

# SEMINAR ANNOUNCEMENT

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UNITED NATIONS  
UNIVERSITY

**UNU-EGOV**

Operating Unit on Policy-Driven  
Electronic Governance

## WHERE

UNU-EGOV, Rua de Vila Flor 166  
4800-445 Guimarães, Portugal

## WHEN

10 July 2018 | 10h00 - 11h00

## SPEAKER

**Ralf-Martin Soe**

ICT Counsellor, Minister of Entrepreneurship and Information Technology (Estonia)



Dr. Ralf-Martin Soe is an ICT Counsellor to the Minister of Entrepreneurship and Information Technology. During the last five years, he has been focused on initiating and coordinating large-scale Smart City and Real-time Economy Research and Innovation projects. He has been working for the UK Government and PwC as a Financial and Economic Consultant.

Dr. Soe holds two master's degrees in financial management (MSc, Maastricht University / United Nations University, and MBA, University of Tartu), and holds a PhD degree in Technology Governance from Tallinn University of Technology. His recent doctoral thesis analyses how cities of Tallinn and

Helsinki could be connected virtually (see: <https://digi.lib.ttu.ee/i/?9794>). He is also affiliated to the United Nations University Operating Unit on Policy-Driven Electronic Governance (UNU-EGOV) as a Government Fellow between July and September 2018.

## TITLE & ABSTRACT

### How to connect cities and countries digitally: the case of Estonia

The presentation first gives an overview of Estonia's success in digitalising public services and then analyses the weaknesses of ICT development in Estonia, especially in the field of digitalising the industry and economy. Thirdly, a perspective how cities (and also countries) could be digitally connected in offering joint services will be given. Lastly, potential research interests as a UNU-EGOV Government Fellow will be introduced and discussed.

Almost all public services in Estonia are digital thanks to successful implementation of Internet-based data exchange layer in combination with mandatory eID cards. Today, close to 98% have e-ID, and it is mandatory for everyone above the age of 15. The eID (either ID-card, mobile ID or smart ID) provides citizens with digital access to Estonia's e-services. Whether we are talking about banking or business operations, signing documents or obtaining a digital medical prescription, eID is the key to accessing those services. Another cornerstone of e-Estonia is the X-Road data exchange system, which works like an open source highway for data traffic via Internet. Over 900 organisations and enterprises in Estonia use X-Road daily. Citizens and businesses do over 500 million transactions per year – this is all done without the need to print out any papers or drive anywhere. All you need is a suitable eID for your device and an internet connection.

As a micro country, Estonia cooperates closely with neighbours. Estonia and Finland are the first two nations in Europe developing a joint data exchange platform based on Estonia's X-Road. This means that very soon health or business data on Estonian citizens can also be accessed by the Finnish government or private sector, regardless of whether the person is living in Estonia or Finland. This presentation proposes also a novel approach to conceptualising connected cities. To date, close-by cities are mostly analysed from the perspective of how to connect them physically, mainly providing the advancement of mobility options; there are significant local, national and supranational financial incentives for this. This talk describes that cities can also be effectively connected digitally by harmonising public services and exchanging data in real time across databases exemplified by cities of Estonia and Finland. The challenge with digitalising cities is that without joint standards and a harmonised approach, two close-by cities may become digital islands, i.e. everything is digital within the cities but not across the cities. That is, two cities can effectively produce a non-digital macro-region where the best

way is to use cash and analogue services. In the field of ICT, there are hundreds of standards, and picking different ones could be compared to having one city with left-hand traffic and another one with right-hand in the most extreme cases.

As part of the Government Fellowship programme within the UNU-EGOV, Ralf is interested in explaining (mainly) the following real-life challenges and cases:

1. How successful e-Estonia could transform to smart cities?
2. The challenges of open and collaborative e-governance in the case of ICT broadband investment plan.
3. Describing the agile and experimental approach of the ICT development plan of Estonia.