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A RISK OF USING INFORMATION TECHNOLOGIES: INFORMATION PRIVACY IN PUBLIC OPINION AND IN THE PRESS IN HUNGARY

Iván SZÉKELY

Department of Information Engineering
Technical University of Budapest
H–1111 Budapest, Hungary
tel.: +36 1 166–4011/ext. 21–55.

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Abstract

Societal risks of the new information and communication technologies, including information privacy issues, have not yet been sufficiently recognized in the former socialist countries of Central and Eastern Europe. Newly introduced data protection legislation is an important step in this process, but in the highly politicized environment the problem often appears to be primarily a legal and political issue.

The first Hungarian research on public opinion and mass communication in relation to information privacy shows a measurable desire for information autonomy and a considerable mistrust of information authorities, but nevertheless a general obedience in providing personal data. The stratum which exhibits a heightened data protection consciousness, higher sensitivity to privacy and increased distrust of computerized data processing comprises 16 per cent of the total sample.

The research also shows that the desire for information privacy in the society is not adequately manifested in the press, nor in the awareness of political and professional circles. International cooperation is needed in research activity.

Keywords: information privacy, data protection, public opinion research, press, Hungary, Central and Eastern Europe.

1. Introduction

In developed Western democracies privacy issues form an integral part of information policy, economy, even technology. In most of the formerly socialist Central and Eastern European countries, however, these issues have not yet come into the limelight, neither in politics nor in public opinion, nor in scientific research.

Before the Second World War, these countries had not yet reached the point of clarification of this information-balance and stage of autonomy of citizens, whereas the development induced by modern information and communication technologies began in the 1950s and 1960s when the countries of the region were no longer able to deal with these phenomena of Western democracies.

During the course of recent changes in the political system in some countries of the region (e.g. Slovenia and the former Czechoslovakia), data protection laws [1, 2] have been enacted as part of the democratization and modernization of the legal system, following existing western legislation; the problems of information privacy, however, remained mainly within the legal sphere.

In Eastern Germany, where unification did not simply bring problems but also extended the existing West German data protection legislation to the new Eastern states [3] , (see also KOLB, 1991) a significant new factor was added to this process: the shock caused by cleaning up the files of the former secret police (Stasi) [5] increased awareness in the society of state surveillance and the power of information; information privacy issues consequently became matters of public concern.

Hungary has had a certain professional advantage over other countries of the region in the theory of data protection: during the last stages of the previous political system a small group of professionals in the administrative and legal fields began systematically to collect and study Western norms and experiences and to work out the framework of possible Hungarian legislation. At that time aspects of informational self-determination could be discussed publicly within a theoretical framework only and within the limits of 'needs and rights defined from above".

As rights and freedoms became political issues, increased publicity was given to this theme for a short period, but later the political approach itself pushed the values of the private sphere into the background. On the other hand, the societal risks of the new information and communication technologies have not yet been sufficiently realized even by professional circles, and until the recent enactment of basic information laws, development of new administrative and information systems had been taking place just as before, without any of the necessary guarantees of privacy or informational self-determination of the data subjects.

As described by SZÉKELY (1991a), certain important events, such as the April 1991 decision of the Hungarian Constitutional Court [6] which outlawed the universal Personal Identification Number, again increased publicity and forced the major institutions which process personal data to defend their interests and to improve their public image. The parliamentary debates on the combined Data Protection and Freedom of Information Bill had similar effects.

The enactment in late 1992 of this basic law on the protection of personal data and disclosure of data of public interest [8], together with a more specific law on the central registration of personal data and addresses [9] and Hungary's recent signing of the data protection convention of the Council of Europe [10] played an essential role in defining the necessary le-

gal and regulatory environment. Yet in the highly-politicized environment of Hungary the whole problem appears to be merely a legal and political issue, sometimes only related to business. Only a few individual researchers or teams have tried to investigate public attitudes, or similarities and differences of related cultural and social traditions between Eastern Europe and the West, or even the deficiencies in the very concept of privacy in this country.

Up to the present two investigations [11], (SZÉKELY, 1991c) were carried out in the field of information privacy from a sociological point of view by the means and methods of public opinion and mass communication research, with the author's participation. These investigations are the first of their area in Hungary and, as far as we know, also in the region; and although their data can be regarded as the first snapshots taken in a period of rapid change in many aspects of life, we believe that they are suitable for drawing some general conclusions about the society's sensitivity to privacy, its data protection consciousness and its desire for information autonomy. In addition, the results of a more recent public opinion survey [13] conducted by a private firm on registering and use of personal data, although with a more narrow scope, allow us to assess some points of change during this period. In the following I present some of the main findings and conclusions of these investigations.

