A4AI ALLIANCE FOR AFFORDABLE INTERNET

4G for Meaningful Connectivity
Bangladesh

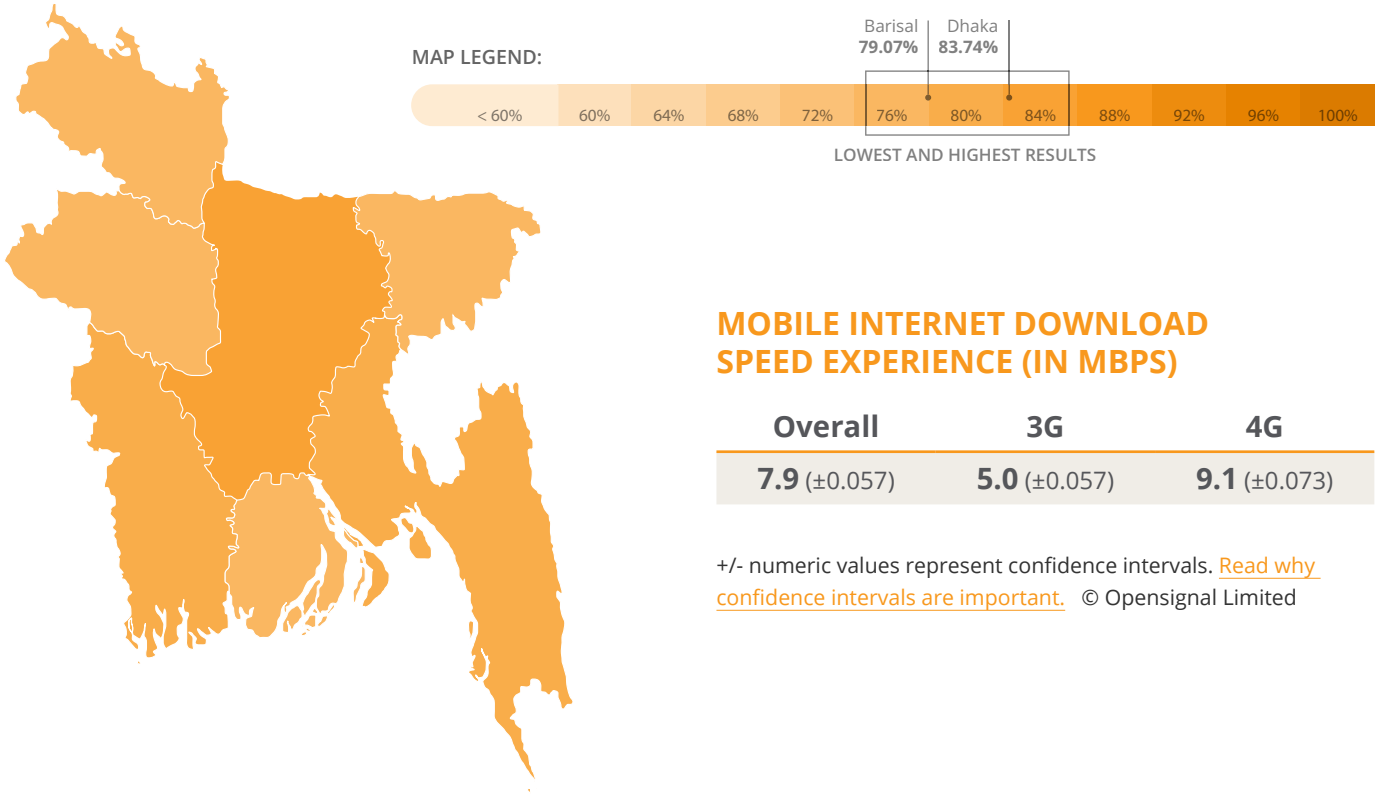
We have meaningful connectivity when we can use the internet every day using an appropriate device with enough data and a fast connection. The Alliance for Affordable Internet (A4AI) published these targets in 2020 to help policymakers set targets for higher quality and more affordable internet access.

This brief focuses on a fast connection — one of the four pillars to measure meaningful connectivity — and the availability of 4G across Bangladesh. It uses data collected from Opensignal to test the amount of time users have a 4G signal that they're able to use on their phone.

This kind of connectivity — at 4G, rather than 3G or earlier technologies — offers higher speeds and greater potential for users to work, play, learn, and communicate online. As governments set visions for their post-Covid recovery with the digital economy as a driver for innovation and economic growth, the meaningful connectivity targets ensure this growth is inclusive and has the foundations to grow to scale.

