that allows her to check the quality of internet connectivity.

“The real-time monitoring tool makes it easier for us to see the status of internet connectivity and follow up with our service provider when services are not up to standard, because we need reliable internet,” says Ms. Kashima.

Using her desktop computer, she looks through the map of Namibia, bright green and red dots pop up on her screen indicating which schools are connected and which are not. Ms. Kashima clicks on a green dot; a pop-up displays the name of the school and the strength of the internet connection. She values being able to get real-time information about the state of school connectivity in Namibia at just a click of a button.

At a regional level, plans are already underway to ensure more schools around the country are connected. Sophia Frederick, Regional Director of Education, says the goal is ambitious but necessary. “Our plan is that in about five years’ time, we should have at least 80 per cent of our schools connected to reliable internet,” she says. “Our kids should be able to integrate ICT into their learning and be prepared for the future. Some want to become engineers, some want to become computer technicians.”

For 16-year-old Grade 9 learner Tjindunda Keuvazere, access to computers has already changed how she experiences school. “It’s very exciting, because we get to learn new things every day,” she says. “It makes learning more fun. We are not only using textbooks now, but we can also use computers. We learn things like e-commerce and e-learning.”

3. ACT II

The Giga model in action

Evidence from 2025

The Giga model in action

Evidence from 2025

In 2025, Giga ramped up efforts across all four pillars at the core of its work. Giga mapped school locations and modelled infrastructure options and costs. In financing, the initiative explored innovative funding approaches, including via the Digital Infrastructure Investment Catalyser. Through procurement support, Giga helped governments design more transparent, efficient and effective ways to procure internet service. An integrated suite of tools and services ensured end-to-end support to help governments achieve school connectivity.

3.1 Map: Data as a national asset

3.1.1 School mapping for national planning and resilience

Multi-country evidence from governments formally engaged with Giga

Reliable data on school location is a prerequisite for effective planning and coordination. In many countries, this information has historically been incomplete, outdated or fragmented across institutions. Giga's mapping and monitoring work supports governments in strengthening this data foundation so that schools can be integrated into national planning processes beyond education alone.

As of October 2025, Giga has mapped 2.2 million schools across 145 countries. In 54 countries, this mapping is based on official government datasets, providing a shared and authoritative reference point for decision-making. This scale of coverage enables governments and partners to use school data as part of broader policy, infrastructure, and service delivery planning.

In contexts where official school data was incomplete or inaccurate, Giga supported governments to improve data quality through AI-assisted school mapping. Using high-resolution satellite imagery and machine learning techniques, Giga helped predict and validate school locations in countries including Kenya, Sierra Leone, Rwanda, Niger, Honduras, Djibouti, Brazil, Mozambique and Ghana.

This approach delivered measurable improvements in data accuracy. In Colombia, AI models identified 7,000 potential school locations missing from official datasets. In Sudan, AI-assisted analysis was used to correct the geolocation of approximately 20,000 schools, addressing long-standing inaccuracies in national records. These corrections strengthened governments' ability to plan infrastructure investment, estimate costs, and coordinate service delivery more effectively.

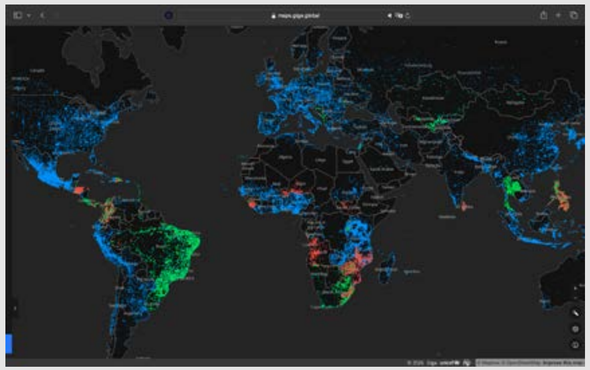
Taken together, these examples demonstrate how school mapping and data quality improvement are more than technical exercises. By improving the completeness, accuracy and usability of school data, mapping supports governments to make better-informed decisions and integrate education infrastructure into wider national planning processes.

What Giga enabled

Giga provided technical support to consolidate and validate school location data and offered guidance on connectivity indicators. The initiative used AI-assisted methods to improve data quality where official records were incomplete and integrated mapping outputs into shared platforms used by governments and partners.

What this unlocked

Reliable data will enable countries to plan more effectively, improve coordination across sectors, and build stronger foundations for infrastructure investment as countries coordinate across sectors, and move from mapping to delivery.



3.1.2 Managing school connectivity as national infrastructure

Driving impact through partnerships with national key players

School connectivity can only scale when governments have a reliable picture of where schools are, how they are connected, and whether services work in practice. Giga's mapping and monitoring capabilities address this constraint by turning fragmented information into a shared state function.

By consolidating school connectivity data into a common reference layer, Giga Maps allows education, telecommunications and finance authorities to plan infrastructure, design procurement, and prioritize investment using the same evidence base. This reduces duplication and coordination costs and enables connectivity to be managed nationally rather than school by school.

In 2025, these capabilities were strengthened through new and expanded partnerships with international and local actors contributing infrastructure and datasets. These include the Brazilian Network Information Center, a non-profit entity which implements the decisions and projects designed by the Brazilian Internet Steering Committee, and Mawingu in Kenya, which supplies real-time data from schools in underserved areas.

Real-time monitoring strengthens oversight. Giga Meter shifts accountability from nominal access to service performance, making connectivity measurable and manageable as an operational service. In 2025, Giga Meter's reach and reliability were boosted through partnerships with Measurement Lab (M-Lab), which provides open and transparent measurement infrastructure, and Cloudflare, whose global network of distributed measurement points expands coverage and strengthens the resilience of real-time connectivity monitoring.

Where official data was incomplete, AI-assisted validation improved accuracy, reducing uncertainty in planning, and cost estimation.

Together, these tools – substantially reinforced in 2025 through partnerships – allow school connectivity to function as infrastructure: planned, visible and governable at scale.

3.1.3 Tools and platforms: Data-driven tech solutions to address global connectivity challenges

In 2025, Giga's capabilities moved from supporting visibility to enabling planning, oversight, and accountability at national scale.

Giga Maps

The Giga Map provides a shared reference layer showing where schools are and how they are connected. By the end of 2025, Giga Maps consolidated connectivity data for more than 460,000 schools across 54 countries, supporting national planning, procurement, and coordination using a common dataset.

Giga Meter

The Giga Meter is a diagnostic application that benchmarks a country's readiness to connect all schools to the internet and identifies priority gaps for action. It enables ongoing monitoring of connectivity performance through automated measurements. In 2025, more than **135,000 schools across 36 countries** reported real-time connectivity data through Giga Meter, helping governments track performance and target interventions where they were most needed.

Sri Lanka

+1.8k

schools reporting real-time connectivity data

600k

students benefitting from live monitoring

Data used to guide national planning, including identifying hub schools and targeting quality gaps

Mongolia

~90%

of connected schools transmitting real-time performance data

Monitoring Integrated

with existing government network systems

Issues diagnosed remotely, reducing downtime caused by internal network faults

Uzbekistan

+10k

schools reporting real-time monitoring

100%

real-time monitoring coverage in schools

Monitoring supports accountability during rapid national scale-up of connectivity

AI mapping and school data validation
Giga uses AI mapping to improve the accuracy of national school datasets where official records are incomplete. In 2025, AI-assisted validation supported governments in Djibouti, mapping over 80 per cent of schools nationwide, and in Mozambique, geolocating nearly 3,000 schools previously missing coordinates, strengthening the basis for planning and cost estimation.

Giga Spatial
Giga Spatial supports advanced geospatial analysis for medium and long-term connectivity planning. By the end of 2025, Giga Spatial had recorded over 8,000 downloads, reflecting growing uptake by governments, researchers and practitioners working on infrastructure planning.

Giga Blocks and Giga Stake
Giga Blocks, enables transparency and public engagement by using digital assets to represent schools and support new contribution models for connectivity. Through Giga Stake, supporters can contribute a share of staking rewards to fund school connectivity efforts. By the end of 2025, non-fungible tokens (NFTs) representing more than 50,000 schools had been minted, expanding awareness and participation in Giga's work.

3.1.4 Open source as a governance choice
Giga's technology stack prioritizes open-source development as digital public goods, allowing governments to adapt and integrate tools within their own systems. This approach supports interoperability, reduces vendor lock-in, and strengthens national ownership of data and infrastructure. As connectivity programmes scale, this approach enables long-term sustainability through local adaptation and reuse. The open-source model also fosters a community of users who contribute to data quality as well as use it.

Two key examples are:

Open APIs
This allows users to explore and download datasets for their own use API page.
Both public and private users can access data generated by Giga for their own research purposes beyond school connectivity.

Giga Sync
This ingests data from contributors, integrates it into an API, and performs over 150 data quality checks to ensure the data meets the standards before displaying it on the platform.

Alongside product development, Giga actively promotes open-source and open-data principles through engagement with local and international partners. In 2025, Giga contributed to global discussions on data governance and sustainable cities through forums such as the Open Government Partnership and United for Smart Sustainable Cities, sharing lessons on ethical data use, child protection, and FAIR standards. Through its Technology Centre in Barcelona, Giga translated these global principles into local practice, supporting the City Council as Barcelona became the first city worldwide to sign the United Nations Open-Source Principles.

3.2 – Model: Turning data into action

A critical gap exists in digital development: while political commitment to school connectivity is widespread, many countries lack the integrated data, analytical tools and investment planning capacity needed to move from ambition to implementation.

