

ESTONIAN E-RESIDENCY AND CONCEPTIONS OF PLATFORM-BASED STATE-INDIVIDUAL RELATIONSHIP

Piia Tammpuu^{1,2}, Anu Masso^{1,2}, Mergime Ibrahim², Tam Abaku²

¹University of Tartu and ²Tallinn University of Technology

Abstract. This study explores how government-supported digital ID systems evoke novel conceptions of platform-based state-individual relationship by drawing on the concept of platformization and Estonian e-residency as the empirical case. E-residency is a policy concept introduced by the Estonian government, which allows foreigners to apply for a state-issued digital ID in order to gain remote access to Estonian public and private e-services. Based on qualitative interviews with individuals having an e-resident digi-ID, we examine the ways in which they construe e-residency from the perspective of state-individual relationship. Our findings indicate that apart from a transactional service-based relationship, being an e-resident can also imply a sense of membership in the state and thus serve as a basis for transnational belonging. Hence, the digital state is not only perceived as a platform manager and a service provider, but also as a membership organisation enacting its rules of inclusion through its digital ID schemes.

Keywords: digital identification, citizenship, digital platforms, platformization, e-government, e-residency, virtual mobility

DOI: <https://doi.org/10.3176/tr.2022.1.01>

Received 27 September 2021, accepted 7 January 2022, printed and available online 10 March 2022

1. Introduction

Identification (ID)¹ systems and documents in their various forms, as Chhotray and McConnell (2018) note, have offered valuable insights into the politics of the relationships between individuals and the state (see also Caplan and Torpey 2001, Lyon 2009, Torpey 2018). Accordingly, a growing body of research has been focusing on the implications that developing digital ID technologies and systems have for citizenship and state-individual relationship in general (see, e.g., Bauböck 2018, Chaudhuri 2021, Chaudhuri and König 2018, Hammar 2018, Lips 2013, Lyon 2009, Rao and Nair 2019, Sullivan 2018).

In this study, we aim to explore how government-supported digital ID systems evoke novel conceptions of platform-based state-individual relationship by drawing on the analytical concept of platformization (Poell et al. 2019) and using Estonian e-residency as the empirical case. While modern digital ID systems are deliberately being designed and built as ‘platforms’ (Lyon 2009), their significance as such has mainly been discussed with respect to their technological architecture and functionality, whereas broader social and cultural implications have been less examined. Besides, the existing studies have mostly applied platformization as a conceptual tool to capture institutional effects that digital platforms have at macro level. However, in our study we intend to consider how the processes of platformization also play out dynamically at macro *and* micro level by analysing how digital ID platforms contribute to the reconfiguration of state-individual relationship and how these emerging reconfigurations are in turn being perceived and experienced by individuals involved in them.

E-residency, or ‘electronic residency’, is a policy concept and a digital service platform launched by the Estonian government in 2014, which allows foreign nationals to apply for a state-issued digital ID document, the e-resident’s digi-ID, in order to gain remote access to the digital infrastructure and services provided by Estonian public and private sector (e-Residency 2.0 2018). While national ID systems generally include only citizens or resident-population of the country, Estonian e-residency is the first initiative for a state to issue a digital ID to individuals with no direct relationship to the country (Gelb and Metz 2018), and independent of their socio-economic status, nationality and residency. In this regard, being an ‘electronic resident’ in a country and having certain entitlements as a result of this can be seen as a supplementary state-granted status besides one’s citizenship and legal residency (De Filippi 2018, Drechsler 2018, Orgad 2018). Furthermore, Estonian e-residency has been argued to challenge existing understandings of membership in and spatiality of the state by performing as a novel form of digital inclusion and globally extending the reach of a nation-state through its digital ID infrastructure and e-services (e-Residency 2.0 2018, Kotka et al. 2015, Orgad 2018, Sullivan 2018, Tammpuu and Masso 2018). Given that Estonian e-residency has also turned into a

¹ In this paper, we use the terms ‘digital identity’ and ‘digital identification’ synonymously with ‘electronic identity’ and ‘electronic identification.’ The acronym ID is equally applied for terms ‘identity’ and ‘identification’ and ‘identity/ identification document.’

model which has been taken up by other governments launching similar e-residency programmes², makes it further an exemplary case for study in these respects.

Previous studies have mainly considered the ways in which Estonian e-residency has been conceptualised and communicated as a policy instrument (Kotka et al. 2015, Orgad 2018, Tammpuu and Masso 2018) and discussed its legal implications (Kerikmäe and Särav 2015, Sullivan 2018, Sullivan and Burger 2017). In this study, we focus on how e-residency is understood and experienced by e-residents, that is, by persons who have been issued an e-resident's digi-ID by the Estonian state. Drawing on a qualitative analysis of 25 semi-structured in-depth interviews with e-residents from different nationalities³, we examine how they perceive their status as electronic residents in Estonia and the ways in which they construe the concept of e-residency from the perspective of state-individual relationship. Here we are particularly interested in how their personal perceptions are shaped by the discursive positioning Estonian e-residency as a 'platform' (e-Residency 2.0 2018) and broader processes of platformization. With our study we thus seek to respond to the call to make the emerging field of platform studies, with its main foci on big commercial tech platforms operating across global and regional scales, more sensitive both to the variety of different types of platforms, as well as to the local contexts, cultural practices and imaginations within which these platforms work (De Kloet et al. 2019).

