DIGITALISATION IN ESTONIA AND LUXEMBOURG
OR THE TALE OF TWO CITIES

How Estonia became digital? What “digital” lessons can be drawn for small states like Luxembourg? These are the two key questions addressed by the former Prime Minister of Estonia Juhan Parts last 22 May 2019 at the Banque International de Luxembourg (BIL). This was the opportunity to take a step back from the numerous projects relating to digitalization and blockchain.

FROM ESTONIA _

Meeting with digitalization in the 1990s.

How Estonia become digital? The Estonian Republic regained its independence from the Soviet Union in 1991. The newly “restored” government had to create from scratch a full legal system and state infrastructure to enable the development of a market economy. In this context, Juhan Parts joined the new Estonian civil service with the mission to support several reforms and notably the drafting of the land laws including the setting-up of a national real estate registry. Working on this project with German experts, he became aware as a result of reading German local newspapers of an Austrian governmental project to create an electronic registry. He pushed for the creation of a paper and digital real estate registry in Estonia. Many legal and technical questions arose and after two years, Estonia had an electronic real estate registry in place. This first achievement had a snowball effect. Digitalisation gradually diffused to all the Estonian state infrastructure. The famous “e-Governance experience” was created which enabled the establishment of rules for the digital society, personal identity in cyberspace, and the creation of a uniform architecture for state databases.

Mr Parts concluded on this first experience that the digital transformation of Estonia did not follow a precise plan but was more informal and an ad hoc process. E-Governance. Mr Parts provided several figures on the efficiency gains resulting from the development of digital services in the public sector. Figures speak by themselves:

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1 By William Lindsay Simpson, Lawyer and president of the Conférence Saint-Yves, the oldest law society in Luxembourg (www.csy.lu)
2% of the Estonia’s GDP is saved due to the collective use of digital signatures; 3 hours is needed to establish a commercial company (instead of 5 days); only 3 public services available (out of 2,400) actually need a physical presence: marriage, divorce and selling land.

The former Prime Minister explained to the audience that the main logic behind e-governance is based on “four building blocks”:

1. **Data bases - the backbone of e-governance** - comprising all public registers.
2. **X-road - the core platform** - an Estonian invention enabling the data bases to communicate following basic protocols. Many criteria of the X-road are similar to the blockchain.
3. **Strong cyber ID for every individual** - each citizen should have a single secured e-identity which should be compulsory and enjoy all relevant guarantees.
4. **legal infrastructure** - all the legal solutions should be envisaged and foreseen beforehand to ensure that use of technology can be implemented.

The “digital” lessons which can be drawn from the Estonian experience are:

- **Permanent access to data** – 24/24h and 7/7days.
- **No digital gap** – digitalisation should be made available to everybody including young people (e.g. programming courses in primary schools) and elderly (e.g., courses on how to use computers at local libraries).
- **Trust is the key element of success** – and creates huge demand from citizens once they feel confident using e-services.
- **Public Private Partnerships** – the government has outsourced everything which has enabled the development of strong IT players (e.g. Skype).
- **No centralisation** – not to have a super ministry but create a fruitful competition between ministries (with strong cooperation).
- **You can ask the same data only once** – when applying for a service, citizen should not be required to re-enter the data already held by the institution (e.g., home address).
- **Data owner? Citizens!** In practice, a special software has been set-up to enable the citizens to monitor their own data.

**Digital maturity.** Paper contracts are now “suspicious” in the country and digital contracts are the norm! This illustration by the Estonian Ambassador Toomas Tirs provides an example of the digital maturity of Estonians. He further discussed the future of e-governance by describing the two main priorities of the Estonian government:

- focusing on the service development related to life events (develop a dedicated citizen digital portal where all the relevant services, benefits and documents would be available in relation to their lives);
- and find solutions to improve digital cross-border services (the EU legal digital framework is in place but EU Member States now need to cooperate between each other).
Questions were then addressed by the audience to the speaker relating to the issue of e-identity, the impact on the audit sector and cybersecurity. Mr Juhan Parts recalled that technology can offer many solutions and e-Governance is designed primarily to make the life of citizens easier and to strengthen governance and transparency. Mr Parts then commented on cybersecurity issues: he recalled that the 2007 attacks against Estonia (strongly impacting the banking sector and the telecoms) has been well managed by the Estonian State. This crisis even had positive outcomes notably with the creation of a cyber security excellence center under the NATO umbrella and a cyber national guard which can provide an effective assistance in the event of a cyberattack or digital disruption.

He recalled that the best tools to prevent the negative impacts of cyberattack are the X-Road, the digital decentralization and personal cyber awareness.

TO LUXEMBOURG

The chairman of the BIL, Mr Luc Frieden, recalled that Estonia can teach Luxembourg a great deal in terms of digitalization. To illustrate his comment, the Luxembourg Minister Delegate for digitalization recognised that Estonia is a model of inspiration for Luxembourg. In this respect, he stressed in terms of public policy that digitalization is a priority for the Grand-Duchy:

- with the creation of a dedicated ministry of digitalization,
- the strengthening of a single contact point between the administration and the citizens/companies (called guichet.lu),
- and the development of digital embassies (with Estonia and Monaco).

As regards data embassies, the world’s first data embassy was created in 2017 in Luxembourg hosting Estonian data. A unique bilateral agreement was signed between the two governments enabling Estonian data to be stored in Luxembourg’s government-owned data centre.

Please note that the Conférence Saint-Yves is organizing an event at the end of the year on Public International Law developments in Luxembourg (which will include an analysis of digital embassies from a legal perspective).

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