

# Local Data Bank as an element of information society in Poland

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The phrase „information society“ became a key words for current changes regarding economic and social life in most countries around the world. Although there are many controversies concerning the shape and output of present economic, social and environmental processes, most experts would agree on the increasing role of information and information technology for economic growth and social development. Moreover, opinions on this fact are to large extent optimistic and it is seen as a chance for further development in contemporary world.

Nonetheless, some authors are concerned about the real significance of the development of information society<sup>1</sup>. They argue that in fact reality of information society is chaotic, there is more information then it may be absorbed and most information is of disputable value. The information technology allows people to communicate and search for information immediately, but is also widely used for worthless purposes, at least from the point of human, social and economic development.

The comparison of these two main perspectives on information society may suggest that it is rather the misty reality of many possibilities and unknown future than well recognized reality of established elements. If we manage to organize information resources and people are able to assess what information is of proved value and they have non restricted access to it, then informational society will become next step in development of the world. If there is more and more resources of worthless information and most people are unable to recognize useful information systems, then we may expect chaos and increasing social and economic inequalities.

But what does “information society” mean exactly and what does it mean as far as public statistics is concerned? The phrase “information society” was used for the first time in scientific paper by Japanese ethnologist Tadao Umesao in 1963. In Europe it became popular thanks to report introduced by French sociologists Alain Minc and Simon Nora in 1978<sup>2</sup>. As a complex and multidisciplinary term it may be defined in various ways. In official report of the UN Secretary-General it is seen as “a society endowed with the ability, capacity and skills to generate and capture new knowledge and to access, absorb and use effectively information, data and knowledge with the support of ICT”<sup>3</sup>. The National Working Party on Social Inclusion in the Information Society, set up in United Kingdom in 1995, described information society as “a society characterised by a high level of information intensity in the everyday life of most citizens, in most organisations and workplaces; by the use of common or compatible technology for a wide range of personal, social, educational and business activities, and by the ability to transmit, receive and exchange digital data rapidly between

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<sup>1</sup> L. W. Zacher: *Transformacje społeczeństw od informacji do wiedzy*, C.H. BECK, 2007.

<sup>2</sup> Papinska-Kacperek J.: *Nowa epoka – społeczeństwo informacyjne*, in: Papinska-Kacperek J. (ed.): *Spółeczeństwo informacyjne*, PWN, 2008, p. 14, 15.

<sup>3</sup> *Development and international cooperation in the twenty-first century: the role of information technology in the context of a knowledge-based global economy*, Report of the Secretary-General, UN, 2000, p. 9.

places irrespective of distance"<sup>4</sup>. Many other definitions appeared in recent years, authors of which considered the phenomenon from perspectives of various social and technical sciences. Despite its popularity, "there is no agreed comprehensive statistical framework of the information society"<sup>5</sup>, as it is stated in newest report published by OECD. Though, the field of information society became the subject of statistical observations in many countries.

In this paper, the aim is to present the Local Data Bank as a part of Polish social information order, defined as a complex of social standards of processes, systems and resources of information<sup>6</sup>. The organisation of social information order became of great importance in information societies and have its consequences, as it was mentioned above, not only for economic development, but also for the scope of social inequalities, potential empowerment of citizens and many other aspects of public life. Moreover, in such society resources included in functional information minimum are growing. Functional information minimum is defined by J. Olenski as "minimal information resources necessary for people and legal persons to perform their activities properly in economic, social and political life"<sup>7</sup>. When functional information minimum becomes extended, the need for reliable and easily accessible information also grows.

Generally, Local Data Bank is based on the idea of widely accessible public database, created to provide citizens and legal persons with reliable and up-to-date information on social, economic and environmental processes, accumulated by official statistics institutions.

The history of Local Data Bank project dates back to 1993, when conceptual work was undertaken. The project was developed in cooperation of several units of Central Statistical Office. Administration of database was entrusted to Statistical Office in Wroclaw, which may be seen as an example of successful cooperation of units located in different parts of the country.

