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LEGAL AND TECHNOLOGICAL CHANGES IN THE HUNGARIAN PUBLIC ADMINISTRATION PROCEDURE (AN OVERVIEW OF THE FORMER VERSION COMPARED TO THE PRESENT; ANALYSIS OF THE CURRENT VERSION AND EXPERIENCES OF 1 YEAR OF PRACTICE)*

Before 1st October 2009, there were two ways for clients to administer their cases in public administration in an electronic way in Hungary: if they were in possession of an electronic signature, they could sign their documents with it, and send it to the authorities directly; or with the help of the so-called "Client Gate" (CG – which is a pair of a login-ID and a password to access (some, but not all) of the services of the official Hungarian government website - magyarorszag.hu). These two ways, were both sumptuous, because e-signature is expensive, and the possibility for the clients, to administer their cases via the CG had to be covered by the own funds of the individual authorities affected. But as a result of the economical world-crisis, lowering the costs and rationalising the methods have become inevitable. The Hungarian law-makers had to form a more efficient and cheaper method, which is at the same time, accessible to more people. The electronic way of administration in the Hungarian public administration procedure is now legally equal to any other forms of administration; furthermore it has a priority in any possible cases. The possibility to electronically administer a case may not be denied (from anybody, at any level of administration) in Hungary today, in those cases, which are based on the regulations of the central government (unless an Act tells otherwise); and can be allowed in the cases, which are based on the regulations of the selfgovernments (in the first case it is obligatory to be managed through an administrative web-surface provided by the central government – called: Central System of Electronic Services, or simply Central System – CS; while in the second case it is a possibility – besides doing it on the webpage of the local self government itself). This method is cheaper for all participants, because they only have to utilise a web-surface, provided by the central government. The services of the system are free of charge for the authorities (in con-

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trary to the former method, where they had to fund the possibility for electronic administration); and part of the services are free for the clients too, while they have to pay for other services (which method is still far cheaper in most cases, than paying the returning costs of ane-signature).

In case the electronic way of the administration is being used today through this CS, it may only be done so by means of the CG, the creation of which is free of charge for any natural person (at least the first one is free-of-charge). It can be created by a one-time appearance in person at an authority, entitled to create CGs, or if the clients possess an e-signature of at least increased security level, they can create it also by means of that. The CG is the elementary method of electronic administration (also called "low-security level authentication"; and it should be used, unless a high level regulation (an Act) tells otherwise). With the CG, the clients can upload their documents to a central container area, and the decision is also delivered here (there is an authority-version of the CG for the authorities, called "Authority Gate" - AG. The authorities, which are obliged by an Act to connect to the system, have to have one). The only weaknesses in this system are the clients themselves, because in this method they are responsible for their CGs not to get in wrong hands, and they have to bear the consequences if it does though happen. The system also gives opportunities for higher security level authentications. As a consequence to the changes in regulations and the technology, the reform of the CS has also been an ongoing issue. The operation of the CS is the responsibility of the Hungarian Cabinet (more closely the ministry responsible for public administration informatics), while the technological adequateness of the connected authorities is ensured by the National Media and Infocommunications Authority (NMHH).

1. Initial situation before the implementation of current version1

The rules of Hungarian public administration procedure were first involved in the Act 4 of 1957 on the basic rules of state administration procedure, until the date 1st November 2005. This Act was a regulation, created in the deepest times of Hungarian socialist era, therefore it basically had a total aversion towards any kind of electronic procedure.

1st November 2005 was the date, when a completely new regulation changed the former one; the Act 140 of 2004 on the general rules of public administration procedure and service (abbreviated form: APAP) came effective. This Act said at that time², that "procedural actions in a public administrational procedure can also be done by means of electronic way, in such a manner as described by legal acts, unless an Act, a decree of the Cabinet or a decree of a local self-government tells otherwise." This meant that the Par-

¹ Partly quoted from: HORVÁTH K. DR. PHD., ORBÁN A. DR., KOHÁNY A. DR., KŐNIG B. DR. (2010., 3rd ed.) *Basics of public administration informatics*, Edited by HORVÁTH K. Dr. PhD., memorandum published by Budapest Corvinus University, Faculty of Public Administration, Budapest, pp 211-214 ² Exact place of legal quotations in the Act are not indicated in this chapter, because present version is different from the previous version; some rules are not existing any more, others are changed. For present rules: see chapters 2.1 to 2.3.

liament, the Cabinet, or any local self-government had the chance to exclude the possibility of electronic way in the Hungarian public administration procedure (not to forbid, but to exclude – although the outcome is the same both ways). Most of the local self-governments actually used the possibility, and did exclude the electronic way in those cases, which were / are under their authority, mostly because of financial reasons. But the APAP also said: "An Act (note that only an Act!) can make the electronic way in some cases or some procedural actions obligatory, or forbidden." (For ex. firms above a certain amount of tax had been obliged to fill and upload their income-tax return forms electronically.)

The APAP had a separate chapter (Ch. X.) for the rules of electronic procedure. The basics of the rules were as follows: "In case the client has an electronic signature of at least increased security level, the document, signed with this e-signature, can be uploaded to the Central System of Electronic Services (Central System), or transferred directly to the authority. For clients, who don't have an e-signature described above, the availability of electronic procedural action is ensured by the Central System (CS)." – This latter solution being the "Client Gate" (CG). The Act also stated: "The clients are responsible for their own Client Gates. If their login-IDs and passwords fall into unauthorised hands – in case it happens because of their fault – they have to bear the consequences." The Act also emphasized, that clients have the possibility to change the way of communication with the authorities at any time during the procedure, including also the possibility for the clients to ask for a paper-based decision in their cases, even if the procedure was electronic. The authorities had to embed the documents they produced and sent, with a "qualified" e-signature.

Although the APAP had been a law pointing into the future, 4 years of practice have shown its weaknesses too. In some aspects it has preceded its era, trying to almost "force" those working in the public administration sector and sometimes even the simple citizens (the clients) too, to administer their cases under conditions, for which they weren't ready (neither in technological or financial aspects, nor based on their knowledge), in case they wanted their cases to be managed in an electronic way.

