



# BEREC Guidelines Art. 22

## Geographical surveys of network deployments (consultation document)

Anton Schwarz  
Abteilung Volkswirtschaft

BEREC Guidelines Art. 22 (Geographic Surveys)



## Article 22

- National Regulatory Authorities (**'NRAs'**) and/or Other Competent Authorities (**'OCAs'**) shall, by 21 December 2023,
  - conduct a geographical survey of
  - the reach of electronic communications networks
  - capable of delivering broadband,
  - and shall update it at least every three years thereafter
- Potential use: State aid, broadband plans, universal service, market analysis, 'designated areas', definition of coverage obligations, etc.
- BEREC shall issue guidelines to assist NRAs and/or OCAs on the consistent implementation



## 2 Phases

- Phase one (foreseen approval in March 2020).
  - Guidelines on the consistent application of geographical surveys and forecasts, regarding QoS-1 information.
- Phase two (foreseen approval in December 2020).
  - Guidelines on the consistent application of geographical surveys and forecasts, regarding verification, for example by QoS-2 and QoS-3 measurements and the procedures to invite undertakings and public authorities to declare their intention to deploy VHCN over the duration of the relevant forecast period for Article 22(3).
- [QoS1 = Simulation, QoS2 = ‘controlled measurements’, QoS3 = ‘user measurements’, e.g. RTR Netztest]



## Definitions

- **Maximum available speed:**
  - The maximum speed is the speed that an end user at the address/grid could expect to receive at least some of the time (e.g. at least once a day). The parameters should describe the capability of the network.
- **Normally available speed:**
  - The normally available speed is the speed that an end user in the address/grid could expect to receive 95% of the time over the whole day when accessing the service. The parameters should describe the capability of network.
- **Premises passed:**
  - The number of 'Premises Passed' is the potential number of premises that an operator can connect in a service area within a short period of time [4 Weeks] at affordable prices [normal connection fee] for the end user (connection fees), regardless of whether these premises are connected to the network. Typically, for a premise to be passed, this requires an existing network or network components (e.g. fiber splitter) deployed in close proximity to the premises.



## Resolution

- **Fixed networks**
  - Address level
  - temporarily 100x100m squares in exceptional cases (e.g. no uniform address database)
- **Mobile networks**
  - 100x100m squares
- **Frequency of data collection: At least once a year**



## Data to be collected for fixed networks

- For each address
  - Network provider code
  - Technology code categorized per subsection (copper, coax, fiber, air)
  - Maximum Download speed class per subsection
  - Maximum Upload speed class per subsection
  - Normal Download speed class per subsection
  - Normal Upload speed class per subsection
  - Number of premises passed by the operator at the address (optional)
  - Determine if that network is VHCN at the address considered

Speed	Code
More or equal to 1 Gbit/s	1000
$\geq 300$ Mbit/s < 1 Gbit/s	300
$\geq 100$ Mbit/s < 300 Mbit/s	100
$\geq 30$ Mbit/s < 100 Mbit/s	30
$\geq 10$ Mbit/s < 30 Mbit/s	10
$\geq 2$ Mbit/s < 10 Mbit/s	2



## Data to be collected for mobile networks

- For each 100x100m square
  - Grid code or polygon ID
  - Technology availability (3G-5G)
  - Qualification as a VHCN

optional:

- Upload Maximum Speed classes
- Download Maximum Speed classes
- Other technical parameters regarding signal strength

Speed	Code
More or equal to 1 Gbit/s	1000
$\geq 300$ Mbit/s < 1 Gbit/s	300
$\geq 100$ Mbit/s < 300 Mbit/s	100
$\geq 30$ Mbit/s < 100 Mbit/s	30
$\geq 10$ Mbit/s < 30 Mbit/s	10
$\geq 2$ Mbit/s < 10 Mbit/s	2



## Forecasts

- Main purposes: state aid, identification of designated areas
- 1 year
  - Fixed: Address level
  - Mobile: 100x100m square
- >1 year
  - 1000x1000m square
- Frequency of data collection: At least once a year





## Procedure and way ahead

- **Public consultation**
  - from 10 October to 21 November 2019
  - 27 contributions
- **Final guidelines to be published after P2 2020**
  - 17.03.2020