This is where Giga's infrastructure analysis plays a vital role. The methodology is geospatial, data-driven, and technology-neutral. The Connectivity Planning Platform has been developed that analyses data on school locations, connectivity status and electricity supply, and distance to the available telecommunications infrastructure, including fibre optic cables, microwave backhaul, cell towers, and mobile and satellite coverage.

Additional infrastructure data, including road networks and population density, is incorporated, since demand is a key factor in cost estimation. Microeconomic inputs on the costs and fees of constructing and maintaining infrastructure and connectivity are also incorporated.

Cost calculations estimate the investment required to connect schools based on selected technologies and routes. Factors include fibre length, terrain type, equipment needs, and labor costs. The extraordinary challenges of last-mile connectivity and deployment are also taken into account.

"We use the ITU model a lot to identify the schools – not just schools but the overall community surrounding the schools that are really in dire need of the service. We use it through the Geographic Information Systems (GIS) platform to try and map out where the current infrastructure is – and use that information in the planning for the next phase of the USF projects." – Jacobus Maritz, Manager, Universal Service Fund, Communications Regulatory Authority of Namibia.

Giga also evaluates the impact of a government policy and regulatory choices on school connectivity plans and makes recommendations to facilitate connectivity.

All these layers of country-specific information are visualized and shared through interactive infrastructure maps, providing a comprehensive picture that allows governments to assess connectivity options and costs to achieve high-quality, sustainable school connectivity.

As of 2025, infrastructure mapping and modeling to enable effective school connectivity has been done in nine countries, **Benin, Botswana, Brazil, Eswatini, Guinea, Lesotho, Malawi, Namibia and São Tomé**, and engagements are underway to advance this work in 21 others.

3.3 – Finance

Mobilizing finance and shaping the investment environment

In 2025, Giga's finance pillar advanced along two complementary tracks, contributing to country-level financing and investment, and influencing the global investment and policy environment in support of digital infrastructure and school connectivity.

Giga signed an agreement to deliver technical assistance under the World Bank-financed Digital Mozambique Acceleration Project (DMAP), valued at US$200 million. The school connectivity component, will support connectivity for 2,000 schools in Mozambique by the end of the project in 2028, expanding access to information, opportunity and choice for thousands of children. Under the agreement, Giga will map all schools in Mozambique, analyse available infrastructure and support the government in deploying real-time monitoring tools as well as launching a transparent open tender process to procure school connectivity.

Giga's role in the project strengthens its collaboration with the World Bank and establishes a pathway for similar engagements in other East African countries. In parallel, the initiative is institutionalizing the provision of technical assistance for school connectivity, including the development of guidelines and a library of investment cases to be launched in 2026.

Giga contributed under the Digital Infrastructure Investment Initiative (DIII), led by ITU and seven multilateral development banks (MDBs) with a working group of 40 organizations to a white paper outlining a digital infrastructure investment gap of US$1.6 trillion that was published in January 2025. The challenges and innovative financing approaches outlined in the paper informed dialogue at the Fourth International Conference on Financing for Development (FFD4) in July 2025, contributing to the inclusion of Digital Infrastructure Investment Catalyzer that will feature Giga school connectivity pipeline opportunities in the FFD4 Outcome Document (the Sevilla Commitment).

3.4 – Contracting

Scaling connectivity through pooled procurement

In 2025, Giga operationalized its Global Procurement Facility in Geneva to support government procurement of last-mile school connectivity. Working with UNICEF Supply Division, the approach shifts procurement from country-by-country tenders to pooled delivery models designed for scale. This model reduces connectivity costs by pooling demand across countries, creating transparent bidding processes, fostering competition among service providers, securing long-term agreements, and leveraging UNICEF's global procurement expertise.

A standardized procurement strategy and Request for Proposal (RFP) package were developed for issuance in early 2026, targeting the establishment of more than 20 Long-Term Agreements (LTAs) with African internet service providers (ISPs).

These LTAs will enable procurement of end-to-end connectivity services on behalf of participating countries, reducing transaction costs, and accelerating deployment. Market consultations indicate potential cost reductions of up to 30 per cent compared to fragmented procurement.

To support supplier engagement, Giga conducted a market-shaping exercise framing a US$6 billion opportunity to connect over 600,000 schools across Africa. At country level, upgraded procurement toolkits informed by research with the University of Geneva were applied in 10 countries, including Mozambique, where preparation of a bidding package for **1,000 schools was reduced from six months to six weeks.**

Together, these mechanisms establish repeatable procurement models that improve speed, turnaround time, cost certainty, and consistency as school connectivity programmes scale.

In 2025, Giga advanced this approach through regional collaboration in Africa, working with Smart Africa and the United Nations Economic Commission for Africa (UNECA) to support collective action on school connectivity. These partnerships create conditions for countries to pool demand, strengthen procurement, reduce costs, and move faster through shared delivery models and peer learning.

Working closely with Smart Africa, Giga secured expressions of interest from 16 African countries, signalling political willingness to pursue connectivity through coordinated approaches rather than fragmented national tenders. This demand directly underpins the pooled procurement and market-shaping mechanisms described above.

Collaboration with UNECA adds institutional alignment with broader regional development and integration priorities. While Smart Africa enables peer coordination among member states, UNECA provides a platform to anchor procurement-led connectivity efforts within regional economic frameworks. Together, these partnerships help translate global procurement mechanisms into regionally endorsed delivery pathways.

3.5 – Capacity development

Strengthening government capacity for school connectivity

Developing capacity in countries engaged with Giga is the central tenet underpinning work across the initiative's four pillars and activities have continued to launch and accelerate.

Through the **Giga Learning Hub** at the Giga Connectivity Centre, five trainings (in person and online) were delivered through the ITU Academy in 2025. These strengthened capacity of **128 delegates from 52 countries** on different aspects of delivering school connectivity. Training areas ranged from infrastructure mapping and modelling for school connectivity to sustainable public procurement for school connectivity.

Speaking about the value of the training, Muditha Gunasinghe, Director Policy & International Relations, Telecommunications Regulatory Commission of Sri Lanka, shared:

"This training is relevant and useful for both the Ministry of Education as well as the Telecommunication Regulatory Commission to use public money very efficiently and effectively."

Giga's digital repository, a comprehensive source for information on school connectivity, is now available online. Organized around key stages of the connectivity journey, this curated repository provides users with an overview of the essential tools, reports, data platforms, and guidance materials to support connectivity efforts.

Through the **Giga Technology Centre** in Barcelona, a Government Technology Exchange Programme, (GTEP) took place in 2025, bringing together 21 government officials from Mozambique, Namibia, South Africa, and Tanzania to collaborate with peers and Giga technical experts. Participating countries developed an actionable roadmap for connectivity using Giga's tools and services and gained exposure to Barcelona's innovation and tech ecosystem.

The Barcelona edition of GTEP concluded with a science-fair-style exhibition, in which participants had the opportunity to see inspiring solutions developed by the local technological ecosystem.

The interactive event drew on the excellent collaboration with partners such as i2CAT Research Centre, BIT Habitat, 300,000 (an NGO), Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), and Associació d'Universitaris per a la Cooperació (AUCOOP) strengthening the Giga Technology Centre's position as a bridge between governments, technology, and applied knowledge.

As part of its commitment to strengthening collaboration with the local innovation ecosystem, Giga participated in the Living Labs Senegal conference, organized by the i2CAT Research Centre. The meeting offered a space to learn first-hand about the implementation and impact of the Senegal Living Lab after two years of activity, and allowed Giga to share its experience in accompanying governments to connect all schools to the internet, highlighting examples including from Senegal, Panama and Honduras. The conference also offered an opportunity to strengthen links with civil society organizations, companies and research centres in Catalonia that are developing projects in Senegal.

These exchanges reinforce Giga's approach to working with the local ecosystem to connect knowledge, technology and regional alliances to global connectivity challenges. They foster shared learning and create the foundation for deeper partner engagement on the ground, where impact is most tangible and solutions must be tailored for complex contexts.

3.6 – Giga centres

3.6.1 Giga Connectivity Centre, Geneva, Switzerland

The Giga Connectivity Centre – fully activated in 2025 – serves as the headquarters of Giga, host of the Giga Learning Hub and focal point for Giga's support to countries in procurement, and the mobilization of financing to connect schools to the internet. As a community space for networking, knowledge sharing and showcasing innovation, the Centre has hosted 65 events, welcoming over 2000 participants in 2025. In its second year, the **Giga Connectivity Forum** – the initiative's flagship event – brought together over 250 delegates from 42 countries to advance universal school connectivity.

Giga Connectivity Centre, Geneva, Switzerland

Giga Technology Centre, Barcelona, Spain

3.6.2 Giga Technology Centre, Barcelona, Spain

The Centre in Barcelona is Giga's technology home, where teams research and co-create open-source connectivity solutions in collaboration with governments and other stakeholders.

The Centre also continued to scale collaboration formats with proven impact, notably the **GTEP**, strengthening technical and institutional capacity through hands-on engagement with Giga's open-source toolset. During the meeting, representatives of participating countries highlighted the value of integrating school connectivity into their national development agendas. Tangeni Kashima, Deputy Director of the IT Division at Namibia's Ministry of Education noted, "When students finish school, we want them to have the skills they need to thrive in the 21st century."

A key milestone was the hosting of the **Pulse Research Week**, co-organized with the Internet Society and M-Lab, which brought together more than 80 researchers, network operators, and public officials. The event functioned as a Measurement Lab accelerator space – advancing methodologies, validating approaches, and directly contributing to the faster development and refinement of Giga's connectivity measurement and monitoring tools.

