

Inclusion in the Information Society - Now!!



Quality of life, digital equal opportunity and social revival in Hungary

Status report, best practices and action plan

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Introduction

There has never been an eInclusion, the information society inclusion report carried out in Hungary. This is the first report of scientific and documentary character in our country which analyses the issue of information society from the points of view of those who have failed to join it so far. In Hungary the development of the information society started with Sulinet, when thousands of members of different generations entered the modern world in an organized way. This so-called "ascending system" met the forms of the new technology, in which the information and social technologies gradually spread from the scientific-social and economic elite downwards in the society.

However, the development of the information society is not only a process of positive impact. While not everybody is a member of the net society, it can be stated that **the tendencies of the information society affect everybody**. In order to form a realistic image it is required to see more precisely the tendencies of the increasing social exclusion generated by the information and communication technology, all the more so because **in Hungary the gap** in the usage of IT devices has also been **widening**.

Hungarian civil organizations, libraries and cultural institutions acted first with due consistence in closing the digital gap. It was regrettable that even the Ministry of Informatics and Communications which became defunct last year could not change these new symptoms of the division. The European Union (and also the USA and several Asian governments) has been supporting the aspiration for nearly a decade that those who have remained stuck in the more disconsolate side of this gap should join the millions of Internet users on the other side. This is the reason why **the year of eInclusion** will take place in 2008, and the so-called **Riga Declaration** was accepted by 32 European leaders last year according to which the digital divide between the groups at risk of exclusion (the elderly, the unemployed, the disabled) and the majority of the society should be decreased by half. Further tasks are the expansion of broadband access - which is a fundamental tool to provide equal opportunities relating to the information society for the people living in backward regions - and the complete accessibility of governmental web pages - it is important primarily for the groups at risk of exclusion.

In our opinion, Hungary has been investing quite a lot of money (but perhaps not enough) in technical investments and developing networks but in

fact it has spent negligible amount of money on opening up the possibilities and new prospects of the Internet for the disadvantageous groups of people who - owing to the new possibilities - would be able to change their lives and improve their quality of life. Investment in human capital has been missing again and again, from the New Development Plan as well so far, and the active participants, citizens, councils and individuals who are worried about the future and the passing generations cannot see the signs of strategic governmental actions which put the human in the centre and inspire better quality of life and active deeds. **The life of an individual is not a marketability, social or health issue.** Happiness, security or keeping personal relationships cannot be measured by returns and profit rates. But we do think that Hungary cannot give up the improvement of the quality of life of 3,000,000 people over 50 years who do not use the Net yet.

Informatics is a tool for the equal opportunity, but now we cannot see if it is a real part of our lives, the fundamental idea of the decision makers and the basis of governmental actions. Together with the leaders of the European Union we ask the Hungarian decision makers to leave the classical, decades-long attitude behind according to which disadvantageous situation is a question of health, social or employment issue. It is lot more and less than this: it is **a question of quality of life**. We presume that the general skill of Internet usage - which is recommended by civil organizations of informatics - would carry Hungary a step ahead. Active, thoughtful citizens would be integrated (in the information society), the market of informatics would be wider, and our citizens would become more well-informed, civilized and responsible.

During the years after the political transformation Hungary has not spent even the price of 300 meters of highway on the digital accessibility of the lives of disadvantageous people (the elderly, people living in the countryside, minorities, and the disabled). We would like to live in a modern, developing country. To strengthen this development more than half of the population cannot be abandoned. They should be a part of the modern and dynamic Hungary. Now!

Gabor Dombi – Szilard Molnar

June 2007

Executive summary

In the past few years besides the slow pace of the development of the information society the digital division of the population has been widening in Hungary. Unfortunately the possibility is given that the country will be definitively divided in cultural sense. **Sixty percent of the adult population is digitally illiterate**, and moreover, the majority of the excluded do not have a direct connection with characteristic tools (computers and the Internet) or with people who use them on a regular, daily basis. It all results that a significant part of the population is not aware of the advantages they can obtain from the digital world. Surmounting the lack of motivation and interest deriving from the aforementioned phenomena is a hard and long-lasting task. It might be the reason that after governmental infrastructural development carried out with relatively good results – for instance Sulinet, eHungary points, e-administration (Ügyfélkapu) – other social investments, training and motivation projects have failed to appear which would **surmount those obstacles of culture and knowledge which are the most responsible for the digital gap**.

In order to achieve for the European Union the leading role of global information economy it is indispensable to aspire to full employment and the highest possible level of **social cohesion** – with parts such as social protection and **social inclusion** – and these are supported by the Union by all disposable means. Developing competitiveness now definitely requires **the development of investments in human capital and the ability of the social application of the new technologies**. According to an announcement of the European Commission in 2005 the increase of the general level of qualification of the labour force by one percent might increase the annual rate of growth of the EU even by 0.3 and 0.5 percentage points.

The failure of the Lisbon Strategy was brought into the focus of the European public opinion and the decision-makers of the Union by a report of a group of high-level lead by Wim Kok, former Prime Minister of the Netherlands in November 2004. Apart from the shocking evaluation the report intended to transfer a positive meaning: it did not consider the ambitious aims exaggerated, but it criticized the Union for the lack of appropriate actions. The report emphasized the importance of **lifelong learning** and attracted attention to the social problems which the strategies of the information society should take into

consideration, primarily the unfavourable demographic tendencies which **lead to the ageing of the societies.**

The real **breakthrough in this field was only brought by the international Riga Ministerial Conference in 2006.** In the frame of the so-called Riga Declaration last year 32 European leaders declared the necessity of the narrowing the digital gap. **Therefore the Lisbon Targets for 2010 have been supplemented by other targets in the dimension of equal opportunity.** According to the first and most important target (1.) **the gap** which lies between the groups at risk of exclusion (the elderly, the unemployed, the disabled) and the majority of the society **should be decreased by half.** Further aims are (2.) the development of **broadband coverage** – it is a fundamental tool to provide equal opportunities concerning the information society for the people living in backward regions – and (3.) the **accessibility** of the governmental web pages fully accepted by W3C – it is important primarily to the groups at risk of exclusion.

Missing eInclusion political activity in Hungary

The studies carried out in Hungary up to now and the development directives set by the European Union can show that **everybody in Europe should face the urgent question of the digital social inclusion (eInclusion¹).** In the light of the domestic deeds it can be generally stated that official **Hungary has not yet paid enough attention to the necessity of eInclusion and to the directives suggested by the EU.**

Most of the organized projects affecting the digital social inclusion are results of civil initiatives which are either supported by public administration (local councils, ministries) or rather not. It can be clearly and unambiguously observed from the researches that the development of physical and infrastructural nets, and organizing ad-hoc projects offering computers cannot be considered as a solution in the case of such complex questions as digital equal opportunity and digital (electronic) social inclusion. Such economic, social, health and welfare policy would be needed whose originators and executors can leave the strictly defined frames of measures and competence, and **can treat the**

¹ We do not have a close Hungarian equivalent corresponding to the term of e-Inclusion. The concept expresses the social inclusion, the contribution to social cohesion via digital tools.

future of about 4.5 million Hungarian citizens as an urgent, complex question of the quality of life. EInclusion **cannot be defined as only** an employment, adult training, mental hygienic, health-related or social issue. The need of modernity and the digital society exceeds the scopes of ministries and the traditional way of thinking. Obviously civil initiatives react earlier to the new challenges than the governmental decision-makers even formulate the problem itself, but in Hungary it is still not trivial that the government treat the organizations ready to act as partners, and the lack of contact, the simple neglect of civil organizations and deprivation of their subsidy are general phenomena.

In order to stimulate a substantial follow-up in the question of digital social inclusion, not only those people should be convinced who have been excluded from the development of the Internet-world and get further and further away from it every day but those as well who want to realize the domestic expectations. **The guidelines and directives of this field set by the European Union have not penetrated the Hungarian (political) way of thinking,** and thus a way of development parallel with that of the Union is rather dubious.

Such cooperation between the Union and Hungary, civil and governmental spheres would be needed that could give an efficient solution to the real problem. **The lack of cooperation penetrates every level of the Hungarian society** and this hinders the efficiency of the reforms in preparation.

Expert studies carried out by the cooperation of civil and scientific organizations would like to attract attention to such necessary steps without which social modernization and digital social inclusion cannot happen. In our opinion it is necessary to inform the decision-makers, political and civil-social opinion leaders what kind of expectations the Union has set, what guidelines it has shown and how Hungary has met these so far. The year 2007 is the 'European Year of Equal Opportunity for All' in which the integration of the eInclusion issue would be an obvious and desirable process, and thus Hungary will be able to prepare for the Year of eInclusion in 2008.