2. Public Attitudes to Processing of Personal Data and Privacy in General

In late 1989 the Hungarian Institute for Public Opinion Research carried out a survey, using a representative nation-wide sample of 1000 persons, on behalf of the State Office for Population Registration (ÁNH, now called the 'National Office for Registration of Personal Data and Addresses', OSZH). Following particular international standards and some elements of a survey carried out in the previous year, we intended to broaden this task to a general investigation on privacy.

According to our results, the majority of the respondents have an interpretable opinion about these relatively abstract issues. (Thus, the false assumption represented by some institutions and their officials that this dry subject does not interest people, and that they have no opinion about it, cannot be sustained.) Although attitudes towards the processing of personal information are partly unestablished, and a considerable number of minor inconsistencies can be found in the replies, some clear and strong background factors can be selected as principal components in the answers by use of multivariate statistical methods. We have interpreted

them as a privacy/data protection factor, a confidence/order factor and a pro-computer or contra-computer attitude.

On the topic of the survey we may regard the respondents generally as moderately well-informed, but less well-informed when it comes to concrete knowledge. They have a by and large adequate knowledge of what institutions register what kind of personal data, or what the personal identification number is for, but many of them confuse personally identifiable (nominate) and anonymous data processing, and they designate the population census as the ÁNH's activity.

On the basis of the answers there appears a considerable mistrust of information authorities and their representatives. In Hungary the preponderant share of information authority at the time of the collection of data was (and more or less, is still being) concentrated in the sphere of state power (in the institutional system of the former one-party system, in state companies and in personnel departments); thus, the questions generally referred to 'official bodies' or 'official places'. The mistrust of official bodies in general, on the one hand, and of computerised registration, on the other, can be observed in the statement blocks of the survey. On the basis of a 1988 investigation used for comparison, the proportion of indifferent or agreeing opinions decreased, and that of distrustful or disapproving opinions increased, over the course of a year.

In spite of the distrust and of the fact that a fifth of the sample are definitely upset by some aspect of the provision of data, the overall majority are obedient data providers: they deliver all kinds of personal details even if they are opposed to it or if the data collector has no legal right to the data. We found disobedience in data provision to be only occasional.

In the assessment of potential data processing institutions, concerning the working of which — including the handling of personal data — the respondents could be assumed to have personal experience, or at least some idea, we found the most positive picture to have been formed about the workplace and the National Savings Bank, the most negative about the tax office and bill collectors. The ÁNH, together with public opinion research and the census received mainly an 'indifferent' rating.

The most of the respondents ranked the inviolability of private life and the other main branch of the direct personal information rights, the freedom of information, in the middle range of issues that are regarded as definitely important. Among the list of issues, the economic crisis ranked first in order of importance, while the multi-party system came last.

The most sensitive among the personal data are those about family life, financial position and medical history (*Table 1*); every second respondent would object to making them public. The least sensitive data are

Table 1–2

Entire sample		Selected group	
Family life	50.4 %	Family life	67.1 %
Personal finances	49.2 %	Personal finances	65.2 %
Medical history	47.5 %	Medical history	59.0 %
Address	39.1 %	Address	54.0 %
Income	36.7 %	Income	54.7 %
Plans for the future	36.6 %	Plans for the future	52.2 %
Personal identification number	34.1 %	Personal identification number	52.8 %
Past records of personal life	32.8 %	Past records of personal life	51.6 %
Telephone number	30.7 %	Telephone number	39.8 %
Religious belief	22.1 %	Religious belief	28.6 %
Political views	19.3 %	Political views	25.5 %
Age	14.9 %	Age	19.9 %
Origin	14.4 %	Origin	23.6 %
Educational level	13.3 %	Educational level	17.4 %
Occupation	9.9 %	Occupation	9.9 %

national (racial) origin, educational level and occupation. The personal identification number fell in the middle range.

