

by Cyrus Farivar

Toomas Hendrik Ilves really, really wants a much more digitally-integrated Europe.

PALO ALTO, Calif.—I don't usually dress up for interviews, but I also don't usually interview heads of state, either.

On a recent afternoon, I waited patiently in a generic conference room with yellow-tinted walls at the Westin Hotel, dressed in a grey suit and a tie, eagerly anticipating the arrival of Estonian President Toomas Hendrik Ilves. My videographer, Chris Schodt, busily set up his camera and light rig.

Minutes before his arrival, a Secret Service agent came by and introduced himself—he didn't search us. As we made small talk with him, he did show us his red lapel pin, identifying him as an on-duty agent wearing the color-of-the-day—a signal to other agents that he's friendly. (How do agents find out what color it is that day? Apparently via a Windows phone app!) The agent disappeared back into the hallway. We didn't see him again.

I tried to make myself useful, by removing some of the extraneous chairs and bottled water from the camera's frame, but mostly I just waited around. Soon enough, in strolled President Ilves, dressed in an impeccable grey three-piece suit and his trademark bow tie.

While I'd met and interviewed him before, I was still a little nervous. After all, this is a guy who throws around deep knowledge of history, political science, and social science: the last time I saw him, about 2.5 years earlier at the United Nations, he was throwing around the Peace of Westphalia, which ended the Thirty Years War in mid-seventeenth century Europe, and comparing it to present-day Internet policy. (Indeed, he didn't disappoint during our conversation, using the phrases "Lockean democracy" and even tossed in a "sine qua non" for good measure. No American politician I've ever met talks like this!)

The Estonian president has a fascinating background. He was born in 1953 to Estonian parents living in Sweden, who had fled their Soviet-occupied homeland. During his childhood, the family moved to New Jersey—eventually Ilves earned degrees from Columbia University and the University of Pennsylvania—consequently, he speaks flawless American English.

After Estonia regained its independence in 1991, Ilves served as ambassador to the United States and Canada from 1993 to 1996, then later as foreign minister, a member of parliament, a member of the European Parliament, and finally as president in 2006. He was re-elected in 2011 to his second and final five-year term.

During Ilves' time in office, the country has gone from Estonia to E-stonia: Skype was sold three times (most recently, to Microsoft), the country was hit by a politically-fueled DDOS attack (which spawned the NATO Cooperative Cyber Defense Centre of Excellence), and the #estonianmafia was born. Last year, Estonia launched its e-residency program, issuing state-sanctioned digital identity cards to anyone who wants one (including yours truly.)

But just because the end of Ilves' time in office is rapidly approaching, that doesn't mean that Ilves is out of things that he wants to work on, both inside and outside of the Kadriorg Presidential Palace.

We talked for nearly an hour, touching on various topics, including digital prescriptions, e-residency, and his staunch support of the European Digital Single Market (DSM), an ambitious goal that seeks to make commerce flow as smoothly across the 28-member bloc as it does in the United States.

We have the technology

When I asked President Ilves how he observes Estonia's technological, social, and cultural changes from 2006 until now, the first thing he mentioned was the advent of fully digital prescription. Estonia, like nearly every other EU member state, has universal health care. Since

2002, Estonia has issued digital ID cards to all citizens and legal residents. These cards allow access to a "citizen's portal," enabling all kinds of government services to exist entirely online: essentially any interaction with the government can be done online, ranging from paying taxes, to voting, to even picking up a prescription.

"In the United States, 5,000 people die a year because of doctor's bad handwriting," he said. "It's very simple. You go to the doctor, and he writes the prescription in the computer, and you go to any pharmacy in the country, and you stick your card in the reader, and you identify yourself, and you get your prescription."

As he pointed out repeatedly, "the stumbling blocks are not technological," but rather, are bureaucratic.

In many ways, the European Union is far more federated than the United States. After all, there are 28 nation-states, each with their own languages and traditions that have bound themselves together in a loose political union that has a (mostly) unified economy and freedom of movement, and yet they have their own bureaucratic systems in most cases. But that's slowly starting to change.

Late last year, Estonia and Finland became the first two countries to open up a cross-border data exchange, which makes such transfer seamless. This, for example, would allow an Estonian in Finland, and vice versa, to access services (such as prescriptions) away from home with no issue.

"You have different countries and different countries subsidizing different drugs to different degrees, so you have to balance all that out, so people don't go cross-border for arbitrage," the president said. "Finland and Estonia are now working together on Version 7 [of X-Road], it would allow us to use all of these services across border, across the countries, at least across Northern Europe. I say Northern Europe, because I don't think the rest of Europe is too keen on these kinds of things."

He just wants to spend €0.99, is that so much to ask?

What Estonia and Finland are doing is a step towards the DSM—but there remain all kinds of national-level laws that stop Europe from being truly unified.

"Take iTunes," President Ilves continued. "iTunes are based on credit cards. Credit cards are national. I cannot buy an iTunes record for my wife who has a Latvian credit card. I cannot buy her an iTunes record because I have an Estonian iTunes. This is true of virtually everything that is connected to digital services. And certainly this is why Estonia is at the forefront of the European Digital Single Market. As I like to say, it's easier to ship a bottle of Portuguese wine from southern Portugal in the Algarve and sell it in northern Lapland, than it is for me to buy an iTunes record across the Estonian-Latvian border."

While President Ilves looks forward to erasing borders for digital services, he does want to use the power of national sovereignty to become the issuing authority of someone's identity online.

"A secure identity is the sine qua non for any kind of process for technology in general," he added. "The new role in this age is the state as the guarantor of your identity."

He noted that as an e-resident, for example, I could now send "very encrypted" e-mail that was linked to my own identity. The recipient knows with 100 percent certainty that I was the one who sent the e-mail, because in order to be issued the card, and have the digital identity, Estonia verified not only my passport but took digital fingerprints.

"We know who you are," he said. "This does touch upon one other thing. We are strongly against any kind of backdoors, because basically the whole system would collapse if there were a backdoor. The whole system is based on trust. The state on its side, has to offer that trust."

Listing image by Chris Schodt.

Original article on the [Ars Technica webpage](#) .