

# **Finland: digital leader standing on mobile feet?**

## **Inequality of citizens as digital consumers of public services online**

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### **Abstract**

*A large part of the public services and mass communication in Finland has been digitalized and moved online, which makes Finland one of the digital leaders within the EU. The focus of the Finnish broadband strategy is exceptional because it is based on wireless mobile networks. This strategy has also been taken further than elsewhere in Europe by demolishing fixed telephone networks almost entirely. So far, there has been some technological and economic critique on favouring mobile networks and slow investments in building new fixed networks. Although the usability of public services and journalistic media content like news online is a growing part of the everyday life of the Finns, the citizen perspective has been not been heard so far. The purpose of the project we are planning for is to find out whether the Finnish broadband strategy based on mobile networks results in growing inequality between different population groups– and is it possible that the strategy could even endanger the citizen rights and their security. Based on the results, we will create a proposal of policies for securing equality of the citizens as well as universal availability of public services and journalistic media content also in the digital environment.*

### **Introduction and context**

Finland is the digital leader in Europe. In 2020, it scored the highest points for the second year in a row in the Digital Economy and Society Index (DESI), which the European Commission has been using to evaluate the development of the member states since 2015. The strongest dimensions of the Finnish performance have been human capital and digital public services. More than three quarters of the population have at least basic digital skills and online government services are actively used by more than nine in ten internet users in Finland. Every second Finn is also using public health and care services over the internet. (EC 2020)

Finland started to build an *information society* already three decades ago and during the last years digitalization has been taken further also in public services like health and care services.

Digitalization means usually continuous availability of service over the internet or by using the internet connection. Most of the internet-based services offer completely independent and automated services (like buying flight tickets online or using *Oma Terveys (Own Health)*-database)

or assisted services, either based on automated artificial intelligence (AI) or human personnel interacting in a very easily accessible mode (eg. via chat).

From the citizen perspective, the main focus of digital services are public services and their availability, but also other functions of everyday life like banking services, which are absolutely essential for trading and exchange – and in Finland, online banking has also an important role for digital identification needed to access public services online. In addition, there are so called critical services like communication in exceptional conditions like during thunderstorm, hurricane, or heavy snowfall. Exceptional situations can be caused also by other possible problems in the most critical infrastructures like in electricity or communications networks or other significant special conditions like the state of emergency during the coronavirus epidemic in spring 2020. (Tiainen 2020)

Despite the highest scores in the European DESI, the comparison with the other EU member states also highlights the special challenges of Finland in the implementation of the internet connections, which are an indispensable precondition for any digital services online. (Ala-Fossi & Hildén 2018)

For some time now, the network operators have been directing the consumer demand for internet connections towards mobile broadband. This strategy has also been supported by the Finnish Ministry of Transport and Communications. Finland granted mobile spectrum licenses in beauty contests instead of auctions until 2013, so the three main operators were able to make large investments in mobile networks, while their mutual competition kept the price for unlimited data plans on a very reasonable level. That is why monthly mobile data use per subscription in Finland is now the highest in the world and more than third of all Finnish households are using only mobile broadband. (Ala-Fossi 2020)

At the same time, the network operators have been much less eager to invest in new fixed networks even with the support of public funding, so the development of fast fixed connections especially outside of the larger cities and in rural areas has been slow. (Ala-Fossi et al. 2018) If the concept of technological neutrality would match with reality, mobile broadband would be in every way equal with the fixed broadband services. But the speed and quality of mobile connections fluctuates according to many external variables like number of users, distance and obstacles between the user and base station as well as to weather conditions. Therefore, mobile broadband is usually slower and more unreliable than fixed broadband. (Ala-Fossi et al. 2020) Finland has also been one of few countries in the world, which have allowed the operators to take down and demolish fully operational copper wire networks for fixed telephone services. (Traficom 2019; Pajala 2019)

### **Discussion: Are we heading towards a digital dystopia ?**

This long-time strategy of Finland with a mobile focus has created a situation, where basically all crucial functions of the digital society and its citizens are increasingly dependent on mobile networks. Significant dependency on mobile communication systems seems to be now leading into inequality of the citizens. (Lindholm 2020; Pyykönen & Lehtonen 2016) Mobile networks are built and developed primarily on commercial terms, which means uneven quality of reception and transmission in different regions and areas. For example, when fixed telephone networks were replaced with mobile GSM networks, they were required to have 99% population coverage, but no indoor reception. This means that you were supposed to have a proper universal service telephone connection (for which you had a legal right) if you were able to make a mobile call from the yard, outside of your home.

And even though Finland was the first country to introduce universal service obligation (USO) for an internet connection in 2010, the minimum speed of USO internet connection has been only 2 Mbit/s since 2015. (Ala-Fossi et al. 2018) In addition, many of the conditions of the mobile network licences are still not controlled by the authorities, but the operators are expected to independently measure and evaluate their own performance. All this taken together may severely endanger the equality of the citizens as users of digital public services as well as their safety, social rights, and freedom of speech, all protected by the Constitution of Finland. (Finlex 2020; Neuvonen 2018)

Significant prioritization of mobile networks in Finland and interdependency of different services means that when for example the delivery of journalistic media like newspapers is developed by moving it online in digital format, in practice it is also concentrated into mobile networks. Besides printed media, this happens also with radio and television, because their contents are increasingly consumed online via mobile networks. (Hindsberg 2020) This leads us to ask, how long public service providers and journalistic media outlets are able to serve their users and audiences independently – and to what degree they already have become totally dependent on mobile networks and commercial network operators. From the perspective of the equal basic rights of every citizen it is crucial, that all the major digital health care and communication services should remain accessible for everybody also during any possible time of crisis. (Horowitz et al. 2019)

Finland is a good example of what may happen, when you combine determined digitalization with a strong focus on internet connections via mobile networks. We think it would be important to study, whether this strategy is sustainable – or will it lead into increasing inequality between different population groups in the realization of the basic citizen rights and safety as well as withering and decreasing diversity of different forms of journalistic media.

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