

The background of the entire image is a photograph of three young women sitting together and looking at a smartphone. The image is dimmed with a dark overlay. The woman on the right is wearing glasses and a grey tank top. The woman in the middle is wearing a yellow t-shirt with a cartoon character. The woman on the left is wearing a blue t-shirt. The text 'Connect2Recover' is overlaid in large white font on the left side of the image.

# Connect2Recover

Building back better with broadband

**Deliverable 1: A Global Methodology**

**Paul Garnett, CEO and Founder**

**The Vernonburg Group**

A Global Methodology for identifying gaps and bottlenecks at a country level for the utilization of broadband networks (and, where appropriate narrowband networks) and digital technologies to respond to and mitigate the consequences of the COVID-19 pandemic (including the recovery following the pandemic, readiness for the 'new normal' and well as preparedness for any future pandemics)

# Methodology

- Assessment of connectivity data collection methodologies and capabilities
- Review of data collection, resiliency, and national broadband planning best practices
- Extensive interviews and input from relevant stakeholders, including ITU subject matter experts

# Key Findings - Overall

The COVID-19 Pandemic has exposed gaps in data, helped broaden our view of resilience, and sharpened and re-energized our focus on closing the global connectivity gap.

A white circle with a blue border containing the text "Connect2Recover" and "Building back better with broadband".

**Connect2Recover**  
Building back better with broadband

## Key Findings - Data

- High quality data is key to having an accurate picture of mobile and fixed broadband availability, adoption, and usage.
- The quality of available broadband data is incomplete overall and is worst in the places where it's needed the most.
- Up to date data that uses international standards and methods with a high level of geographic specificity is the ideal, but governments can reveal a lot with simple, consistent data collections from network operators, verified with trusted third-party data sources.
- The ITU is in a unique position to convene various stakeholders to develop new data collection methodologies and visualizations, such as coverage maps.

## Key Findings - Resiliency

- Mobile and fixed broadband networks have proven resilient where they exist, but we have seen problems in markets without the basic infrastructure of the internet, such as interexchange points and direct access to submarine cables.
- The COVID-19 Pandemic shows us that we need to think of resilience more broadly to address the global fixed and mobile broadband gap, as well as issues like electricity.
- The pandemic has taught us that a country's broadband network cannot be viewed as resilient if significant portions of its population cannot access the internet at home.

## Key Findings - Policy

- Many governments and regulators have implemented emergency measures – in spectrum access, broadband pricing, infrastructure access, investment, and subsidization – to address the immediate challenges from COVID-19.
- To be better prepared for the new normal and for future disasters, governments and regulators should consider refreshing and renewing their national broadband plans. Governments and regulators can use the national broadband planning process to collect trustworthy sources of data to carry out gap analyses, increase network redundancy and resiliency, help close digital divides, and be prepared to move quickly should future natural and manmade disasters occur.



## C2R : Phase 2&3

### Data Collection

- For countries with complete/near complete ITU data on availability: Confirm coverage using 3rd party data sources for mobile (e.g., OpenSignal) and country surveys for fixed
- For countries with complete/near complete ITU data on usage: Confirm usage with 3rd party data sources (e.g., Ookla) and surveys (e.g., EIU)
- For countries with limited/no ITU data on availability: Fill in missing coverage with e.g., Giga, GSMA maps, OpenSignal, OpenCellID, or estimates from satellite data (e.g., nightlights.)
- For countries with limited/no ITU data on usage: Fill in missing indicators with 3<sup>rd</sup> party data sources (e.g., Alexa and EIU surveys) or estimates from new data clearing house with combined Facebook, Google, and other service provider data

### Assessing Resiliency

- Check resilience of population to lockdown environments by checking level of household availability and usage
- Check ISP resilience: Resilience of links (number of peers), Performance/QoS, DNS resilience and Protection against Denial-of-Service attacks
- Check resilience of critical infrastructure: Power infrastructure resilience, cable infrastructure resilience (terrestrial and undersea), Number of IXPs, Top Level Domain infrastructure
- Check resilience of Market: Ability of market to self-regulate and provide affordable prices to end-users with diverse and competitive market.

### National Digital Strategy

- Good Governance: The strategy and implementing regulations are developed through an open and transparent process.
- Clear Goals: A multi-year plan with clear, ambitious, and achievable policy-related commitments and quantifiable supply-side, demand-side, and network resilience targets.
- Regular Assessment of Availability and Adoption: Combine data from network operators, household surveys, and third-party availability, adoption, and usage data.
- Supply Side Interventions: Implement clear and enforceable competition policies, allow access to more spectrum, invest in infrastructure, support community networks.
- Demand Stimulation: Affordable devices and services for low-income households and anchor institutions, digital skills programming, and development of locally relevant content.
- Monitoring & Evaluation: Open and transparent review of progress at least every two years.



Join the Connect2Recover initiative at:  
[connect2recover.itu.int](https://connect2recover.itu.int)



**Thank you!**

[Paul@Vernonburggroup.com](mailto:Paul@Vernonburggroup.com)

[David@Vernonburggroup.com](mailto:David@Vernonburggroup.com)



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