To tell the truth – based on its former place in the Act, and its separation from the other parts of the law – electronic public administration procedure had only been auxiliary (secondary) compared to the paper-based procedure in Hungary, before 1st October 2009.

Hungarian lawmakers felt that too, and they've rationalised the rules of this Act elementally, including the rules of electronic procedure. By now, it has become more efficient, more logical, accessible to more people, more cost-sensitive, and what is the most important of all: absolutely platform-independent.

As a matter of fact, the period between 1st October 2009 and 1st March 2010 was a time of transition, when this new version was not fully operational yet. It has reached its full potential and is operating at full functionality since 1st March 2010.

1. Show-Case description

1.1 The present – rules of the reformed APAP (in effect since 1st October 2009.)3,4

The former Ch. X. of the Act was put entirely out of effect at that time, and new rules are now spread all over the Act (and in two other Acts – to be presented later in this paper), so that rules concerning paper-based and electronic procedure are now hard to be separated, and furthermore: the Act explicitly says: "In any possible cases, electronic way has a priority over any other forms." The Act doesn't even use the term "electronic procedure" any more; the new term is "electronic contact", which is a more sophisticated and more complex idea.

Further rules (partly the new versions of the rules formerly in APAP, whilst partly absolutely new rules), can be found in two other, closely attaching laws: one of them is Act 60. of 2009. on electronic public services (short form: Act on Electronic Public Services – abbreviated form: AEPS; effective also since 1st October 2009.) and the other is Act 52. of 2009. on electronic delivery of official documents and on electronic receipt (short form: Act on Electronic Delivery of Official Documents – abbreviated form: AEDOD; effective since 1st January 2010.).

First of all, the reformed formulas of interest in APAP are as follows: "The client, who started the case by means of a plea, also other participants of the case, have the right to choose freely from the available ways of contact – under the rules of this Act." 5

According to APAP electronic contact is a version of written contact, equal to that in all aspects, in case the rules of related laws are taken into consideration. This formula has to be retained also in an authority-to-authority contact. If there are several methods available, the authority has to pick one, by considering the aspects of efficiency and cost-thrift. The APAP also says: "Authorities have the right to keep the contact via e-mail or phone, in every instance other than the communication of the decision."

And, as for the focus-point of the changes, the APAP states:

"The contact is to be considered as written, in case:

- the client sends the document to the authority via the Client Gate;
- the authority sends the document to the client or to the other authority via the Central System."7

³ All legal quotations in this chapter are from Act 140. of 2004. on the general rules of public administration procedure and service (APAP); quoted sections are: 8., 28/A., 28/B., 33., 34., 37., and 172. – as of in effect 1st January 2011.

⁴ Partly quoted from: HORVÁTH K. Dr. PhD., ORBÁN A. Dr., KOHÁNY A. Dr., KŐNIG B. Dr. (2010., 3rd ed.) *Basics of public administration informatics*, Edited by HORVÁTH K. Dr. PhD., memorandum published by Budapest Corvinus University, Faculty of Public Administration, Budapest, pp 215-219 ⁵ APAP section 8.

⁶ APAP section 28/A, (5).

⁷ APAP section 28/B, (1)

Easy to recognise the change: there is not a word about e-signature! This point will have a real significance (and will be explained) later on, at the exposition of the rules of AEPS and AEDOD.

APAP also repeats that the client may only be obliged by an Act, to contact any authority in an electronic way. The Hungarian authorities are under a big pressure nowadays, from both the side of the clients and more importantly: the regulation makers, to use the way of electronic contact, wherever possible, since the law also states: "The authority keeps the contact with the client in an electronic way, in case the client asked for it, also in the case the client has uploaded his/her plea electronically, and did not dispose of any other methods." This regulation is not to be followed in any cases, where electronic contact is unimaginable, or in cases, where:

- an Act;
- a decree of the Cabinet (only those, which are derived directly from the Cabinet, and are not based on a law);
- or a decree of a local self-government (only those, which concern local affairs, and not centrally regulated affairs);
- tells otherwise.

To sum it up: in centrally regulated cases (cases, which are under the direct authority of the Hungarian Parliament) only an Act can exclude (or forbid) electronic method. This is also a difference, compared to the previous version, where a decree of the Cabinet, or a decree of any local self-government could exclude (not forbid, but exclude) the electronic method in any case.

The starting point of a case, in most instances is: a plea. APAP states: "Any regulation (meaning: any form and any level of regulations) can order the client to upload his/her plea using an electronic form, in case electronic contact is used. If an Act makes electronic contact obligatory, and the plea is to be uploaded via an electronic form; the authority has to make

- the downloadable and completable version of the electronic form;
- as well as the software required to fill the form; available.9

The client may not suffer any disadvantage, in case the authority did not make the form or the software available, because of its (the authority's) own fault." 10

The authority obviously makes some kind of decision, as the closing of the case. This decision can be passed also electronically to the client, or any other participant of the case, if the regulative conditions are fit. In this case, if the client (or other participant of the case) does not certify the receiving of the electronic document within eight days, the authority passes the decision on, in other form (paper-based) too.

As a closing of this chapter, I must also mention the cases of system-malfunctions. Previous version of APAP had a large set of rules for these occasions, differentiating short-term and long-term malfunctions. The rules have been simplified, and now it only

⁸ APAP section 28/B, (6)

⁹ APAP section 34, (3)

¹⁰ partly quoted from APAP section 37, (3)

says: "the interval of system malfunction11 is not a part of the procedural terminus (so is excluded from it), in case the malfunction lasts for at least one whole day" (24 hrs period)12.

1.1 The present – rules of the AEPS (in effect since 1st October 2009.)13,14

As I mentioned before, several rules, concerning the electronic public administration procedure (too), have been extracted from APAP and put into two other, closely relating acts, alongside with a lot of new regulations. One of them is Act 60. of 2009. on electronic public services (short form: Act on Electronic Public Services - abbreviated form: AEPS; effective also since 1st October 2009.). The APAP itself also refers to this Act, amongst its explanatory regulations.

The reason, why this new law is a separate one, is, that this does not only concern public administration procedure, but also other types of public services (later on, in the coming years, its regulations will also have affect on courts, prosecutors, the police, and public services providers /for ex. providers of power and gas, etc./).

