



'Personal data protection, frequency regulation and competition law in the context of smart city infrastructure'

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Modified version of the article has also been published as a chapter 'Current legal and regulatory framework' (2020) in Tukiainen, T., Paavola, L. (eds.) State-of-Art Understanding Neutral Hosts in Smart Cities. Helsinki: Unigrafia, pp. 72-91.

The article provides an overview of the current national and EU legal and regulatory framework for creating smart city ecosystems and developing and operating the Neutral Host (NH) business model. The article focuses and points out further research topics on the following fields of law:

1. Personal data protection and privacy

Personal data protection and privacy are identified as major concerns in the context of digital smart cities deploying IoT and 5G technologies. The General Data Protection Regulation (GDPR) provides the general framework of personal data protection in the EU, and complying with its requirements is essential to mitigate the risks to protection of personal data and to ensure trust to digital services in smart city ecosystems.

In the context NH, consideration must be given to, for example, wide definitions of the material and territorial scope of the GDPR as well as the widely interpreted concept of personal data, use of anonymization and pseudonymization techniques, roles (controller, joint controller or processor) and responsibilities in the processing, general processing principles, legal grounds for the processing, rights of the data subjects, and implementing appropriate technical and organisational measures.

2. Network and spectrum regulation

Exploring network and spectrum regulation in relation to running networks and recognising the possible ways to use the frequencies is important in a smart city ecosystem. Currently, the new EU provisions (European Electronic Communications Code) are being implemented, and amendments have been proposed to the national Act on Electronic Communication Services and related acts in Finland. The reform responds to the need to adjust or lighten certain procedures and practices to support the deployment of 5G.

NH as a concept is possible to execute already under the current national practices and regulatory framework, by cooperating with existing telecom operators (frequency holders) or by obtaining a network or radio spectrum license for unallocated frequencies. In these scenarios, NH may fall under the scope of legal obligations imposed for telecom operators engaged in public telecommunications activities. The influence of the national reform of network and spectrum regulation and the means of allocating the new frequencies (26 GHz) remain still to be seen, but are of significant relevance in the near future, when assessing the local activities of different operators.

3. Competition law

The general framework of Finnish and EU competition law (national Competition Act and the Treaty on the Functioning of the European Union) prohibits 1) agreements and other forms of cooperation that restrict competition and 2) abuse of dominant position, and requires that 3) certain transactions are notified in advance to competition law authorities and may not be implemented unless the authorities clear the transaction. However, as regards particularly platforms and data, the legal approaches are still under development in the Member States and at the EU level.

Generally, competition law analysis considers the form and nature as well as the legal and economic context of the practice, effects on competition, and efficiencies and other justifications. In the context of NH, possible competition law issues might be raised in relation to, for example, formation of NH operators, connectivity layer (network and facilities), data platform (collection and use of data) and marketplace rules (applicable to those willing to provide their products via NH marketplace). Consequently, competition rules also affect which business strategies are attractive for NH.

4. Public procurement legislation

The Finnish and EU public procurement rules (national Act on Public Procurement and Concession Contracts and the EU Directive on Public Procurement) require procurements to be arranged through a tendering process in certain circumstances. The obligation depends principally on the organization (procurer) as well as the value and type of the procurement.

Whether NH itself is required to arrange competitive tendering depends on whether NH could be defined as a contracting entity. This would mainly come into question if a public entity, e.g. city, occupies a central role in NH activities. The applicability of the public procurement rules to NH's customers depends on the object of the procurement, whether goods and services of NH are acquired as separate components or as one package and what their value is deemed to be. An issue requiring further analysis is to what extent the exceptions applying to "electronic communications services" cover products offered by NH.