3. The Stratum Desiring Information Autonomy

We devoted a separate investigation to the question whether we could identify a social stratum aware of the need for data protection, the members of which express, through consistent opinions, a demand for information privacy, data protection and ultimately, information autonomy. If yes, does this stratum have a common characteristic profile, and along which lines of social or attitudinal stratification is its structure formed?

The selection criteria can be summarised as follows: the respondent should prefer safety to comfort in administering his/her affairs, and also should prefer decentralised over centralised data registration, and should be aware of the potential dangers of computerised data processing.

We found significant differences between the distribution of answers for the entire sample and that for the selected group the share of which made up 16 per cent of the sample. In the question block concerning sensitivity of personal data, for example, the sensitivity of the selected group is significantly higher along the entire scale (*Table 2*), however, the two rank orderings are almost identical, at most, immediately neighbouring data change positions. The greatest differences approach 20 per cent (personal identification number, income, finances, past and plans for the future), and differences decrease only for the less sensitive data at the bottom of the ranking (*Fig. 1*).

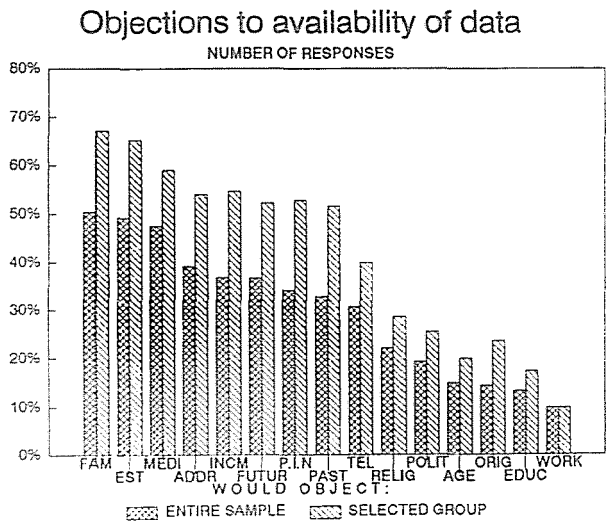

Fig. 1.

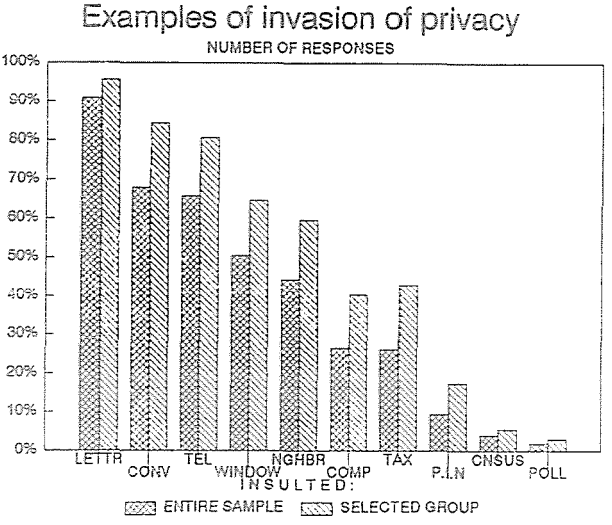

Fig. 2.

The situation is similar for the issues referring to prompted examples of invasion of privacy. The response rates of the entire sample and of the selected group result in two nearly parallel scales (*Fig. 2*) in which the selected group represents the higher values. The typical distance between

Table 3
Entire sample

Letters are received open	90.8 %
Conversations are monitored	67.9 %
Telephone calls are monitored	65.7 %
People watch through the window	50.5 %
Neighbours are curious about one's family life	44.1 %
Computerised data collection	26.6 %
Taxation authorities monitor one's finances	26.2 %
Data must be supplied together with name and personal identification number	9.5 %
Census-takers ask about personal and family data	4.1 %
Opinion researchers ask about one's views	2.0 %

Table 4
Selected group

Letters are received open	95.7 %
Conversations are monitored	84.5 %
Telephone calls are monitored	80.7 %
People watch through the window	64.6 %
Neighbours are curious about one's family life	59.6 %
Taxation authorities monitor one's finances	42.9 %
Computerised data collection	40.4 %
Data must be supplied together with name and personal identification number	17.4 %
Census-takers ask about personal and family data	5.6 %
Opinion researchers ask about one's views	3.1 %

the two series of figures decreases only at the two extremes, approaching 100 per cent and 0 per cent (*Tables 3* and *4*).