The Centre also reinforced its role as an open hub for outreach and collaboration, welcoming newcomers through the Barcelona International Welcome programme, hosting like-minded organizations, engaging students, entrepreneurs, and women leaders in tech, and deepening partnerships with academic, research, and accelerator communities to advance Giga's open-source tools.

Complementing these technical and policy-oriented efforts, Giga expanded its public engagement formats through the launch of **Giga Talks**, a new open series of events hosted at the Technology Centre to foster dialogue on technology, innovation, and social impact. The first edition, bringing together more than 60 attendees, featured Pascal Van Hentenryck from the Georgia Institute of Technology, who explored how artificial intelligence can be applied for social good across education, health, mobility, and research. This format reflects Giga's commitment to an open and inclusive conversation on connectivity and digital inclusion.

3.6.3 The Giga Accelerator Programme

To move from dialogue to deployment, in 2025 the Giga Technology Centre launched the Giga Accelerator Programme, supporting early-stage companies developing open-source digital infrastructure solutions to accelerate school connectivity.

Nine companies were selected from a global pool of 352 applicants for their promising, innovative technologies aimed at advancing school connectivity. The selection was made by an international panel of experts drawn from the three Spanish public-sector donors to the Giga Barcelona Tech Centre – the Government of Spain, the Regional Government of Catalonia, and the City of Barcelona – as well as representatives from ITU, UNICEF, Mobile World Capital, Barcelona Activa, Tech Barcelona, and Cercle Tecnològic.

The selected projects from the cohort of nine companies include solutions ranging from **solar-powered internet access points to open-source network management platforms and AI-enabled analytic tools.**

The cohort reflects Giga's global reach, with two startups from Kenya (Chargebyte and Wekkitech), one from South Africa (Taurine Technology), two from Nigeria (MacLink and Peddle iLabs), one non-profit organization from the United Kingdom operating in Uganda (Hello World), and three startups from Spain (Kreios Space, MOAI Analytics, and Thinger.io).

In 2025, Giga engaged with the companies through more than 10 virtual masterclasses and a series of workshops designed to support pilot development and strengthen technical and commercial readiness. Each company also received more than five hours of one-on-one mentoring during the first month of the programme. This engagement helped them refine their business model and deepen their understanding of the legal and intellectual property considerations of company formation and business development. Giga's engagement with the cohort continues with strength in 2026.

3.6.4 Academic and research collaboration

During 2025, Giga received support from the Geneva Research Lab (GRL) for Digital Impact. The research lab, established through a partnership between UNICEF and the University of Geneva, bridges evidence and action, supporting more effective, inclusive and sustainable digital impact efforts worldwide. The research arm of the lab helps shine the light on questions such as the impact of connectivity on learning and economic activity, while the student engagement arm helps nurture the next generation of leaders. The GRL and Giga collaborate to activate the Geneva ecosystem: both in terms of gaining insights from the community as well as disseminating research and other insights

Another key event was the **Giga Knowledge Spark,** a pilot programme in which 26 Master-level students from six Swiss universities worked together, exploring the challenge of 'Incentives towards achieving meaningful connectivity'. The programme began with a foresight workshop, setting out the scope of the challenge with the support of technical, policy and regulatory expertise drawn from ITU, complemented by the experience of practitioners from different backgrounds. Students then transformed their ideas from the workshop into recommendations, presented in a co-authored, published policy brief.

Also in 2025, collaboration with Spanish academic, research, and digital innovation institutions expanded significantly, helping Giga and the institutions identify synergies and potential joint projects. This has laid the groundwork for deeper collaboration in 2026 and highlighted the value of working with partners across the Barcelona ecosystem. The foundation was laid for collaboration with entities such as the i2CAT Foundation and Mobile World Capital for new data-sharing capabilities to support the growth of new Giga solutions.

In parallel, new cooperation pathways were initiated with ESADE Business School and IE University focused on talent development and applied problem-solving. These collaborations connect Giga's real-world connectivity and digital inclusion challenges with multidisciplinary student communities through structured challenge programmes, applied coursework, and project-based collaboration. Fully fledged activities under these new collaborations are planned for 2026.

3.7 – Global advocacy and public engagement

In 2025, Giga expanded its global advocacy footprint by engaging cultural institutions, creative industries, and technology communities to elevate school connectivity beyond technical and policy audiences.

Giga photo festival, Geneva, Switzerland

In 2025, Giga organized the Giga Photo Festival under the theme ‘The Joy of Connection’ and received 3,420 submissions from 89 countries. The selected works highlighted digital inclusion, education, health, gender equality, and resilience, engaging over 163,000 people globally through exhibitions and media coverage, including features in Le Temps, Tribune de Genève, Le Matin Dimanche, and TV5Monde. The initiative also strengthened local partnerships in Geneva, including collaboration with HEAD–Genève, the Centre de la Photographie Genève, and the City of Geneva, and by participating in Swiss Photomonth 2025.

Paris Photo 2025, France

At Paris Photo 2025, Giga presented a garden, a generative art project created by conceptual artist Cole Sternberg for Giga. The installation transforms global school connectivity data into evolving digital artworks that reveal real-world connectivity conditions.

Visitors were invited to explore a selection of the 50,000 schools currently included in the project, each represented by a unique generative artwork that grows and changes with the school’s connectivity journey. As the project expands, it will encompass more than one million unique digital works, each reflecting updates within Giga’s adaptive school database.

By translating complex infrastructure data into an accessible visual form, the garden engaged international audiences and highlighted the urgency and importance of achieving universal school connectivity.

Giga hackathons – open-source innovation

In 2025, Giga organized two hackathons to mobilize developers, researchers, and students around open-source and AI-enabled solutions for school connectivity: the first was a Geneva-based hackathon hosted at the Campus Biotech SDG Solutions Space and the second was a Barcelona-based hackathon hosted at NTT DATA which focused on experimentation using Giga's open datasets and connectivity tools on the sidelines of Mobile World Congress 2025.

These initiatives strengthened Giga's engagement with technical communities and contributed to the growth of its open-source ecosystem.

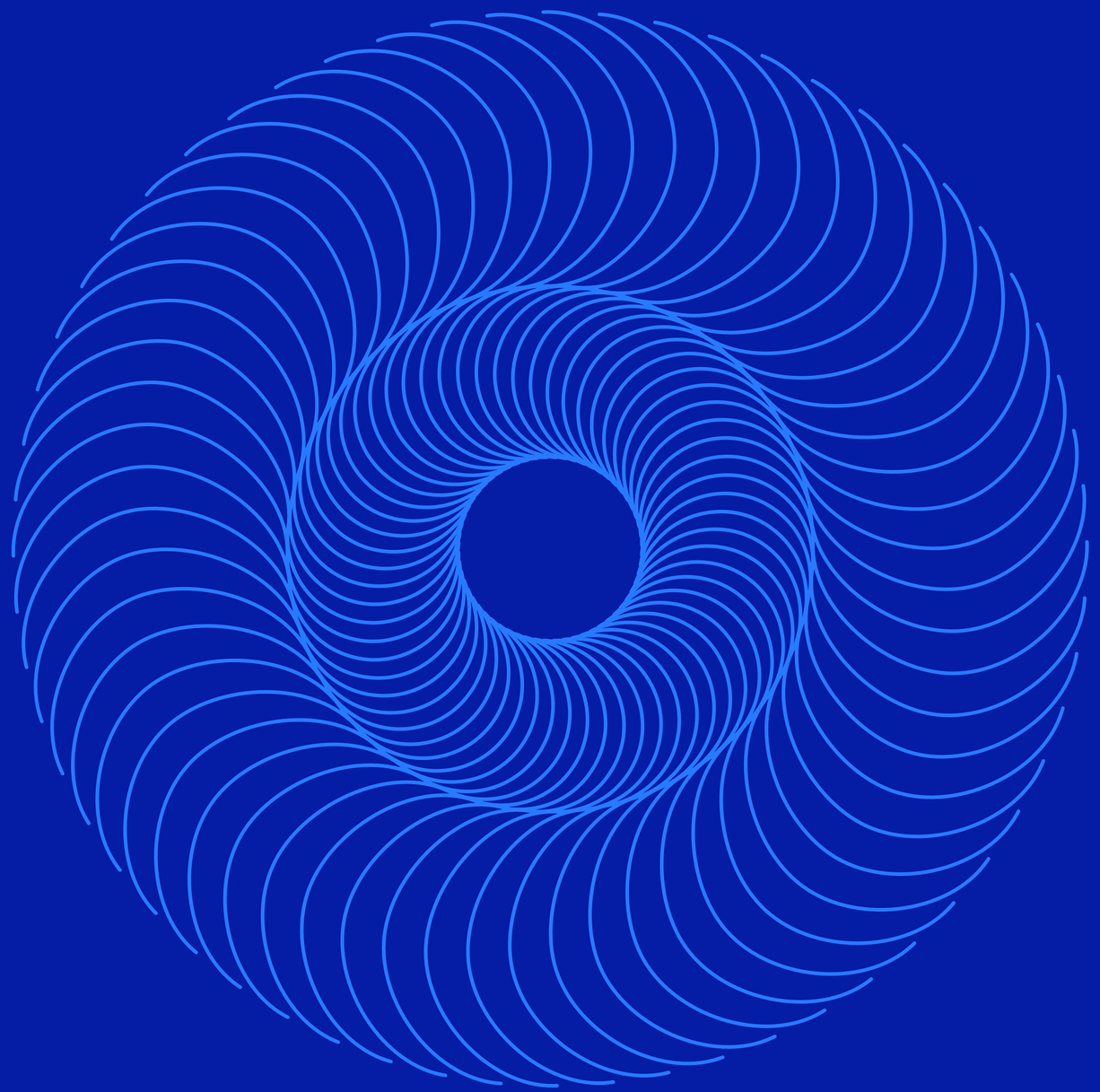
Collaboration with UNESCO and UN system partners

In 2025, Giga continued collaboration with the **United Nations system** to advance the agenda of school connectivity. Substantive collaborations with UNESCO include the **Digital Transformation Collaborative,** a multistakeholder alliance to advance the digital transformation of education systems, and **Gateways for Digital Public Learning**, a global initiative jointly run by UNESCO and UNICEF to help countries establish and improve public digital learning platforms. This process includes the UNESCO, UNICEF and ITU Charter for Digital Public Learning – open for public consultation until February 2026 – the first-ever international normative principles to help guide the development of public digital learning platforms which is a part of Giga's broader work on digital transformation for education.