We consider it absolutely necessary in Hungary to strengthen the motivation related to the information society among the members of the society, to introduce new ways of educational work concerning the Internet, to inform and prepare precisely the disadvantageous groups. In connection with it the system of adult education and training regarding informatics and information society is in

need of improvement, and the central and local educational initiatives would deserve support. Formulating such content of the Internet and bringing the existing ones into position seem necessary that offer solution, best experiences and contents regarding the problem of eInclusion for the disadvantageous target groups. Finally it deserves thinking what kind of stimulation can be used for the hardware supplier and Internet providers in order to make them offer cheap and reliable tools for the disadvantageous groups.

The breakthrough of the eInclusion policy

Considering that the digital gap is caused by a cumulative social disadvantage and, at the same time, is a cause of further inequalities, different programs, documents, analyses and proclamations are raised in order to resolve the problems of eInclusion (a social integration aided by digital facilities, adaptation, and admission). The eInclusion is only one aspect of the wide ranging political principles aiming to contribute to the social integration and unity. Being excluded from the information society does not lead necessarily to social exclusion, but people belonging to socially excluded groups typically access ICT tools on a restrained level. **EInclusion** might be the passage for certain groups to the social inclusion.

The expansion and, at the same time, concentration of the new functions of welfare policies show the change of approach which focuses **primarily on the groups threatened by social exclusion**. This can be considered to be of particular importance as **the diffusion of informatics can generate new social knick points and new social inequalities as well as intensify the existing ones**.

The diffusion (or non-diffusion) of modern information and communication (ICT) tools **raises important questions of social policies**. Utilising or not utilising computers, mobile phones and the Internet on a social level creates changes of as important fields of life as education, employment, health care, communication and administration appearing in everyday life. Online applications are spreading and become dominant: quick information gathering, contacting administrators, obtaining and filling out forms, tax return, bank transaction, studying, work and lots of other things become available through these applications. For that very reason these people who are either not willing or not able to access the ICT tools and not possessing the digital literacy which makes it

possible to use the Internet and mobile communication **on a regular basis** are getting seriously disadvantageous.

Naturally, the diffusion of the use of the ICT tools is not equally fast in each stratum of the society. It has become an important question for whom the access and use of ICT tools is assured and who are still excluded from it at the moment. This is described with the concept of the digital gap which "expresses the extent to which **inequalities develop between persons, households, market actors, institutions and geographical areas** along socio-economical levels and conditions, with particular respect to what kind of possibilities they have to access the information and communication technology tools and to use the applications of the Internet as widely as possible" (OECD 2001). As the definition above suggests, the possession and the use of the new information and communication technology tools became these days an important indicator expressing the social distances and social division.

In parallel with the early recognition of the society-(re)shaping power of the information and communication technology (ICT) tools, notions warning to dangers and risks also appeared. The dual image of society (information rich and -poor) and the uncertain questions emerging from the chances to access computers and information are thus replaced by a more tinted concept of the digital division. The expression generally means that remarkable differences can be observed between continents, countries, regions, institutions, organisations, households and individuals regarding the access and the actual use of ICT tools. A major benefit of the concept is that besides giving a more and more exact description of the phenomenon, it is also able to contribute to the development of the information society with sociological explanations and recommendations for practical solutions. This is the reason why it can be stated that:

1. The digital division is caused by a cumulative social disadvantage and, at the same time, is a cause of further inequalities. That is, the digital division cumulatively intensifies the existing social inequalities. This means that it is not a new phenomenon, emerging only in the information society (this fact is concealed by the term "digital"). The point is that due to different conditions – economic, educational, age, gender, place of living and the list could be continued – not everybody can equally access the modern info-communication tools, and even those who access them can not equally use/utilise the advantages of it.

2. **The digital division is a group of phenomena which is varying dynamically.** The diffusion of the ICT tools in the society can be best modelled with an S-curve. In its first period (the early diffusion) the division regarding the access was measured, in the present phase of sharp rise the differences between users and non-users are described, while in the last period of the curve (the phase of saturation) the stress will be put on the description of differences between users and the explanation of the causes of these differences. This implies that the social policy aiming to bridge the division has to consider the characteristics of the problems emerging at different levels of the diffusion process.

3. One of these characteristics is, for instance, that in order **to decrease the extent of the division it is necessary, but it is not sufficient to increase the chances of the disadvantaged to access the ICT tools.** Assuring the technology and the infrastructure is indispensable, but it will not convince people with unconcerned or rejecting attitudes to the achievements of the information society. **First, they should be convinced that** everybody has a place in the digital world (motivation), and **then they should be helped** (via adult education) to enter. A world of **online content** attracting and interesting for them and interactive services playing important roles in their everyday lives should be developed, and they should be assured **supporting services** which help them use and access the above. A kind of **digital world should be created which is useful and reasonable for them**, and a human infrastructure is to be established which works as an adaptor, connection between their demands, needs and the answers and solutions that can be given with the help of the ICT tools.

4. **The problem of the digital division will not be resolved even in the state of social saturation of the ICT tools.** Neither assuring the access, nor the usage becoming general decreases sufficiently the social division, because interestingly sharp inequalities can be observed within the users as well. One of the most important causes of this is considered to be the time how long somebody has been using the Internet. The old Internet users, who have been users for at least 4-5 years (who are generally, due to the casual chain, younger and more educated, and it is possible for the very same reason) use a broadband connection at a higher probability, search and use online services and contents which enrich their abilities, social networks and resources. It seems that digital

literacy and culture, the ability of online self-expression, the ability of thinking and problem-solving in terms of the network are all new kinds of knowledge and skills the acquisition of which should be achieved as soon as possible, regardless of gender, age, level of education, financial circumstances, ethnicity and so on.

5. For this reason, the **participation of the state, political decision makers, opinion leaders can be crucial in decreasing the digital division.** It does not mean that in every case related to these questions state intervention is needed, that only state intervention can achieve the bridging of digital division. It would be more than enough if these actors performed proactively, showing an example to demolish rejective, obtuse or uninterested attitudes which constitute an obstacle to the use of the network and the digital culture. **A fundamental condition of solving the problem is that actors of the public administration involve civil organisations working in this field into the development of programs, decision-preparation and the execution of the tasks. In Hungary, only a very low level of willingness to co-operate can be experienced so far.**

Reviewing the works of the most important international workshops and authors of the research of the digital division, it can be observed that the description of the informational inequalities is usually based on the following sociological dimensions:

- income,
- profession,
- education,
- gender,
- age,
- ethnicity,
- geographical position,
- disabilities ².

² However, the explanatory power of these variables is continuously changing, according to the level the social diffusion of ICT tools has reached.

It can be observed thus that, at the moment, the digital division is not a dual one, as in much more dimensions can differences proving to be steady be observed, and it is not digital either, because assuring 'the hard infrastructure', the mere physical access to computers and the Internet does not lead to a decrease in the social differences³. Furthermore, one of the most important experiences of the past few years is that ICT tools are not only engendering the division, but in many cases they can be effective tools of increasing social integration, equality of opportunities and employment rates.

It is not accidental thus, that **the concept 'e-Inclusion'** is increasingly replacing the expression of 'digital division' which gives a static picture. The concept behind the new term concentrates primarily not on the description of the new kind of inequalities, but much more on the formulation of solutions which can help to bridge the division by revealing the causes. It does not mean that ICT tools can solve the problems of poverty and discrimination, the inequalities deriving from the social structure, but that **the access and factual use of ICT tools, and online contents and services can contribute to the decrease in the social exclusion, and can establish equal opportunities of the participation in the information society.**

Despite the intentions, a lot of problems impede the decrease of the division. The emergence of newer and newer technologies (e.g. networks with large bandwidth, mobile technologies), the intensive increase of the digital literacy of old users compared to the skills of people who have entered recently, cultural and economic differences, the problems of the ageing of the society all lead to a new type of the digital division.

In August 2004 a document titled 'Rethinking the European ICT Agenda'⁴ was published. The document emphasises ten areas where the European Union should achieve a breakthrough in order to keep up to other continents and countries in the field of social and economic development and in order to the Lisbon Targets be realizable. The document defines the tenth area needing a breakthrough as follows: **"The eInclusion policy has to move from the target of 'access to everybody' in the direction of the target 'ability to everybody'"**. According to the recommendation, the EU should import the

³ Vietórisz Tamás warns that "hard infrastructure" cannot be a fundamental element of the development of the information society, because the success of the transformation depends primarily on "soft infrastructure", that is, the people and institutions (e.g. telecottages) who are able to use the ICT tools innovatively. For more details see: Vietórisz, Tamás: Optikai kábel és regionális fejlesztés. Információs Társadalom, 2002/4. p.63.

⁴ Rethinking the European ICT Agenda. Ten ICT-breakthroughs for reaching Lisbon goals. PricewaterhouseCoopers, The Hague, Augustus 2004

enhancement of the abilities necessary to use the ICT tools (that is, the skills of digital literacy) into the strategies. This is of the same importance as assuring the access to broad bandwidth, because lacking it makes the participation in the information society impossible to the same extent.