To summarise the characteristics of the selected group in comparison with the total sample: There are no differences between the two samples in the ranking of socially important issues, despite greater conflicts in the low degree of disobedience to supplying data to institutions, and in the general assessment of the ÁNH. Moderate (in general 5–20 per cent) but consequential and easily interpretable differences can be observed, with respect to the selected group, in a more negative assessment of data processing institutions (except for the ÁNH), in a higher sensitivity for personal data, in a greater approval of statements referring to data protection consciousness and to the dangers of registration, and in a more critical assessment of computerised registration.

Members of this group are generally somewhat better informed, are less uncertain in the formation of their opinions, are more interested in the fate of their data, pay more attention to the differences between nominate

and anonymous data processing, are bothered more by compulsory provision of data, and more strongly oppose the establishing of interconnections among registrations. According to their selection criteria, they place safety before comfort, prefer decentralised to centralised registration, and are suspicious about the computerised processing of personal data. Accordingly, they more strongly oppose an expansion of ÁNH activities, call for more information about their data, and almost one hundred per cent of them oppose the selling of their personal data for various services.

Of whom does this stratum consist? According to the common conception, we might assume mostly of intellectuals from Budapest. We might think that the city environment, being better informed, the impact of political propaganda, the critical stance of the intellectuals, their informal contacts and, last but not least, their higher professional competence in these issues would promote the development of this profile. We might assume further that these respondents are younger people who are politically more active, are more suspicious about the state, and are more familiar with modern computer technology.

The reality, however, shows something else: according to our investigation there were no significant differences between the compositions of the entire sample and the selected group with respect to age, sex, social status, educational level, occupation, position in the workplace, the kind of work, or place of residence. I suppose that in the present Hungarian society — where even the concept of privacy, as understood in developed Western societies, is deficient — data consciousness appears as a result of a number of background factors, as an indirect manifestation of familial, religious, cultural and other traditions, instead of showing a direct connection with the basic variables of social status (the role of which has significantly decreased in general in the structure and distribution of opinions since the time of our investigation, according to recent surveys). Neither did we find differences on the level of attitudes: the few questions that dealt with relations to political parties (referring to current membership or the intention to join) show similar response rates in the two samples.

On this basis we may conclude that sensitivity in private life and, within that, the desire for information privacy and the awareness of data protection issues (i.e. key elements of personal information autonomy and self-determination) do not follow the traditional social stratification but rather constitute a sort of new dimension in the society.

In mid-1991 ÁNH commissioned another public opinion survey concerning ÁNH's activities from Hungarian Gallup Institute. The differences between the two surveys, the scientific and business-oriented environments, longer-term investigations and casual orders, the compatibility of professional ethics and the client's interests could serve itself as the theme of a

second study; and considering that there was no professional contact between the two teams (moreover, the Hungarian Institute for Public Opinion Research was liquidated in the meantime with questionable reasoning and methods), the results and the methodology of the two investigations show a rather limited direct compatibility. This time, however, I rather refer to some of the common points from which directions of change or relative constancy can be deduced on the basis of the results of the Gallup survey which, despite of its limited scope, constitute an important element in exploring this field.

In general, I understand these points as signs of constancy of the opinions and attitudes during this short, however turbulent, period in Hungary. In the two statement blocks of the Gallup survey the percentage of agreement, disagreement and refused or missing answers concerning the benefits of computerized population registering are similar to those concerning the benefits of computerized administration in general in the original survey (typically around 70, 20 and 10 per cent, respectively). Similarly, these percentages concerning the disadvantages of computerized handling of personal data are more or less analogous in the two surveys (around 50, 40 and 10 per cent). Although the Gallup report does not contain a separate consistency analysis, comparing the response rates in its subgroups we may conclude that the level of inconsistent opinions is about as high as in the first survey (we rather concentrated on multivariate methods in order to reduce the effects of this factor).

Although Gallup's subsamples cover broader sections of the population than the above described stratum, applying a double filter more or less comparable to our criteria (e.g. the 'trust' variable in the subsample of 'personal rights advocates') results in defining a similar size section of the population (about 40 per cent part of a 40 per cent subsample). I consider Gallup's observation as a verification of our results, namely that the opinions concerning the processing of personal data show only negligible correlation with the basic demographic variables.

4. Privacy in the Press

The aim of conducting the second investigation, some of the findings of which will be presented here, was to measure and evaluate how aspects of information privacy appeared in the press, namely in four national daily newspapers in the 1987–1990 period.