4. ACT III

Country delivery and impact pathways

Applying Giga’s model within national contexts



Country delivery and impact pathways

Applying Giga's model within national contexts

The shift from interest to national action is driven by country engagement. This is how Giga applies its global capabilities within national contexts, bringing together technical solutions, policy priorities, and institutional processes. Engagement is not linear. Countries work with Giga at different stages – mapping, infrastructure modeling and analysis, procurement, financing, or capacity development – depending on national priorities and readiness. This flexibility allows governments to engage where support is most helpful, rather than conforming to a predetermined pathway.

In 2025, Giga engaged with governments at varying levels of readiness. Some countries were actively using Giga tools to inform national planning and delivery, while others were in earlier phases, aligning data, institutions and policy to build a foundation for school connectivity.

This range reflects diversity of country contexts and underscores the need for tailored support.

Country engagement supports this sequencing by working closely with UNICEF and ITU's regional and country offices, and government counterparts, to clarify objectives, align ministries, and establish the conditions for system-level progress. This includes helping governments move from initial interest to formal coordination, and from fragmented initiatives to more coherent national strategies.

The following country stories show how this engagement works in practice demonstrating how sustained collaboration supports governments strengthen systems, manage complexity and move towards connectivity as part of the national infrastructure rather than as isolated projects.

4.1 From pilots to scale

What governments need to scale connectivity

Constraints faced by governments	Why it matters	Evidence
High and unpredictable connectivity costs	Limits the ability to plan and finance delivery beyond pilots	In Kenya, connectivity costs were reduced through use of public fibre infrastructure and competitive, multi-vendor procurement, with deployments expanding to more than 600 schools and further roll-out prepared under EU-funded programmes.
Incomplete or unreliable school data	Makes prioritization and investment planning difficult	In Malawi, a first national school connectivity landscape analysis established a comprehensive baseline that is supporting planning for digital education initiatives alongside World Bank-supported investment.
Fragmented institutional roles and weak coordination	Slows decision-making and undermines continuity	In Honduras, connectivity has been embedded in national policy, supported by a multi-sectoral Technical Committee on Digital Education, with the support of the UNICEF Honduras and ITU Central America Office, and the adoption of official national monitoring tools.
No visibility into service quality	Accountability shifts from access to performance	In Sri Lanka, Mongolia, and Uzbekistan, real-time monitoring is being used to track connectivity performance and support operational oversight.
Limited tools to deploy capital and deliver large-scale investments efficiently	Large public investment carries higher delivery risk	In Mozambique, integrated mapping, monitoring, modelling, real-time monitoring, and procurement support is being applied within a World Bank-financed national digital acceleration programme.

4.2 Country results in practice

4.2.1 Honduras

Embedding connectivity in national policy

In 2025, Honduras took a decisive step towards making school connectivity and digital education a matter of state policy rather than a programme-level initiative. This marked a shift from fragmented pilots to a national coordinated approach anchored in policy, institutions, and long-term planning.

Honduras is modernizing its telecommunications framework through a new law developed under an ITU-implemented project. Presented in September 2025 to the National Telecommunications Commission of Honduras (CONATEL), the draft law aims to align national regulation with international best practices and support inclusive, future-ready meaningful connectivity.

One key reform shifts the focus from universal connectivity, which centred solely on infrastructure to meaningful connectivity, which also includes digital skills and device affordability, among other goals. The draft law also proposes increasing operators' contributions from 1 per cent to 1.5 per cent of operating income, strengthening the long-term sustainability of connectivity across the country.

Along with this regulatory work, Honduras has also adopted a **national digital education strategy**, establishing a shared vision for the digital transformation of education. The strategy sets a clear national target: **to connect 10,000 schools, or approximately 60 per cent of all schools, by 2030**, and is structured around five core pillars – connectivity, devices, platforms and content, teacher training, and pedagogical innovation – with sustainability and cybersecurity applied across all areas.

To support coordination and continuity, UNICEF Honduras and the ITU Central America Office facilitated the establishment of the Technical Committee on Digital Education, a a multi-sectoral body that brings together education, telecommunications and planning authorities, alongside academia, civil society, the private sector and international partners. The Committee provides a mechanism for aligning policy and implementation and is designed to ensure continuity beyond its current term, which ends in 2029.

A central feature of this policy shift has been the integration of data into decision-making. The Ministry of Education has adopted **Giga Maps as the official monitoring tool** for the national digital education strategy. The platform is now used to track implementation across approximately **15,500 schools**, covering four priority areas: connectivity, devices, teacher training and support, and pedagogical innovation through technology. This has given government counterparts a transparent, system-wide view of progress and gaps.

In parallel, **Giga Meter has been deployed in more than 50 schools**, enabling real-time monitoring of internet connectivity quality. The rollout is now expanding to additional schools reinforcing the shift from access alone to whether connectivity is reliable and fit for educational use, and strengthening planning and oversight.

Together, these elements show how connectivity in Honduras is being repositioned as part of national education infrastructure, and how Giga's technology is being used to ensure progress. By combining policy alignment, institutional coordination and the systematic use of data, Honduras has moved beyond pilots towards a state-led approach designed for transparency, continuity and long-term impact for the country's 1.8 million students.

Complementing this system-level progress, Honduras also demonstrates how strategic level engagement with partners maintains momentum. Giga facilitated an exchange between stakeholders to align policy, regulation and implementation, and strengthen shared ownership of connectivity as a public service. In 2025, during a field visit to Honduras, representatives from Spain's Ministry of Foreign Affairs, European Union and Cooperation observed how school connectivity supports learning in contexts where printed resources are limited and engaged with regulators on the practical challenges of delivery, quality and sustainability.

What Giga enabled

Shared technical platforms, data-driven monitoring tools, structured support for inter-institutional coordination and guidance on policy and regulation.

What this unlocked

Sustained public oversight, predictable planning and financing, and the integration of connectivity as a permanent component of the national education system.

4.2.2 Kenya

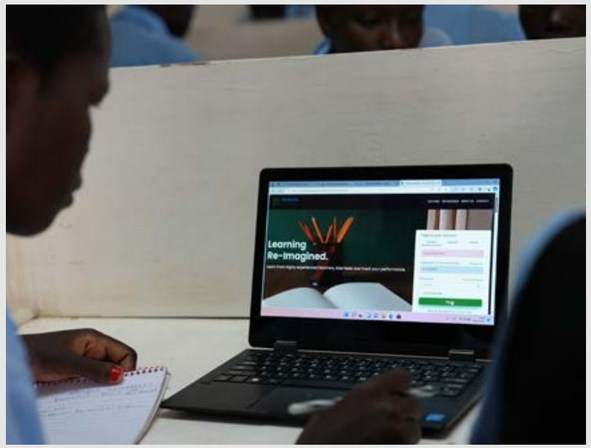
Lowering the cost of school connectivity at scale

Kenya's experience shows how reducing the cost of school connectivity can make large-scale deployment feasible. By combining public digital infrastructure with competitive procurement, the country moved beyond high-cost pilots towards a delivery model that is affordable, predictable, and suitable for expansion using public and external financing.

A central element of this approach is the National Optic Fibre Backbone Infrastructure (NOFBI), a government-owned network spanning more than 10,000 kilometres and reaching all 47 counties. Developed to support broadband access for public institutions, NOFBI is a core component of Kenya's national digital development agenda. Instead of procuring fully commercial, end-to-end connectivity solutions, the government used NOFBI as a shared infrastructure and prioritized investments connecting the last mile from existing fibre to schools.

Giga has supported early pilots to test this model in practice.

The pilots generated evidence that fibre-anchored connectivity, built on public infrastructure, could deliver higher reliability at lower cost than standalone wireless solutions, while reducing ongoing operating costs.



Evidence from the pilots informed a shift in procurement. Rather than relying on single-supplier contracts, competitive, multi-vendor procurement arrangements for school connectivity were introduced. Under this approach, multiple internet service providers compete for groups of schools through secondary bidding. Demand is aggregated, pricing is transparent, and providers compete on both cost and service quality.

The impact on affordability was significant. **Average monthly connectivity costs for schools fell from between US$110 and US$120 to around US$45, representing reductions of up to 60 per cent in some cases.** By 2025, more than 600 schools had been connected through this model. Lower and more predictable unit costs changed how school connectivity was viewed. Reduced cost uncertainty, clearer procurement arrangements, and delivery anchored in national infrastructure improved confidence that connectivity could be sustained over time. Connectivity shifted from being treated as a series of isolated projects to being approached as a scalable public service aligned with government systems.

This evidence supported further scale-up. Building on the cost reductions achieved and the delivery model tested, Kenya prepared additional deployments under EU-funded programmes to extend connectivity to more schools. The availability of a lower-cost, proven approach strengthened confidence that public and external funds could be deployed efficiently and at scale.