2. Analysing the state-individual relationship through ID systems and documents

ID systems and documents have been central to state-building and citizen-making activities by identifying who is included (and excluded) in membership terms, and who may make legitimate claims to the rights and benefits of that membership (Hammar 2018, Torpey 2018). By regulating and enabling access to a wide range of benefits and resources, including movements within and across state borders, they can enable and disable, empower and deprive, emancipate and repress both individuals and groups (Caplan and Torpey 2001, Lyon 2009). As long as the possession of an officially recognized ID can significantly shape an individual's access to various spaces and socio-economic opportunities, people also remain dependent on states to obtain such IDs (Torpey 2018).

For the aforementioned reasons, state-issued IDs have also turned into political currency that can be traded, sold and bought (Chhotray and McConnell 2018). An example of this is the commodification and marketization of citizenship (Bauböck 2018, Joppke 2018, Shachar 2018) where states strategically offer their passports, but also residence permits and visas through special citizenship-by-investment schemes, golden residence programmes and visa-free schemes in order to attract either investments or talents or both. From an individual's perspective, the possession of

² Among the countries that have initiated similar e-residency programmes are, for example, Lithuania, Portugal, and Azerbaijan.

³ In this paper, we use the terms 'nationality' and 'citizenship' synonymously, with both referring to the formal status of state membership.

multiple passports, or other state-issued IDs, can likewise be part of one's personal strategy of capital accumulation, as Ong (1999) has argued with her concept of flexible citizenship. Ong's concept points here to the ways in which individuals respond fluidly and opportunistically to changing political, economic, cultural, and social situations while navigating within and between transnational spaces in order to reduce their uncertainties and optimize their opportunities and benefits (see also Cottrell Studemeyer 2015). While (national) citizenship has become emblematic of mobility rights and the opportunities for global mobility are valued more than ever, such strategically considered acquisitions of (national) citizenship(s) are also argued to be on the rise (Harpaz and Mateo 2018).

However, besides their instrumental value, state-issued IDs can be sources of pride, dignity and self-esteem; or, on the contrary, as badges of disgrace and inferiority, and thus also carry symbolic and affective values for their holders (Chhotray and McConnell 2018, Tammpuu 2019). For example, in the case of transmigrant groups, as Pogonyi (2019) has shown, the passport can equally serve as means of identity management and ethnic boundary making, which is not obtained only for instrumental purposes but in order to assert one's national belonging and ethnic distinctiveness.

Hence, the processes of issuing and obtaining ID documents can lead to the assertion of very different models and experiences of citizenship and membership in a state or states. The analysis of government-supported ID systems and documents can respectively provide valuable insights into the ways in which individuals and groups negotiate their relationship with a state or states (Chhotray and McConnell 2018, Hammar 2018, Lyon 2009, Martin and Taylor 2021).

The implications of ID systems and documents are tightly related to their materiality, which affects the distribution and accessibility of different kinds of IDs, as well as their affordances and uses from both the perspectives of their issuers and holders (Hammer 2018). The shift toward digital societies and economies has created new challenges for ID technologies and systems, such as how to identify participants for remote transactions (Gelb and Metz 2018). As both private sector and government organisations have been moving their services online, the requirement to use digital ID for various online transactions has also tremendously increased (Sullivan 2018). Intensified modes of international mobility, at the same time, have brought along the need for portable and interoperable ID solutions (Gelb and Metz 2018, Lyon 2009, Sullivan 2018). Consequently, the availability and accessibility of trustworthy and multifunctional digital ID solutions has become essential in shaping citizens' opportunities to participate in the digital society and market, within as well as across the state borders (Sullivan 2018, Tammpuu and Masso 2019).

In this respect, the view of a digital ID as an 'Internet passport' or 'e-passport' pointedly illustrates its significance and critical role in the contemporary digital societies, which not only includes identification of a person but also authenticated access to different kinds of digital transactions and resources (Van Dijck and Jacobs 2020). Since states generally issue an official digital ID only to their citizens or resident populations, such e-passports can be seen, on the one hand, as digital

extensions of the existing citizen and resident entitlements. At the same time, digital IDs can also reconfigure the existing state-citizen relationship in terms of how states and citizens interact with each other, as well as regarding the ways in which the roles of state and the citizen are being re-conceptualised and re-imagined (Chaudhuri 2021, Masiero and Shakthi 2020, Rao and Nair 2019, Sarkar 2014). These changes, as we will suggest in the following section, can be considered through the analytical prism of platformization.

