# Mobile Applications for Administrative Purpose in the EU and V4 – with Special Regard to Document Management

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**Summary:** The growing popularity of smartphones is undoubtedly one, if not the most important factor in widening the administrative application process for smartphone use. The widespread use of smartphones has changed the way that people communicate, which has also allowed governments the opportunity to create a new channel alongside traditional ways of connecting with citizens. In my opinion, people are less and less likely to use their smartphones to make phone calls classically, but instead to connect via email, social media services (e.g. Facebook, Twitter, etc.) and use their smartphone features, applications to manage their daily tasks (e.g. banking transactions). Therefore, I believe that m-administration (mobile/smartphone-based) can be a much more convenient way for the state and public administrations to connect with citizens. In this study, I intend to study mobile applications for administrative purposes made by the European Union and a V4 country, Hungary.

**Keywords:** ICT – smart-phone application – m-administration – government – advantage

## 1. Introduction

Smartphone applications can also be considered as new practices in mobile e-government or m-government<sup>1</sup>. Although smartphone applications are not yet used by most governments, governments that have already tried them have given positive feedback. The reason for this satisfaction is that these "new solutions" have an extra advantage over many other communication channels, such as increasing time and cost efficiency by reducing (eliminating) personal administration, and increasing customer involvement in the process. All this can

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TÓZSA, I. Jövőbe mutató közigazgatási megoldások In: *Budai Balázs Benjámin, Tózsa István E-közigazgatás*. Debrecen: DE AMTC AVK, 2007, pp. 123–158.

promote<sup>2</sup> "more open governance" by increasing efficiency, transparency and civic engagement.

The use of mobile technologies for service and information provision is referred to in the literature<sup>3</sup> as mobile government (m-government)<sup>4</sup>, which can be considered as part of e-government. While e-government has access to public services at all times, m-government enables citizens to access government services at any time and from anywhere. Numerous research shows that eGovernment can bring significant benefits to governments, including improving efficiency and accountability, reducing costs, strengthening state-to-citizen relations, and promoting civic engagement and democracy. Expected effects of the application of eGovernment include increasing civic participation and cooperation, which can fulfill the principles of well-functioning<sup>5</sup> open government. However, it is also a fact that many e-government solutions do not meet the prior expectations, which may be client/citizen expectations and those of the state. M-administration is a new initiative, the potential of which, especially the application of smartphone applications in public administration, is still under investigation. Most of the studies undertaken so far are not explicitly based on the concept of mobile e-government, but focus on 'classical' IT developments focusing on the provision of information and services<sup>6</sup>.

It is essential to distinguish this technology from e-administration because smartphones are equipped with a variety of – additional – sensors, such as cameras and GPS, which allow users to capture real-time information and environment data, not only to access and view it. When combined with Web 2.0 technologies, smartphone users (users) become data processors. This is especially true for spatial information, where data collection and analysis can be unprecedented, not only by specialists who are specialized in this area, but also by smartphone owners. This is the case, for example, with a system of voluntary geographical information (VGI<sup>7</sup>) based on personal experiences and statements, for which data is provided by smartphone users via web technologies. The VGI, and thus

<sup>&</sup>lt;sup>2</sup> PIERRE, J., PETERS, B. Guy. *Governance, Politics and the State*. New York: University of New York Press, 2000.

See furthermore: QUINTANILLA, G. Exploring the M-Government. *Encyclopedia of Information Science and Technology*. Third Edition, 2015, DOI: 10.4018/978-1-4666-5888-2.ch266.

<sup>&</sup>lt;sup>4</sup> See furthermore: LEE, S. M., TAN, X., TRIMI, S. (2006). M-government, from rhetoric to reality: learning from leading countries. *Electronic Government, an International Journal*, 3(2), pp. 113–126.

<sup>&</sup>lt;sup>5</sup> See furthermore: DEMKE, C., MOILANEN, T. *Effectiveness of public service ethics and good governance in the central administration of the EU-27*. Frankfurt am Main: Peter Lang, 2012.

<sup>&</sup>lt;sup>6</sup> TÓZSA, I. *Jövőbe mutató közigazgatási megoldások...*, p. 125.