The lack of the knowledge necessary to use the ICT tools often appears in the form of attitudes of resistance against the Internet. According to surveys, about one fourth of the population of the EU **is not aware of the possible advantage** the use of the Internet could bring to their lives. Fighting off these obstacles will not be achieved by itself, the diffusion of the information society driven by the market is not enough in itself to make the use of the Internet attractive for the majority of the people. Providing general access appeared as a new concept in the European Union, which includes assuring the ICT skills as well. The fundamental knowledge must cover all the informatics-related, informational and critical skills which lift the appropriate orientation in the information and the ability of putting the information found into a proper context to a higher level. In a broader sense thus the point is the **assuring the access to the informational culture**, which, beyond the criteria of affordability, accessibility and usability, brings the attention to three further components:

1. assuring an access that is utilisable in a sensible way,
2. providing relevant content to the users,
3. sensible services and **useful help to those who need it.**

According to a document titled *'eInclusion revisited: The Local Dimension of the Information Society'*⁵, released in February 2005 by the European Commission, huge differences related to the use of ICT tools still can be observed within the European Union. In the period between 2001 and 2003 the gap between genders significantly decreased, and also the shortfall of the unemployed decreased, but that of **housewives, the elderly, pensioners and people living in the countryside** increased. The digital gap is the most significant in the dimensions of the level of education, the income and the age.

According to the documents of the European Union the social exclusion is a 'serious problem' which is **far from being treated with proper relevance** in the information society and in national strategies wishing to promote the

⁵ For more details see: http://ec.europa.eu/employment_social/news/2005/feb/eincllocal_en.pdf

development of the information society. Based on research experiences collected so far it can be seen that the problem of digital division is not resolved even in the state of the social saturation of the ICT tools, **so it cannot provide social policy with a comfortable position based on waiting.** On the contrary, it attracts attention to the fact that neither assuring the access, nor the use becoming general decreases this new type of social division to a satisfactory extent. The digital division cumulatively reproduces social inequalities, so social policy, or the actors who shape it, should be motivated to act as early as possible, if information society does not tend to be a society of the included and the excluded.

The real **breakthrough in this field was only brought by the international Riga Ministerial Conference in 2006.** In the frame of the so-called Riga Declaration last year 32 European leaders declared the necessity of the narrowing the digital gap. Therefore the Lisbon Targets for 2010 have been supplemented by other concrete - though slightly broad - targets in the dimension of equal opportunity. According to the first and most important target **the gap** which lies between the groups at risk of exclusion (**the elderly, the unemployed, the disabled**) and the majority of the society should be decreased by half. Further aims are the development of broadband coverage – it is a fundamental tool to provide equal opportunities concerning the information society for the people living in backward regions – and the accessibility of the governmental web pages fully accepted by W3C – it is important primarily to the groups at risk of exclusion.

At the same time, the Riga Declaration does not define which factual activities and from what resources should be carried out by the member states. According to a presentation held recently on a domestic professional workshop-conference, the toolkit of the EU consists of three fundamental elements, and similarly to other political objectives, these together can assure the achievement of the objectives. Both soft, incentive methods and hard, compulsive tools occur in this toolkit.

The Riga Declaration⁶

The European Parliament and the Council has decided on the 17th May 2006 that 2007 will be the European year of equal possibilities to be assured to everybody. The European year of 'Equal possibilities to all', by the intention of the European decision makers, is intended to support and give an impulse to the member states by supporting endeavours aimed at executing community laws in the field of promoting equality and forcing back discrimination.

The main aim of the initiative is the reinforcement of the social participation of groups suffering from disadvantageous discrimination by helping the member states and other affected countries (countries aspiring to join the EU, EES/EFTA States, West-Balkan countries) in executing community laws in the field of promoting equality and forcing back discrimination. In order to achieve this, the compatibility with other community actions and mutually complementary nature must be assured, particularly in the following fields: fight against discrimination and social exclusion, fundamental rights, education and training, culture and inter-cultural dialogue, youth, citizenship, immigration and right of sanctuary, and the promotion of the equality of genders.

The aims of the European year are the following:

Rights – Bringing attention to the rights of equality and being free of discrimination, and to the problem of multiple discrimination. Every human being has the right to be treated equally, regardless of gender, racial or ethnic origins, religion or conviction, disabilities, age and sexual orientation. The aim is that groups at the risk of being discriminated recognise their rights, and to attract attention to the existing European laws in the field of anti-discrimination.

Representation – Starting a debate on how the participation of groups suffering from discrimination and the balanced participation of men and women in the society can be assured.

Acknowledgement – easing diversity and equality, and celebrating their social contribution

Respect – Support of a more solidary society. Attracts the attention to the elimination of stereotypes, prejudices and violence, to the promotion of friendly relationships between all members of the society, especially the young and to the importance of promoting and disseminating the values establishing the fight against discrimination.

The ministers of the member states of the European Union were committed in the Ministerial Declaration signed in Riga on 12 June 2006 to the inclusive information society free of restrictions. In this declaration a Pan-European campaign in order to strengthen the use of information and communication technologies that can promote the fight against discrimination was ratified.

The document confirms that e-Inclusion will have a priority in the policy of the member states. Among others, the declaration also includes the following specific aims:

- ***to reduce the drawback of the groups at the risk of discrimination in the Internet usage to the half of the present state by 2010;***
- ***to increase the broadband availability at least to 90 percent in Europe***

⁶ Decision No 771/2006/EC of the European Parliament and of the Council of 17 May 2006 establishing the European Year of Equal Opportunities for All (2007) - towards a just society

by 2010;

- ***to assure the accessibility of all the web pages of the public sphere by 2010;***
- ***to establish common point of views and to develop recommendations regarding the accessibility standards, which can be obligatory in case of a public procurement by 2010.***

The Riga Declaration reflects a shift of emphasis in the policy of the EU regarding the information society in a direction which highlights the establishment of an inclusive European information society as a primary priority within the three priorities of i2010.

The framework of the realization of the policy is determined by the so-called (1.) Open Method of Coordination. According to this, state members agree on common targets, these are transposed into state level programs, the countries share their best practices of the field with each other, and the way leading to the achievement of the targets is supported by the methods of monitoring and assessment. The second group consists of the (2.) not obligatory standards and the slightly stronger constraint of community laws and recommendations. A third possible way of intervention is the (3.) mobilization of the common financial resources of the Union. This means primarily payments from the structural basis.

Introduction to the situation in Hungary

One of the most important problems and challenges of the information society of Hungary today is exactly the correspondence to the objectives required by the Union: that the advantages provided by the ICT tools be equally accessible to everybody and that the ICT tools help improve the **quality of life** indeed.

It is a sad commonplace that in Hungary the digital “transition” has happened only in case of a narrow stratum of the society: the majority of the Hungarian population has only acquired the know-how of the handling of mobile telephones. The representative surveys related to the use of computers and the Internet report that about half of the Hungarian population is definitely averse of the use of computers and the Internet, or any other ICT tool which needs interactivity. Refraining and rejection is not too probable to be medicated in a short term by voluntarism intervention. Every program aimed at developing the human abilities promoting the use of personal computers as a device can exert a measurable, perceivable effect in a long term period only.

The lack (based on the knowledge and the attitudes) of the usage of tools related to informatics steadily restricts all the objectives of market actors and the government which are aimed at securing the widest possible acceptance of the use of the Internet and other kinds of information services.

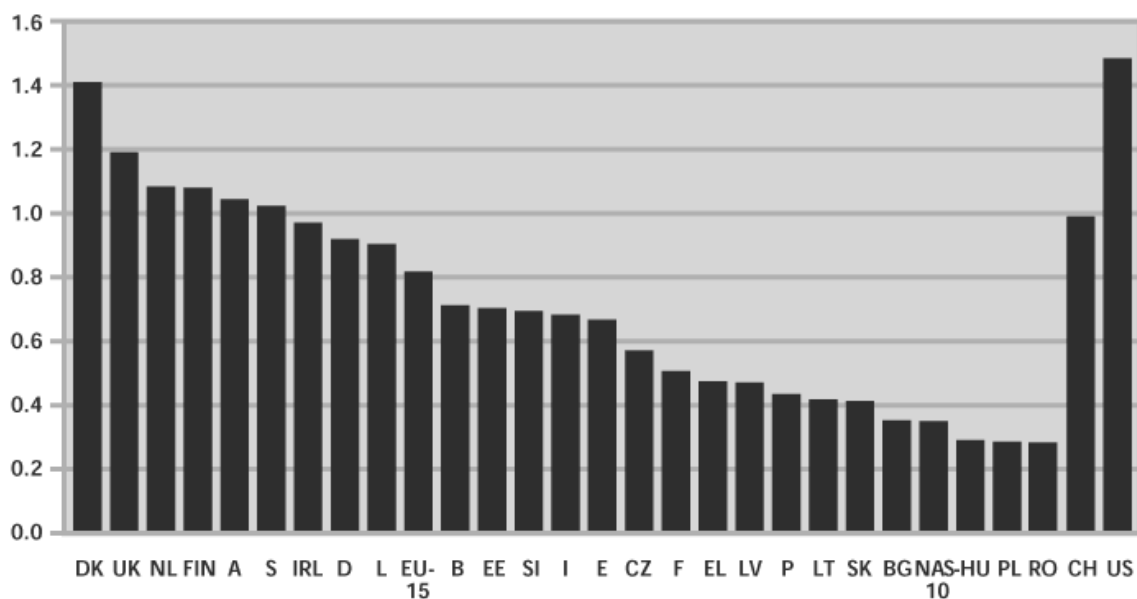
The low values of the basic access indicators, unfortunately, go together with a startlingly low digital literacy of the society. Around **two third of the adult population can not be considered to be a member of the network society**, and within this group, the majority has no relation at all with the characteristic tools of the information society such as the personal computers and the Internet. Very little is known about the expectations, needs of this huge part of the population in relation with the information society.