3. The implications of digital ID systems as ‘platforms’ for the state-individual relationship

The studies dealing with digital ID systems as ‘platforms’ tend to accentuate certain aspects and meanings of the platform as a term and a concept. For instance, a digital ID system can be considered as a platform primarily with regard to its technological architecture on which different applications and services can be built (Lyon 2009), as well as in terms of its role as an intermediary regulating and enabling access to various services and benefits (Masiero and Shakthi 2020). Also, by serving as entrance points for many other services, digital ID services are listed among the key infrastructural services in the platform society, which form an inextricable part of a platform ecosystem (Van Dijck and Jacobs 2020, Van Dijck et al. 2018).

In the literature on digital ID platforms, a much-discussed example is *Aadhaar*, the Indian ID platform and the world’s largest biometrics-based ID system, which aims to give every Indian resident a unique ID number that is linked to his/her demographic and biometric data. Existing research has shown how Aadhaar is being turned into an intermediary for services in India, whereby having an ‘Aadhaar number’ and being enrolled in the programme becomes a prerequisite for access to different kinds of welfare and financial services (Bhatia and Bhabha 2017, Gelb and Metz 2018, Masiero and Shakthi 2020). Besides, a number of recent studies have examined the emerging social practices and imaginaries around the Aadhaar programme as indicative of the changing state-individual relationship. For example, according to Chaudhuri and König (2018), Aadhaar marks a new citizenship regime in India, which aims to turn citizens into ‘economically empowered customers’. Similar conclusions have been drawn by Sarkar (2014) who argues that Aadhaar involves the reimagining the state-citizen relations as a series of transactions in which individuals appear primarily as beneficiaries or consumers rather than citizens or residents. In this regard, Aadhaar is seen to represent a re-imagining of ‘the state as a platform’, which, rather than functioning as a ‘protector’, becomes primarily a ‘service provider’ for citizens reconfigured at once as ‘customers’ (Rao and Nair 2019). With such reorientation of the state towards a market logic, Aadhaar is claimed to carry the potential “to profoundly redefine the relationship between the state and its subjects in starkly transactional terms” (Masiero and Shakthi 2020: 2).

The above-described implications attributed to Aadhaar can accordingly be seen as instances of platformization. We draw here on the definition suggested by

Poell et al. (2019: 1), according to whom platformization can be understood as the “penetration of infrastructures, economic processes and governmental frameworks of digital platforms in different economic sectors and spheres of life, as well as the reorganisation of cultural practices and imaginations around these platforms”. As an analytical concept, platformization thus highlights the ways that platform infrastructures, economic models, and discourses are performative (Van Dijck et al. 2018), that is, constitutive of social action and evoking social change. Hence, the analysis of platformization does not concern just the dynamics of digital platforms and how they work but also the ideological premises on which they function, as well as the social implications of their operation (Van Dijck et al. 2018). Also, as seen from the definition above and equally emphasized by Poell et al. (2019), platformization as a meta-process involves both macro-level and micro-level transformations, as well as the mutual dynamics between the two.

While Aadhaar has offered important insights into the ways in which a national digital ID platform reshapes relations between the state and its citizens or residents, Estonian e-residency serves as a unique case to study how a government-supported digital ID system is further designed into a ‘service platform’ to ‘digitally connect’ foreigners with a state through its digital ID infrastructure and e-services. Though our empirical analysis is focused on e-residents’ personal understandings and perceptions of the concept, we first explain the technological and institutional foundations of the Estonian e-residency programme and comment its policy frames and objectives.

4. The premises and promises of Estonian e-residency

Estonian e-residency largely builds on and takes advantage of the widely acknowledged advancements of the Estonian government in building a digital society and the global reputation of the country as a digital innovator (Drechsler 2019, Tammpuu and Masso 2018). In the literature on digital transformations, Estonia has been put forward as a model case of effective e-government, digital governance and as the ‘e-ID pioneer’ (Gelb and Metz 2018, Kalvet 2012, Kattel and Mergel 2019, World Bank Group 2016). As Kattel and Mergel (2019: 154) argue, at the core of Estonia’s digital transformation has been the idea of a “digital citizen who accesses public and private services through a digital platform that ensures the interoperability of diverse and decentralized information systems”. This idea has been accomplished, on the one hand, by X-Road (*X-tee*), the data exchange layer between decentralised state information systems and registers, which was put into operation in 2001 and formed the infrastructural foundation for the development of public as well as private e-services. Two decades later, almost all governmental services in Estonia are online, which gives the country also a leading position in Europe in digital public services according to Digital Economy and Service Index (Kattel and Mergel 2019). The national digital ID system as another foundational pillar was launched approximately at the same time, with the first ID card issued in 2002. Today, the ID-card is a mandatory identity document for Estonian citizens

aged 15 and more, as well as for the EU citizens permanently residing in Estonia. With their ID card, Estonian citizens can access virtually all public services online through a government-portal and perform numerous digital transactions, including to electronically sign documents and to e-vote over the Internet both in parliamentary and municipality elections (Gelb and Metz 2018, Kattel and Mergel 2019, World Bank Group 2016).