Volunteered Geographic Information – defined by MICHAEL F. G. "A system for the creation, collection and dissemination of geographically voluntarily provided individuals by exploiting technological tools."

the citizens who upload data to it, can play a very important role in many areas, including emergency management, by facilitating real-time communication and information sharing between government agencies (e.g. disaster management, police) and citizens. All of this can be key to saving life and property (prevention) or even mitigating damage.

It can be said that the use of smartphone applications in the public sector, in public administration, is still in its infancy, which may be due to several reasons. Among other things, the legal framework for applications is currently not perfect, but there are also shortcomings in terms of resources. I believe that empirical research is needed to identify potential applications and then develop the actual implementation. In addition to information gathering and needs assessment, this can also help to better understand the role and potential of smartphone applications in the development of e- and thus m-administration<sup>8</sup>.

These services are, in fact, applications of mobile e-government services available. M-administration is facilitated by the ever-expanding range of mobile communication features, while traditional e-administration focuses on non-mobile (e.g. computer-based) services. One of the reasons for this is the willingness of the citizenry. On the one hand, trust must be built in the new solution (in terms of security, 'can they trust') and on the other hand, the introduction of new technology also requires user knowledge. Therefore, the customer who appears as a user must be digitally trained to use the service and must also have the appropriate technology device (smartphone). On the other hand, you need to trust in your device and application, have secure information that your data is be secured, your procedural fee will actually be transferred to the acting agency, and the program cannot be hacked to steal the personal and financial data it contains and there is stored data.

The significant advantage of m-administration over e-administration is that it can be accessed anywhere, anytime, from any device with an Internet connection. This feature, from the point of view of public administration, provides an opportunity for the government to be everywhere present and able to serve. In addition to the many advantages mentioned above, it can, of course, also have disadvantages, which, as it is not organically related to the subject of this dissertation in terms of the efficiency of public administration, are not discussed here. E-Government is responsible, among other things, for managing and managing government processes electronically while being able to address government mobility objectives<sup>9</sup>. For example, even a committee meeting can be held on the train using mobile devices.

<sup>&</sup>lt;sup>8</sup> TÓZSA, I. *Jövőbe mutató közigazgatási megoldások...*, p. 127.

<sup>&</sup>lt;sup>9</sup> CSÁKI-HATALOVICS, B. Guy. *Az elektronikus közigazgatás tartalma és egyes gyakorlati kérdései* HVG-ORAC, Budapest: 2010. ISBN: 978 963 258 092 0, p. 381.

Another significant benefit is the ability of public administrations to provide relevant information to citizens on time. GPS-enabled smartphones allow you to provide personalized information and services based on real-time user information. Mobile devices can establish real-time communication between citizens and governments/administrations, which can effectively serve those who need essential and verified, authenticated information. An important point of use may also be the use of real-time information transmitted through mobile applications in case of an emergency, as traditional data and information may be less useful in the event of a disaster due to their slower spread. Such real-time positioning is especially important for law enforcement agencies in the event of an accident or disaster where location time can be greatly improved (more accurately reduced) by using modern ICT tools, contributing to increased rescue efficiency and reduced potential for loss of life and property, or reduce the amount of damage that may occur. Part of this is now that mobile network operators can use GPS to identify the source/location of emergency calls so they can forward calls to the nearest security answering service<sup>10</sup>.

While smartphone apps provide more flexible and personalized services with GPS location and mobility features, they also pose a risk to users by collecting real-time location data from service providers. Accumulated field data, coordinates can be used to re-identify and subsequently track the privacy of individuals/users. These security issues are, therefore, at the heart of almost all public administration development programs, strategies, and projects. It should be emphasized that e-administration and thus m-administration services can be affected by many different cyber-attacks if they are not adequately protected, including eg unauthorized access, phishing, etc. To reduce these risks, it is essential to build and operate the appropriate hardware and software infrastructure to ensure the security of e- and m-administration services and to employ highly qualified IT staff.

# 2. Positive effects of the usage of mobile applications

One of the most important benefits of keeping in mind people's smartphone usage habits is that smartphone applications make their everyday lives more comfortable. We can think about communication activities, information transfer, photo taking and GPS positioning, navigation services<sup>11</sup>.