In the past two years **the sociological composition of the Internet users** and the PC and Internet penetration of the households have **hardly changed**. 53 percent of the adult Hungarian population did not use a computer in 2006, and 64 percent can not be regarded to be an Internet user, according to the estimations of the World Internet Project. An even more disquieting phenomenon is that within non-users the vast majority has no direct, personal

relation either to the characteristic devices of the information society, or to close individuals who use the Internet or use public e-services.

The shortfall of the country is not of new origins. At the time before entering the European Union there were analyses according to which examining the indicators of digital literacy the performance of Hungary was distressing even compared to the countries of the same region. The most comprehensive and in-depth research on a European scale in the subject was carried out between 2001 and 2003. The project known as SIBIS (*Statistical Indicators Benchmarking the Information Society*) was a comprehensive attempt to the renewal of the system of indicators of the European Union related to the information society. The Budapest University of Economics and Public Administration (today called Corvinus University) has also participated in the project. In Hungary, a small-size sample survey was carried out in the framework of the research project, and in 2003 the program was interrupted, but even so the results are exciting. From the research projects related to digital literacy, the above mentioned World Internet Project could also be highlighted.

The indicator of the digital literacy of the SIBIS consists of four components. First the skills related to the communication on the Internet were examined. Besides the use of e-mail and other online tools, the downloading and installation of computer programs, the questioning of the source of information deriving from the Web, and skills of targeted search were encountered, with each indicator being assessed values from 0 to 3. The index was named COQS-index which is an acronym created from the English names of the components. The figure below shows that Hungary performs worse than the ten new member states based on the compound index. The value of the indicator in the higher developed countries of the Union can be three-four times as high as in Hungary.



Digital literacy: the value of the COQS-index within the whole population
Source: SIBIS 2002-2003

Not more than 32 percent of the Hungarian population has attended any training in the past few years which also transferred skills related to computers. This rate is between 40 and 55 percent in the Scandinavian countries and even the average of the Union scores 40 percent. The situation is not much better in the field of the use of computers at work: only 29 percent of the employees use a computer at work, which is one of the lowest values in the Union, while the value of this indicator is above 60 percent in six European countries.

A report of the Eurostat published in 2006 notes that regarding digital literacy, the unemployed and certain minorities are the most lagging groups within the Union. Unfortunately, our country also excels in the high rate of digital illiteracy of the unemployed.

The data thus can testify on one hand that **digital gaps have been getting deeper for years in the Hungarian society, and the use of the Internet and the computers have not become accepted and a demanded everyday activity for the majority – that is, for two third of the adult population** – and, on the other hand, that infrastructural developments and investments by the government have not generated a transition of culture automatically and, therefore, **the country has definitely recoiled before the challenges of the information society.**

A remarkable proportion of the Hungarian employees works in a job where they simply do not need reading and writing at all, and one third of the adult

population reads a book less often than weekly⁷. It is a surprising experience, which also considerably reinforces the **parallel between digital and knowledge gap**, that the overwhelming majority (95 percent) of those who do not read books does not use the Internet for reading purposes either. The public expenditures spent on education amount to 5.23 percent of the GDP of the European Union, and almost amount to the 5.35 percent rate of the United States, but despite the expenditures, many young people are unable to acquire the necessary basic skills. Almost 20 percent of the 15-year-old European youth have only very moderate abilities in the field of reading and writing, and the phenomenon of giving up studies – about 16 percent in 2004 – also raises serious anxiety. Several, similarly distressing data could be cited, but this is enough to see that the rate of those for whom the cultural adaptation to the information society means a too drastic change is significant. From them the change would demand a continuous renewal in the field of learning, work and human relations.

In Hungary, exactly those **soft infrastructure and services** promoting cultural change **are missing** which could play a crucial role in the conviction of the non-users. The government have up to this point focused on the hard (physical) infrastructure – which is, of course, also necessary, but it has been too single-sided. A good example to this is the network of eHungary points within the PublicNet (KözHáló) project. A physical infrastructure has been developed, and it is mostly used only by those who have already been users before. This situation is going to remain the same until human services are provided together with the infrastructure. There are simply **too few possibilities when a non-user can acquire direct experience about the advantages of the Internet, there are few experts and services from where the non-user could obtain help**. The Grandparent-Grandchild Competition of Informatics series organised by the Inforum tries to contribute to the improvement of this situation, and so do the IS mentors, the profession whose history is also thought-provoking: although the necessity of its introduction has been explained for many years in the Hungarian Strategy of Information Society, the actual education and employment has been started only by a coalition of civil organisations.

⁷ Találkozások a kultúrával 5., Olvasási szokások, MTA Szociológiai Kutatóintézet, 2006

The target groups of the eInclusion

The elderly

An independent initiative within the i2010 strategy deals with the situation of the elderly in the information society. The introduction of the action plan by the European Commission describes fundamental demographic correlations. While in 1920 **the life expectancy** was only 55 years, today it **has reached 80 years**. The generation of the so-called 'baby boom' is retiring now, and the **population between 65 and 80 years will increase by 40 percent between 2010 and 2030**. These demographic changes will make Europe face serious social and economic challenges. The information and communication technologies might play an important role in solving this problem.

The **information and communication technologies (ICT)** can not only help for the elderly to lead a more active, independent and healthier life, but in several cases it **can make the years spent in the labour market longer** and thus unburden the great health care systems. **The knowledge of the older and more experienced work force is** – despite the fast changing world – **of high importance in the knowledge-based society**. It should be accepted that the elderly should be considered as the owner of important knowledge. This can **both mean competitive advantage** for the continent and **give an identity** for the members of the older generations.

The health care system has to face similar challenges as well: by 2050 the approximate number of people over 80 years will have been doubled. By using ITC more efficient welfare services, sustainable systems can be developed, technology creates the basis of self-provision and community care. Based on the well-developed European providence the care and support of the elderly should be maintained by using the new possibilities of the ICT.

It is relevant that none of these issues are mere technological questions. The social image of the elderly should fundamentally be changed as the active old age can be achieved by full social support. The importance of the market actors cannot be neglected in this process. Companies have been trying to provide the elderly with more and more aimed products by now. According to the study the older generation is gaining more and more importance in the ICT market as well.

The action plan of the Commission is the first action project in compliance with the recommendations of the Riga Conference in 2006 and in accordance with the revised Lisbon Strategy. The action plan published in June 2007 supports the commission document which aims to improve the situation of the disabled and which was accepted for the period between 2003 and 2010.

The action plan is a strategy aiming to improve the social situation of the elderly, its main task is to synchronize the strategic actions, promote the elimination of technological and regulation barriers and support the innovation related to the target group. The document differentiates three highlighted fields of intervention.

Ageing well at work: According to the target, access, innovative practises, flexible work and the knowledge which is necessary to use the ICT as well as the acquisition of new knowledge with the help of the ICT (e-learning) all promote more active, efficient old age, provide better working conditions and improve the balance between work and leisure time.

Ageing well in the community: the ICT contributes to active social life, partly provides social nets, and partly promotes the access to commercial and public services. Therefore the ICT can increase the quality of life and decrease the risk of isolation and separation.

Ageing well at home: in the everyday life the ICT provides healthy and substantial (quality) life while it supports independence and self-reliance.

The document also attracts attention to the fact **the European ICT industry might play a significant role** in developing a quality life for the elderly. This can be realized in pure market models and in cases of certain public projects in business models based on Public Private Partnership (PPP) that is the cooperation of the public sphere and enterprises. According to the action plan, if Europe is able to develop the conditions for the active old age, it may highly promote the creation of new workplaces and may indirectly contribute to the development of the competitiveness of the continent.

