

Net neutrality and 5G

Klaus Nieminen
5GTNF result seminar
28.8.2020

Open Internet Regulation (EU) 2015/2120

End-user rights to use and provide services and a terminal equipment of their choice

Agreements shall not limit end-users rights

Equal treatment of traffic as a basic rule

But there is room for differentiation

- ▶ A rather good introduction and links are available on BEREC website:
https://berec.europa.eu/eng/open_internet/

Equal treatment rule and exceptions

Equal treatment means

no blocking

no slowing down

no alteration

no restriction

no interference with

no degradation

no discrimination

Specific exceptions are allowed only as long as necessary for

compliance with other laws

integrity and security

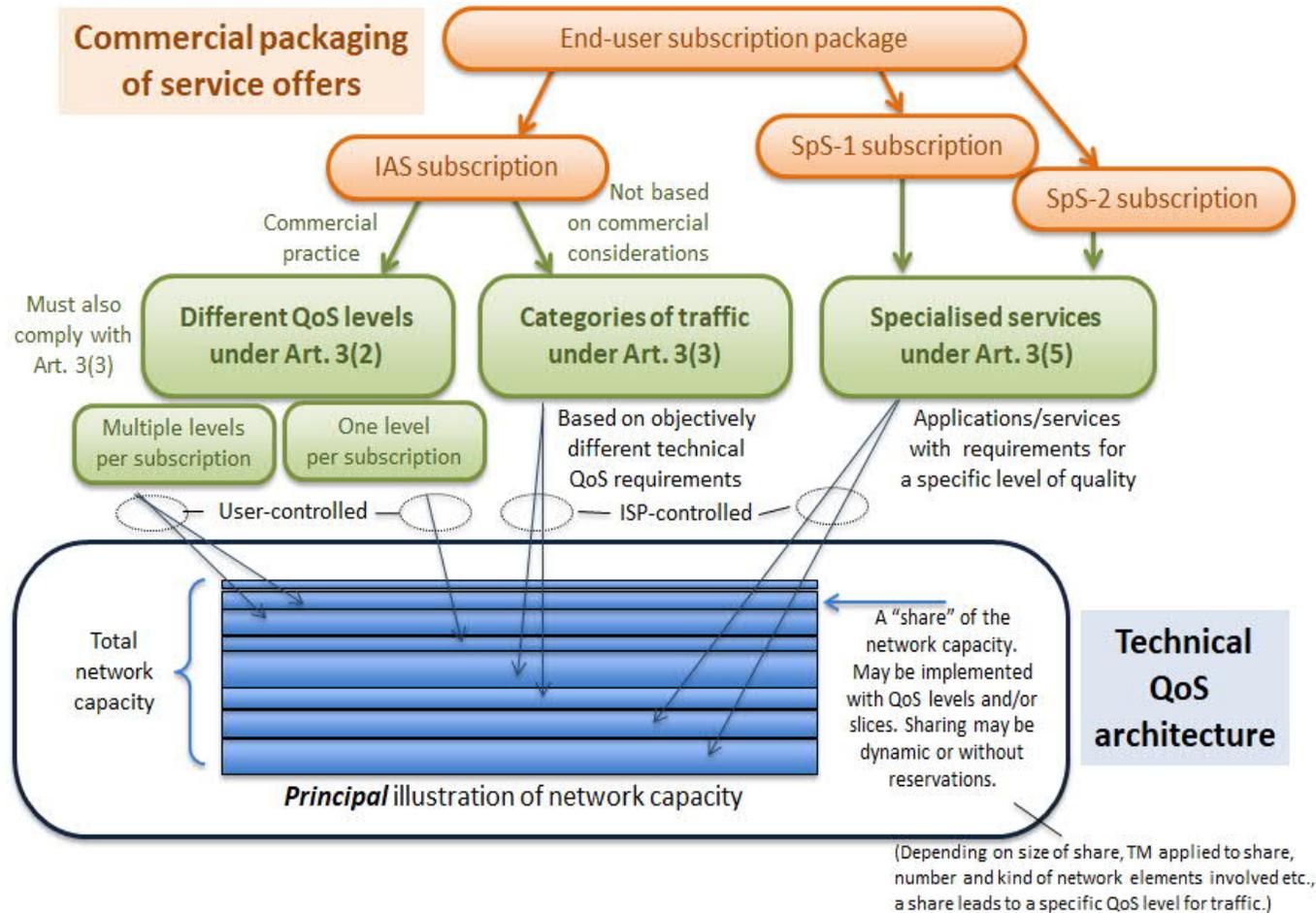
congestion management

And there are also different QoS options available under OI Regulation...

Regulation does not ban the use of 5G technologies

- ▶ The OI Regulation is technologically neutral, and do not constitute a ban on the implementation of any 5G technology itself.
 - ▶ We are not aware of any concrete example where the implementation of 5G technology as such would be hindered by the OI Regulation.
 - ▶ The specific 5G use cases may need to be analysed case-by-case basis.
 - ▶ The Regulation won't be applied to private networks or end-user equipment.
 - ▶ M2M/IoT device requirements e.g. for energy preservation and security may qualify as specific level of quality requirements to justify specialised services.
 - ▶ Different application-agnostic QoS levels may be offered based on combination of different QoS parameters.
 - ▶ ISPs may provide additional endpoint-based services (e.g. parental control or security) same way as CAPs.

An abstract illustration of QoS options under OIR



IoT and M2M as a specialised service

- ▶ Specialised services are connectivity service that are optimised to meet the use case requirements. Services can be offered
 - ▶ when optimisation is necessary to meet the QoS requirements of the service
 - ▶ to the extent internet access service is not degraded
 - ▶ for dedicated connectivity, not for internet access
- ▶ Machine-to-machine services (M2M) may have requirements that cannot be fulfilled by regular internet access products
 - ▶ devices may be resource-constrained (e.g. limited processing power, battery lifetime and memory capacity) that may require networks to tackle issues like
 - ▶ energy exhaustion, interference and security

A large teal graphic element on the left side of the page, consisting of a rectangle with a diagonal cut on its right side.

TRAFICOM
Finnish Transport and Communications Agency