Also besides, the information coming from the smartphone app is more structured, more precious than that received through other channels, especially the

<sup>&</sup>lt;sup>10</sup> CSÁKI-HATALOVICS, B. Guy. *Elektronikus közigazgatás...*, p. 383.

<sup>&</sup>lt;sup>11</sup> TÓZSA, I. Közigazgatási mobil alkalmazási tartalomfejlesztések..., p. 220.

email channel. The free text style of email channels usually provides incomplete information about governments and administrations, so it may often be necessary to ask for additional information through a channel or even in person<sup>12</sup>.

Lower costs compared to telephone calls also represent a significant advantage for smartphone applications, which is also a matter of prime importance given a large number of potential customers (citizens with smartphones). If you compare the use of applications to a telephone contact service, you can quickly see that, due to the growing number of service issues, the workload of the clerks may also increase. In contrast, the mobile application is a quasi "self-service" channel that is fully integrated into the system. This integration into the central system provides additional cost savings as collecting rich and structured data and information in this way also saves the customer money by eliminating the need for on-site presence and the evaluation of problems that may arise<sup>13</sup>.

Smartphone applications allow citizens to initiate, request, begin a procedure at any time, from anywhere, with significant benefits, mainly in terms of time and cost, over other communication channels. Citizens can report problems immediately if they are detected and do not have to wait for them to be at home or visit the website of the body in question. It can also be a kind of attitude in people that they have a smartphone and can "do it" locally. If they need to go back to their home, work, and log on to their computer or make a phone call to contact various authorities, they are less likely to do so. By combining the benefits of mobile phones and web applications, online services can be accessed without geographic restrictions, which can also mean expanding the service area of public administrations. We can also ask if it can be faster through service applications?

There is a time advantage in dealing with applications, as there is no waiting time for citizens compared to the telephone communication channel<sup>14</sup>. Just think, waiting for the clerk in the case of telephone administration and processing of requests all take time. As smartphone applications are integrated into the central system (s), applications can be sent directly to the competent authority immediately, thus not only saving costs but also speeding up the processing of applications. This can be of immense importance, especially in the case of an emergency or disaster, but it is not the last aspect in everyday instances either.

TÓZSA, I., ANCSIN, L. A mobilkommunikáció alkalmazása az ügyfélszolgálati munkában. In: KÁKAI, L. (ed.). 20 évesek az önkormányzatok: születésnap, vagy halotti tor? p. 630 Konferencia helye, ideje: Pécs, Magyarország, 2010.03.19-2010.03.20. Pécs: IDResearch Kft.; Publikon, 2010, p. 490.

<sup>&</sup>lt;sup>13</sup> TÓZSA, I., ANCSIN, L. A mobilkommunikáció..., p. 492.

<sup>&</sup>lt;sup>14</sup> TÓZSA, I. Közigazgatási mobil alkalmazási ...., p. 225.

# 3. Mobile applications in the institutional system of the European Union<sup>15</sup>

As I stated earlier, mobile applications (or "applications") are software applications designed/developed specifically for smartphones or tablet operating systems (Apple, Android, Windows, BlackBerry, etc.) that are useful for common tasks (including administrative tasks) and can also be used to target communication with specific audiences. The European Union is well aware of this kind of utility and advantage, and it supports it accordingly, both professionally and financially, through tender sources. However, for an application to be applicable in practice, it must be only implemented after a proper design process.

To ensure that the application fits in with the Commission's mobile strategy and the directive<sup>16</sup> to ensure the smooth development of the application and to avoid "unpleasant surprises," it is crucial that the start-up organization consults all relevant stakeholders in the Commission in particular. Directorate-General for Communication with the EUROPA group and those who may be interested in the application.

Before making any budgetary commitment to the application service, you must enter into a contract and submit a formal application to the EUROPA team of DG Communication before starting any development work.

The Head of the Communication Unit of the competent DG must approve the application/content development request, before being sent to the Europa team.

Accordingly, it can be stated that the practical implementation is only possible after successful passing of serious pre-filters.

At present<sup>17</sup>, there are thirty-six mobile applications related to the Institutions of the European Union in various application stores, which have been developed for various purposes by various EU institutions. Of these, I would like to briefly mention and introduce mobile applications relevant to the subject of the study.