The concept of e-residency takes the aforementioned idea of a digital citizen accessing public and private e-services through a digital platform further to the global level by combining Estonia's digital ID infrastructure, competencies and national aspirations for economic growth with a global demand for internationally operable digital ID solutions and e-services. A major premise underlying the idea of e-residency concerns here an overall shift in the government-citizen relationship, namely that the geographical location of public service consumption is becoming less relevant, as citizens can use an e-government service from any location as long as they have access to Internet (Lips 2013). Accordingly, the main purpose of e-residency has been to give foreign nationals a remote access to Estonian public and private e-services via a government-supported digital ID credential, the e-resident's digi-ID card, on similar bases with Estonian citizens and residents. The implementation of the idea, however, has mainly been driven by an economic rationale – to enlarge the national economy by offering foreign nationals the opportunity to electronically register a company to Estonia and manage it remotely, which in turn would stimulate the development e-services and bring economic revenue to the state (e-Residency 2.0 2018).

Furthermore, given Estonia's membership in the European Union (EU) and the EU regulation on electronic identification and trust services for electronic transactions (eIDAS), which obliges EU member states to mutually recognize their digi-IDs, Estonian e-residency is also aimed to facilitate access to the EU digital market and services (Sullivan 2018). However, since the functionality of the e-resident's digi-ID is limited only to the electronic environment, being an Estonian e-resident does not grant a person the right of entry and residence either in Estonia or in the EU. Nevertheless, by offering modes of the Internet-based virtual mobility (Kellerman 2016, Taipale 2013), e-residency has been suggested to serve as certain alternative to migration and physical cross-border movement, especially in the case of nationals otherwise restricted from international mobility (Tammpuu and Masso 2019).

The idea of e-residency as a 'platform' which provides global access to Estonian e-services draws, on the one hand, on the vision of 'the government-as-a-platform' (O'Reilly 2011), which calls to apply a 'platform thinking' to government technology projects and envisions the role of the government thereby as that of a 'platform provider' and a 'marketplace manager'. Besides, e-residency epitomizes what Taavi Kotka, the former government Chief Information Officer and one of the key founders of the e-residency programme, has described as 'the country-as-a-service' – the idea of turning a digitalized nation-state into a 'marketplace' whose services can be sold and consumed across its borders (Kotka 2016).

However, despite the economic foci, the ways of conceptualising and

communicating e-residency have combined rather different discursive frames and positioning of the concept. At strategic policy level, the e-residency programme has been envisaged, on the one hand, to operate as a multi-purpose ‘platform’, which is supposed to simultaneously function as a ‘marketplace’ for exporting and as a ‘store’ for accessing services offered by the Estonian public and private sector (e-Residency 2.0 2018). ‘The new digital nation’ as the headline of the government website of e-residency, at the same time, also deploys political terms and categories for presenting the concept (Republic of Estonia. e-Residency 2021). The factsheet on e-residency published on the same website (Factsheet on e-Residency 2017), for example, promises ‘global citizens’ an inclusion into a ‘borderless digital nation’ through a ‘globally accessible platform’: “Estonia is creating a new borderless digital nation for global citizens [...] where no one is held back from their entrepreneurial potential. E-residency is a transnational government-issued digital identity that anyone in the world can apply for and then gain access to a platform built on inclusion, legitimacy and transparency.” In the same vein, the marketing of the e-residency programme has, since its very beginning, overtly highlighted the inclusiveness and openness of the concept (Tammpuu and Masso 2018). In this respect, the public presentation of the concept has also suggested a more participatory mode of involvement in the Estonian digital state and society beyond the mere access to e-services.

As of December 2021, ca 85 000 persons had joined the e-residency initiative altogether since its official launch in December 2014⁴ (Republic of Estonia. e-Residency 2021). Although the programme has succeeded to have a global reach, the adoption of e-residency has been highly uneven in geopolitical terms, as the majority of applicants have been from digitally and economically advanced countries and regions (Tammpuu and Masso 2019). Besides business-related motives, such as to run a location-independent business and register one’s business to Estonia, the reasons for becoming an e-resident also include other kinds of professional needs or personal connections with Estonia. Approximately 10 percent of applicants have described themselves just as ‘fans of e-residency’, thus having a general rather than instrumental interest in the programme. However, as the main target group of the programme have been entrepreneurs, the applicants of e-residency have been predominantly male, thus representing the overall gender bias in that field globally (Republic of Estonia. e-Residency 2021).

