

# New map from HERE Technologies shows quality of cell phone coverage on roads around the world

HERE Cellular Signals is a powerful data set for mobile network operators, logistics fleets, and vehicle manufacturers to assess mobile network connectivity

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**Mobile World Congress, Barcelona** – HERE Technologies, a global leader in mapping and location platform services, today announced <u>HERE Cellular Signals</u>, a unique data set that provides up-to-date information about mobile network performance on roads across 196 countries.

For every road segment – from highways to urban canyons to rural areas – HERE Cellular Signals provides a snapshot of network coverage, carriers, signal strength and radio network type. Signal strength is represented as *Excellent*, *Good*, *Fair* or *Poor*. This information can help cellular carriers monitor the performance of their own network, conduct competitive analyses to identify areas of relative strength and weakness, and make more informed network planning decisions.

"Predicting the available signal and bandwidth at a given location is a key part of enabling connected vehicles," said Aaron Mayfield, Senior Product Manager at HERE Technologies. "With the emergence of 5G, a new generation of connected services will be developed, making the mapping of available bandwidths even more crucial."

### How it works

To create HERE Cellular Signals, HERE has fused its rich and dynamic global radio map with its leading global map of the road network.

For its radio map, HERE processes aggregated cell and Wi-Fi traces and GPS coordinates from more than 250 million connected devices globally that utilize HERE network positioning technology. HERE network positioning technology helps a device locate itself based on which cellular and Wi-Fi networks are in range of the device and how strong each signal is. By aggregating this information, HERE has created a vast map of the world's radio environment.

The radio map is updated on average more than 100 million times a day through cellular-based updates alone. The high data volume enables increased positioning accuracy across every type of road, including minor residential and rural roads. HERE applies cloud-based machine learning to identify outliers and anomalies in the crowdsourced data and ensure high data quality.

HERE offers the HERE Cellular Networks data set to customers in FGDB (File Geodatabase) format.



## Benefits for mobile network operators

HERE Cellular Signals provides a range of benefits to mobile network operators, including aiding with network and RF planning and optimization as well as conducting quality evaluations and competitive assessments. The product can also help the carrier's customer service team answer network service related questions and its investor relations team prepare performance reports for the financial community.

### Benefits for transportation, logistics and automotive companies

HERE Cellular Signals also offers benefits to other industries too. Transportation companies can use the product to enhance communications between their fleets and the dispatch center; optimize planning and logistics; and evaluate cellular network coverage and service plans.

Connected vehicles meanwhile need always-on connectivity to the cloud, the road infrastructure and other vehicles. With HERE Cellular Signals, vehicle manufacturers can optimize when the vehicle downloads and uploads information. For example, if the vehicle knows it is traveling into an area with poor cellular connectivity, it can pre-download the information it needs, ensuring a better driver experience and the least impact on the network.

HERE Cellular Signals is part of a new integrated solution being demonstrated at Mobile World Congress in Barcelona next week by HERE and <u>Continual</u>, which provides connected car manufacturers and mobile network operators with a unique toolset for analyzing and improving the connected journey experience. The companies will demonstrate their integrated solution from 25 – 28 February 2019, on Stands 5D81 in Hall 5 (Israeli Pavilion) and 2E14EX in Hall 2 respectively.

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### **About HERE Technologies**

HERE, the Open Location Platform company, enables people, enterprises and cities to harness the power of location. By making sense of the world through the lens of location, we empower our customers to achieve better outcomes – from helping a city manage its infrastructure or an enterprise optimize its assets to guiding driver to their destinations safely. To learn more about HERE, including our new generation of cloud-based platform services, visit: <a href="http://36o.here.com">http://36o.here.com</a> and <a href="https://36o.here.com">www.here.com</a>.