Source online. Available at: https://publications.europa.eu/en/applications?p\_p\_id=101\_INSTAN CE\_I9vpiqUfqVn6&p\_p\_lifecycle=0&p\_p\_state=normal&p\_p\_mode=view&p\_p\_col\_id=maintop&p\_p\_col\_pos=1&p\_p\_col\_count=2&\_101\_INSTANCE\_I9vpiqUfqVn6\_delta=20&\_101\_INSTANCE\_I9vpiqUfqVn6\_advancedSearch=false&\_101\_INSTANCE\_I9vpiqUfqVn6\_andOperator=true&p\_r\_p\_564233524\_resetCur=false&\_101\_INSTANCE\_I9vpiqUfqVn6\_cur=1 (last download: 2019. 10. 5.).

Directive on the protection of personal data in mobile applications operated by the Institutions of the European Union. Source online. Available at: https://edps.europa.eu/sites/edp/files/public cation/16-11-07 guidelines mobile apps en.pdf (last download: 2019. 9. 25.).

Source online available at: https://publications.europa.eu/en/applications (last download: 2019. 10. 2.).

#### EU Parliamentary Positioning APP<sup>18</sup>

The purpose of the application, released by the EU Parliament, is to provide navigation assistance through the phone's GPS unit in the organization. Following the navigation, arrows allows us the opportunity to view all of the EP's attractive and innovative activities<sup>19</sup>, which will play a refreshing role in European democracy. The staff will be introduced to the fascinating buildings and personalities of the European Parliament that have been named, as well as to the remarkable historical facts of the area.

#### EUROSTAT - "My Region" App<sup>20</sup>

The "Own Region" application released by the Statistical Office of the European Union allows mobile access to select annual regional indicators at NUTS 2 level for the EU-28, EFTA and candidate countries. The application is available in three languages: English, French and German.

#### SenseEurAir App<sup>21</sup>

This application allows citizens (amateurs or professionals) to receive information on ambient air quality and notify them when the preset pollutant threshold is exceeded. Displays air sensor networks that publish their data using IN-SPIRE-compliant sensor monitoring services.

## My Natura 2000 App<sup>22</sup>

The application, released by the EU Commission, provides information on protected areas in the Natura 2000 network. This allows users to send photos of each location and provide comprehensive feedback on the protected area. Natura 2000 is the world's largest network of coordinated protected areas. It covers more than 18 % of the EU's land area and almost 6 % of its marine areas and provides shelter for Europe's most valuable and endangered species and habitats. In my

Source online available at: https://publications.europa.eu/image/journal/article?img\_id=5284575 &t=1543935032036 (last accessed 2/10/2019).

See furthermore: RHODES, R. A. W. *The New Governance: Governing without Government*. (source online available at: http://law.hku.hk/gl/rhodes.pdf (last download: 2018.09.12.).

Source online. Available at: https://publications.europa.eu/image/journal/article?img\_id=4862198 &t=1535003675299 (last accessed 10/1/2019).

Source online. Available at: https://publications.europa.eu/image/journal/article? Img\_id = 417 4459 & t = 1522229500992 (last viewed: 9/30/2019).

Source online. Available at: https://publications.europa.eu/image/journal/article? Img\_id = 417 4452 & t = 1522229472536 (last accessed 5/10/2019).

opinion, the applicator contributes to increasing the efficiency of environmental protection, as users can provide the authorities with up-to-date information on the current state of protected areas utilizing photographs and data recorded on the sites.

## ECDC Threat Reports App<sup>23</sup>

The European Center for Disease Prevention and Control (ECDC) is an EU agency that aims to strengthen European control against infectious diseases. Their 'ECDC Threat Reports' application gives the EU direct access to major updates and infectious disease threat reports. Searching for a specific disease or virus – from bird flu to Zika – or nowadays especially for the Crown virus – or by particular report type, including the Weekly Infectious Disease Threat Report (CDTR), quick risk assessments and epidemiological updates. The app is free to use and available to anyone. ECDC partners can access additional reports by logging in with their ECDC credentials.