The Commission is planning to take actions for the elimination of the market barriers in the second half of 2007 and in 2008. In connection with it, it **emphasizes the potential possibilities of the dissemination of RFID technology**. In addition it sets deadlines in accordance with the Riga Conference and formulates recommendations for the member states in order to decrease the legal and technological obstacles which hinder the development of the informatics

for the elderly. Another important step might be the acceptance of the interoperability recommendations of the e-health care in 2007.

The disabled people

We do not have up-to-date and precise data about the number of the Hungarian disabled. According to the Census 2001 their number is 577 thousand persons, in other words 5.7 percent of the population is somehow disabled – but this rate even according to the Hungarian Central Statistical Office (KSH) underestimates the actual proportion of that group. It is not surprising that other expert materials work with a rate of 7 percent.

Additionally disability is usually accompanied with other disadvantages, and can hardly be differentiated from them. There is a significant number of elderly among the disabled as most of the disabled people do not have congenital disability but along the ageing – as a result of an accident or an illness – become disabled. Therefore the rate of people over 60 years among them reaches 50 percent.

Similarly unfavourable image can be drawn regarding the educational level of this group. Their average level of qualification significantly falls behind that of the population as a whole. According to the data of the census **32 percent of the disabled people have not completed elementary school**, and the rate of people with tertiary qualification is remarkably lower among them compared to the rate of the majority of the society.

The unfavourable labour market situation of the disabled is remarkably based on the aforementioned disadvantages. According the Census 2001 the employment rate of the disabled was only **9 percent**. The labour market demand for the disabled work force is very low, it significantly correlates with the low level of education and the limits of physical and mental abilities, but at the very same time the society as a whole, including the employers as well, has strong prejudices against them. Therefore it is not surprising that the disabled are employed for badly-paid, unsteady jobs in low positions. Most of them execute physical, skilled or unskilled work; a lot of them only do housework.

According to an analysis by Gábor Csereklei and Szabolcs File published in the periodical 'Mozgó Világ' the disabled living in Hungary have to face serious problems and challenges now. The most remarkable problems are the following:

- The disabled are separated and discriminated
- The proper, special facilities are missing
- The properly trained helping personnel are missing
- The disabled cannot reach the information how they can improve their situation
- Financial problems

Based on the data of the level of the qualification and that of employment of the disabled it is evident that the infocommunicational accessibility should be supported and the digital illiteracy of disabled people should be solved as these make the public services which are offered by using infocommunication devices and solutions available. The necessary material and human conditions should be provided.

There **is not any data** on the Internet usage of the disabled **at our disposal**. However, this technology would create a unique opportunity for the target group in several aspects. Parents of disabled children living in isolation would be given the possibility to get in touch with the others. The disabled and their helpers-parents would be able to join forums, and online exchange of experiences in mail groups and chatrooms. Nevertheless, informatics would be a useful tool for the complex rehabilitation of the disabled and would promote the evolvment of a more independent life.

Accordingly the information and communication technologies can contribute to the social reintegration of the disabled, promote the surmounting of the disadvantages emerged and prevent that new disadvantages settle on the existing ones.

Therefore the ICT devices are necessary in the education as the majority of the people living with an aid has low level of qualification and the expanding possibilities of distance learning would make any level of the education accessible for them.

The usage of the ICT devices are needed in the field of work as well as much smaller proportion of the disabled can execute work traditionally; the number of professions which can be chosen by people with impaired eyesight is insignificant, for instance. With a small international outlook it can be observed that remarkable part of these problems can be solved by PC usage and the Internet: in the United States large proportion of the disabled uses computers

and Internet so it is not surprising that the employment rate of the certain groups of the disabled approximates that of the national average in the USA.

In addition the usage of ICT devices is needed considering the access to information as significant part of the disabled does not have the proper aid or does not make use of important services because the necessary information does not reach them.

The history and conclusions of the IS mentor project

The Hungarian IS mentor project is an individual initiative. The particularity of the solution primarily lies in the fact that such professionals are trained and became IS mentors who – besides the usage of the informatical devices – know the social situation and problems of the target group. The mentors promote to take advantage of the ICT devices and to handle the problems emerged at community access points. Therefore they offer complex help, promote the social-economic processes of the individuals and communities and make the equal opportunity for the disadvantageous individuals and regions more accessible.

The most important task of the IS mentors **is to surmount the obstacles of motivation occurring just before the dissemination of digital literacy on individual levels.** They are to bridge the gap between the ICT devices and the contents and electronic services reached by the ICT devices and the ICT access and usage of the (traditionally and in digital sense) disadvantageous people. The task of the IS mentors is primarily to help those people who are not able to use independently the services offered by the information society and cannot utilize the possibilities of the information and communication technologies.

According to the conclusion of up-to-date Hungarian data surveys in 2007 dynamic development at a good pace cannot be still mentioned in the field of the domestic information society as the 60 percent of the adult population have never used the Internet (NRC 2007). That is a more worrying phenomenon that within the non-users there are more people who do not have any direct, personal contact with either the characteristic devices of the information society or with people close to them who use the Internet or e-public services. Nobody has ever wanted to convince six in ten Internet non-users what advantages s/he can take of using the World Wide Web. These are all reflected in the fact that **today clearly obstacles of motivation play the main role** (not interested, not needed) in non-using rather than financial reasons (WIP 2006).

This can result in serious social and economic consequences. It can now be experienced that besides the slow pace of development of the information society the digital division of the population has been widening in Hungary. Unfortunately the possibility is given that the country will definitely be divided in cultural sense: one third of the society follow the changing trends of the information society, they are characterized by the continuous replacement of technology – for

instance the use of mobile devices and wireless broadband Internet access, etc. – as well as the expansive use of online services, while about the two-thirds of the adult population show a rather rejective and uninterested attitude towards the characteristic devices of the information society.

The major lines of fracture of the divide can be seen along the qualification level and the type of settlement. Along the ageing the probability of the Internet usage dramatically falls: the probability of people over 60 years is 94 percent lower than that of the generation under 30 years but the very same probability for the generation between 30 and 39 years is still more than 50 percent lower compared to the generation under 30 years⁸.

It could be observed even in 2000 – even if at that time it was not as clearly visible as it is today – that the development of the information society would lead to the cultural division of the country if the fundamental social tendencies are not taken into consideration. Even if we did not observe it in our case but during the analysis of the digital divide occurred in developed countries it became evident that a long-termed **social policy not missing governmental intervention is required.**

The rudimentary plans of the IS mentor service and profession could be found in the National Information Society Strategy accepted in 2001; its chapter on social policy emphasized that “such professionals are needed in the institutions who, by their qualification and attitude, can mediate as an interface” between users and non-users.

The eGovernment 2005 Strategy published at the beginning of 2004 called that intermediary professional ‘IS mentor’ without whose participation the socialization of electronic public services is impossible.

During the formulation of programme booklets titled the Hungarian Information Society Strategy it was clearly visible that the more remarkable part of the Hungarian society could not be a part of the digital culture without help. The highlighted target groups of the Social Integration (e-Inclusion) project are: the elderly, the somehow disabled, the Roma, people at disadvantage regarding the digital divide. The emphasized aim of the project was that besides the physical infrastructure (typically eHungary points) the human infrastructure should be developed through nets of IS mentors, that is such a net of community access points where not only the demand for the special use of the ICT devices

⁸ Lásd Albert, Fruzsina - Dávid, Bea - Molnár, Szilárd (2006): *Az Internethasználat és a társadalmi tőke időbeni alakulása Magyarországon. Egy longitudinális vizsgálat eredményei.* In: Internet.hu 3. A magyar társadalom digitális gyorsfényképe 3., TÁRKI, 2006., p. 69-110.

can be fulfilled but IS mentor professional ('IT specialist grafted into a social worker'), who knows well the highlighted target groups and the infocommunicational devices at disposal as well, can be reached.

It has become clearly evident that the emplacement of technological devices and making them accessible in public places has any effect in that case only if it generates any favourable social and economic effects. One of the most important effects of such kind is to reinforce the weakening and powerless communities of small settlements. If it does not have the community building, strengthening and regenerating effect that photocopiers, computers and broadband Internet connections are accessible at eHungary points, libraries, post offices or telecottages, it is a mere waste of money as those people will use them who have already been using them (that is to say students, the young, the educated). The most remarkable problems occur in small settlements (approximately 2500) where there are hardly any human resources to build on and therefore the retaining force of the communities rapidly decreases in Hungary. Dozens of fundamental sociological studies write about how harmful it is when this base texture of the society starts to work badly not accomplishing its function such as transmitting norms, behavioural patterns and values.

Despite this fact for years nothing happened regarding the adaptation of the IS mentor profession. However, in 2006 the IS mentor intermediate training was listed in the National Qualification Register. According to estimates within some years approximately 3000 IS mentors will be needed, especially in small settlements. Here such a trained professional should stand at the population's disposal at community access points who:

- helps to solve the technical difficulties emerging during the use of electronic services, and shows the beauties of the Internet to the interested according to his/her teaching and educational role.
- helps to learn the use of the computers and the Internet and the ways of finding information for the users.
- which is relevant: the mentor can play an intermediary role when using central electronic public services or those of the local government.