According to this law, the electronic public services are: "the way electronic public services are provided by organisations and persons (natural persons or legal entities) obliged by an Act to provide public services, according to the rules of this Act. It covers authoritical or other actions, or providing data from authentic registers via the CS in an electronic method. All the services of the CS are to be considered electronic public service, and electronic public services are available to anyone."15 (Note that the Act mentions: "anyone", not just Hungarian citizens.)

AEPS states: "This Act controls:

- the order, in which electronic public services provided by the Central System –
- the rights and the duties of the organisations and persons, providing public services, taking part in the providing of public services, or performing tasks specified to provide public services;
- the rights and the duties of any person (natural persons or legal entities) using public services."16

An interesting regulation in AEPS is, that no personal profile may be formed using the data which flows through the CS - which is a bit in contradiction to needs of creating the level 5 e-government (personalisation) – but a contradiction which can easily be solved

¹² APAP section 33, (3) g)

¹¹ system malfunction is described in detail in section 172 of the APAP

¹³ All legal quotations in this chapter are from Act 60. of 2009. on electronic public services (AEPS); quoted sections are: 1-6., 10-16., 19., 21-22., 25., 28., 30. – as of in effect 1st January 2011.

¹⁴ Partly quoted from: HORVÁTH K. Dr. PHD., ORBÁN A. Dr., KOHÁNY A. Dr., KŐNIG B. Dr. (2010., 3rd ed.) Basics of public administration informatics, Edited by HORVÁTH K. Dr. PhD., memorandum published by Budapest Corvinus University, Faculty of Public Administration, Budapest, pp 219-230

¹⁵ AEPS section 3 (1) – (3)

 $^{^{16}}$ AEPS section 1, a) – c)

with the adequate technologies of today. On the other hand, users of the Client Gate (CG, described later) are allowed to form a personal administering surface, which is clearly the level 5 of e-government – they are also entitled to trace the history of all the data they provided. This possibility for the users has to be ensured by the operating organisation of the Central System (which is the ministry responsible for public administration informatics).

Several key components and definitions to truly understand the technological background of Hungarian electronic public administration procedure are also described here. The most important ones are:

- the Central System CS (an aggregation of IT&C systems, which aid the providing and using of electronic public services);
- the electronic container, including;
- the short-term electronic container (a part of the electronic container area provided by the CS, the aim of which is to ensure the arrival and short-term containing of electronic files sent to the user of Client Gate – CG) and;
- the long-term electronic container (a part of the electronic container area provided by the CS, the aim of which is to ensure the long-term containing of electronic files sent to the user of Client Gate – CG);
- the Authority Gate AG (a point of the CS, through which the organisation, which is connected to the CS, can reach the services provided to it by the CS);
- and the organisational post-box (a strictly short-term electronic container area provided by the CS to the organisations which possess an AG).

The CS is a complex system of IT&C solutions, consisting of:

- the electronic governmental spine-network (physical part of the CS; advanced network hardwares);
- the official, central website of Hungary (magyarorszag.hu);
- Governmental Client-line;
- Client Gate;
- and Authority Gate.

1.1.1. The Central System and the official central website of Hungary:

According to the Act, the CS has public and informational modules, to which anyone can freely access (without the need of authorisation) – this is also the place where data of public utility is to be stored; but it also has other modules, to which an adequate authorisation is required.

Most of the services of the CS are available through the Internet, on the website <u>mag-yarorszag.hu</u>¹⁷ (no need for www). The same page loads, if one types <u>mo.hu</u> or <u>hungary.hu</u> into the browser. Other services are available via phone on the Governmental Client-line, on the short phone number 1818 (available only from inside Hungary, outside of Hungary one has to dial: +36-1-452-3622).

 $^{^{17}\,\}underline{https://magyarorszag.hu}$ – website accessed: 23^{rd} January 2011.

Unfortunately, the website currently operates only in Hungarian language. The website has been in operation since 2005, and its current, second version, with a renewed interface, and expanded functions is available to the public since 1st March 2010. This new version was programmed and tested for over a year, and a sum of approx. 5 billion HUF (approx. 18,5 million €) was spent (partly funded by the EU). The new version of this webpage is fully compatible in functionality with all the requirements set up in this new version of electronic contact.

The day it actually started, was the ending of an almost half year long period of legal and technical transition from the former version of electronic public administration procedure to the present version of electronic contact (including now electronic public administration procedure as well, as other electronic (public) services), as mentioned in chapter 2.

The official, central website of Hungary (magyarorszag.hu) according to the AEPS:

- ensures the access to the electronic public services provided by those organisation, which are either obliged to connect to the CS, or have connected themselves volunteerly;
- provides access to the information-sheets, which describe the procedures to be followed;
- guarantees access to the official registers which contain data of public utility, or authentic data;
- provides the surface to administer cases electronically;
- ensures the conditions, under which electronic payments (in relation to electronic public administration procedures or electronic public services) can be made.

It has to be ensured that all the pieces of information (provided on different surfaces) required to administering cases be available in an integrated way, in a systematic form, accessible through one single access point for the user of the official website."¹⁸

An important change in regulations is, that according to AEPS: "Public administration authorities – which are obliged by an Act to connect to the CS – are obliged to make the possibility for electronic contact and any other services, which fall under this Act, available via the CS, unless an Act, or a decree of the Cabinet orders otherwise. These authorities are also obliged to create their AGs, which ensure the access to the documents sent by them or to them, in a logged way, which also has a decisive power. Other organisations in the public finance sector – which are not obliged by an Act to connect to the CS – have the right to connect themselves to the CS, and thus make their services available via the CS; this also entitles them to make contact with other organisations in the CS via the CS."¹⁹

In Hungary, there are two separate types of organisations, administering cases in public administration. One is the Central Government and its (regional and local) institutions, the other group is formed by the separate local (and regional) self-governments.

¹⁸ AEPS section 21 (on the governmental website)

¹⁹ AEPS section 6, (1) and (4) – (5)

Centrally regulated cases are administered (partly) by both, while locally regulated cases are administered only by the latter. (The Central Government and its institutions don't administer cases under the authority of self-governments, only shape the frame to administer them, by creating regulations – though some of them may administer the appeals of clients (as a second level), but only in a small part of cases.)