#### 'EU Resettlement' App<sup>24</sup>

The application, issued by the EU Commission, provides information on the transfer of asylum seekers from Greece and Italy to another European state, who need international protection. The purpose of this application is to assist those already in Greece and Italy regarding the resettlement procedure and their rights and obligations when applying for a resettlement. This application contains clear and concise information in various non-EU languages, as well as a section of frequently asked questions. The app is equipped with an interactive map showing the location and availability of hotspots in Greece and Italy.

The European Union is also trying to take advantage of the "weapon" that smartphones are the most widespread information communication device in the world. Therefore, it is advisable to place great emphasis on their development and make more services available through this platform. Existing applications are predominantly for information and exchange purposes, which can be of particular benefit to citizens and EU institutions.

In the following, I will focus on some of the good practices introduced by the V4 countries.

Source online. Available at: https://publications.europa.eu/image/journal/article? Img\_id = 417 4466 & t = 1522229542852 (last viewed 9/19/2018).

Source online available at: https://publications.europa.eu/image/journal/article? Img\_id = 417 4357 & t = 1522228796507 (last accessed 10/1/2019).

## 4. Czech Republic<sup>25</sup>

On 27 August 2014, the Strategic Framework of the Development of Public Administration in the Czech Republic for 2014 – 2020 was approved by the government by Government Resolution No. 680 of 2014. This strategy of public administration development formulated four targets to be further elaborated by the Government Council and achieved within the six years. Specified priorities covered public administration modernisation, which included the evaluation of its current functioning, proposing and implementing performance improvement measures, improvement of services availability via eGovernment tools, and continuous human resources professionalisation and development.

The implementation of individual measures and activities leading to the implementation of both specific and strategic objectives was, to a certain extent, interconnected.

In respect of the strategic objective No. 1, the modernisation of the public administration, a key task was to optimise and streamline the performance of individual (selected) agendas, primarily via their initial mapping and subsequent standardisation. These activities would, at the same time, contribute to the reduction of the regulatory burden. The established quality management systems and the system of public administration evaluation subsequently identified the potential for further optimisation of the public administration system.

Currently, there is a preparation of new conceptual material for the development of public administration called Client-Oriented Public Administration 2030, which will follow the currently valid Strategic Framework for the Development of Public Administration in the Czech Republic for 2014-2020.

The following are some of the most important developments in recent years, the CzechPoint system, the new Technology Center, the "What to do if ..." application, and the digital map of the administration.

#### Czech POINT network

The Czech POINT system is a network of one-stop access points to eGovernment services intended to prevent citizens from visiting several offices, thus significantly reducing excessive administrative burden. Through these one-stop points, the general public can access all public records and to obtain transcripts/extracts, as well as information statements from the national registers.

<sup>&</sup>lt;sup>25</sup> Source online available at: *DIGITAL GOVERNMENT FACTSHEET 2019 Czech Republic*: https://joinup.ec.europa.eu/sites/default/files/inline- files/Digital\_Government\_Factsheets\_Czech%20 Republic 2019.pdf (last download: 2020. 2. 9.).

The Czech POINTs are primarily located at post offices, municipal authority offices, registry offices and Czech embassies. As of December 2018, the network is comprised of 7,461 local and regional physical contact points. An interactive map on the website serves as a Czech POINT location finder. By the end of 2018, the number of issued excerpts reached 21,021,279 million.

In the future, the accessibility of Czech POINT remotely from the Public administration portal will make it possible to obtain required documents from home. In this light, the Act on Electronic Actions and Authorised Document Conversion, which gives electronic records the same legal status as traditional stamped hardcopy equivalents, will have a significant impact on the effectiveness of the network. Since July 2009, Czech POINTs have been in charge of converting paper-based administrative documents into electronic form, processing applications for the establishment of personal Data Boxes and terminating/re-creating these Boxes, when needed and upon request.

Gradually more services are introduced, such as:

- Validation of the Czech citizens identity is made possible at the Czech-POINT@office interface at the embassies of the Czech Republic abroad;
- New map service makes it possible to find Czech POINT offices on the map, including the address and office hours;
- E-mail alert service of the crime register is for those who applied for the extract from the crime register. The applicant can provide his email, to which an alert message is being sent when the excerpt is ready;
- The Validation of the cadastral map image at the public administration contact point (i.e. any of the CzechPOINT offices), as well as on the CzechPOINT @ office interface for clerks;
- Excerpt from the Driver's Point Account as a free service for the Data Box holders at the CzechPOINT@home interface and more.