In 1998 the first version of database, named Regional Data Bank in 1999, was made available in the Internet for all interested<sup>8</sup>. Now it is the greatest Polish organized information bank about social-economical situation, demographical, social and environmental matters. The number of variables in subsequent years depends on the range of surveys conducted and gradual informational development of the Bank. However, it is increasing each year and in 2005 have reached more then 16000, as it is presented in table 1.

**Table 1. Number of variables available in Regional Data Bank in years 1995-2007**

NUTS level	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
yearly data													
NUTS5	1075	1146	1155	1386	2013	2058	2238	2531	2530	2932	4370	4512	4512
NUTS4	-	-	-	6	504	702	632	804	1255	1094	1334	1138	1138
NUTS3	8	8	8	8	8	8	8	231	231	1431	1399	1447	1447
NUTS2	105	105	105	122	3639	3668	3800	3933	4398	5334	5504	5399	5399
quarterly data													
NUTS4	-	-	-	-	-	-	-	-	-	-	1078	1078	1095
NUTS2	-	-	-	-	-	-	-	-	-	-	3097	3097	3017
TOTAL	1188	1259	1268	1522	6164	6436	6678	7499	8414	10791	16782	16671	16608

<sup>4</sup> *The Net Result: Social Inclusion in the Information Society. Report of the National Working Party on Social Inclusion in the Information Society*, Community Development Foundation, IBM, 1997, p. 3.

<sup>5</sup> *Guide to measuring the information society*, OECD, 2009, p. 11.

<sup>6</sup> J. Olenski: *Ekonomika informacji. Metody*, PWE, 2003, p. 15.

<sup>7</sup> *Ibidem*, p. 277.

<sup>8</sup> Regional Data Bank website: [http://www.stat.gov.pl/bdren\\_n/app/strona.indeks](http://www.stat.gov.pl/bdren_n/app/strona.indeks).

The data in Regional Data Bank is divided into following categories:

- agriculture,
- catering business,
- culture and art,
- entities of the economy recorded,
- environmental protection,
- forestry,
- fuel, energy and materials market,
- health care and social welfare,
- higher education,
- housing economy,
- hunting,
- industry and construction,
- investments and fixed assets,
- justice,
- labour market,
- municipal infrastructure,
- ownership and structural transformation,
- physical education, sport and recreation,
- population,
- pre-school education,
- prices,
- primary, lower secondary, post-primary and upper general secondary education,
- regional accounts,
- revenue and expenditure of local government entities budgets,
- science and technology,
- territorial division,
- territorial self-government,
- tourism,
- trade,
- transport and communication,
- wages and salaries and social security benefits,
- and several categories which consist of data collected during censuses.

Categories listed above are composed of groups (139) which consist of subgroups (616), where relevant variables may be found.

As it is possible in many other popular databases, users of Regional Data Bank are allowed to generate tables and charts. The tabular compilation may be generated for selected categories, groups and subgroups, as well as for selected territorial units and selected variables in years. Charts are available for selected years, variables and territorial units.

From the point of this paper, it is important that Regional Data Bank describes voivodeships (NUTS level 2), powiats (NUTS level 4) and gminas (NUTS level 5) as elements of social and administrative organization of the country, as well as regions (NUTS level 1) and subregions (NUTS level 3) that are parts of territorial units nomenclature, for statistical purposes. This fact is crucial for the significance of Regional Data Bank in the fields of regional statistics and regional policy. Public and private users are highly interested in information on territorial units. For example, policy makers use it when working on policy strategies and settling goals. Local authorities inquire into relation of data on their territory to data on other territorial units. Companies often make such comparisons when taking decisions concerning future investments.

Generally, main Regional Data Bank users may be mentioned as follows:

- public administration,
- universities and other research institutions,
- banks and insurance companies,
- other companies,
- students,
- mass media,
- units of public statistics.

