

4G for Meaningful Connectivity Indonesia

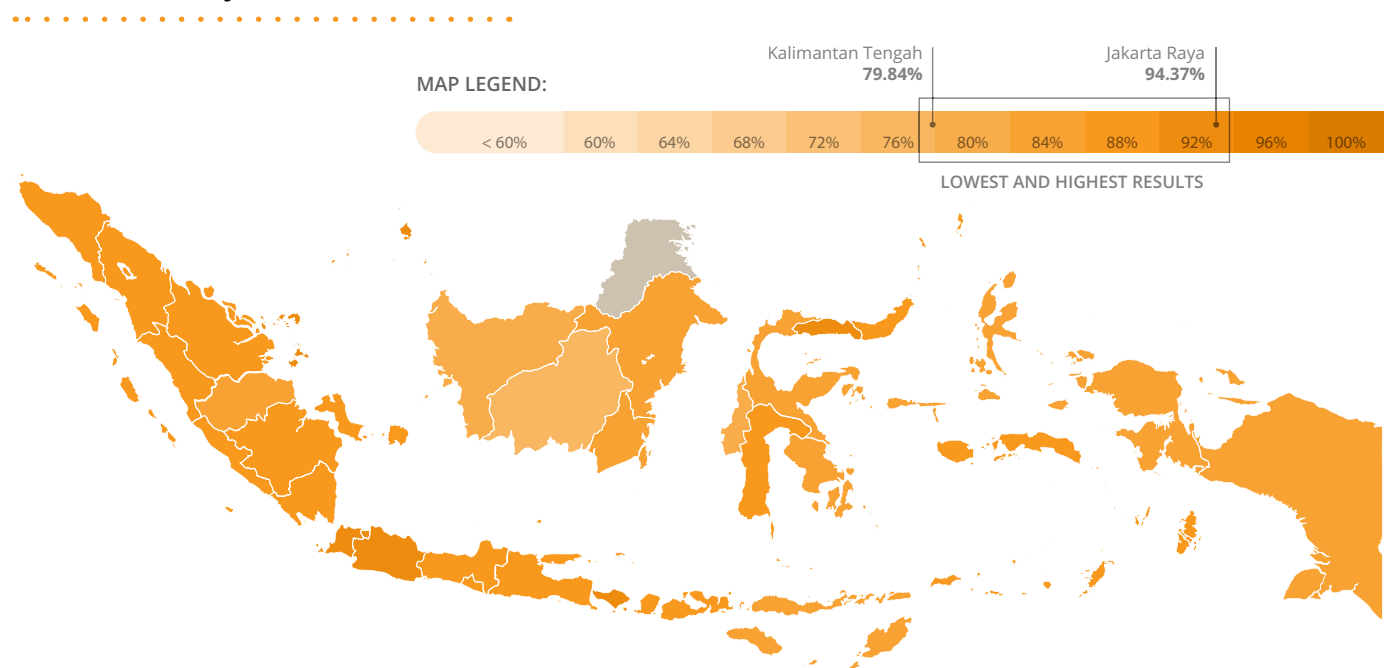
We have meaningful connectivity when we can use the internet every day using an appropriate device with enough data and a fast connection. The Alliance for Affordable Internet (A4AI) published these targets in 2020 to help policymakers set targets for higher quality and more affordable internet access.

This brief focuses on a fast connection — one of the four pillars to measure meaningful connectivity — and the availability of 4G across Indonesia. 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, 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 INDONESIA

% time, January-March 2021



MOBILE INTERNET DOWNLOAD SPEED EXPERIENCE (IN MBPS)

Overall	3G	4G
11.8 (±0.023)	4.36 (±0.023)	13.0 (±0.026)

+/- numeric values represent confidence intervals. [Read why confidence intervals are important.](#) © Opensignal Limited

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.

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

Indonesia — like its peer countries in ASEAN — 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.