As a Hungarian lawyer, it is hard for me, not to recognise the change, and the regulation maker's hard will to spread the possibility of electronic contact as wide as possible. Because from this point on (since 1st October 2009.) local self-governments do not have the chance to exclude (let alone not to forbid!) the possibility for electronic contact in any centrally regulated cases, and they have the possibility to hand their services out electronically too, in those cases, which fall under their authority. I believe this is one of the biggest milestones, one of the biggest turning points in the whole reform.

Now the regulation makers took away something on one hand, but also gave something else instead on the other hand at the same time. Because under the former regulations, local self-governments had to fund the possibility for electronic procedure by their own funds, they had to fund and form their own (separate) systems. This was one of the toughest reasons, why most of the local self governments excluded electronic procedure before the date mentioned.

Now, they cannot exclude or forbid it, and they have to / may connect themselves to the CS (as we could see: it is an obligation in the centrally regulated cases, and a possibility in locally regulated ones), but this way they only have to make the connection. The operation of the CS is not funded by them, but by the Hungarian Cabinet.

As for the utilisation of electronic services: "For the users of the services, the possibility to administer their cases electronically via the CS, becomes available after authorisation."²⁰

The services of the CS can be divided into two large groups: basic services (or free-of-charge services) and charged services. Basic (or free-of-charge) services are:

- making contact with the organisations obliged to connect to the CS, and the electronic container area required to it;
- authorisation services;
- the possibility to electronically pay the charges in connection with electronic public services and/or electronic public administration procedure;
- and those services, which are handed out by the organisations connected to the CS as free-of-charge services.

All other services are charged services.

Focus-point of AEPS is authorisation, because, as we saw above, some (or we could say: most) of the services of the CS are available only after authorisation.

²⁰ AEPS section 10, (3)

1.1.1. The Client Gate - CG:

Precondition of authorisation on the side of the clients is: creating a Client Gate (CG). This is a registration, done by a one-time appearance-in-person at any authority, entitled to create CGs (the largest group of authorities, entitled to create CGs among public administration authorities in Hungary are the license-offices – these offices have functioned since 2000, these are the offices, where one can obtain official licenses, like personal ID card, driving license, passport, etc.; these offices operate with a country-wide authority, which means any Hungarian citizen can obtain any kind of license in any of them in the country, regardless to his/her place of residence), or by other means, which are equal to that, under the orders of any regulation. According to present legal conditions, the only option besides appearance-in-person is: registering by using an e-signature of at least increased security level.

In case the client – appearing-in-person (for any reason) at any authority entitled also to create CGs – does not have a CG yet, the authority in question is obliged to offer the possibility to create one.

People wishing to create a CG, first have to identify themselves, then provide their natural identification data (name, date and place of birth, mother's maiden name, exact place of residence, nationality, etc.), and at last, but not least, they have to provide a functioning and valid e-mail address, which must be under their (and only their) control. No CG can be registered and activated without a valid and functioning e-mail address!

The CG itself is a pair of a login-ID and a password which can be used to access those services of the website <u>magyarorszag.hu</u> in an identified, logged and decisive way, which require authentication.

It is very important, that a CG is strictly connected to the one, single person, who created (registered) it. No one is allowed to administer the cases of any other people via his/her own CG. This has caused some misunderstanding and confusion in the past, because obviously there are some people (accountants, advocates, etc.) who administer the cases of other people. The solution is: those, who administer the cases of other people, have to create multiple CGs, as many, as many clients they have and wish to (or are obliged to) manage their cases electronically − each one with a valid mandate from the person, in the name of whom the CG will be created. The only problem with this is, that only a person's first CG is free-of-charge, other CGs may only be created for a fee of 2200 HUF (approx. 8 €) apiece.

Identification in the process of creating a CG is done by the organisation, which is entitled by the Hungarian Cabinet to handle the data (the central organisation is the Central Bureau of Public Administration Services and Electronic Public Services, in the counties and in the capital, the databases are maintained by the Government Bureaus, and locally by the notaries of the local self-governments; the database is fully online-

maintained, and operational 24/7, this way always up-to-date)²¹. The data provided is also stored here, and may only be used for later authentications in connection with the usage of one's CG.

In case of actually using the CG, after a successful authentication, this organisation mentioned above, only provides the following data to the requesting (public administrational) authority and/or organisation: the name, the e-mail address, and a separate code of the user of the CG. (This separate code may not be a universally usable identification code, and may also not be a code derived from any or more of the natural identification data provided by the owner of the CG.).

As it may widely be known, identification (technologically speaking) can be made 3 separate ways, at the current level of technology: knowledge-based (for ex. passwords), possession-based (for ex. magnetic cards) and feature-based (for ex. DNA-sample, fingerprint, etc.). The AEPS recognises these exact 3 methods in public services.

In the aspect of security (the security level of authentication) AEPS uses 3 methods again. Basic form is the low-security level authentication, and there is a separate high-security level authentication and middle-security level authentication.

The most widely used form is the low-security level authentication, which is the CG itself. In case a regulation does not order otherwise, it is to be used when performing any electronic action required to an electronic public administrational procedure or to using an electronic public service.

No one may be obliged to use higher security level of authentication, than low-security level, unless ordered by a legal regulation. Higher security level authentication exchanges low-level security authentication, but in case, it is not ordered by a legal regulation, it may only be done so on a "volunteering basis" (if the client volunteers).

According to AEPS, the next level (in importance and in rank) is the high-security level authentication. This means using at least two separate ways of identification. One has to be the knowledge-based, the CG itself (which is, as we have seen a pair of login-ID and a password, thus perfectly matching the criteria for knowledge-based identification), and the other has to be either a possession-based, or a feature-based identification. According to AEPS, possession-based identification, while performing actions in an electronic public administration procedure, or accessing electronic public services, may only be the use of an e-signature, handed out especially for public administrational purposes, and being of at least increased security level. Although it is not written explicitly in this Act, but it is a fact, that if both (possession-based and feature-based) identification methods are present besides a CG, it is also a high-security level authentication. This fact is on one hand logical, and on the other hand, it can be derived from the technological background too.