5. Methods and data

The empirical data analysed in this study was collected through semi-structured personal interviews conducted with Estonian e-residents, that is, with individuals who have been issued an e-resident digi-ID by the Estonian state. The sample of interviewees was compiled according to purposeful sampling strategy (Suri 2011) with an aim to include participants from different nationalities and geographic

⁴ At the time of writing this paper, real time statistics on applications and holders of an e-resident’s digi-ID are publicly available on the government website of e-residency <<https://e-resident.gov.ee/dashboard/>>.

regions, including both EU nationals as well as third-country nationals, and with different personal motives (e.g., instrumental, business-related motives *vs* non-instrumental motives and interests) for applying for an e-resident digi-ID. To reach out potential interviewees a special call for participation was posted in a private Facebook discussion group ‘e-residents of Estonia’, which connects both e-residents and people interested in Estonian e-residency in general. Besides, personal invitations were sent to concrete persons who had publicly presented themselves as e-residents and had actively participated (e.g., posted, commented) in this group. In addition, potential interviewees who had publicly revealed their status as an e-resident on different kinds of (social) media sites and platforms (e.g., LinkedIn, Twitter, personal blogs etc.) were also personally contacted either via e-mail or through social media accounts. These modes of recruitment were in turn combined with snowball sampling, where interviewees were asked to suggest other potential interviewees. As a result of these recruitment techniques, 25 participants (23 males, 2 females) were selected for an interview, whose motivational and national profiles correspond to the overall structure of e-residents in these respects. The interviews were carried out between March 2019 and October 2020.

Given participants’ geographically dispersed places of residence, all interviews were conducted online via audio or video-enabled channels such as Skype, Google, Facebook (video) Messenger or Facetime. The primary focus of interviews was on individual rationales for be(com)ing an e-resident, personal experiences and evaluations of the concept regarding its advantages and limitations, and understandings of one’s status as an e-resident in Estonia. Each interview was approximately 1–1.5 hours long. All interviews were recorded under the consent of the interviewee and transcribed word-by-word. All interviews were originally conducted in English.

For the analysis of the collected interview data, we used the thematic analysis as the main method (Braun and Clarke 2006). We started our analysis with a close reading of the interview transcripts and inductive coding, focusing not only on thematic aspects *what* participants talked about (e.g., their personal motives for becoming an e-resident, their ways of positioning themselves as e-residents vis-à-vis the Estonian state, etc.) but also on *how* they talked about these aspects, for example, what kind of rhetorical devices they deployed to make their arguments and what kind of reasoning they used in their talk. The first coding was followed by further systematization and organization of initial codes around emerging themes and sub-themes. In this process, initial codes were also revised and refined or merged where appropriate in order to better structure the identified themes. For the coding and analysis of the interview data, the qualitative data analysis software MAXQDA was used and combined with manual coding techniques (Kuckartz and Rädiker 2019).

The findings presented in this article are illustrated with typical extracts from the interview transcripts. Given the fact that many interviewees were not native speakers of English, the extracts are edited to the extent to ensure their comprehensibility. To ensure the anonymity and confidentiality of the study participants, only numeric acronyms (eR1 ... eR25) are used and no socio-demographic or other personal or contextual data besides participants’ nationality (citizenship) are presented in the analysis.

6. Findings

The ways in which interviewees described and construed e-residency from the perspective of the state-individual relationship revealed two broad and essentially contrasting views, which we present and comment in the following.

6.1. E-residency as a ‘service-based involvement’ in a state

In accordance with the discursive positioning of the Estonian e-residency programme as a ‘platform’ (e-Residency 2.0 2018), interviewees also regularly spoke of e-residency in terms of a ‘service platform’ or as a ‘service’ itself. As a participant summed it up: “Digital residency – it’s basically a service that a country gives to you” (eR1 Russian).

Regarded as a ‘service platform’, participants described the e-residency programme to function as a ‘gateway’ and as an ‘one-stop-shop’ through which to access either public or private e-services mainly needed for one’s commercial activities. Moreover, as a ‘gateway’ it was further expected, especially in the case of e-residents from the so-called third countries, to facilitate their access to the EU market and international banking and financial services, and not just to Estonian e-services or business environment *per se*. In this way, e-residency was expected to compensate the restrictions of (physical) cross-border mobility or restricted access to commercial e-services related to one’s nationality and/or residency. For example, as interviewees from African (but also from other non-EU) countries explained this:

I suppose e-residency is more interesting for Africans than for Europeans, because to access European market is easy for European citizens and they don’t need e-residency to get into that market. But for Africans it would be more interesting because they can’t access European market without being citizens and even without being physically in Europe (eR17 Algerian).

The purpose of e-residency is to help Africans to overcome the barrier with the African passport and to get an e-passport in order to make business as the French, the Belgian and the Estonians do (eR 22 Tunisian).