These disparities in 4G availability have consequences for average speeds and therefore also user experiences with voice, video, and gaming applications. As Indonesia 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 Indonesia, January-March 2021

Top Three Regions	4G Availability
Jakarta Raya	94.4 (±0.12)
Bali	93.3 (±0.35)
Kepulauan Riau	93.0 (±0.51)
Bottom Three Regions	4G Availability
Kalimantan Tengah	79.8 (±0.77)
Kalimantan Barat	81.7 (±0.57)
Sulawesi Barat	84.0 (±1.22)

+/- numeric values represent confidence intervals. [Read why confidence intervals are important.](#) © Opensignal Limited

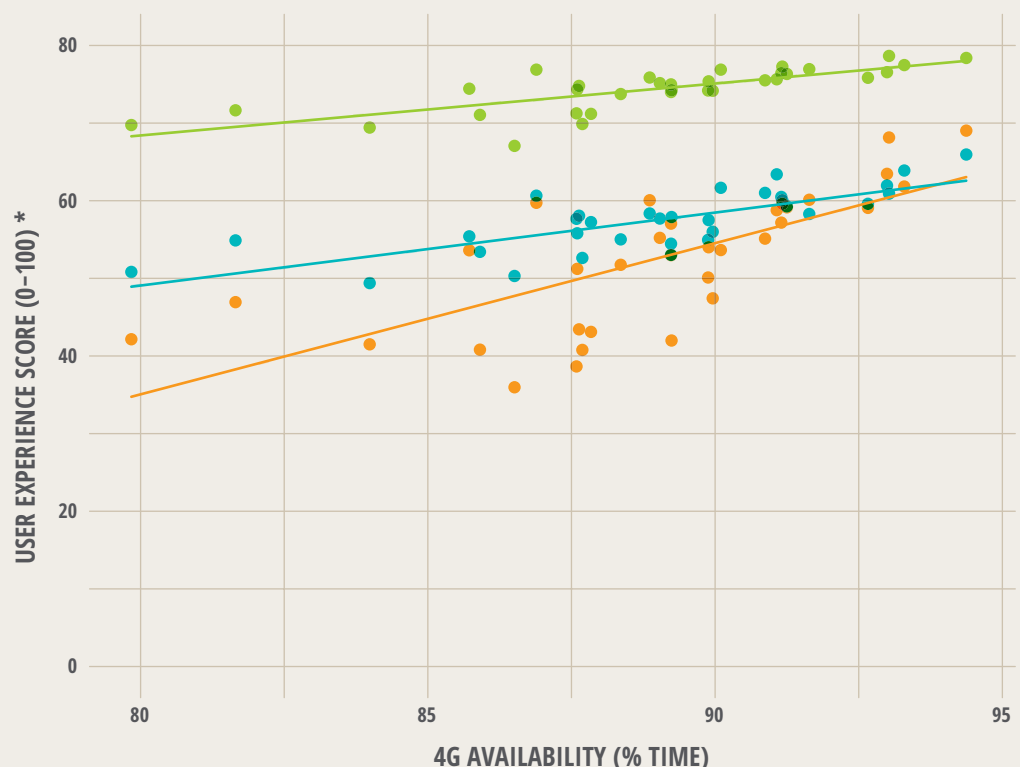
4G AVAILABILITY & USER EXPERIENCE IN INDONESIA

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.

USER EXPERIENCE:

- Voice App Experience
- Video Experience
- Games Experience



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

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

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, Indonesia scored 69 out of 100 on the Index, the 14th highest place on the Index, but far behind peer countries like Malaysia (86/100, 1st) and Thailand (77/100, 6th).

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

SCORE ON 2020
AFFORDABILITY
DRIVERS INDEX

69/100

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

4G YES

Rural YES

Fixed YES

Device Costs NO

Data Costs YES

RECOMMENDATION 1

Adopt a new National Broadband Plan with clear targets for meaningful connectivity

The country's National Broadband Plan expired in 2019. [Broadband plans are essential](#) drivers in shaping the broadband market in a country; setting long-term, evidence-based targets; and aligning stakeholders across the sector towards a common vision. Policymakers should prioritise the drafting of a new broadband plan for Indonesia that includes targets for affordable and meaningful connectivity based on data that reflects consumers' experiences.

RECOMMENDATION 2

Continue to support connectivity through the USAF and public access strategies

Indonesia, like many other countries in Southeast Asia, has made substantial gains in affordable and meaningful connectivity through [its investments in public access strategies](#).

These investments, along with works like the USAF-backed [Palapa Ring project](#), have been key strengths to Indonesia's ADI score and the development of its broadband market.

RECOMMENDATION 3

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

As the Indonesian 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.

