

# MONITORING OF MOBILE AND WI-FI NETWORKS

New app enables 24/7 monitoring of the operating state and functionality of mobile and Wi-Fi networks through standard Android mobile phones.

## 24/7/365 monitoring

We become more and more attached to mobile phones, both for regular voice calls and data services like web browsing, but also for critical apps that were previously used on stationary wired phones and computers. At the same time, the complexity of the radio networks 2G, 3G, 4G, 5G, Wi-Fi is increasing as well as the number of frequency bands. This becomes a challenge, particularly when an indoor mobile network (DAS facility) must work together with the outdoor (macro) network.

Ramboll has partnered up with a Swedish company to develop an app for monitoring mobile networks on Android smart phones. Once the app is installed it can do several functional tests on mobile or Wi-Fi networks. The measurement data is uploaded on a server that makes it accessible via a web portal. Afterwards, the data can be reviewed or exported for further analysis and reporting. There is no

need for IT integration as approved Android terminals with regular internet connection to the web portal are sufficient to use the app.

There is, among other things, the possibility to do the following test sequences (more are under development):

- Voice call to answering machine
- Ping to server (Round Trip Time)
- Http Download
- Http Upload
- DNS check

Ramboll offers flexible agreements, from “full-service” where Ramboll manages and operates the measurement terminals and reports, to “self-service” where the client manages the monitoring process by own resources. In both cases, Ramboll offers support in Danish and English, as well as sparring regarding requests for measurement and report.

## Telecommunication experience

We have extensive knowledge of mobile networks and measurements, and our understanding of the telecom sector builds on 70 years of experience within the field.

## A multidisciplinary consultancy

As a multidisciplinary consultancy, Ramboll can undertake most services and special analyses that could be required within telecom infrastructures.

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