#### New Technology Centre

Through its new Technology Centre, the Vysočina region provides several ICT services to the regional administration, its municipalities and organisations financed by the region. The center is in two locations connected by two separate optical fiber cables. Among the services offered by the regional technology center are a document management service, secure storage management, spatial information system, interface to central registers, and videoconferences for the regional and local administrations, eProcurement system, eHealth services and the services for the national integrated rescue system. The technology centre also provides a security dashboard of the region for the cybersecurity administrators of the regional information systems and the public wi-fi hotspots supporting the EDUROAM project.

#### Services 2.0

The next phase of modernisation of the public administration communication infrastructure took place, and its central element is the central place of services 2.0. It ensures mutual, controlled and secure interconnection of public and state administration entities, it also ensures communication of public and state administration entities with other entities in external networks such as the Internet or the EU communication infrastructure.

#### "What to do, when..."

The mobile application "What to do, when..." provides information on key government services for life situations of citizens. The application includes solutions to the following situations and related agendas:

- newborn baby
- change of residence
- loss of documents
- family deaths
- property transfer
- location of the nearest CzeCz Point
- My Office

#### Digital Map of Public Administration

The Ministry of the Interior began implementing a project to create Digital Government Maps (DMVS). The digital map of Public Administration unifies data from various geographic information systems in one application. The project aims to facilitate the exercise of public administration and accessibility of spatial data for the authorities and the public in line with Smart Administration, promoting efficient and user-friendly public administration, and development of eGovernment in the country.

## 5. Poland $^{26}$

In the sense of Poland, the key objectives include increasing the wealth of Polish citizens and reducing the number of persons at risk of poverty and social exclusion by 2020. The most important goal will be to achieve an increase in the

<sup>&</sup>lt;sup>26</sup> Source online available at: *DIGITAL GOVERNMENT FACTSHEET 2019 Poland* https://joinup.ec.europa.eu/sites/default/files/inline-files/Digital\_Government\_Factsheets\_Poland\_2019\_4.pdf (last download: 2020. 2. 9.).

average household income to 76–80% of the EU average by 2020, an approximation to the EU average by 2030, while reducing income disparities between individual regions. Among the main objectives still to be implemented include eGovernment measures, particularly those involving the effective use of information and communication technologies in public administration.

The concept of eGovernment and digital public services imply that high-quality services for citizens, including entrepreneurs, are to be provided by modern IT solutions supporting a logical and coherent government IT system, developed and maintained with the cooperation of all actors at various levels of public administration.

A priority task in the field of eGovernment is to allow the broadest possible range of public services to be provided digitally, thereby enabling citizens to handle their business remotely. It will be necessary to ensure the interoperability of public IT systems and to computerise the internal processes of the administration.

Act on the Digital Accessibility of Websites and Mobile Applications of Public Sector Bodies The Act on the digital accessibility of websites and mobile applications of public sector bodies regulated rules on digital accessibility for persons with disabilities. This act specified how to complain about the unavailability of information and explained how to monitor digital availability. This Act fully implemented Directive 2016/2102 of the European Parliament and of the Council of 26 October 2016, on the accessibility of the websites and mobile applications of public sector bodies.

#### eID and Trust Services

Polish National Electronic Identification (eID) Scheme Poland aligned its national legal system with the eIDAS Regulation through the adoption of the National Act on Trust Services and Electronic Identification (see also below). The Polish National Electronic Identification (eID) Scheme was established. The purpose of this project was to allow Polish citizens, companies and other entities to identify themselves online to access the public administration's electronic services. This target will be achieved through the integration of different, currently functioning eID systems to create a single, standardised access point to eID services. Moreover, the Polish eIDAS Node will be linked to the national eID nodes of the other EU Member States. Since March 2017, a few new eServices concerning eID have been introduced in Poland, as listed below:

■ The Ministry of Digital Affairs launched mDocuments — a pilot version of a service enabling citizens to confirm their identity (or rights, e.g.: for driving a car) through a mobile device (mobile phone or smartphone), instead of paper documents;