At the end of 2006 the training 'Information Society Consultant' (ITT) was launched with the aim that graduated professionals working in the field of information society (or interested in it) were provided with a special, advisory training which they could use in their everyday activities. The training was

launched with the support of the Ministry of Economy and Transport, and approximately 200 librarians and IT specialists were trained.

Relevant differences can be found between the two conceptions. The IS consultants are trained that as a kind of social mediators they should persuade people that the Internet is not the work of the devil and it has services that might be useful in everyday life. This task can certainly be executed by a consultant in the library but it is still not community development and does not serve the social integration. It is rather a reflective service: if somebody comes in – typically to the customer service – the consultant tries to find the answers to the questions arisen there and uses the help of the ICT devices. On the contrary to this the IS mentors are proactive: they collect the inputs, identify the groups of problems characteristic of the community and try to solve these by using a different set of tools and approach.

Deriving from all the above the IS mentor is a kind of a community service; s/he thinks on the level of the community even if s/he obviously helps individuals as well. The IS consultant, however, offers only personalized help with counselling.

The IS consultant is capable of helping those who are receptive to use the ICT devices, but at the same time do not know the possibilities of them as these people have not clearly been told that, for instance, these devices can be used for administration, communication, banking services, etc. The question is how big this stratum (of receptive attitude but limited access and knowledge) is in Hungary? There is no exact data on it but some segmentation attempts of other researches lead us to the conclusion that it equals 15 percent of the adult population. This is a much smaller stratum than that of the people to whom only the IS mentors can offer efficient help.

On the contrary to all the above, the IS mentor – based on the province of the consultant – tries to reach the completely avoiding, refusing and excluded people, which is primarily not a phenomenon in connection with the letter 'e', but a problem of social care, welfare policy, community development, education, and therefore it requires primarily professionals with competences related to these fields. Who can be regarded to belong to this group (avoiding, excluded) from the Hungarian society? In the researches people without access, motivation and competence / knowledge are classified to this group. Based on the results of a

survey⁹ on e-administration about 50 percent of the Hungarian society could be classified to this group.

It can clearly be seen that the IS mentor and the IS consultant do not reflect processes mutually excluding each other. One is good for this, the other is good for that, but it should be noticed that these are completely differing things, and it can not stand that we think only in terms of the IS consultant. The different application of the concept of IS mentor has reached a critical point by today, from where the dissimilar approaches should be brought closer to each other. Anyway, in our opinion, the profession basically accepts the following definitions:

- “The IS Mentor is the social worker of the digital equal opportunities, a representative of a new profession. His/her task is to help with the first steps into the information society in a personalised, situation-dependent way even to those who are perhaps not even aware of what good the computer and the Internet could provide for them, and who can not manage to use these devices alone.” (Gáspár Mátyás)
- “The IS mentor is a new profession, a specific blend of the social worker, cultural manager and informatics trainer. The IS mentor knows the situation, demands, problems of the local community and of its individual members, and in order to find a solution to the community and personal problems, connects people with the services available through the Net, teaches and helps them to use these services individually.” (Déri Tamás)

The thought that the informatical sector had to do something in order to let the achievements of the informatical society reach the disadvantages strata of the society as widely as possible was formed in 2004. The initiators (the Inforum, the MATISZ and the IVSZ) thought that a mediating agent, a catalyser was needed which mediated the modern services of informatics to the users – this person is the mentor of the information society, shortly the IS Mentor.

The basic thought was simple. A social stratum being inactive at the moment was offered a completely **new working possibility, a tool of helping other people**, who was once active and successful in another field, but they got into a disadvantaged position, or they are unfortunately disabled (people with impaired hearing or physically disabled, people with altered working abilities).

⁹ See <http://www.euser-eu.org/>. The survey was carried out in 10 European countries – among them in Hungary – with the questioning of altogether more than 10 thousand persons over 18 years.

The profession of the IS mentors was shaped during the implementation of the project and was also registered in the National Qualification Register. The project called "IS mentor – the informatical sector as an employer" subsidized by the EQUAL was divided into three main parts:

- Selection: Many people from different places and with different education answered the call for applications to the IS mentor program.
- Education: After the selection 46 persons could start the mental preparation, and 42 of them attended the five-month-long professional trainings and the courses related to each IS mentor job (innovator, adult training consultant, distance learning tutor, etc.). After all, 41 of them became IS mentors.
- Employment: After the training 39 persons started their activity gathering working experiences. IS mentors work for local governments, civil organisations, a large enterprise running governmental portal, community houses, enterprises, education institutions. They have proved with their work that they are needed in jobs such as an adult education consultant, distance learning tutor, community service operator, innovator, executive assistant, customer service assistant, and system administrator for small enterprises.

Making use of the experiences of the IS mentor project of EQUAL, the definition was complemented with adding further target groups (such as the disabled and the elderly). Education in a broader sense, dissemination of knowledge and the support of the use electric services was added to the scope of the mentors' duties. According to the definition used by the project, an Information Society Mentor is a person who was selected from one of the disadvantaged target groups (people over 45 years, the disabled, the unemployed etc.) and s/he is made to be capable of employment, disseminating the new services of the information society (e-Government, e-Learning etc.), the local realization of the inclusive information society (e-Inclusion) by a special training (which also supports the idea of lifelong learning), network relations, and by the cooperation of the business, the civil and the governmental sector.

A broader version of the concept of the mentor related to the information and communication technologies also exists. **Neil Selwyn, in opposite with the Hungarian practice, connects the concept of the mentor – or, as he often calls it, the "helper" or the "warm expert" not to the formal, but to the**

informal transmission of knowledge. In this formation the helper is grown out from the informal community of a network-like construction of people studying the use of computers. According to his research results people choosing this form of studying are mainly recruited from low social classes (poor, uneducated) and the members of the older age groups. In Hungary, the rate of this form of helping is much more widespread.

The role of the informal channels during the studying of the use of the computers was also detected by Loges and Jung¹⁰. According to their experiences, the successful and effective use of the ICT devices – besides the access to the technology and to formal education – depends highly on the expansion and intensity of the human network relations related to the technology and the tasks that can be carried out with the help of it.

Provided that the mentor projects make use of the power existing within the local communities, they will be more successful in motivating the members of the target groups to use the ICT tools than the formalised, top-down organised governmental approaches, and, furthermore, they can also transmit the knowledge necessary to the use of the devices more efficiently.

As it can be seen, the IS mentor has become a collective term by today: it covers three similar, but at several fundamental points different programs. In the first version the emphasis is on the accredited (1.) education and professional operation: the IS mentor is a professional working at community access points who completely meets the professional requirements listed in the National Qualification Register. Within the framework of the EQUAL project, the (2.) employment came into the spotlight, the training, based on a differing educational curriculum after the experimental project, was adjusted to the requirements of the informatics industry. Meanwhile, the Ministry of Economy and Transport started a project named Information Society Consultant, which provides only further education based on a restricted educational material to future mentors from the social worker or librarian professions. Despite the differences, the Ministry of Economy and Transport also uses the term of IS Mentor in the description of the project. According to the plans, the focus of the program of the ministry is the (3.) supporting of the administration. This can equally mean the use of an e-government service or a situation of life that can be solved with the help of the information and communication technologies.

¹⁰ Loges, W., & Jung, J. (2001). *Exploring the digital divide*. Communication Research, 28(4), 536-562.

The way of development – an action plan

It can be seen from research reports carried out in Hungary and the directions of development sketched out by the European Union that the question of digital social inclusion (eInclusion) faces everybody in Europe with urging constraints. It can be stated in general, in the light of the domestic actions, that the official Hungary has not paid enough attention yet to the necessity of e-Inclusion, the digital social admission and to the directions recommended by the EU. Up to these days, the actions organised in relation with the e-Inclusion have been mainly results of civil initiatives. We can see that the actors of the Hungarian economy have not recognised yet that steps towards the elimination of the problems of e-Inclusion will imply a really remarkable expansion of the market. Enthusiasm about social responsibility is mainly of charitable nature, but it is not in correspondence with the changes of the demands of the market and the society. Research results and the experiences of the past four years show that governmental network-building and ad-hoc computer actions can not be regarded as a solution in the case of such a complex task about the quality of life as the realization of digital equality of possibilities, the digital (electronic) social inclusion. What is needed here is a complex of economy-, social, health care and welfare policy the creators and executors of which can override the narrowly interpreted legal and competence frameworks, and can handle the future of about 6 million Hungarian citizens as an urgent, complex task about the quality of life. E-Inclusion can not be interpreted as a question purely of employment, adult education, mental health, health care or social welfare. The demands of modernity and the information society exceed the frameworks of ministries and the conventional schemes of thinking.