To sum it up: high-security level authentication is:

a CG+

http://www.nyilvantarto.hu/kekkh/kozos/index.php?k=adatszolgaltatas hu a nyilvantartott adatok kore s zemelyi – website accessed 23rd January 2011.

²¹ According to the website:

- e-signature (specially designed for public administrational purposes, being of at least increased security level), or;
- feature based identification, or;
- a) and b) together, at the same time.

It's easy to recognise the presence of e-signature. To sum up the rules of the APAP and the AEPS: e-signature may not be used today in Hungary, directly and solely to take actions in an (electronic) public administration procedure; only to take part in the authentication process, or later on, during the procedure, but there too, only after logging in to one's CG (if the sending of the documents requires a genuine form, or is regulated so by an Act).

The AEPS speaks about the middle-security level authentication too, as a completely separate way of authentication. According to AEPS, it consists of a CG + a single-time-usable identification code, where this code has to be sent to the user of the CG (the client) at a channel, which is perfectly separated from the Internet (for ex. in an SMS). It is the third in rank and importance, but in my opinion, it will soon become the first one, because its being higher, than a basic-level authentication, yet obviously being far not as expensive, as high-security level authentication.

But all of this is just the authentication (not administering a case) yet.

To sum up all the rules, it's perfectly clear, that the CG can not be by-passed nor in authentication, nor in administering a case electronically today in Hungary in a public administrational procedure (because it is part of all the three possible ways of authentication, and is also required to administer a case, and to take legally effective actions in a case – these latter to be presented later in this paper).

A big advantage of CG furthermore is that if one enters to the official website of Hungary via his/her CG, and steps on to an other related (and connected) website of a (connected) authority from here out, the person remains authenticated on those websites too, and can administer cases on those websites in an authenticated manner (this actually is OneStopGov).

1.1.2. *The Authority Gate - AG:*

The Authority Gate (AG) is basically the "authority version" of the CG (with the necessary and obvious differences). According to the AEPS: "Authority Gate ensures, that the organisations, which are connected to the CS, access the documents sent by them or to them, in a logged way. Receiving and sending documents via the AG may happen manually by the authenticated and entitled people (also called: "on-line"), or automatically by an identified computer (also called: "off-line"). Connected organisations have an organisational post-box, provided by the CS. This is a strictly short-term container area (for obvious reasons). Clients have to be allowed to access certain and defined points of the document-management systems of the organisations connected to the CS, so that they can monitor the history of their cases."²²

²² AEPS section 25

Organisations with an AG may oblige their employees to register a CG, solely for the purpose of that being registered to the AG (one can say it is a "non-private CG"). This second CG of these people concerned (but only of these people) is also free-of-charge (for the reason of equal rights). These CGs have to be handed over to the person (the AG administrator), whose task is, at the particular organisation, to create and maintain the AG of the organisation in question. His/her task is to create the AG, and to ensure, that the CGs of other employees, who use the AG, are registered to it. In case a person, whose CG is registered to the organisation's AG, loses the right to use the AG because of any reason (dies, leaves the organisation, etc.) this person mentioned above (the AG administrator) also has the task to ensure, that that particular CG is unregistered from the organisation's AG.

Several security measures ensure the security, integrity and safety of the AGs:

- computers accessing the AG have to have a fixed IP-number (so not a dynamic one);
- CGs of the administrators accessing the AG have to be registered to the AG;
- technological background for receiving and sending documents via the AG is ensured by the Secure Electronic Document-forwarding Service (SEDfS) – a software to be described later in the paper), and;
- the softwares called "General Form Designer" (GBD) and "General Form Filler"
 (GBF) in those cases, in which the use of electronic forms is required.

The GBD and the GBF are the sole softwares usable in electronic contact, if the contact requires the usage of forms (and in public administrational procedures it most often does).

The CS only recognises those forms as "official", which were designed with the use of GBD and filled with GBF, to ensure uniformity. The CS embeds the identification data of the authority in question to the forms, using a so called "prefix", which is an integral part of all the forms designed with GBD. This happens in order, so that "mis-sendings" may be avoided. GBD is only available via an AG, while GBF is available freely to anyone (also without an authorisation). So only authorities may possess the GBD, and anyone (even a person, who does not have a CG) may possess the GBF (this is because the forms in the GBF are totally similar to the printed forms used by the public administration; so they may be printed empty from the GBF and used as forms even in the paper-based procedures – filled with a pen).

The GBF, and the forms stored within it, are updated automatically, every time the program is started, in case there is a new version of the program or the form. Because the forms are modular-built, only the updated module needs to be downloaded again, not the whole form. (This system had functioned very well in the area of the electronic way of personal tax-income refunds for years, even before 1st October 2009. The present system of forms is mainly based on that idea and solution.)

The possibility to connect to the CS is not absolutely evident, not even for those organisations, which are obliged to connect to it. The organisation has to go through a qualification process, carried out by the National Media and Infocommunications Au-

thority (NMHH – the authority keeps the abbreviated form of its Hungarian name as-it-is, even in international contacts). This qualification is a precondition for connecting to the CS, but furthermore, it is not only a precondition, because there is not just a preliminary qualification, but other qualifications are also carried out with time, on a non-regular basis too. In case NMHH finds out, that an organisation does not meet the requirements anymore, it also has the right to delete the organisation's connection to the CS, which is more than displeasing, because the organisation, obliged to be connected to the CS, finds itself this way in a breaking-the-law situation (it has to be connected to the CS, but it is not / it can not be). This is a very strong argument for the organisations, to always be up-to-date technologically, and to always meet the requirements.

1.2. The present - rules of the AEDOD (in effect since 1st January 2010.)23

The other law, in relation to the topic is Act 52. of 2009. on electronic delivery of official documents and on electronic receipt (short form: Act on Electronic Delivery of Official Documents – abbreviated form: AEDOD; effective since 1st January 2010.). This Act lays down the most important rules concerning the technological background of all the processes, procedures and services, analysed above (in chapters 2.2. & 2.3.).

The rules of this Act must be followed, if an Act makes it obligatory, or an Act or a decree of the Cabinet makes it possible to send official files electronically, in any kind of authoritical procedure (including judicial, public administrational or any other kind of authoritical procedures).²⁴

These rules mentioned above need some more refinement, because they don't actually describe the present state of all authoritical procedures. The reason for this is that, although AEDOD covers judicial procedures too, the rules of AEPS don't cover them yet. They only will do so from 1st January 2012.