Certainly, these users are highly diversified in many aspects. For example, they differ in the field of information needed, level of information technology competences, time of searching for information etc. That is the reason why data is available in a couple of modules, including "territorial portrait", "hermin" and "voivodeships in years". The "territorial portrait" module is intended to provide statistical data set about selected territorial units. Macroeconomic data set about voivodeships for econometric models may be found in "hermin" module. The "voivodeships in years" module consist of predefined tables for units of NUTS level 2.

Because of technological development and growing necessity for information describing not only voivodeships, powiats and gminas, but also other areas that recipients are interested in, research work was undertaken. The aim is to transform Regional Data Bank into significantly more developed Local Data Bank and make it important element of social information order in Poland.

Main reason for development of the database is demand for information on localities of different size. The smallest territorial unit described in Regional Data Bank is gmina, which may consist of several localities. There are 2478 gminas in Poland, while the total number of statistical localities for which statistical data may be collected reaches 892 towns and 41430 localities in rural areas. For many data users administrative organisation of the country is not sufficient for their analytical purposes.

The Local Data Bank is now the element of complex Information System of Public Statistics project. As before, the conceptual and IT work is being carried out in cooperation of several units of Central Statistical Office and regional statistical offices, including Statistical Office in Wroclaw together with its branch in Jelenia Gora.

Main tasks of future database are as follows:

- to support local authorities in carrying out their tasks and preparing strategies or plans of action,
- to provide researchers, planners and other users with information on social processes in local scale,

- to make it possible to evaluate public policies,
- to assess local social and economic development.

As far as origin of data is concerned, there will be three main sources of information: statistical censuses, surveys conducted by institutions of public statistics and administrative sources. One of the guidelines is to increase share of information resources acquired from administrative registers, which would diminish costs and reduce number of surveys without any losses in final data resources.

The authors of Local Data Bank project intend to create three main modules in the database: regional, local, and module for special localities. The regional module will consist of data accumulated in Regional Data Bank. The local module will gather data on small localities that is unavailable in present database. Finally, the module for special localities will consist of information on specific areas, such as metropolitan districts or cross-border areas. Other modules are also being considered.

Another guideline is to provide the database with technology enabling advanced graphic visualization of data. It would help users to understand information in simply way, assess trends or enhance their analysis.

Previous experiences regarding types of database users caused the decision to prepare three types of interfaces: simplified, basic and advanced. Depending on statistical and computer competences of users it will be possible to choose interface adapted to one's abilities.

Present conceptual work is based on previous experiences gained during development and administration of Regional Data Bank, but also on conclusions of complex analysis of other databases, especially these created in public statistics systems of other countries and international institutions like EUROSTAT, Organization for Economic Cooperation and Development, International Monetary Fund or United Nations.

Generally, the Local Data Bank project may be seen as an important element of future Polish information order. The shape of information order may determine social and economic development of society in Poland, as well as in any other country. The great challenge for official statistics is, and will be, to provide reliable, up-to-date and widely accessible information on social and economic processes. This is prerequisite for taking control of information chaos, which pose a threat to welfare of future societies.

## References

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## Summary

Key words: data bank, informational society

Reliable, up-to-date and widely accessible information is a very important factor determining development in modern world. There is not only a growing demand for information, but also growing store of data derived from various sources. Therefore present societies are often called "information societies".

Development of information societies is a great challenge for public sector, especially for official statistics. Various sources of information that are open to citizens and legal persons are of different quality. Recipients may not be aware of the fact which source is reliable. Therefore it is very important to provide official databases that are accessible, easy to use and popularised.

In 1998 Polish Regional Data Bank was made available to internet users. Now it is the greatest Polish organized information bank about social-economical situation, demographical, social and environmental matters. Regional Data Bank describes voivodships, powiats and gminas as elements of social and administrative organization of the country, as well as regions and subregions that are parts of territorial units nomenclature, for statistical purposes.

Because of technological development and growing necessity for information describing not only voivodeships, powiats and gminas, but also other areas that recipients are interested in, research work was undertaken. The aim is to transform Regional Data Bank into significantly more developed Local Data Bank and make it important element of information society in Poland. The main features of Local Data Bank are presented in the paper.