It is natural that we experience that civil initiatives start years before the decision makers in the government could even get to a formulation of the problem at all. Still it is not trivial in Hungary that the government would see civil organisations wishing to contribute as partners: the lack of relations, a simple ignorance of the civil organisations and the withdrawal of their subsidies are general phenomena.

In order to make a substantial step forward in the question of digital social inclusion in Hungary, not only those should be convinced about the importance of this question who were left out of the development of the world of the Internet and who are getting further day by day from being able to use the services which are getting more and more complicated, but also those who are trying to fulfil the domestic reforms. The directives, expectations of the European Union in this field did not get into the public and political thinking in Hungary, and this makes the way of development parallel with that of the EU rather dubious. In Hungary, in the past years besides a slow growth rate of the information society, the digital division of the population has been deepening. The process goes towards a complete and permanent division of the country into two parts in a digital cultural sense. 60 percent of the adult population is digitally illiterate. The main reasons of the remarkable lack of motivation are that the majority of the population is not aware of the advantages the digital world could bring to them, and that the social mediators are missing who could illustrate this in a direct way. A cooperation of the EU and Hungary, of the government and civil organisations is needed, which tends to give effective answers to the real problems. The lack of this cooperation affects every level of the Hungarian society and obstructs the efficiency of the reforms under preparation.

The experts material emerged from the cooperation of civil and scientific organisations tries to attract the attention to the necessity of such steps without which the social modernisation and the digital social inclusion can not be accomplished. In our opinion it is necessary to inform the opinion leaders and the decision makers of the political life and the civil-social life what expectations the Union has, what directives it gives and where Hungary stands in this question. 2007 is the "European Year of Equal Opportunities to All" – and during this year it would be natural to include also the questions of e-Inclusion, so that Hungary could be properly prepared to the Year of e-Inclusion in 2008.

We also think it is necessary to enhance the motivation of the society, to strengthen the dissemination of knowledge about the Internet, and a targeted informing and preparation of the disadvantaged groups. Related to this, the infrastructure of adult education and training on informatics and information society needs development. We consider it worth subsidising the central and local, civil and private educational initiations. It seems to be necessary to develop the production of the web-based content and to subsidise the existing ones which

offer solutions, best practices and directives to the disadvantaged groups in the field of the problems of e-Inclusion. Finally it deserves thinking what kind of stimulation can be used for the hardware supplier and Internet providers in order to make them offer cheap and reliable tools for the disadvantageous groups.

Concluding from the above mentioned, the Inforum recommends the following to the domestic actions of e-Inclusion.

Recommendation 1.

Popularization of the thought of e-Inclusion – theoretical preparation

- a.) A written overview of the situation of e-Inclusion in the EU for the domestic decision makers, social institutions, social and political organisations. Introduction to the domestic and European policies. The question requires continuous communication with decision makers and executives.
- b.) An assembly of the methodologies and best practices of the activities in the European Union;
- c.) An assembly of the domestic best practices and its communication in English to the EU and its institutions. Regular review of the news about domestic events and results according to the expectations of the EU benchmarking and indicators related to the topic;
- d.) Regular publication of a newsletter in English for the institutions of the EU and the international press about the domestic situation of e-Inclusion, in which a broader range of questions about the information society could also be accounted for;
- e.) The establishment of a website concerning this question in English and in Hungarian (under construction). Research, expert materials (for education and for activities of civil organisations and local governments)
- f.) Initiating regular domestic research programs in order to better understand the needs, motivations, attitudes of the groups being excluded from the information society;

- g.) A reinforcement and expansion of the domestic social and community thinking and practices about informatics.

Recommendation 2.

Motivation programs

- a.) Motivating, demand-making and attention-attracting programs for people above 50 years and the elderly: Inforum Grandparent-Grandchild IT competitions, roadshows, television campaigns;
- b.) The development of the e-Health Care in order to achieve active old age;
- c.) The disabled (Targeted DM programs involving their civil organisations)
- d.) The minority of the Roma (special campaigns initiated with the involving of cultural and legal defence organisations);
- e.) Accessing the groups of young people with cumulated disadvantages and in bad financial situations;
- f.) Local motivating programs, in the realisation of which community access points and schools play a highlighted role.

Recommendation 3.

Educational programs

- a.) Launching of national eAbilities program;
- b.) Involving libraries, telecottages, schools, elderly clubs, reinforcement of existing institutions (e.g. Click on it, Grandma!);
- c.) Launching and strengthening the education of IS mentors;
- d.) Preparation of the network of welfare workers;
- e.) Professional tutorials for the trainers (elaborated);
- f.) Special, printed and online tutorials for the members of the target groups;
- g.) Involving schools and students into the education of the elderly (e.g. Inforum: "young chicken teaching" program);
- h.) Educational materials, enhanced online public services, primarily in the field of e-administration and e-health care.

Recommendation 4.

Content providing

- a.) Informative web sites aimed at the IT education of the elderly (e.g. 50Plusz.Net, in progress);
- b.) Gathering and subsidising the information services relevant to the highlighted target groups;
- c.) Organising cooperation necessary for the educational, knowledge-disseminating programs, looking up partners.

Recommendation 5.

Access and devices

- a.) The possibility of the broadband Internet access on the given settlement or region (in partnership with mobile telephone and wi-max providers);
- b.) Cheap computers;
- c.) Special devices (infra mouse, Braille keyboard, printer, reading software);

The Forum of the Hungarian IT Organisations and its member organisations, the Information Society and Trend Research Institute and its associates offer and ask cooperation from other civil social organisations, the competent ministries, to act together in the field of digital social inclusion (e-Inclusion), the development of the digital literacy and skills, and the policies affecting the quality of life

- in order to put an end to the shortfalling of 6 million of our citizens and
- to keep our 3.5 million citizens over 50 years within the social network.

This third part of the population of the country could be made a citizen of the modern Hungary with an expense equal to the price of 1 km of motorway. We do not know if it is worth it to somebody.

Best practices in Hungary

In order to achieve – corresponding to the aims formulated in the Riga Declaration – for Hungary to decrease the shortfall of the groups being endangered from the aspect of the information society to the half of its present value, we must build consciously on the results of the existing Hungarian and European initiatives.

In the chapter closing this publication introducing the best domestic practices the initiations are taken one by one which have worked successfully, the implementation can be copied and disseminated. The initiations listed here do not cover all the successful domestic projects, only point at some of the most important, exemplary programs.

The adaptation and dissemination of the best practices is an important element of the toolkit of the European Union that can be used in order to achieve the information society. In Hungary, no such reviewing publication has been published yet which presents the successful civil, governmental and business project related to the digital equality of opportunities. The good practices can support the planning of effective Hungarian projects and at the same time can give an example to other countries as well.

It can be said based on the overview of the practices which can be considered the best ones that in most cases they can achieve only isolated changes, and many times they are stopped in the experimental phase. Similarly to the IS mentor initiation, the cooperation of the state, the civil sector and the market actors is needed to the effective dissemination of several other programs and projects.

Grandparent-Grandchild Competitions of Informatics

The Forum of the Hungarian IT Organisations has been fighting for years for making the elderly citizens equal in rank in the information society. In the history of the Grandparent-Grandchild Competition of Informatics having become a tradition it has already been proved that the cooperation of the two generations can contribute to the involvement of the elderly into the information society. By its intentions, the competition is aimed at attracting the attention of the elderly to the possibilities implied in the Internet, with which they can keep active even in

their old age. The intention of the organisers is that the decision makers – having cognised the competition – should handle the question of the elderly not only as a social question, but as a question of the quality of life.

In the competition, grandparents over 50 years and their grandchildren between 4 and 14 years can compare their knowledge with the other pairs in different questions, using the Internet as an aid to find information. Children help their grandparents in the competition to cross the threshold of the information society. The competition is a successful series of the campaign, and its message is that inter-generation programs can be one way of the e-Inclusion in Hungary, because the young have already made acquaintance with the use of the informatical devices at home, at school and elsewhere, and so the involvement of the elderly should first be assured place within the family and through the young.

The Grandparent-Grandchild Competition of Informatics has been organised 7 times so far in different points of the country. Today it is not only a family program anymore, it has become a foundation stone of the starting of a social movement as the competitions have mobilised 1 200 families so far. The question of the quality of life and the use of computers of the elderly has come into the spotlight due – to a not negligible extent – to this competition, as the competitions were widely followed with attention by the media.

A small survey carried out within the group of the participants can serve with interesting data. The youngest competitor was 4 years old, the oldest one was 84 until 2007. 53 percent of the respondents participating in the competition lived in Budapest, and 47 percent lived in the countryside, mainly in towns. The average age of the respondents was 64 years (range between 50 and 84), and examining their level of education those with a tertiary qualification were highly over-represented (62 percent); 35 percent of the respondents were of secondary education and 3 percent had only primary education.