Therefore judicial – and relating – procedures are done by a completely different method nowadays, which is still based on the use of electronic signature. This anomaly in the practise will be resolved at latest by 1st January 2012, when the rules of AEPS will also cover judicial – and relating – procedures.

From that time on, those procedures will also have to be made according to the legal and technical method described in this paper.

Anyway, according to the rules of AEDOD, a file, document, or any other electronic data must be considered "official file", in case:

- an authority has it delivered to the client, electronically, with a legal effect, or;
- authorities have it delivered to each other, or;
- the client has it delivered to an authority;
- according to the rules of this Act.25

²³ All legal quotations in this chapter are from Act 52. of 2009. on electronic delivery of official documents and on electronic receipt (AEDOD); quoted sections are: 1-7. – as of in effect 1st January 2011.

²⁴ AEDOD section 1, (1)

²⁵ AEDOD section 1, (2)

1.2.1. Electronic documents

According to Hungarian laws, there are two types of "official" or "quasi-official" documents (files), in any relations (natural persons (or legal entities) to natural persons (or legal entities); natural persons (or legal entities) to authority; and vice-versa; and authority-to-authority). One of them is called "notarial document" – this is the type of document, which was created by an authority, with a legal effect, with full legal proving power, made according to the regulations effective on the authority in question, and provided with all the necessary formal details (signature, stamp, etc.). The other is called "private document with full legal proving power" – this is the type of document, almost the same, as the one mentioned above, just with the difference, that it was created by a person (natural person or a legal entity). The point and the essence in both of these documents is, that they come with some kind of legal effect, and have full legal proving power (unless they are disproven).

It is important, to know these rules, because both exist also in electronic form in Hungary since 1st January 2010. According to the rules of AEDOD, any document has to be considered "electronic notarial document", in case it was made to be delivered via the CS – more closely with the technological assistance of the authority called National Electronic Delivery Service (NEDS) and in the technological environment of the SEDfS – by an authority entitled to create "notarial documents", to the client or an to other authority, and what the most important is: even without the authority's e-signature!²⁶ The "receipt of the recorded delivery" and the "acknowledgement" (to be analysed later) are also to be considered so. On the other hand (on the client's side) any electronic document has to be considered "electronic private document with full legal proving power" in case it was made to be delivered via the CS – again with the technological assistance of the NEDS and in the technological environment of the SEDfS – by the client to an authority, even without the client's e-signature!²⁷

On the other hand, it is also possible to send electronic documents via the CS embedded with an e-signature of at least increased security level; and an Act can also make it obligatory.

To sum it up: e-signature is not put totally aside in Hungarian electronic contact (in the public administration sector and in public services), but has been quite (or we could say: mostly) ignored since 1st October 2009.

The electronic forms of these documents are legally absolutely equal to the paper-based forms in all aspects (legal effect, proving power, etc.). It is also important, because – according to Hungarian criminal law – forgery and/or falsification of (electronic) notarial documents is a crime and the use of forged / falsified (electronic) private documents with full legal proving power, is also a crime!

²⁶ AEDOD section 1, (5)

²⁷ AEDOD section 1, (6)

1.2.2. *The NEDS*

Ensuring the technological background of sending and receiving (official) electronic documents is the responsibility of the State. This task is performed by the authority called National Electronic Delivery Service (NEDS), which is an organisation under the authority of the organisation, which operates the CS (the ministry (minister) responsible for public administration informatics). The main tasks of the NEDS are:

- to deliver the (official) documents marked by the sender as "deliverable" to the recipient;
- and to attest the delivery and other circumstances to the sender and the recipient, in a legally proving way.28

The tasks of the NEDS are performed by the technological background of an IT&C solution (basically a software) called: Secure Electronic Document-forwarding Service (SEDfS). This receives the electronic documents, sent by the client in an electronic procedure to the organisations connected to the CS (under a mandate issued by the connected organisation). It also receives and forwards the reply-documents created in the procedure by the authority connected to the CS, to the recipient client. The SEDfS is available for the clients via the CG (or in possession of an e-signature, also without a CG, through the official, central website of Hungary), and via the AG for the authorities connected to the CS (on-line, or off-line).

NEDS (and so the SEDfS) performs an IT qualification process on the form marked by the sender as "deliverable" (note and remember, that only forms created by the GBD and filled with the GBF may be used). In case the form checks out OK, the NEDS (and so the SEDfS) houses the form into its IT system and puts a time-stamp onto the form.²⁹ (Other documents – which are not forms – are not qualified by the NEDS, only housed and time-stamped.)

NEDS (actually the SEDfS) sends an electronic acknowledgement to the sender (the client) about the housing. This is important, because this electronic acknowledgement comes also with a time-stamp.³⁰ Time-stamped electronic acknowledgements can turn out to be very important to the client later on, because, according to the AEDOD this is an electronic notarial document, which is to testify, that at the exact time of the time-stamp, the document the client sent, is to be considered as "delivered" (and not "to be delivered yet" or "deliverable", but "(already) delivered") to the authority (even if the authority opened the file some time later). Because of its feature described here, it can prove whether the client considered and kept the deadline, or not; and this is independent from the fact, whether the authority opened the file, or not.

On the authorities' side the NEDS (actually the SEDfS) sends an electronic receipt of recorded delivery to the authorities, right after the client opened the document (so, the difference: not at the time of housing, or delivery, but at the time of opening by the client

²⁸ AEDOD section 2, (1)

²⁹ AEDOD section 3, (3)

 $^{^{30}}$ AEDOD section 3, (4) – (5)

– in case presumption of delivery has not happened yet – see later). This receipt is to testify (to the authority) that the client actually opened the file sent to him/her, and the exact time of opening (again with a time-stamp). This receipt must include (at least) the name (or other identification data) of the sender and the recipient, the number (or other identification data) of the case, a reference to clearly identify the electronic document, and a time-stamp, testifying the exact date and time of opening.³¹

Authorities, connected to the CS and sending electronic documents, are obliged to do that via their AGs, while on the other hand, clients, receiving official electronic documents, are obliged to do the opening via their CGs.