The instrumental essence of e-residency was likewise revealed from the ways in which interviewees frequently referred to it as a ‘tool’ or a ‘product’, or explained e-residency through its functional affordances as well as limitations, like in the extracts below:

You cannot do anything else [with it], it’s just for business. (eR14 Ivorian).
It’s just a way to sign documents in another country (eR18 Egyptian).

To further exemplify their understandings and personal experiences of e-residency as a ‘service platform’, several interviewees drew parallels with commercial digital platforms or applications that they regularly use – mainly in order to highlight their expectations for further convenience or easiness of access, as in the following example:

Things could be much easier and maybe that card [the e-resident's digi-ID] could just be abolished. [...] It could be easy as like opening a Facebook or a Twitter account (eR5 Turkish).

The relationship between the Estonian state and e-residents was accordingly understood as that between a service provider and customers of the service. As a participant explained this based on an analogy with Google as a service platform:

If you register your account at Google just to get some Google docs, this is the same relationship: you just pay them, and you get something back. Like they say: "Here are the list of our services you can use." Likewise, the government figures it out: "Okay, we can give some services to other people." It is just like a company that offers some services (eR1 Russian).

Hence, the Estonian government behind the e-residency programme was perceived to perform as any other market actor – or as an interviewee phrased it: "Basically, it's doing government like a business" (eR23 Rwandan).

Therefore, when asked about their entitlements as e-residents, some interviewees expressed certain indecision or unreason. For instance, as an interviewee responded, again by appealing to an analogy with commercial service platforms, in the case of e-residency one could rather speak of 'the terms of service' rather than of rights or entitlements:

It is hard to tell [what are the rights of e-residents] because usually when you are in a business, you don't have rights – you just have terms of service, you pay for something and the company gives you back the service (eR1 Russian).

The main duty that e-residents as 'customers' of such a 'service' were admitted having concerned mainly formal obligation to abide by Estonia's laws and regulations, including paying taxes, if required, in accordance with these regulations. Thus, seen from that perspective, the relationship between the Estonian state as the primary owner and manager of the e-residency platform and e-residents as customers was perceived to be mainly transactional and service-based without special moral commitments, emotional attachments or 'deeper' involvement in the Estonian state or society.

Moreover, the view of e-residency as a transactional service-based involvement in a state appeared to be framed and shaped by broader understandings of the state-individual relationship as being formed and flexibly re-formed, if necessary, on the basis of instrumental considerations. For example, as an interviewee suggested when asked to share his opinion about the future prospects of the concept – not only could other states start offering a similar 'service' such as the Estonian e-residency, but people could also choose their residency on a 'service-basis', that is, according to

their changing needs and preferences, similarly to how they are used to navigate between commercial digital service platforms:

In the best case, [in the future] every country will offer e-residency and physical residency as a service, and people will freely move around and choose between various offers and combinations that suit them best – just like when buying stuff online. (eR12 Russian)

Such perceptions and personal modes of construing e-residency, which indicate a highly individualised and commodified, customer-and-service-based relationship with a state, largely align with and echo the ideas of ‘the government as a platform’ (O’Reilly 2011) and ‘the country-as-a-service’ (Kotka 2016), which have originally inspired the conceptualisation of Estonian e-residency. At the same time, such imaginations of a ‘pick-and-choose relationship’ with a state (or states) also appear to be influenced by existing articulations of instrumental citizenship (Joppke 2018), whereby individuals seek to obtain citizenship status and passports of certain countries in order to optimize their cross-border opportunities for work, entrepreneurship or travel. In this respect, several interviewees also put forward the EU citizenship as a political and economic ideal, regarding the freedom of movement and residence between the EU countries. By offering the opportunities of virtual mobility and digitally enabled remote access to the EU market and digital services, Estonian e-residency was thus expected to function as a kind of digital version of the EU passport.

6.2. E-residency as a mode of (digital) belonging in a state

Apart from the view of e-residency as a ‘service’ or a ‘service platform’, interviewees’ personal experiences and reflections also revealed an alternative understanding of e-residency – namely, as a mode of (digital) transnational belonging in a state. What was highlighted in those instances was rather the digital inclusion and membership in the Estonian state obtained through one’s official status of an e-resident and described, for example, in terms of one’s ‘digital nationality’ or ‘digital citizenship’. The following extract, which clarifies an interviewee’s personal motives for becoming an e-resident, pointedly demonstrates such a point of view:

I found it really cool that a country was so welcoming and would say: “Ok, if you want to be an additional type of citizen [...], you are more than welcome. You don’t have the same exact rights and you can’t vote but you can create a company and do things for the country.” So, it was a kind of mix of e-residency and e-citizenship in the beginning, and I found it very attractive because it was very welcoming (eR6 French).