- The so-called Trusted Profile, an eldentification method ensured by the public administration, was integrated with the seven biggest banks operating in Poland;
- The e-ID project (former pl.ID project) was initiated. Its primary purpose was to replace traditional plastic ID cards with new e-cards. eID cards became available in March 2019. The implemented eID card included an integrated electronic layer which contained the same data as those available at the graphic layer. The electronic layer included 3 certificates: presence confirmation (only tap needed), identification and authorisation (4 number PIN needed) and personal signature authorisation (6 number PIN needed). Furthermore, additional space for qualified certificate of personal signature was provided. The implementation of this last certificate was voluntary.

#### *mCitizen*

mCitizen is a public mobile application for Polish citizens launched on Android and iOS platform. It is designed as a container for mobile documents. Currently, it has implemented mobile ID based on national citizens registries and mobile school ID.

Mobile School ID – The responsible authority is the: Ministry of Digital Affairs <sup>27</sup> Description: Mobile version of the pupils' card implemented in public mobile application mCitizen. The solution is fully deployed and available for willing schools and pupils.

Mobile Student ID – The responsible authority is the Ministry of Digital Affairs <sup>28</sup>. Mobile version of the student card implemented in public mobile application mCitizen. A pilot project at two Polish Universities will be launched in 2019.

# 6. Hungary

In Hungary, a comprehensive record-keeping process is underway between government agencies, which will hopefully lead to greater transparency, easier administration of the case and ultimately more efficient administration — at least for clients. To this end, the legislator is also working to develop mobile applications so that the simpler, more convenient administration and the services it provides can be felt in practice. One of the key elements of this is OkmányApp.

It is an easy-to-use, customer-friendly solution that, based on the structure of the Web Attorney, allows you to handle a large portion of your document

Source available at: https://www.gov.pl/web/mobywatel/mlegitymacja-szkolna (download time: 2020. 2. 9.).

Source avalaible at: https://www.gov.pl/web/mobywatel/mlegitymacja-studencka (download time: 2020, 2. 9.).

matters through your mobile phone. Mobility is an important part of this, as it eliminates the need for the client to work in person at the document offices for several document management.

Of course, a significant number of cases also require some form of authentication, which the developers wanted to solve with a Mobile Gateway-enabled Client Gateway. So, with the application download, all you need is a "Gateway Client Registration" (which is nowadays provided to more and more clients) and you can begin to manage your documents through your smartphone. As in the case of documentary bureaus, in some cases, we will encounter types of cases that are subject to a fee / procedural fee. In these cases, we can also pay by credit card or bank transfer. The latter will be an advantage for those who are reluctant to enter their credit card information online. I myself have made many successful transactions with the option of paying by credit card, to my highest satisfaction, as I have been able to deal quickly and efficiently.



Source: http://www.kekkh.gov.hu/okmanyapp/ (last download: 2020. 2. 9.)

The main features available, as shown in the picture above, can be divided into six broad groups. In the first group, we find personal documents. This includes the ability to invalidate your ID if it is lost, stolen from us, or destroyed. We are required to report this knowledge within three business days of acquiring it, which may be done electronically. This 'transaction' is reported free of charge and automatically, immediately. The following feature allows you to replace your passport if it has been stolen or destroyed. This service already entails a cost. The law also allows you to apply for a so-called "Second Private Passport" at

an appropriate fee, which we can also do through the Documentary Book. It can also be a practical and useful function to check the validity of your existing documents without taking it in your hand. I do not always carry all my documents (e.g. passports), so this service can be helpful when planning travel outside the European Union, for example.

The second major group of cases concerns vehicle administration. As part of this, we have the opportunity to file, free of charge, a change of ownership as a previous owner, as well as issues relating to the recall of a vehicle and subsequent (feasible) restitution. These services are complemented by the Vehicle Data Inquiry Service, which you may need when buying a vehicle. This service allows you to query certain technical details (data request option/tab) of one or more vehicles for a fee and to check their conformity (data equivalence). The information requested shall be based on the officially recorded data contained in the vehicle register of the public road traffic register maintained by the BM. This will tell us what kilometer-hours the car has been registered to, whether it is in the process of being circulated, or whether it is in circulation with a valid technical test. From my own experience, this feature has proven to be extremely useful for my friends and me. On many occasions, it has been proven within a few minutes that the odometer values in the ad details of the vehicles we want to buy are untrue or backward.

