



Via email

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**BODY OF EUROPEAN REGULATORS FOR  
ELETTRONIC COMMUNICATION**

Rome, 21 November 2019

**Subject:** Public consultation on the draft BEREC Guidelines on Geographical surveys of network deployments  
– Linkem contribution

Dear BEREC,

with reference to the public consultation on the draft BEREC Guidelines on Geographical surveys of network deployments please find in attachment Linkem contribution.

Best regards,

Linkem S.p.A.



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digitalmente da

C: IT

## Annex 1 – Linkem Contribution

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## Annex 1

### Linkem contribution to the Public consultation on the draft BEREC Guidelines on Geographical surveys of network deployments.

#### Question 1

Linkem agrees that a high resolution is necessary for most of the regulatory and policy functions that the survey of broadband reach and performance is intended to provide information for and the criteria must be homogeneous within all Member States.

Linkem agrees that for wired fixed networks the level of resolution should be the address.

For mobile networks, a 100m x 100m grid (or equivalent polygon) level of resolution should be (at least) could be suitable.

In order to achieve an overall awareness and monitoring of telco networks in each country, BEREC should include also a specific view for fixed wireless access network operators, addressing in particular high-capacity networks operating with licensed spectrum and standard technology, the only “future-proof” conditions able to support a reliable, scalable, nationwide business model for providing high quality and volume fixed services with radio access.

Linkem’s network, for example, is based on LTE Advanced technology, the same implemented by mobile operators, and 3.5 GHz band and is evolving towards 5G.

For the specific aims of this radio networks, last-mile radio access for fixed internet services, for an outdoor coverage map a 100mx100m grid (or equivalent polygon) level of resolution should be suitable.

#### Question 2

For a fair and deep comprehension of quantitative network performance, BEREC should consider that network performance depends on business model and not only on network (technology, in-use aggregated bandwidth, particular adopted functionalities like MIMO data streams, etc.): for a fixed wireless access operator, for example, maximum data rate must be intentionally limited in order to provide wireline-like user experience - in terms of constancy and reliability performances - to the highest number of customers for each base station - for sustainability – and following current trends of high volume and low latency user applications.

From this point of view, maximum downlink and uplink bandwidth has to be referred to current commercial and technical implemented service profiles and not only to network potential.

In conclusion, BEREC should ask to operators also downlink and uplink maximum values (up to) based on commercial service conditions.