A distinctive characteristic attributed to e-residency as a novel mode of digital citizenship concerned especially its perceived openness and inclusiveness, which were seen to be rather exceptional in the current ‘age of restrictionism’ (Shachar

2018), characterized by states' restrictive migration and citizenship policies. As a participant who presented himself as a 'fan of e-residency' explained this:

I just liked the idea and wanted to support it – the fact that it is a novel way of looking at citizenship. [...] There is a country that wants to make you a citizen of the digital country or digital world. [...] In a world where everybody is trying to close the bar and stay out, there is a country saying everybody is welcome. Yeah, that's a nice message (eR10 Belgian).

The metaphoric description of e-residency as an 'open door' to the country, suggested by an interviewee (eR5 Turkish), also serves here as another example illustrating the highly appreciated digital inclusiveness of the concept.

In this respect, the access granted e-residency was perceived and described in a broader sense as an 'access' to Estonia as a country. Accordingly, e-residency was also characterised in these instances as a 'digital means of participating in society' (eR8 German) rather than a means for merely accessing certain e-services.

Even if interviewees' personal motives for joining the e-residency programme had been affected by its practical benefits, their decisions to become e-residents in Estonia appeared to be value-driven at once and thus shaped by the perceived societal values and norms of the country in general, for example such as democratic and transparent governance, the rule of law, digital innovativeness, etc., as shown in the examples below:

I heard that Dubai is going to have its e-residency programme, but it never excited me because I don't have any connection with Dubai morally and according to other values that I have. I have values of Estonia. So, it was a motivating thing (eR5 Turkish).

I go to Estonia [for e-residency] because I like the vision of the country. I think that this vision can help me to achieve my personal goals in a different way. So, I'm aligning with that (eR13 Senegal).

Hence, unlike the view of merely signing up for a 'service', be(com)ing an e-resident was supposed to involve or create certain 'connectedness' with the (Estonian) state as a whole:

It doesn't feel like you are creating an account with the company. It feels like there is a country which accepts you as an e-resident. So, you feel connected in a way (eR10 Belgian).

Interviewees' personal stories gave indeed evidence of multiple ways in which e-residents could feel themselves 'connected' with the Estonian state. For instance, in addition to learning about Estonian country and society, several interviewees had started or planned to visit Estonia after becoming e-residents, with some also having decided to move to Estonia and thus to become residents there – that means, in accordance to separate regulations concerning the right of entry and residency in

Estonia. Also, as an interviewee noted, without being physically in Estonia does not hinder him, as an e-resident, still being *in* Estonia:

Being an e-resident doesn't prevent you from being in Estonia. Anytime I connect my ID-card to my computer, anytime I do something under [...] my Estonian company, anytime I sign a document [...] – I am in Estonia in my computer. My computer can be anywhere, but it's a window to Tallinn [the capital of Estonia] (eR6 French).

Besides their own personal endeavours to build connections with Estonia, the Estonian state was likewise expected, according to some interviewees, to be 'more emotional' – for example, by making efforts to involve e-residents in national celebrations and thus strengthen their sense of belonging to Estonia.

Thus, contrary to the view of themselves merely as 'customers', e-residents were rather considered as officially accepted 'digital members' of the Estonian state. As such, e-residents were also suggested to have more substantial obligations or commitments besides their formal duties, for example such as to actively 'advocate' the e-residency programme and the vision behind it, and not to corrupt the reputation of the country by misusing their e-resident's digi-IDs:

An important obligation it gives to a person who receives that status is to behave in a way that it can keep the deal, the Estonian national dignity high (eR9 Armenian).

The essential difference between these alternative approaches to e-residency and being an e-resident in a country was pointedly summarised by an interviewee who suggested a parallel with the ways migrants choose to connect with or disconnect from their host countries:

As a migrant you always have a choice. You either try to blend in, to fit in, you try to adapt and become a local or you live a very separate life. The same goes for e-residents – some of them never choose to be interested in Estonia as a country or as a nation and some of them make a different choice. [...] e-residents can be part of Estonia or they can be just consumers of the services (eR12 Russian).

However, as this parallel also indicates, irrespective of which ways e-residents were regarded to be 'connected' with the Estonian state, that is, either as 'customers' or as 'digital members', these modes were supposed to result mainly from individual choices. In this regard, the ways of construing e-residency from the perspective of state-individual relationship can also be seen as personal adjustments and responses to the different discursive positioning and rhetoric used in the strategic policy documents and marketing communication of the e-residency programme (e-Residency 2.0 2018, Tammpuu and Masso 2018), which we commented earlier in

this paper. In other words, e-residents also appear to align with and contest, select and mix the variety of references and rhetoric they are exposed to in order to personally make sense of the concept and its implications.