Kenya's experience illustrates how affordability and scale are closely linked. When public infrastructure is leveraged effectively and procurement is designed to foster competition, school connectivity becomes more viable for sustained investment and broader national rollout.

Additionally, Kenya was one of four pilot locations, for a Connectivity Credits model in 2025, alongside Malawi, Mexico and South Africa. Connectivity Credits rewards internet providers with digital credits for connecting schools, which can be exchanged for incentives, creating sustainable school connectivity.

This model was tested in five schools in Kenya. Through a partnership with the Equinix Foundation, Equinix, a digital infrastructure company, supported Giga with technical expertise on how Connectivity Credits can leverage under-utilized infrastructure to enable sustainable school connectivity models, while Liquid Intelligent Technologies, an ISP, provided backhaul capacity that local providers used to connect schools via fibre from the nearest point of presence. Equipment was installed in the schools to extend connectivity to surrounding homes and revenue from household subscriptions allowed the ISP to keep schools connected at no charge.

This pilot demonstrates a replicable model for sustaining school connectivity while expanding community access.

What Giga enabled

Technical support to inform connectivity design anchored in public fibre infrastructure, evidence from pilots to support procurement reform, and support to structure competitive and transparent procurement arrangements.

What this unlocked

Lower and more predictable costs, reduced delivery risk, and additional financing for school connectivity using a model designed for scale.

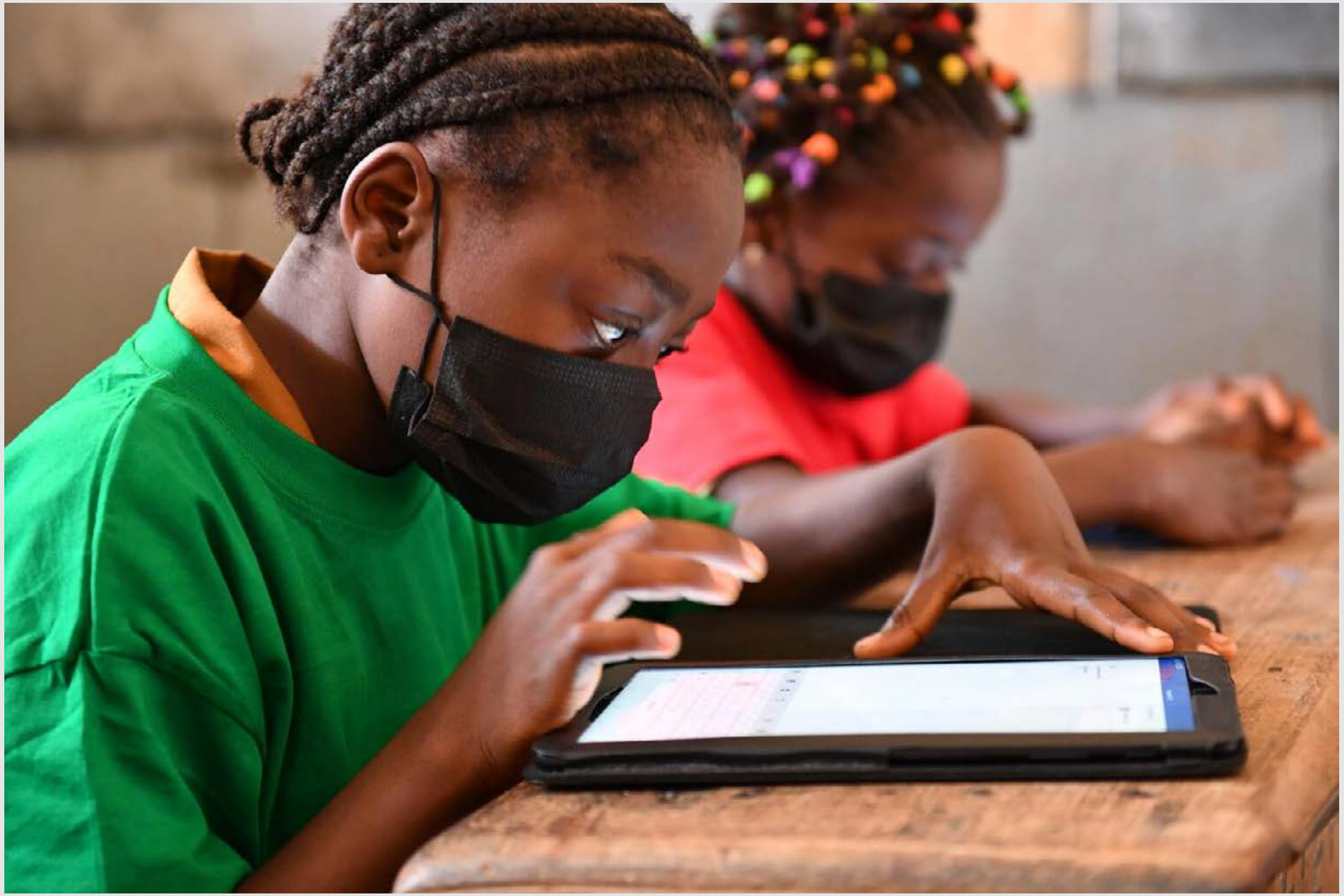
4.2.3 Mozambique

Applying a full connectivity model alongside large-scale public investment

In September 2025, Giga signed a Memorandum of Understanding with the Government of Mozambique inviting Giga to support the country's digital transformation.

This engagement is anchored in the World Bank–financed US$200 million Mozambique Digital Acceleration Project, under which Giga has been contracted as a technical partner to support the connection of schools to the internet. In its first stage, the project will connect 1,000 schools by August 2027, creating a foundation for more inclusive and equitable digital learning.

Mozambique's scale and diversity make this partnership particularly significant. While the World Bank project provides financing to connect a defined number of schools, the engagement also focuses on strengthening the technical foundations needed for effective implementation of large development and public financing for digital infrastructure. The project will leverage government datasets and Giga's support in school location and connectivity status mapping, deploying the Giga Meter, infrastructure mapping, modelling and procurement.



Rather than applying individual tools in isolation, Mozambique is using an integrated approach aligned with the World Bank–financed programme. Giga is supporting the use of government datasets and AI-powered school mapping with local validation to address information gaps, alongside the deployment of Giga Meter to provide real-time insight into internet performance in connected schools. This is complemented by infrastructure modelling, cost estimation, and procurement support to inform delivery under the project.

Together, these elements support more informed implementation of the World Bank investment. By combining financing with data, monitoring, and planning tools, the government is strengthening its ability to oversee connectivity delivery and understand how services perform in practice across different contexts. While national connectivity scale is still emerging, Mozambique’s experience shows how technical support can complement large-scale public investment. The partnership illustrates how a World Bank–financed connectivity programme can be strengthened through improved visibility, coordination, and planning, delivering school connectivity effectively.

What Giga enabled

Integrated technical support across mapping, real-time monitoring, infrastructure analysis and modelling, and procurement, aligned with the World Bank–financed programme and government priorities.

What this unlocked

Improved oversight of connectivity delivery and a stronger technical foundation to implement large-scale public investment.

4.2.4 Malawi

Building a national school connectivity baseline through mapping

In Malawi, Giga in technical collaboration with UNICEF Malawi supported the country's first comprehensive school connectivity landscape analysis. The exercise provided a national baseline on whether schools are connected to the internet, how connectivity is financed, what bandwidth levels are contracted, how services are used in practice, and whether schools have the supporting infrastructure required for digital learning, including electricity and water.

Establishing this baseline was critical. Prior to the analysis, information on school connectivity was fragmented and incomplete, limiting the ability of government and partners to plan effectively or prioritize investment. By verifying school locations and consolidating connectivity, infrastructure, and service data in a single exercise, the analysis created a reliable foundation for decision-making.

The work was anchored in a national school survey led by UNICEF Malawi in close collaboration with the Ministry of Education's Education Management Information System team. Giga jointly developed survey tools with the Ministry drawing on its expertise supporting connectivity mapping in other countries. This ensured that the data collected went beyond basic connectivity status and captured the technical and operational details needed for planning and investment.

The findings will provide government and partners a complete picture of Malawi's school connectivity landscape. This evidence is already informing planning for digital education initiatives and driving major investments, including the World Bank-supported US$70 million Digital Malawi Acceleration Project, under which 2,000 schools are expected to be connected to the internet, reaching an estimated one million learners.

The survey was also used to deploy the Giga Meter app. Surveyors were trained to install the app in connected schools, enabling the collection of real-time connectivity data. More than 170 schools are already sharing connectivity performance data on Giga Maps. As the full dataset from the landscape analysis is integrated into the platform, Malawi will have its most accurate and comprehensive public map of school connectivity to date.

By strengthening the quality and availability of school connectivity data, the mapping exercise improved visibility across the system. Government, regulators, and partners can better identify gaps, track progress, and align future interventions. Malawi's experience illustrates how investing in comprehensive school mapping can support more informed planning and create a stronger foundation for scaling connectivity and digital learning.

What Giga enabled

Technical guidance on connectivity indicators and survey design, infrastructure analysis, support to develop data collection tools, and deployment of real-time monitoring through Giga Meter, aligned with national data systems.

What this unlocked

A reliable national connectivity baseline, improved planning for digital education and infrastructure investment, and greater transparency to support coordinated action across government and partners.