The material selected from the newspapers comprised two main categories: (a) writings dealing with questions of privacy and information autonomy in general as their theme, and (b) writings on examples connected

with this topic (whether or not they mentioned directly of the connection with privacy issues). Examples again were of two types: negative and explicitly positive examples. The classification of the examples and the writings in general was based on the modern Western norms in this field.

After controlling, classifying and coding of the selected writings, 799 cases were included in the sample suitable for computer analysis. This quantity of newspaper articles seems to be contradictory to my conclusion based on both general experience and the analysis of this sample, namely that our theme under investigation has not yet been given a place in the press in accordance with its significance, even in the period of the changing of the political system, and in short periods of greater publicity it appeared with ambiguous interpretation and usage of concepts. Two factors, however, have to be taken into consideration: on the one hand, our theme could often be found in groups of occurrence (both within a single issue and in parallel reporting on the same event, e.g. a press release), on the other hand, according to our selection criteria, a writing could be included in the sample because of a mere hint as well; moreover, almost the half of the articles represent negative examples, mostly non-qualified ones.

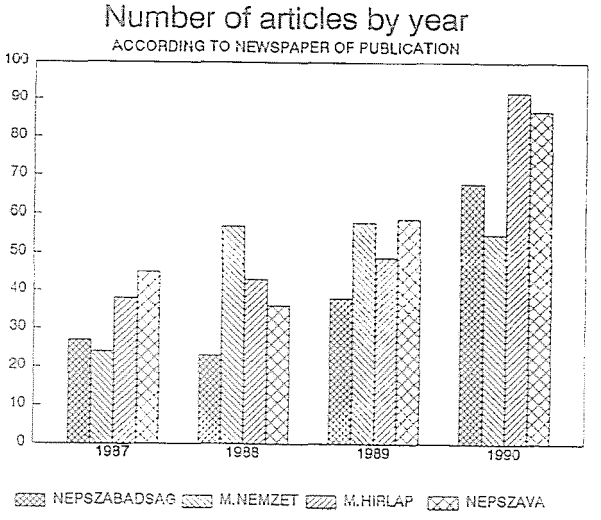

Fig. 3.

Fig. 3 shows the distribution of the articles per year, by newspapers. The share of the newspapers shows different structures in each year; e.g. *Magyar Nemzet* contained more articles in this theme in 1988 and 1989 than in 1990. Its 1988 peak was caused by discussing a relatively broad range of the practical sides of information privacy (e.g. personnel files, travel regis-

tration, 'statistical card', examination results) which meant a clear political standpoint at that time; in 1990, however, the decreasing occurrence of this theme from our point of view, was caused by the over-politization itself, the aspects of private life were pushed to the background. The 1987 peak in *Népszava* was caused mainly by publishing information concerning administrative approaches (e.g. registration of residence, 'medical personal identity certificate', the computerisation of registers of the local councils, regulation of data supply) and the politically harmless AIDS theme; the few qualified cases were related to negative practices of Western countries (e.g. 'FBI surveillance over American writers').

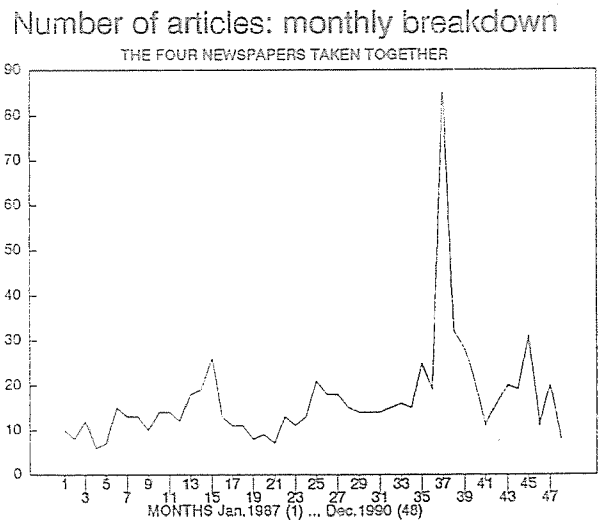

Fig. 4.