4G AVAILABILITY IN BANGLADESH

% time, January-March 2021



MOBILE INTERNET DOWNLOAD SPEED EXPERIENCE (IN MBPS)

Overall	3G	4G
7.9 (±0.057)	**5.0** (±0.057)	**9.1** (±0.073)

+/- numeric values represent confidence intervals. Read why confidence intervals are important.

This report is an A4AI brief, with data provided by Opensignal. Learn more about their work at www.opensignal.com. Data, tables, and charts are copyright Opensignal. All text is written by A4AI and released on a CC BY-SA 4.0 licence.

OPENSIGNAL

What is meaningful connectivity?

A FAST CONNECTION

Our internet speeds make or break our online experience. We all know the frustration of a buffering movie or an unstable video call. And without fast speeds, services like telehealth and real-time online learning cannot happen.

A **4G mobile connection** is the minimum threshold that can give us the speeds we need for the experience we want.

AN APPROPRIATE DEVICE

To experience the full power of the internet, we need the right device for the task at hand.

A **smartphone** gives us the functionality to create and consume content in a way that basic phones don't — and the portability to use the internet anywhere. Ideally we will have access to a range of device types.

ENOUGH DATA

While some people have unlimited data packages, others experience severe data scarcity, preventing them from doing certain online tasks or forcing them to wait until they can connect to public Wi-Fi.

An **unlimited broadband connection** at home, or place of work or study gives us reliable internet access in our daily lives to use the full breadth of the internet's potential.

REGULAR INTERNET ACCESS

We benefit most from the internet when we can use it regularly. As our societies grow more digital and the internet is integrated into our daily lives, connecting occasionally is not enough.

Daily access to the internet is the minimum we need to see real benefits for work, education and communication.

Why 4G for meaningful connectivity?

Video content is what people want to access and is also data intensive. Field research conducted by A4AI/Web Foundation confirms YouTube, Facebook, WhatsApp, and Instagram as the most popular online applications — all of which thrive on visual content. This matches with other research which includes photos and video as prominent features in a user's online experience and studies of the changing dynamics of internet traffic globally.

These are data-intensive activities and require a far greater bandwidth than text-based communication alone. While 3G was designed with no lower limit to its bandwidth and not expected to carry much more than 10Mbps, 4G offers greater technological capacity for users to do more online at faster speeds.

Who has 4G, and what kind of internet do they have?

Bangladesh — like its peer countries in South Asia — has generally high rates of 4G coverage throughout the country. However, disparities do exist in different parts of the country in coverage and in availability, as measured by consumer time on a 4G signal. This difference is in particular felt by users outside of the country's capital division, Dhaka.

These disparities in 4G availability have consequences for average speeds and therefore also user experiences with voice, video, and gaming applications. As Bangladesh looks to grow its digital economy, it requires a strong foundation in mobile infrastructure that provides reliable, high-quality connectivity to all.

REGIONAL COMPARISONS:

4G Availability within Bangladesh, January-March 2021

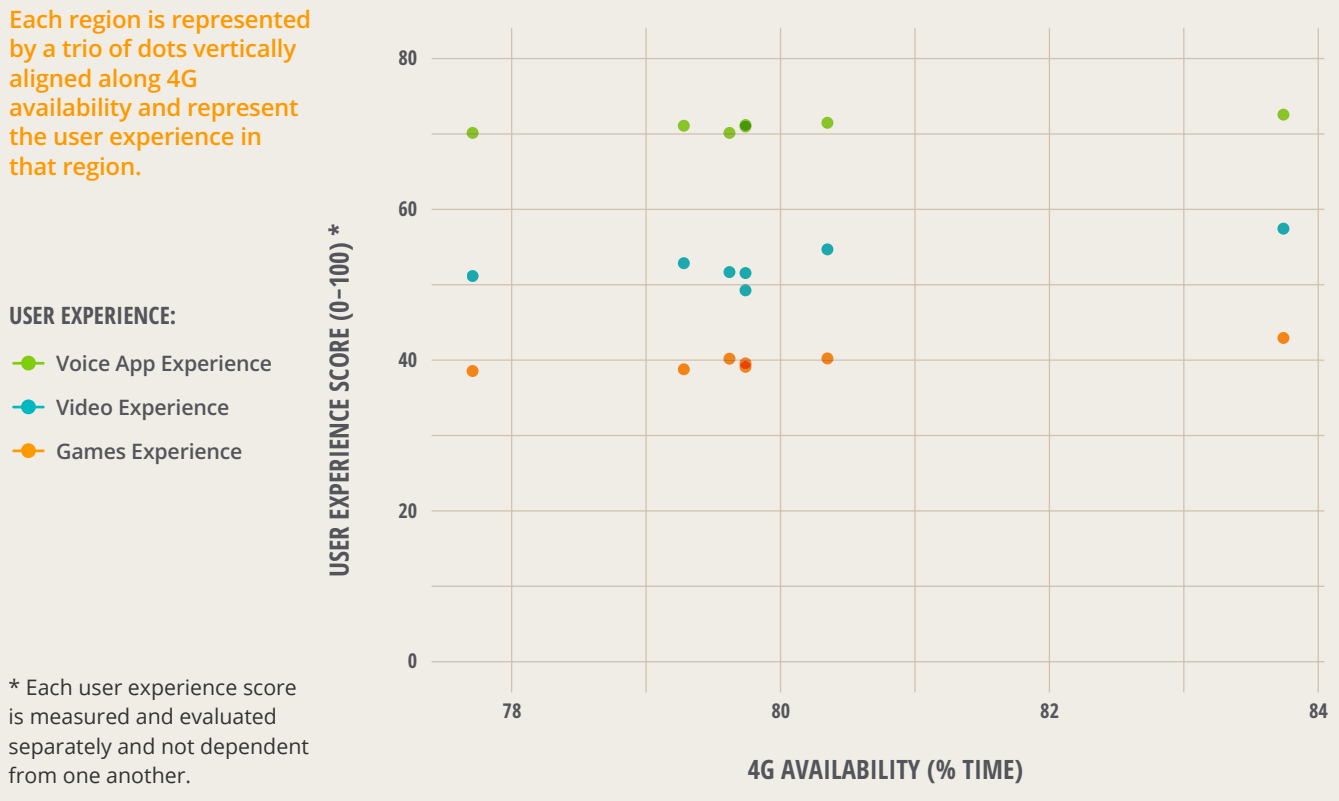
Regions	4G Availability
Dhaka	**83.7** (±0.31)
Khulna	**80.4** (±0.87)
Rangpur	**79.7** (±1.09)
Sylhet	**79.7** (±1.00)
Chittagong	**79.6** (±0.51)
Rajshahi	**79.3** (±0.91)
Barisal	**79.0** (±1.36)

+/- numeric values represent confidence intervals. Read why confidence intervals are important.

4G AVAILABILITY & USER EXPERIENCE IN BANGLADESH

January-March 2021. Data © Opensignal Limited

Each region is represented by a trio of dots vertically aligned along 4G availability and represent the user experience in that region.



* Each user experience score is measured and evaluated separately and not dependent from one another.

What's next for affordable and meaningful connectivity in Bangladesh?

Every year, the Alliance for Affordable Internet publishes the **Affordability Drivers Index (ADI)**, which is an assessment of policy indicators and market factors that correlate with more affordable internet prices in low- and middle-income countries.

In 2020, Bangladesh scored 48 out of 100 on the Index, in 45th position on the Index, but far behind neighbouring countries like India (70/100, 11th) and Nepal (58/100, 33rd).

There's immense potential for Bangladesh to improve its score and to reach affordable and meaningful connectivity for everyone. Here's how:

SCORE ON 2020 AFFORDABILITY DRIVERS INDEX

48/100

Does the national broadband plan set targets on...?

4G	NO
Rural	YES
Fixed	NO
Device Costs	NO
Data Costs	YES

RECOMMENDATION 1

Make new infrastructure easier to build with clear policies

Rights of Way and zoning issues can affect the feasibility of new developments and also reduce potential infrastructure sharing that would enable more widespread coverage and greater market competition in the mobile broadband sector.

Draft guidelines were issued in 2017, but a lack of clarity has also led to legal orders to dismantle some towers.

RECOMMENDATION 2

Provide sufficient spectrum on regular basis to enable coverage

Amid countries in South Asia, Bangladesh had one of the lowest policy scores for spectrum management in the 2020 Affordability Report, dragging its overall score down on the Affordability Drivers Index.

The irregularity of allocations by authorities has been a bottleneck for operators historically, although the auction this year and five-year plans from the regulator indicate positive potential in this area.

RECOMMENDATION 3

Increase transparency within the sector with clear rules for evidence and inclusive participation

As the Bangladeshi broadband market matures, it is important that the country's regulator has the authority to set clear and transparent rules for all stakeholders to participate in the regulatory and policymaking process.

Clear procedures and greater transparency positively build trust among stakeholders in the sector, boost investment potential with greater security, and enable consumers' voice to be heard. This includes the ongoing development process for the country's broadband policy.