What system decisions mean for schools and learners

What governments put in place	What schools experience in practice	Evidence
Connectivity embedded in national policy and planning	Schools are no longer dependent on short-term or ad hoc connectivity arrangements	Honduras embedding connectivity in national policy and using official monitoring tools
Lower and more predictable connectivity costs	Schools are able to afford connectivity and face fewer disruptions linked to unaffordable or renegotiated services	Kenya cost reduction through public fibre and competitive procurement, with scale-out to 600+ schools
A reliable national picture of school connectivity	Schools are prioritized based on need and location, not estimates or fragmented data	Malawi national connectivity landscape analysis establishing a comprehensive baseline
Ongoing visibility into connectivity quality	Connectivity problems are identified and addressed earlier, before learning is disrupted. Planning for appropriate digital learning platforms is supported.	Real-time monitoring in Fiji, Sri Lanka, Mongolia, and Uzbekistan
Stronger oversight of large-scale delivery	Connectivity is maintained more consistently across regions, not only in pilot locations	Mozambique integrated delivery under a World Bank-financed national programme
Connectivity treated as part of national infrastructure	Schools can plan teaching that depends on digital access with greater confidence	Patterns reflected across country stories

4.3 The big picture: How Giga drives change

Across the countries highlighted in the previous section, progress on school connectivity is shifting into a more operational phase. Progress now depends less on isolated deployments and more on whether countries have the systems in place to deliver at scale.

Where data is reliable, governments can prioritize and plan with greater confidence. Where schools are mapped, infrastructure options are modeled, analysed and costed – and implementation moves faster and with fewer risks. Where procurement is organized, markets respond with improved pricing and service quality. And when monitoring is routine, attention shifts from access alone to performance and reliability.

These experiences show that connectivity is increasingly treated as national infrastructure, embedded in policy, budgets, and delivery arrangements. This creates clearer conditions for investment and supports long-term implementation. The next phase of progress will be shaped by execution. Partnerships matter most where they reinforce country-owned plans, support delivery at scale and help maintain quality as systems mature.

By strengthening data, systems, partnership and national ownership, school connectivity becomes increasingly embedded as national infrastructure, leading to improved learning outcomes and accelerating progress towards the 2030 Agenda for Sustainable Development, adopted by the United Nations.

Continuous learning, continuous improvement

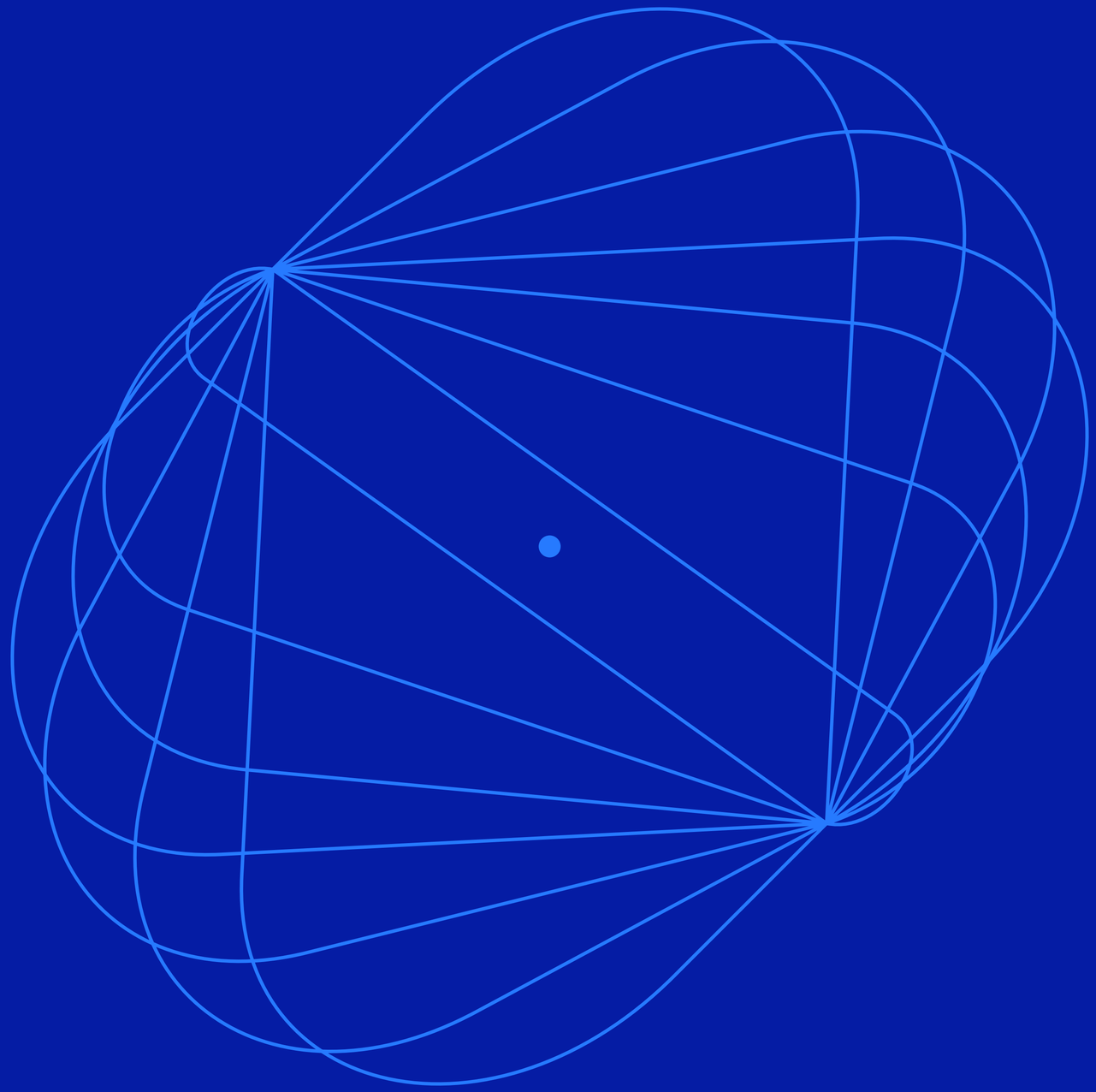
As countries move from planning to execution, implementation generates new insights. Giga's model is therefore shaped not only by design but by continuous learning from governments and partners. Platforms including the Giga Connectivity Forum and the Government Exchange Programme provide structured opportunities for country delegates, regulators, development banks and private sector actors to surface practical constraints, financing realities and procurement bottlenecks. Insights from these exchanges have refined pooled procurement design, strengthened cost modelling approaches, and expanded real-time monitoring partnerships.

Engagement with regional and global partners, including Smart Africa, UNECA and UNIGE, further deepens this feedback loop. By convening diverse actors around shared evidence, Giga acts as a neutral platform, translating operational experience and market conditions into programme adjustments. This commitment ensures that Giga's mapping, financing and procurement support remain responsive to country demand and grounded in delivery realities.

5.

Giga’s next chapter

Scaling school connectivity as public infrastructure



Giga’s next chapter

Scaling school connectivity as public infrastructure

Giga’s next phase builds on what has been established: a programme that operates simultaneously at system, technical and human levels.

For governments, Giga strengthens the foundations required to manage school connectivity as national infrastructure. Mapping, infrastructure analysis, financing models, pooled procurement and real-time monitoring are not parallel activities; they form an integrated system that enables planning, coordination and long-term sustainability.

For technical and financing partners, Giga provides structured entry points. Open data, measurable performance standards and coordinated investment platforms reduce fragmentation and create clearer pathways from evidence to capital deployment.

For every child, these system decisions determine whether connectivity becomes reliable, equitable and sustained.

The progress documented in this report reflects more than connections delivered. It reflects stronger national capacity to govern connectivity at scale, laying the foundations for the digital transformation of education.

In 2026, Giga’s work will focus on building upon the successes so far to enhance support to governments in achieving coordinated, transformative digital impact for sustainable socio-economic development.

6. Partnerships for acceleration

Giga is built on partnerships that deliver real-world connectivity for children and young people, at national scale. Working with governments, industry, philanthropies, multilaterals, civil society, and academia, the initiative turns connectivity plans into connected schools through investment mobilization, in-kind contributions, and deep technical collaboration. Partners – both globally and locally – support Giga with financing and investment alignment, data access, engineering time, compute and infrastructure resources that accelerate open-source tools and procurement approaches.

These contributions strengthen transparency on cost and performance, and make connectivity more affordable and accountable for governments. The partnerships create mutual value. Partners can contribute to what they do best, see measurable outcomes, and help shape scalable solutions that countries can adopt and sustain.