The time scale in *Fig. 4* breaks down the four-year period into one-month intervals by values 1–48. The line representing the monthly fluctuation of the number of articles is dominated by the peak of month 37: in addition, smaller peaks can be observed at months 45, 15 and 25. The highest number in month 37 (January 1990) is due to the publicity of the 'Hungarian Watergate' or 'Duna-gate' scandal; besides some news on the population census, issues of other East-European secret services and the first information about the preparations for the election deserve mention. At month 45 (September 1990) several factors amplify each other's effect: at that time the debates on the public availability of the lists of former secret agents were discussed, along with information about local elections and fresh news on the files of the former East-German secret service, the Stasi, several newspapers reported on the new personal identity card, and

the aspects of information autonomy emerged in connection with these themes as principal topics.

5. Concepts and Factors

A separate analysis was made to measure and evaluate the occurrences of 30 concepts, names and expressions which can be considered as especially important in this subject. In the entire sample all concepts occurred, but at the lower end of the frequency table freedom of information (the term was written in English) and open government had only 1, privacy (again, in English) and distribution of information power had only two occurrences each. Law (legal, illegal...) was mentioned in 243 articles, personal data in the narrow sense in 136, personal information as a general concept in 95, personal rights in 78, personal identification number (PIN) in 73, computerised registration of personal information in 53 articles.

One of our subsamples, comprising the writings dealing with the theory of the theme or discussing it as a general question, contains a relatively high number of occurrences of these concepts. The most frequent ones are:

law	48.4%
personal information	31.7%
personal data	25.6%
Privacy-FOI Bill	24.2%
personal rights	22.0%
data protection	15.9%
PIN	12.2%
computerisation	11.0%
public opinion	9.8%
human rights	9.8%
informational self-determination	9.8%

Considering that our simple coding system (occurrence = 1, else = 0) does not preserve interdependence nor structures of the independently recorded data, we selected the twelve most frequently occurring concepts from the entire sample to perform a factor analysis in which the resulting factors can be interpreted as indicators of conceptual schemes and associations reflected in the usage of the concepts.

Finally, four characteristic types emerged after analysing these hypothetical variables in the entire sample and in the three subsamples (global or theoretical writings, negative examples, explicitly positive examples). The factor-variants of the first type play a role in mentioning data protection and the Privacy-FOI Bill. We do not attribute this connection to a data protection awareness, rather to an expert, explanatory, well-informed approach. The type 2 factor-variants can be attributed to the expression

of a technocratic approach; they are significant in the occurrence of computerisation and the automatic processing of personal data. We consider the third type as a projection of a political approach, reflected in mentioning human rights, democracy and public opinion. The effect of the factor-variants of the fourth type can be followed through the occurrence of personal data, personal information and the PIN; we attribute it to the indication of a basically administrative approach manifested in passively transmitted information and statements without value judgements.

6. A Note on Research Perspectives and Needs

One of the conclusions which we may draw from the above investigations is that there is a measurable desire for information privacy in the society, however, this desire is not manifested adequately in the press, nor in the awareness of political and professional circles.

Among the causes we consider it important that this theme seems to be too abstract for politicians and informatics professionals alike since it does not directly concern citizens or the administration but rather the information about them. On the other hand, the classical intellectuals do not realize the possibilities and risks of the new information technologies from the technical side, whereas the technical intellectuals do not realize them from the societal side. Moreover, the norms of a legally guaranteed information privacy and personal-level freedom of information could of course interfere with the interests of the new administration as well, and, paradoxically, the exercise of such rights and freedoms can only be guaranteed by complicated, 'bureaucratic' rules and procedures. Hence even the opposition intellectuals who are fighting against symbols of administrative power do not perceive the possibilities and stakes of gaining a new kind of freedom.

Hungary and the other formerly socialist countries of the region have to import numerous elements of their social, political and legal systems as well as their information technology from the West, instead of developing them in an organic process. Therefore it would be desirable that the lack of organic development also in this special area of the social impacts of information technologies be partly compensated by the means and methods of scientific research and education to result in a more functional knowledge and applying of the local and regional peculiarities in this field.

In the present environment of receding public research sector it seems particularly important to establish international professional cooperation, to launch common projects, to work out some standards for the investigation of the concept of privacy, data protection awareness and the claim for

informational self-determination in society, considering the existing social and cultural differences between the eastern and western parts of Europe. This would provide possibilities to measure this area of impact of the informatization on the society and its strata and groups, and to measure and evaluate future changes in the countries of the region.

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