



The Global Race to 5G

Spring 2019 Update



01.

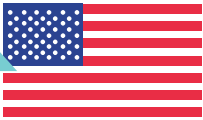
America leads in 5G readiness

A year ago, China and South Korea were leading in 5G readiness, with the U.S. close behind. This year, America is now tied for first with China in 5G readiness. This tremendous improvement is thanks to the quick action and visionary leadership of policymakers, which empowered America's commercial wireless industry to forge ahead in the global 5G race.

Global 5G Readiness—2019

Tied for 1st place

3rd place



UNITED STATES



CHINA



SOUTH KOREA

The U.S. has moved up 2 places in the ranking since 2018.

02.

America leads in industry investment

America's wireless industry continues to be the global leader in making the commercial investments and preparations necessary for 5G deployment. America leads the world with the most commercial 5G deployments of any nation, and deployments are happening all across the country, from Harrison County, Mississippi and Indianapolis, Indiana to Phoenix, Arizona and Nashville, Tennessee.

5G Deployments *(by the end of 2019)*

UNITED STATES | 92



SOUTH KOREA | 48



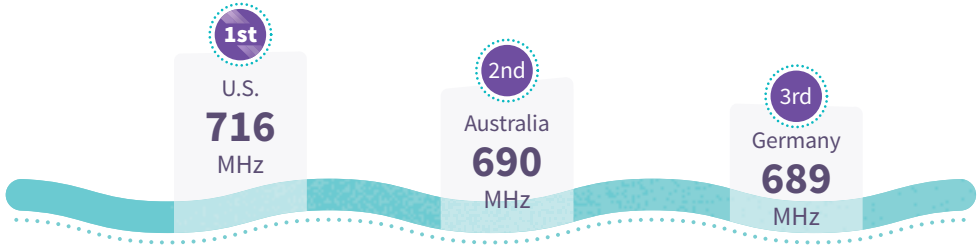
UNITED KINGDOM | 16



03.

High- and low-band spectrum

America leads the world in assigning low-band spectrum for wireless; however, much of that spectrum is being used for U.S. 4G wireless networks. To date, a total of 716 megahertz has been assigned in the U.S., compared to 690 megahertz in Australia and 689 megahertz in Germany. Thanks to the FCC, America also leads in high-band, with South Korea close behind. The U.S. has already assigned 2,500 megahertz of high-band spectrum, and is working on releasing more. South Korea has assigned 2,400 megahertz, Italy has assigned 1,000 megahertz, and China intends to make 2,000 megahertz available per operator.



U.S. ahead in low-band



U.S. ahead in high-band

04.

Mid-band spectrum deficit

Our work is far from done. While America ranks strongly in the majority of 5G-readiness metrics, China and many other countries are ahead in making critical mid-band spectrum available for 5G. Rectifying that deficit should be central to the Administration's efforts.

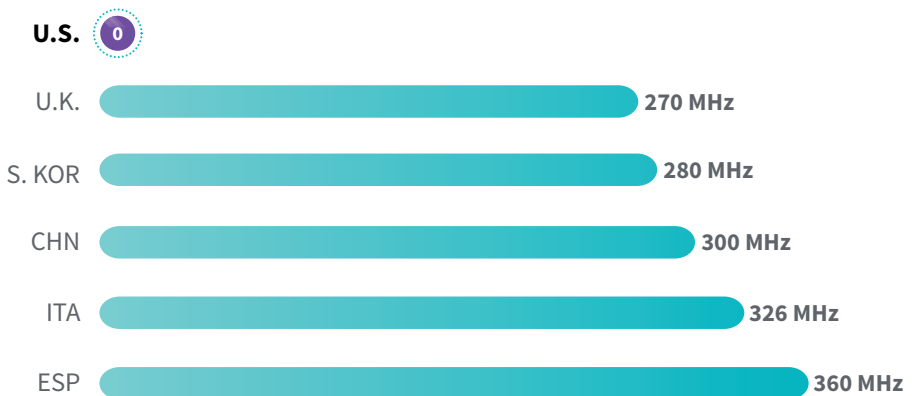


Other countries will make

4x

more spectrum available than the U.S. by end of 2020.

Current Mid-band Availability



05.

A National Spectrum Strategy to lead 5G

To secure America's 5G leadership, we need a National Spectrum Strategy, based on free market principles that includes the **following key steps**:

- 1 The creation of a 5-year schedule of auctions that puts more high-, mid- and low-band spectrum in the hands of America's wireless industry
- 2 Recommitting federal spectrum policy to proven free market approaches that harness the power of competition to enhance our nation's economic and national security
- 3 Modernizing government policies and procedures to ensure optimal use of spectrum





To learn more about the policies
needed to win the global 5G race,
visit www.ctia.org.

About the Research

This paper draws on original research from Analysys Mason. Analysys Mason compared 5G spectrum and infrastructure policies proposed in markets worldwide to advance 5G technology and facilitate successful network deployment, and to prepare a comparison of 5G readiness between markets.



www.ctia.org