Public Sector Partners

GOBIERNO DE ESPAÑA

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Generalitat de Catalunya

Barcelona

Private Sector Partners

Equinix Foundation

CLOUDFLARE

IHS
Towers of strength

Measurement Lab

Internet Society

Mawingu

nic.br

Fira Barcelona

Launchnodes

i2cat

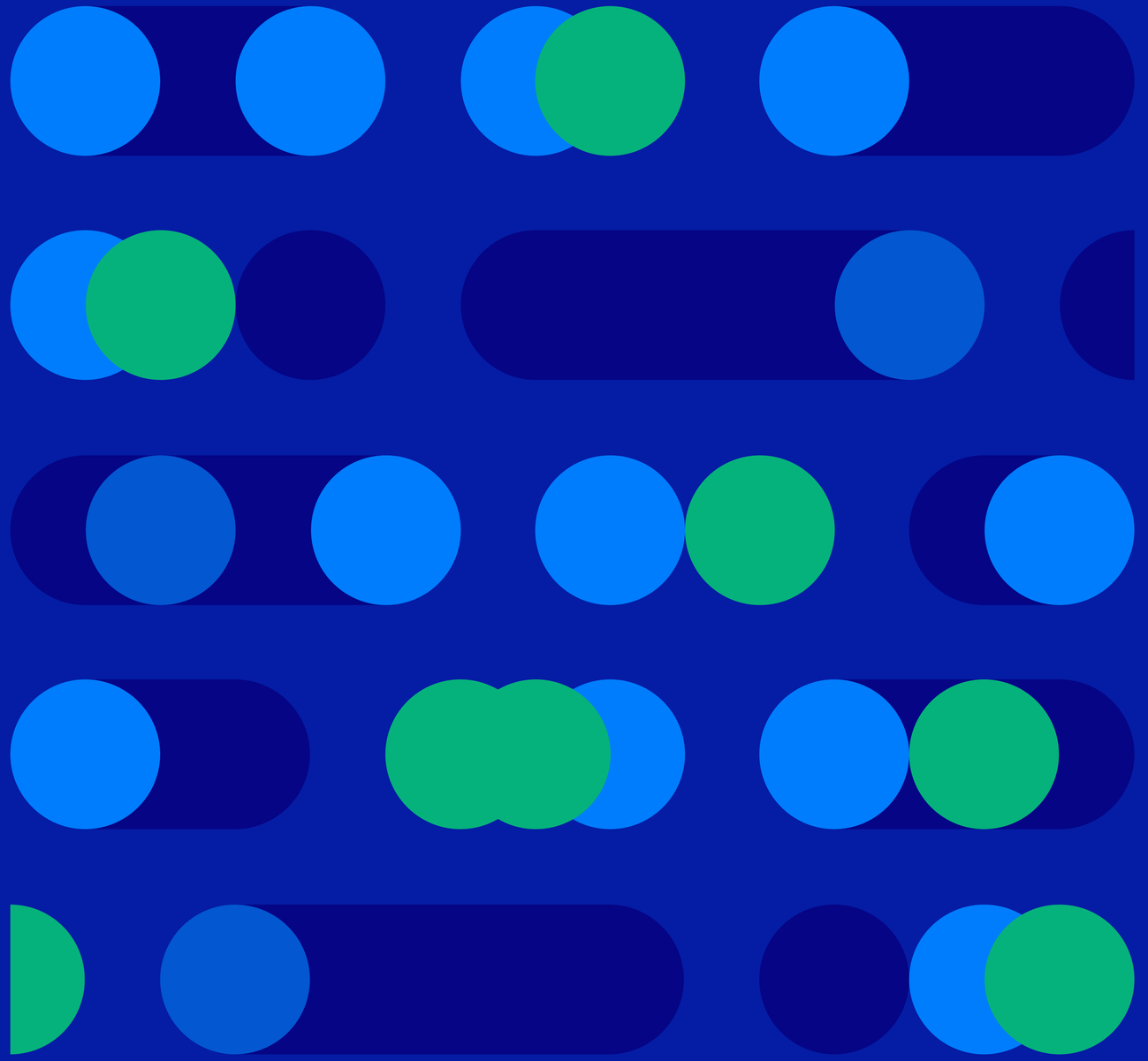
upf. Universitat Pompeu Fabra Barcelona

EMAI Erasmus Mundus joint Master in Artificial Intelligence

7.

Giga impact stories

giga.global/impact



Sri Lanka

Bridging dreams: How connectivity is opening doors for students in Ampara, Sri Lanka

"Before our school had connectivity, I climbed trees and even went onto sheds to get stronger signals and access information. Now, with more schools getting connected, I feel hopeful that students like me can have the same opportunities as those in cities," said Harshani, a 10th-grade student at Bakmitiyawa Vidyalaya.

In Ampara, the largest district in Sri Lanka's Eastern Province, education is taking a digital leap forward. With vast distances stretching over 150 kilometers from one end to another, schools and students have long faced challenges in accessing quality education. Since 2023, Giga has been partnering with the Government of Sri Lanka to identify connectivity gaps, capture real-time internet data impacting students' learning, and empower decision-making with actionable insights to bridge the digital divide.

Botswana

Digital inclusion: Schools as a bridge put remote areas on the map in Botswana

In Botswana's Kgalagadi District, Ncaang Primary School reflects a wider national shift toward digital learning. Internet connectivity is replacing the limits of chalk-and-talk teaching, supported by Giga. More than 700 schools across Botswana are now connected, reaching over 400,000 learners. About 80,000 students are using the Learning Passport, a curriculum-aligned digital platform co-developed by UNICEF and Microsoft.

Mongolia

Empowered schools: Advancing digital transformation in education

Advancing digital transformation in education is a national priority for Mongolia, aiming to ensure equitable access to quality learning for all students. Schools in Mongolia have made important strides by integrating global and national learning platforms into classrooms.

Yet many continue to face basic infrastructure challenges such as unreliable internet connectivity and limited technical support, hindering the consistent and effective use of these platforms.

To help address these barriers, the Government of Mongolia partnered with Giga to ensure every school in the country is connected to the internet.

Lesotho

Empowering girls through digital learning in Lesotho

Giga connects you to Leribe, a picturesque town in the mountain kingdom of Lesotho. Let’s meet the Grade 10 students, each with their own computer. Learners at Holy Family are fortunate to have access to devices connected to the internet, because the country’s mountainous terrain and limited infrastructure leave many schools on the wrong side of the digital divide.

To overcome this digital divide, Giga assisted the government to conduct a broadband infrastructure analysis in Lesotho, which will inform investment planning and procurement.

Sierra Leone

Connectivity cost reduction: A game-changer for internet sustainability

Sierra Leone is proving that even the most remote schools can become hubs of innovation, creativity, and opportunity. The country has reduced school internet costs from US$12,000 to just US$1,500 per year – opening the doors of digital learning for thousands of students.

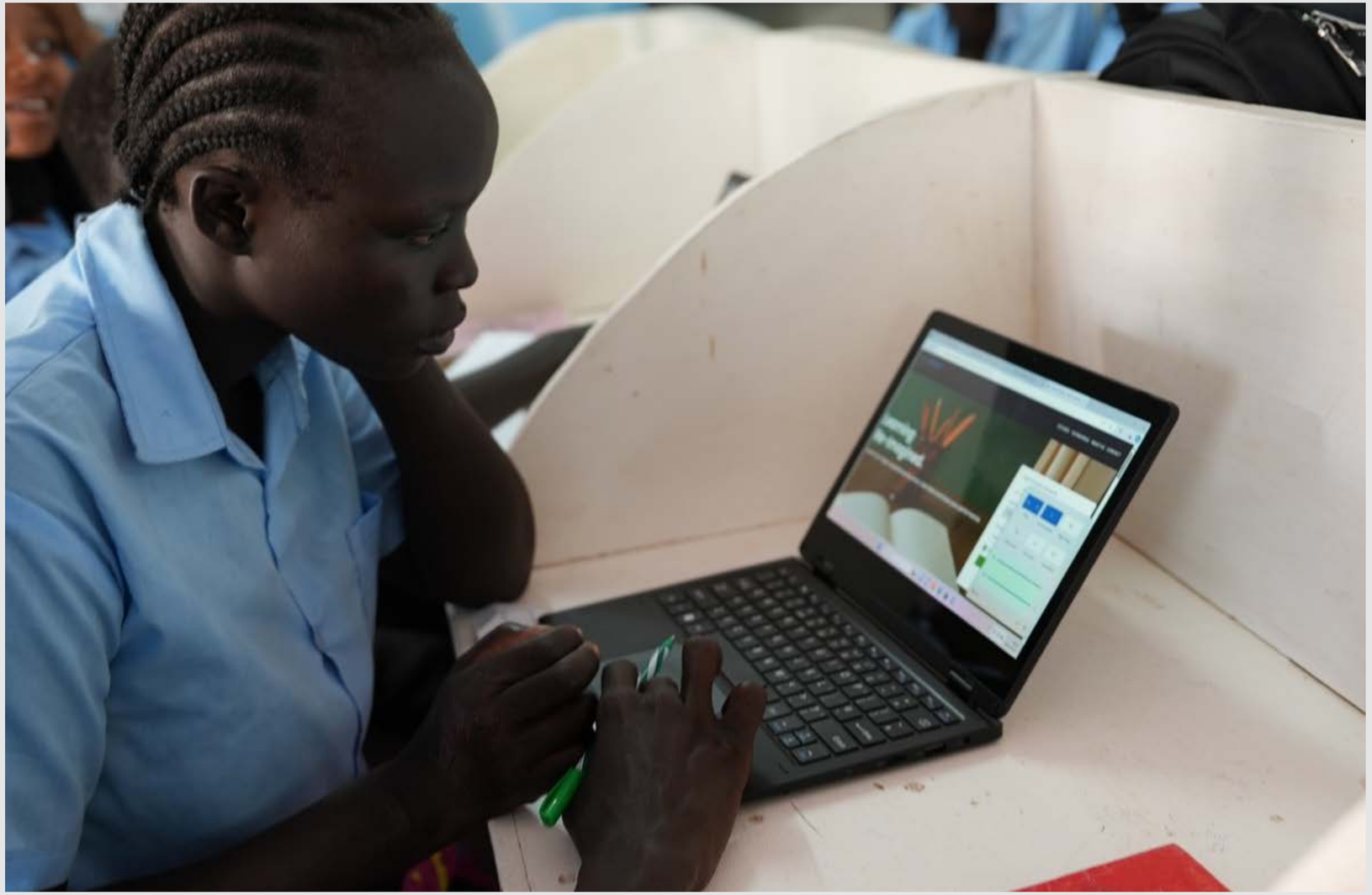
From rural villages to the outskirts of Freetown, this connectivity revolution is empowering students like Mohamed Turay, who now use online research and AI tools to become true 21st-century learners. Strategic partnerships, smart policy, and innovation are driving sustainable connectivity and human capital growth in Sierra Leone.