7. Conclusions

In this paper, we examined how government-supported digital ID systems, conceived and developed as ‘platforms’, can lead to new conceptions of platform-based state-individual relationship. Drawing on the concept of platformization (Poell et al. 2019) and using the example of Estonian e-residency as a novel kind of digital ID platform launched by the Estonian government and specifically targeted to foreign nationals and non-residents of the country, we explored the ways in which the persons issued an e-resident digi-ID by the Estonian state construe the concept of e-residency from the perspective of state-individual relationship.

As Lyon (2009) has argued, new kinds of IDs introduced by governments should not only be seen as ‘products of’, but also as ‘agents of’ the changing conceptions of what it means to be a citizen in a state. Likewise, the development of government-supported digital ID systems as ‘platforms’ has been claimed to reshape the interactions and relations between the state and citizens, as well as the ways in which the roles of the state and the citizen are understood and imagined (Chaudhuri 2021, Chaudhuri and König 2018, Masiero and Shakthi 2020, Sarkar 2014). Accordingly, the initiative by the Estonian government to start issuing a digital ID credential, the e-resident digi-ID, to foreign nationals in order to provide them access to Estonian public and private e-services via a digital ID platform can be seen as indicative of the potential forms that state-individual relationship may take in the contemporary platform societies.

The findings of this study reveal alternative ways of construing e-residency from the perspective of platform-based state-individual relationship. On the one hand, the view of e-residency as a government-managed ‘service platform’ denote a transactional service-based relationship with the Estonian state for e-residents. Here, be(com)ing an e-resident is based on similar instrumental rationales common to the ways in which individuals strategically seek to acquire multiple passports, or other state-issued IDs, in order to maximize their socio-economic opportunities across state borders and compensate the deficiencies related to their original nationality and/ or place of residence (Harpaz and Mateo 2019, Ong 1999). Accordingly, seen to serve as an e-passport, the e-resident digi-ID is mainly obtained in order to get access to certain digital services and markets. Besides, the perceptions of e-residency as a transactional service-based relationship with a state appear to be influenced by e-residents’ engagements with various digital commercial platforms which serve here as significant reference points in shaping their experiences as ‘customers’ of the e-residency platform, as well as their expectations towards the Estonian state as ‘the manager of the platform’.

On the other hand, our findings also indicate the potential of e-residency to

create a sense of belonging among e-residents and add an affective dimension into the ways in which they perceive themselves as ‘digitally connected’ with the Estonian state through their status as electronic residents in Estonia. Hence, as our study shows, in contrast to the transactional rationale underlying the service-based approach to e-residency, being an electronic resident can also imply a value-based opt-in ‘digital membership’ in a state, and thus serve as a basis for collective identification and transnational belonging. Nevertheless, instead of suggesting these alternative positions to exist as mutually exclusive, we would rather consider them as potentialities which characterise the essentially different, yet in practice also intertwined dimensions that the concept of e-residency involves from the perspective of state-individual relationship.

The above-described alternative approaches to e-residency also indicate the changing perceptions of the state. On the one hand, the Estonian government is seen to represent here a state that performs as an active ‘market actor’ in the platform society by introducing its digital services and solutions to a global digital market. Yet, at the same time, the digital state also remains to be perceived as a ‘membership organisation’, which can purposely extend its membership beyond its territorial borders through its digital ID infrastructure and services, as well as through its communal values and suggested visions of a ‘borderless digital state’.

Acknowledgements

We would like to thank all the interviewees who took part in our study. The interviews analysed in this article have been conducted by the members of Data Lab, at Ragnar Nurkse Department of Innovation and Governance, Tallinn University of Technology. We thank Rahi Patra and Tsagana Badmajeva for conducting some of the interviews used in this article. This work has been supported by the European Commission through the H2020 project *Finest Twins* (grant No. 856602) and developmental program *ASTRA* of Tallinn University of Technology for years 2016–2022 (2014-2020.4.01.16-0032).

Addresses:

Piia Tammpuu

Institute of Social Studies
University of Tartu
Lossi 36
Tartu 51003, Estonia

Ragnar Nurkse Department of Innovation and Governance
Tallinn University of Technology
Akadeemia 3
Tallinn 12616, Estonia

E-mail: piia.tammpuu@gmail.com

Anu Masso

Ragnar Nurkse Department of Innovation and Governance
Smart City Center of Excellence (Finest Twins)
Tallinn University of Technology
Akadeemia 3
Tallinn 12616, Estonia

Institute of Social Studies
University of Tartu
Lossi 36
Tartu 51003, Estonia

E-mail: anu.massos@taltech.ee

Mergime Ibrahim

Smart City Center of Excellence (Finest Twins)
Ragnar Nurkse Department of Innovation and Governance
Tallinn University of Technology
Akadeemia 3
Tallinn 12616, Estonia

E-mail: mergime.ibrahimi@taltech.ee

Tam Abaku

Ragnar Nurkse Department of Innovation and Governance
Tallinn University of Technology
Akadeemia 3
Tallinn 12616, Estonia

E-mail: tam.abaku@gmail.com

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