It can be known about the people over 50 years participating in the competition that altogether 3 538 000 persons have achieved this age from the whole population of Hungary. The vast majority of them does not make use of the advantages of the Internet, despite the fact that it could help them staying active in the labour market, avoid psychosomatic illnesses (those of psychical origins), reduce the feeling of being isolated, make use of the cheapest ways of entertainment and getting information and sustaining – and even improving – the

quality of life. Only about two-thirds of the competitors who participated in the competition – that is, the most active grandparents – have an internet access of their own at home. It can be seen that the process of diffusion of the Internet is very similar in this age group to that in the case of the young, this is demonstrated by the distribution of the level of education as well.

On the average, the polled grandparents spent 100 minutes a day browsing the Internet. The variance was rather high: there were respondents who spent only 15 minutes a day, others spent as much as 6 hours on the Internet. They were most frequently interested in subjects of culture, politics and sciences. The research for public information was the following on the list of popularity. The rate of regular online news readers was 62 percent. The answers of the participants of the competition show that 43 percent of the respondents use the Internet for online banking and shopping. In relation to the financial affairs, only 23 percent was completely distrustful with the Internet.

The Telecottage movement

In Hungary the telecottage movement can be regarded to be the primary flagship of the decreasing of the digital gap and the increasing of the e-Inclusion programs. Telecottages take a great part in most of the considerable projects. With the help of the Hungarian Telecottages Association, the movement for the improvement of the access possibilities of rural regions has become organised before the governmental intervention. Telecottages mean the foundation stone of the e-inclusion in a number of small settlements in Hungary.

They can be regarded best practices primarily because they are able to manage to integrate a wide stratum of the marginalised groups of the society into the information society with the help of new information technologies. For people living in the countryside, and within this group primarily for the unemployed, for people with altered working abilities, for the disabled, for the Roma and the elderly, and for every other group that can not afford having a computer of their own and an internet connection at home, telecottages make it possible to get into direct, even everyday relation with these devices. This is always realised in community locations where these devices can be used for free or at a low price. It is worth mentioning that these community access points provide a lot of other technological services such as photocopying, scanning, and video telephoning

also appeared as a new phenomenon, although it is still available at only a few points.

However, the existence of the devices is not enough in itself to decrease the digital gap; the truly successful telecottages have moved further. It is also necessary that the digital literacy of the above listed target groups be increasable via trainings and courses. It is thus indispensable to connect the assuring of the devices with trainings related to the use of computers and the Internet. Several Hungarian telecottages organise such trainings for certain target groups, e.g. for women or the elderly. Language courses are also quite frequent, and there are a number of NQR-trainings for people with altered working abilities and the disabled listed in the National Qualification Register as well. By doing so, telecottages step out from their original frameworks, and they also take other, "traditional" functions.

'Click on it, Grandma!' Program

With the sponsorship of the UPC Hungary, courses for pensioners and the elderly have been being organised for years, where they can learn the most important basic skills related to the use of computers. At the moment, the six-week long elementary course of 25 lessons called "Click on it, Grandma!" (<http://nagyi.bmknet.hu/>) is held in 12 settlements of the country (Budaörs, Budapest, Debrecen, Eger, Gyöngyös, Nagykanizsa, Nyíregyháza, Pécs, Salgótarján, Székesfehérvár, Szombathely, Veszprém). After the course is finished, the participants will be able to use the online program magazines, recipes, news pages, databases of events, maps, search engines, and besides this, they also learn the basics of using e-mail services and video-telephoning.

The elderly form a special target group, because people of their age are usually much less flexible, it is more difficult for them to learn new knowledge, they can take plunge to the use of new innovations less easily, they are less open, and they have significant fears of the technological innovations. These programs thus have to overcome these problems and fears as well if they want to achieve some results.

Digital Secondary School

The Ministry of Informatics and Telecommunication launched the pilot project of the Digital Secondary School in September 2003 in North-East Hungary for Roma adults without a secondary qualification. In the first step, members of the Roma minority local governments had the possibility for applying for the program from Borsod-Abaúj-Zemplén county. This form of education completes the traditional corresponding form of secondary school training and makes it more efficient with the tools of informatics and e-Learning.

Training Centre of Social Informatics for Helper Jobs

The Infonia Foundation has created the "Training Centre of Social Informatics for Helper Jobs" with a subsidy from HEFOP, where, with the help of qualified professionals, one hundred helpers are trained in a one and half year period.

The indirect, short term aim of the project is to increase the social inclusion of the disadvantaged people – with high probability the Roma, the disabled and women – contacting the social helpers, primarily via (re-) integrating them into the information society and the labour market.

The direct target group are the professionals and volunteers working in the social system and the social administration. Mainly helpers who work with the Roma, disadvantaged women and with disabled people are trained within the framework of the project, who also have a minimal beginner level of computer- and Internet-related skills. The volunteers – with the contribution of supporting partners – are partly taken from the disadvantaged target groups.

Young Mother Re-integrating Centre model institution

With the development of the technology of informatics, a wide variety of possibilities opens to the appearing of new forms of working not bound to location, and of new kinds of jobs characteristic to the information society. The spreading of these new forms is also favourable for the employers. The new jobs require a special preparation phase. The aim of the Young Mother Re-integrating Centre project lead by the Infonia Foundation is to establish a model institution where women staying at home with their children can spend their free time, they

can contact professionals with their problems related to their mental health care, bringing up children, lifestyle, mother-child and husband-wife relations, or if they need, they can attend therapies and educative trainings, and in order to promote their social re-integration they can choose from personalised vocational trainings. This complex of services mobilises many young mothers, many of them will choose the education and employment forms enriching their possibilities. The project, because of its complexity, is described in a bit more details below.

The training program is aimed at the construction of the lacking informational literacy (a collection of skills which are the precondition of the communication entertainment and work performed in a digital environment). The 15 young mothers involved in the program learning a higher level of the use of the computers and the Internet are trained to be able to perform modern activities executable through the Internet which are subject to an increasing demand in the labour market. In this case re-integration thus means not "following", but competitiveness. This also makes it possible that the re-integration centre will be a workplace at the same time, as they can execute their tasks from home or from the computer labs they are familiar with in the form of telework. The data bank created during this program is aimed at increasing the employability for everybody who has registered into it.

Free courses for the Roma and for the physically disabled

The physically disabled are physically restricted in getting to places and services important for them. The Roma minority is fighting similar problems in a certain point of view. The members of this social group often get into marginalised, segregated situation, and because of the scanty chances of accessing information they are often unable to access the possibilities which are evident for the members of the majority of the society. Because of this, the courses organised by the National Federation of the Disabled Persons' Associations and the Mediator Foundation Roma Centre the participants are taught theoretical and practical basic knowledge in order to make them interested in using the Internet.

The training is completely free, the participants of the four-hour long courses can make acquaintance with the Internet in groups of 10 to 15 persons; each applicant can practice on a separate computer. According to the estimation of the organisers, 650 persons can participate in the program. The question

arises what kind of sense this type of trainings has. Four hours of trainings is probably not sufficient to give real motivations to the participant, to teach them user knowledge, and to achieve attitudes motivating to independent learning. The high number of the trained here gives no warranty at all that the training succeeded in bringing a real change into the life of the target group. For this reason such programs are necessary which can actually provide a positive user experience and by this shape a long term motivation in the participants, which would guarantee that they will tend to use these possibilities in the future as well.

“Awakening training” of Oszkó

The primary aim of the awakening training of Oszkó is that the completely beginners get acquainted with the possibilities provided by the Internet. As the first step of the program launched in the organisation of the West Pannon Regional Development Agency non-profit company the most important questions, fields of interest were collected which were hoped to motivate the target group to wish to learn more about. According to the answers these were the keywords health, work, managing relationships, studying, children, family, money, friends, mates, relatives, getting informed. About 40 topics were gathered altogether. The participants were then helped by IS Mentors to gather information related to the questions they were interested in. The reception of the awakening training by the participants was highly encouraging.

Special softwares and web pages for the blind

The use of computers and the Internet is aided by a variety of softwares for the blind and people with impaired eyesight, but the accessibility of these softwares for people with restricted working abilities (and, therefore, with narrow financial resources) is not easy.

This problem is tried to be resolved by the software developed by the Axelero, the Speech Technology Ltd. and the National Association of the Deaf and Hard of Hearing, which can be downloaded for free and which transforms the contents of the downloaded web pages into speech, and this makes the ability of reading actually unnecessary. The software reads out the instructions appearing on the screen during the installation so that people with impaired eyesight can download and use the service without outer help from the first steps. The system

basically transforms the news of the portal into speech. By using the File/Open option, the text of other web pages can also be transformed into voice. The possibilities of the software are restricted by the fact that most of the web pages include a huge amount of graphical information and text which makes the voice based browsing and navigating quite difficult. It would be important that many content providers undertake to prepare a text based version of their own web pages which could easily used by people with impaired eyesight.