Kenya

Connected for hope: Bridging the digital divide in Kenya's Kakuma Camp

Seventeen-year-old Darlene Vakoko is a Congolese refugee and lives in a small brick-walled house with corrugated iron sheets. Along with her parents and her younger brother, she fled the ravages of the armed conflict in the Democratic Republic of Congo seeking the relative peace and stability of the Kakuma refugee camp in northern Kenya. The camp is home to over 250,000 refugees, most from South Sudan and Somalia. It's among the seventh largest refugee camps in the world. Brightstar Secondary School is located in the Kakuma refugee camp and is a digitally connected school which was made possible with Giga's support.

Connectivity in refugee-hosting schools gives displaced learners access to digital skills and opportunities, ensuring they are included in national education systems.



Barbados
UNICEF Office for the Eastern Caribbean Area
Ministry of Education, Technological and Vocational Training
Ministry of Industry, Innovation, Science and Technology
ITU Regional office for Americas
ITU Area Office Bridgetown, Barbados

Belize
UNICEF Belize Country Office
Ministry of Education, Culture, Science and Technology
Ministry of Public Utilities, Energy and Logistics
Ministry of E-Governance
ITU Regional office for Americas
ITU Area Office Bridgetown, Barbados

Benin
UNICEF Benin Country Office
Minister of Digital Economy and Communications (MND)
Ministry of Pre-school and Primary Education (MEMP)
Ministry of Secondary Education and Technical and Vocational Training (MESTFP)
Information and Digital Systems Agency (ASIN)
ITU Regional Office for Africa
ITU Area Office for West Africa

Bosnia and Herzegovina
UNICEF Bosnia and Herzegovina Country Office
Ministry of Communications and Transport
Ministry of Civil Affairs
Communications Regulatory Agency
ITU Regional Office for Europe

Botswana
UNICEF Botswana Country Office
Ministry for State President (MSP) - SmartBots Digital Transformation Office
Ministry of Education and Skills Development (MESD)
Botswana Communications Regulatory Authority (BOCRA)
ITU Regional Office for Africa
ITU Area Office for Southern Africa

Brazil
UNICEF Brazil Country Office
Ministry of Communications (MCom)
Ministry of Education (MEC)
Brazilian Development Bank (BNDES)
Anatel
Nic.br
National Education and Research Network (RNP)
MegaEdu
ITU Regional Office for Americas

Cambodia
UNICEF Cambodia Country Office
Ministry of Education, Youth and Sport
Ministry of Post and Telecommunications
ITU Regional Office for Asia and the Pacific

Dominican Republic
UNICEF Dominican Republic Country Office
Ministry of Education
Dominican Institute of Telecommunications
ITU Regional office for Americas
ITU Area Office, Tegucigalpa, Honduras

El Salvador
UNICEF El Salvador Country Office
Secretary of Innovation (previous government)
ITU Regional office for Americas
ITU Area Office, Tegucigalpa, Honduras

Eswatini
UNICEF Eswatini Country Office
Ministry of Education and Training (MoET)
Ministry of ICT (Information, Communications and Technology)
Eswatini Communications Commission (ESCCOM)
ITU Area Office for Southern Africa

Ghana
UNICEF Ghana Country Office
Ministry of Education
Ministry of Communication, Digital Technology and Innovations
Ministry of Finance
Centre For National Distance Learning and Open Schooling
Research, Statistics and, Information Management Directorate
National Communications Authority
Ghana Investment Fund for Electronic Communications
ITU Regional Office for Africa
ITU Area Office for West Africa

Guatemala
UNICEF Guatemala Country Office
Superintendencia de Telecomunicaciones
ITU Area Office, Tegucigalpa, Honduras
Ministry of Education

Guinea
UNICEF Guinea Country Office
Ministry of Pre-University Education and Literacy
National Agency for State Digitalization
Ministry of Posts, Telecommunications and Digital Economy
ITU Regional Office for Africa
ITU Area Office for West Africa

Honduras
UNICEF Honduras Country Office
Secretary of Education of Honduras
National Telecommunications Commission of Honduras
Directorate for Results-Based Management
ITU Regional Office for the Americas
ITU Area Office, Tegucigalpa, Honduras

Kazakhstan
UNICEF Kazakhstan Country Office
Ministry of Education
Ministry of Artificial Intelligence and Digital Development
ITU Regional Office for the Commonwealth of Independent States

Kenya
UNICEF Kenya Country Office
Ministry of Education
Ministry of Information, Communications and the Digital Economy
Communications Authority of Kenya (CA)
Information and Communication Technology Authority (ICTA)
ITU Regional Office for Africa

Kyrgyzstan
UNICEF Kyrgyzstan Country Office
Ministry of Education
Ministry of Digital Development
Internet Society Kyrgyzstan Chapter
ITU Regional Office for the Commonwealth of Independent States

Lesotho
Ministry of Education and Training
Ministry of Information, Communications, Science, Technology and Innovation
Lesotho Communications Authority (LCA)
UNICEF Lesotho Country Office
ITU Area Office for Southern Africa

Malawi
UNICEF Malawi Country Office
Ministry of Education, Science and Technology (MoEST)
Ministry of Information and Digitalisation
Malawi Communications Regulatory Authority (MACRA)
Universal Service Fund (USF)
ITU Area Office for Southern Africa

Moldova
UNICEF Moldova Country Office
Ministry of Education and Research
Ministry of Economic Development and Digitalization

Mongolia
UNICEF Mongolia Country Office
Ministry of Education
Education Information Technology Center
ITU Regional Office for Asia and the Pacific

Montenegro
UNICEF Montenegro Country Office
Ministry of Education
Ministry of Economic Development

Mozambique
UNICEF Mozambique Country Office
Ministry of Education and Human Development (MINEDH)
Ministry of Communications and Digital Transformation (MCTD)
National Communications Institute of Mozambique (INCM)
Universal Access Service Fund (FSAU)
ITU Area Office for Southern Africa

Namibia
UNICEF Namibia Country Office
Ministry of Education, Arts and Culture
Ministry of Information and Communication Technology
Communications Regulatory Authority of Namibia (CRAN)
ITU Regional Office for Africa
ITU Area Office for Southern Africa

Niger
UNICEF Niger Country Office
Ministry of Education
National Agency for the Information Society
National Institute of Statistics
ITU Regional Office for Africa
ITU Area Office for West Africa

Panama
UNICEF Panama Country Office
Ministry of Education (MEDUCA)
National authority for public services (ASEP)
National Authority for Government Innovation (AIG)
ITU Regional office for Americas
ITU Area Office Tegucigalpa, Honduras

Rwanda
UNICEF Rwanda Country Office
Ministry of Education
Ministry of ICT and Innovation
ITU Regional Office for Africa
ITU Area Office for Central Africa and Madagascar

Sao Tome and Principe
UNICEF Sao Tome and Principe Country Office
Ministry of Education and Culture
Ministry of Public Works, Infrastructure, Transport and Communications
Autoridade Geral de Regulação (AGER)
ITU Regional Office for Africa
ITU Area Office for Central Africa and Madagascar

Senegal
UNICEF Senegal Country Office
Ministry of Education of Senegal
Ministry of Digital Economy and Digital Transformation
Regulatory Authority for Electronic Communications and Posts
Universal Telecommunications Services Development Fund

Sierra Leone
UNICEF Sierra Leone Country Office
Ministry of Basic and Senior Secondary Education
Ministry of Communication, Technology and Innovation
Directorate of Science, Technology & Innovation
ITU Regional Office for Africa
ITU Area Office for West Africa

South Africa
UNICEF South Africa Country Office
Department of Basic Education
Department of Communications and Digital Technologies
Independent Communications Authority of South Africa (ICASA)
ITU Area Office for Southern Africa

Sri Lanka
UNICEF Sri Lanka Country Office
Ministry of Education
Ministry of Digital Economy
Telecommunications Regulatory Commission of Sri Lanka (TRCSL)
ITU Area Office for South Asia

Tajikistan
UNICEF Tajikistan Country Office
Ministry of Education and Science
Communications Service
Agency of Innovation and Digital Technologies
Project Implementation Center under the Executive Office of the President of Tajikistan
Republican Center of Information Technologies and Communication
Tojiktelecom
ITU Regional Office for the Commonwealth of Independent States

Tanzania
UNICEF Tanzania Country Office
Ministry of Education, Science, Technology and Vocational Training
Ministry of Communication and Information Technology
Tanzania Communications Regulatory Authority (TCRA)
Universal Communications Service Access Fund (UCSAF)
ITU Regional Office for Africa

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Uzbekistan
UNICEF Uzbekistan Country Office
Ministry of Preschool and School Education
Ministry of Digital Technologies
New Uzbekistan University
ITU Regional Office for the Commonwealth of Independent States

Zambia
UNICEF Zambia Country Office
Ministry of Education
Ministry of Technology and Science (MOTS)
Zambia Information and Communications Technology Authority (ZICTA)
Smart Zambia Institute
Presidential Delivery Unit (PDU)
ITU Area Office for Southern Africa

Zimbabwe
UNICEF Zimbabwe Country Office
Ministry of Primary and Secondary Education
Ministry of Information Communication Technology, Postal and Courier Services
Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ)
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Giga Partnerships, Communications and Design Team

Published by
Giga (UNICEF and ITU)

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