Official electronic documents, sent to the client, are stored at the short-term container area of the CG, for 30 days. In case the client enters his/her CG, opening of the electronic document can be made by opening a link, pointing to the document. Opening this link is the time, the electronic receipt of recorded delivery, is generated. The recipient may open the file, and download it to his/her own computer, or put it into the long-term container area of the CG (for ex., in case he/she is abroad, and has no access to his/her own computer). - This whole "process" is called "normal delivery".32 In case the recipient does not erase the document from the short-term container area of the CG, the document auto-deletes itself after 30 days (no matter, whether the recipient downloaded it / put it into the long-term container area, or not; and furthermore (and more importantly): no matter, whether the recipient logged in to his/her CG, to at least view the document, or not). Connecting to this very strict rule, the AEDOD states: "NEDS has to make sure, that the informational details of the documents, which would have required acknowledgement (receipt), but were not viewed by the recipient within 30 days, and so auto-deleted, have to be available for the recipient for a period of 1 year (from the date of delivery)."33 This way, recipients may ask the authority in question, to re-send the document, even after the 30 days, within a 1-year period (although the legal consequences, for ex. the calculation of the deadlines, start after the fifth workday after the delivery - this to be explained yet).

Recipients get a notification to their e-mail address (provided at the time of the creation of the CG) immediately, that an electronic document has been delivered into their short-term container areas. In case the recipient does not log in to his/her CG, and does not view the document, he/she gets an other notification in e-mail, 3 days after the delivery. If NEDS possesses any other means of contacting the recipient, the recipient may ask for this other form of notification too (for ex. SMS). Sending and receiving these notifications does not have any legal effect!

In an authority-to-authority contact, the rules of sending and receiving documents in an electronic form, are the same as above (with the obvious and necessary differences).

1.2.3. Presumption of delivery and changing the method of delivery

³¹ AEDOD section 4, (4)

³² AEDOD section 4, (4)

³³ AEDOD section 6, (3)

If the recipient does not log in and does not view the document for five workdays (this "five workdays period" starts on the workday after the day of delivery to the short-term container area), the document has to be considered as "delivered" on the next workday (presumption of delivery)³⁴. A notification on the presumption of delivery is generated and sent to the sender and also to the recipient. As I mentioned above, although the document rests in the short-term container area for 30 days, the legal effects are bound to this presumption of delivery (for ex. calculation of the deadlines).

AEDOD also says that if the clients have their official documents delivered electronically, they have the right to ask for paper-based delivery based on a weighty reason once in any given procedure. If the authority agrees to this request, returning to electronic delivery is not an option any more in that given procedure. If the client does change the way of contact, he/she may not ask the authority, to re-send the documents once sent to him/her, in case these documents have been "normally delivered" (regardless to the form of the normal delivery (paper-based or electronic)).

On the other hand, there is one exception. If the client changes the method of contact from electronic to paper-based (but not vice versa!) he/she may ask the authority, providing a weighty reason, to re-send those documents (on a paper-basis), which have already been "normally delivered", but only under the condition, that legal effects are bound (henceforward too!) to the "normal (electronic!) delivery".³⁵

1.3. Government-windows (single points of contact) – GWs

Although this topic is not an "electronic contact" topic literally, it does have some relevance to the topic of this paper. According to the rules of Act 126 of 2010, government-windows have been set up on the 1st January 2011 – these are related to the "OneStop" idea rather than electronic contact. There are 29 of them, for the time being, and these "single points of contact" administer 29 different cases for the citizens and for enterprises too, as integrated client service offices of the Government Bureaus. They operate with a lengthened opening time (12 hours daily, between 8 am and 8 pm). Clients – for example, amongst other cases – can make their CGs here, administer cases concerning enterprises, various subsidies, ask for general information, and ask for legal help too. The tasks and duties of these GWs are described in detail in the Decree 288/2010. (21st Dec.) of the Cabinet.

Hungary has had an obligation based on 2006/123/EC – European Service Directive to form these kind of "single points of contact" by the end of the year 2009 – so our state was a year late. On the other hand, the EU Directive only makes this an obligation in relation to enterprises, but not for the citizens – no EU legal norm makes us (or any other EU country for that matter) obligated to form "single points of contact" for the citizens – so in this aspect, Hungary has exceeded the expectations.

³⁴ AEDOD section 6, (1)

 $^{^{35}}$ AEDOD section 7, (3) – (5)

2. Geographical scope

The geographical scope of this show-case concerns the total area of the Republic of Hungary, as it tries to introduce the legal and technological background of the Hungarian public administration procedure, as it is – or should be – managed in the whole country.

3. Stakeholders

Stakeholders of this solution could be (should be) the entire Hungarian population (either as public administration managers, or as clients).

On the other hand, this is not the situation. There are only about 970.000 CGs registered (as of October 2010).³⁶ This would mean ~10% of Hungarian population, if a person could only have one CG.

But again, that's not the case. Since people may have more than just one CG (and some people, who require to have more than just one for their work, mostly have several CGs (3, 4, or even more)), the accurate and actual number of people having (one or more) CG(s) may not be exactly told.

According to the best assumptions, it is somewhere around 600.000 – 700.000 nowadays, so about 6-7% of the Hungarian population has access to the full scope of the present state of e-government (meaning only the centrally regulated cases, but not including the locally regulated ones, which have the chance to be regulated totally separately from the central version; with no central register, thus no data of any kind may be provided in that aspect, not even assumptions).

But even out of this 6-7%, only a part of them uses the possibilities of e-government regularly. The best bet (an assumption again) is that somewhere around 300.000 – 400.000 people use e-government on a regular basis; most of them living in the capital, and in the 5 largest cities of Hungary.

4. Obstacles and problems encountered

Several key problems make it hard to operate e-government at a full (or at least at a significantly larger) scale in Hungary. Technological, financial, and human problems also appear.