In the third group of cases, the client currently has the possibility of replacing passports in the framework of document replacements.

In the fourth group of cases, the so-called "Other Matters" group, you can apply for a Moral Certificate or check the validity of a previously requested Moral Certificate. For these services, it is essential to emphasize that issuing a moral certificate is free of charge to all clients four times a year. Fifth or more proceedings were instituted under Section XCIII of 1990 on Fees. General procedure for the payment of first instance administrative proceedings, as defined by law

You have to pay a fee (3000 HUF), which can also be done immediately through the application – by choosing a credit card payment method.

In the fifth issue, you will find the "Document Status Query" where you can get information on when the documents we request are completed. By specifying the number of vouchers on the application form that you received from the document office, we are able to inquire about the status of our document exhibitions. We can retrieve your ID, passport and driver's license information.

In the sixth menu item of the Application, the authority provides the means to check the applications and declarations, where we can continue the previously started but abandoned/suspended applications.

In my opinion, as a handy and modern feature, the application has been designed with Contact Center integration to support administration, whereby the

application combines the ideal combination of self-service (mobile application) and customer service with Contact / Call Center. In practice, this means that customers will have access to the Government Customer Line 24 hours a day, free of charge, from their application, free of charge, by dialing 1818 from their application, where trained officers will "live" seek to resolve emerging situations. ".

The Government Window app was created to complement the features of the Docs Book and to create additional convenience features. The purpose of its creation was "the Government wants trust-based, efficient and fast administration". The most important function of the application is to map all the government windows of the country anywhere on the screen of the smartphone and inform the user how long it can handle the particular case type in the nearby government window. Currently, the program is 1.0. version is available on Google Play and App Store web stores, but further improvements are expected that will allow developers to resolve the issue by dropping the app immediately. As a result, if the user enters the steering wheel, his serial number would directly flash on the screen, and he would be able to start administration immediately, as the program would also calculate the time it takes to reach the steering wheel.

In the application, almost all case types (except ID card cases) can be selected, such as the car dealerships that have already been discussed, the map in the vast majority of the country is green, meaning this case type can be completed within 15 minutes in most government windows. Depending on the load, the application uses different colors, marked with orange or red if the waiting time is longer than 15 minutes. I have to note that through the application, the citizen does not see how many people wait for a particular administration, but how much time he has to wait for it to occur (which, of course, may contain inaccuracies). The application monitors, among other things, which government window, what type of case, there are reserved times for a particular case type, how many clerks are working on that case type and how much the clerk's average time is, and then calculates the waiting time accordingly. It is important to emphasize that due to the complexity of the administration processes, the waiting period can change continuously, which the system strives to follow with an update every 5 minutes.

In my opinion, with the launch of the Government Window application, citizens' (satisfaction) feelings of satisfaction with public administration will continue to increase, as the administration process will be more planned and predictable with the help of the program. This is a great help for every client when planning their day (e.g. scheduling working hours, parking time at the Government Window ... etc.), as we can manage our business even at lunchtime.

Of course, in a number of other administrative areas, including but not limited to construction, health, law enforcement, nature protection, etc. – applications

have already been developed to make life easier for both authorities and clients, the presentation of which could be the subject of a forthcoming study.

# 7. Closing thoughts

I believe that the increased demand for smart devices, as well as the rapid increase in the proliferation of devices, prove that the population is increasingly ready to receive and use these devices. Day by day, we can see in our immediate environment that smartphones have become a part of our everyday lives, with little exaggeration that most citizens cannot imagine their existence without them.

Today, we may not even consider these devices as luxury items, but rather as objects of use, which is why more and more people have at least one. According to research, this can reach up to 70 % of the total population, but they are almost certainly not equipped with a 'traditional computer. In my view, this is such a high rate that it certainly makes it clear to us that smartphones — and the applications running on them — are the best tools for public authorities (states and their administrative systems) to address this large percent quickly and efficiently.

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