4.1. Technological problems

A basic technological problem in Hungarian society is that only ~52% of the households have a PC at all, and 50% of the adults do not use a PC anywhere in any situation regu-

³⁶ According to https://edemokracia.magyarorszag.hu/forum/posts/list/499.page#143027 – website accessed 23rd January 2011.

larly. Internet-penetration is also about 55% in Hungary³⁷ (these figures are in close correlation, the usage of Internet, and the need to use it, has "pushed forward" the purchase of PCs). These figures also mean that almost 50% of Hungarian population does not use a PC, and so does not use the Internet at all (or very rarely). Anyway, PC- and Internet-penetration is much higher in the capital and in the 5 largest cities (over 70%), than in rural areas (below 40%). This problem is in correlation to the fact of the lack of interest (which is a reason of course, too), but also to financial and human problems too.

4.2. Financial problems

PCs are expensive. Not absolutely of course, but relatively. The average net income in Hungary is about 140.00 HUF (about $500 \in$) a month, in the case of workers (with huge variations in income, as well as according to place of residence). In the case of nonworkers (unemployed, on pension) it is only about the half of the amount mentioned. Cheapest (yet functionally useable) PCs come at a price of about $250 \in$ each (only the PC itself, not to mention the display, the mouse, the keyboard, the speakers, and more importantly: the software, etc.) – so at least a month's income for non workers and a half month's income for workers (if they are lucky to live in an area, where their incomes reach the average)... The figures speak for themselves... Other problems are the prices of the Internet service providers; the prices vary of course, but the cheapest, yet useable broadband Internet-access is about $20 \in$ a month; but it is available only again in the capital and in the 5 largest cities. In the far rural areas, it is not a rare thing, that a person has no chance at all to reach the Internet – simply because there's no provider. And even if there is one, they usually abuse their monopole situation, providing Internet (slow, not trustable, non-broadband) at horroristic prices... The figures speak for themselves again.

4.3. Human problems

Hungary's population – as many others in the developed western countries – is an aging one. More than 40% of the population is above 40 years of age, whereas only less then 20% of the population is below 20 years of age. Elderly people usually hardly adapt to new technologies, especially, if they have a low education, a low income, or live far in the rural areas, where they hardly have any access to new technologies at all. These people make a significant part of Hungarian population; next to them the people who are not (or not so) elderly, but don't feel the need for new technologies (especially people with low education, and living in the far rural areas).

4.4. Educational and "marketing" problems

³⁷ According to http://szinte.wordpress.com/2010/04/29/internet-penetracio-2010/ - website accessed 23rd January 2011.

No (or very little) real legal, organisational and technological education is provided for the most of the population of Hungary; only at colleges and/or universities dedicated directly to those kinds of studies. E-government is even less concerned even in these institutions, because there are a lot of teachers and professors, who themselves don't use and/or understand IT&C.

On the other hand: central government does not market e-government well. There are no posters, radio-, or TV-spots, nor ads on the Internet at all, to popularize possibilities and ways of e-government. Most people only learn about this possibility, if they go to some kind of higher education, where technological, organisational or legal aspects of e-government are explained to them in detail (for example at our Faculty); or in case a friend or a relative tells them about it; or – which is the worst case – they only find out about it "on the spot", when they are in a situation, where they should use it – and they have to search for the knowledge by themselves and in a rush.

5. Problem-solving approaches

Use of PCs and Internet is taught to students of primary schools and of secondary school now; but they are yet a future generation (not the one, which would be (or should be) using these possibilities now) – their situation will of course be much easier this way, when they grow up.

Problem-solving approaches (concerning adults, or even elders) exist only in separated initiations in Hungary, carried out mostly by civil organisations, which try to educate rural people, and people with low education, to the use of PCs and Internet (for example the John von Neumann Computer Science Society, which regularly organises trainings for elderly people all across the country, with a non-profit (or low profit) budget); and there's the network of tele-houses too (mentioned and explained in chapter

6. Results

Current state of e-government in Hungary – according to my opinion – is good. As a lawyer and a researcher, I was a witness of the previous version too, which was quite incoherent, secondary and not too logical either – entitling the citizens to choose from a variety of forms electronic contact; which made it expensive, and hard-to-catch-up-with for the authorities. Current version is much simpler, logical and cost-effective.

It is being utilised in a growing scale (about 6-8% of all the public administration affairs are managed electronically, compared to the less then 5% utilisation rate of the previous version, which is a good rate of change).

Anyway, according to a survey, 60% of clients (or future clients) liked the idea of egovernment solutions (mostly because it's easier, quicker, cheaper, more comfortable), and are willing to manage all the possible cases via electronic contact; 35% would partly use it, partly not; and only about 5-7% of the clients asked said, that they don't want to

use e-government solutions at all, and will continue to stick to paper based management, and personal appearance.

I believe, this is a good result, which will surely encourage all these people (and people they come in relation with) to use e-government solutions.

7. Success factors and lessons learned

Success may not be considered total, until every citizen is able to (and/or willing to) administer all the imaginable cases via electronic contact, and only those cases remain paper based, in which electronic version may not be imagined. But such a grand scale of change will most likely happen in a time-horizon of decades.

All the problems mentioned in chapter 6 should be solved – or at least tried to be solved – which is – the way I see it – not a true priority of Hungarian Government nowadays, especially because of Hungary's quite poor economic situation.

The greatest success factor would be for the Hungarian Government to really consider these problems, and give a good solution to them (mostly through education (not only in schools, but also outside of schools – for adults and mostly for elderly people) and by providing possibilities so that everyone could have a computer with Internet access). Tele-houses are a good initiation, but are not really a solution.

I believe, the most important lesson learned is, that one can not change a society (let alone not the attitude of a society) in a matter of a few months, or even in a few years.

Upcoming generations (people, who are now about 20 years of age (or younger)) will be the real beneficiaries of these new systems and techniques. Until then, we have to make sure, that the present adult generations are prepared and trained to use currently available aspects of e-government; also in order to better the services in the long run, so that upcoming generations will be able to use a mature version, by the time they grow up.

8. Summary

The most important about this show-case is to understand, that electronic public administration procedure in Hungary is mostly only a possibility, not an obligation (an obligation only in a small part of all the cases, mostly for organisations).

It will truly become a viable alternative, in case more public administration affairs will be obliged to be handled electronically, and even more, in case the affairs will be managed totally electronically (where the decision is also made by a computer, not only the file transfer). But this can not be implemented, as long as PC and Internet penetration is not much above 50%, and almost the same amount of people don't know how to use a PC, and/or the Internet.

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