

The Fundamental Principles of Official Statistics as the basis for a social information environment in the globalised world

Fundamentalne zasady statystyki publicznej jako podstawa społecznego środowiska informacyjnego w zglobalizowanym świecie

1. The origins of the Fundamental Principles of Official Statistics

The Fundamental Principles of Official Statistics (FPOS) is a document often referred to as the *Statistical Decalogue*. It was developed in the years 1989–1991 under the auspices of the United Nations Economic Commission for Europe (UNECE) Conference of European Statisticians as a set of recommendations for governments and statistical offices of countries belonging to the UN European region. The direct and main purpose of this initiative was to create a document that would provide guidance and form the basis for statistical offices in post-communist countries. In 1989, in-depth political, social and economic transformations began in these states, which were transitioning to a democratic political model of state and establishing a market-driven economy. The countries of the European region which gained or regained political sovereignty after 1989 were in particular need of such official support. Building systems of official statistics harmonised with UN global statistical standards became a strategically important task for the transformations occurring in these countries to be effective.

The FPOS were first adopted in 1992 as a resolution of the UNECE. It soon became apparent that the principles presented in the *Statistical Decalogue* were of universal significance and that all countries and regions needed them amid the dynamically developing globalisation. The resolution proved to be a strategic guidepost for the development of official statistics not only in the countries of the UN European region that were transforming their political and economic systems, but also beyond. As a result, the FPOS were adopted by the UN Statistical Commission as early as in 1994, and 20 years later they gained the status of a UN General Assembly resolution.

Now, more than three decades following the initiative of the Conference of European Statisticians, the FPOS form the unquestionable *Statistical Decalogue* for all statisticians, statistical offices and other stakeholders of the systems of official statistics. For 30 years, the FPOS have provided the intellectual and legal basis for

strategies to modernise and develop the capacity of official statistics of all international organisations and all countries, especially those undergoing a deep and dynamic political and economic transformation combined with social and economic shocks.

The *Statistical Decalogue* has proven useful in countries which have gained or regained independence and political and institutional sovereignty. Micro- and small economies that have acquired political autonomy or sovereignty, as well as exclaves and enclaves form a large group of beneficiaries of the *Statistical Decalogue*. The FPOS are important for shaping the systems of official statistics in countries joining a variety of international structures such as customs unions, free trade zones or political-economic unions. The FPOS are also helpful in developing transborder official statistics whose basis is the deep regional-level harmonisation of the statistical systems of neighbouring countries.

2. Challenges of official statistics amid information, political, social and economic globalisation

The transformation of national and local systems of official statistics into a global infrastructural information system began in the 1920s under the League of Nations. In 1928, the International Convention on economic statistics was signed, along with a protocol containing detailed decisions regarding the economy and agricultural censuses. This was the first document somewhat initiating the harmonisation of official statistics on a global scale. The next important stage in the process was the establishment of the UN Statistical Commission in 1946, followed by the formation of the UN Statistical Office and the relevant offices for the UN regions.

Since the 1970s, the role and function of official statistics in political, social and economic processes has undergone further qualitative changes on a local, national, regional and global scale. These changes, their scope, pace and effects for official statistics and all of the stakeholders of statistical processes are determined primarily by the worldwide development and dissemination of modern information technologies. Widespread access to electronic mass media, particularly the Internet and global telecommunications networks, has made the world a global village, as Herbert M. McLuhan predictively, even prophetically, wrote in 1962.

Along with the globalisation of information processes, political, social and economic processes are also rapidly globalising. They are accompanied by a growing profound institutionalisation, which in practice means the coordination and sometimes direct management of these processes by international institutions (e.g. in the EU). International organisations and the international law are playing an increasingly important role in regulating political, economic and social processes in many regions of the world and on a global scale. The state under the rule of law is

becoming a commonly occurring political model, in which the political, social and economic life is regulated by legislated acts. This leads to extensive institutional interventionism of state authorities, international organisations or interest groups influencing the creation and application of law in all areas of political and economic life. It is currently difficult to indicate any areas of the economy and politics that are not governed by legal regulations, often highly detailed and comprehensive. In many countries, legal regulations also apply to numerous spheres of social activity or even to the private lives of citizens.

At present, official statistics is faced with new problems and challenges resulting from the globalisation and institutionalisation of political, social and economic processes as well as information processes, which are becoming more dynamic due to the spread of modern information and communication technologies (ICTs). The following are the most important:

1. The extensive institutionalisation and widespread regulation of political, social and economic processes through the introduction of laws creates the need for relevant, up-to-date, reliable and verified information, rendered in a language understandable unambiguously to all the potential users living in different countries, using different mother tongues and professional languages, in different usage situations. This phenomenon occurs among all international organisations, state authorities and administrations, social and economic entities and 'ordinary' citizens. In turn, all legal acts regulating economic, social and political processes require precise and quantified information. The language of statistical systems adhering to the FPOS fulfils these needs and requirements.
2. Until now, the systems of official statistics of particular states and international organisations coordinated by the UN Statistical Commission, the relevant regional statistical offices of the UN and other international organisations collaborating with the UN constitute the only information system of a global range that is currently able to perform (and indeed performs to the largest possible extent) the tasks of providing scientifically-based, quantified information on social, economic, political and ecological processes, and is able to develop a uniform language (of statistical metadata) for describing all these processes and phenomena.
3. Owing to the widespread modern information technologies and the lower costs of data collection and processing, more and more entities, including commercial ones, conduct statistical surveys commissioned by public institutions. Unfortunately, it is not uncommon for commercial surveys to fail to adhere to the scientific methodology required of official statistics by the UN and the relevant official statistical bodies of countries and international organisations. By publishing or otherwise using data that are the product of commercial research, these institutions create an illusion that the data are of the same quality, relevance

and usefulness as real official statistical data. As a result, the public information space offers both reliable official statistical data and information that meets the formal requirements of official data, but fails to fulfil the quality requirements, especially in terms of methodology and precision of measurement.

4. Numerous laws created by states and international organisations include components in which statistical data and metadata appear. Directives or administrative decisions also include such statistical components. One would expect these data and metadata to meet the standards and requirements of international or state official statistical institutions. These statistical components are in most cases edited not by professional statisticians, but by lawyers who do not always feel obliged to coordinate and harmonise them with official national or international statistical bodies. This phenomenon is sometimes referred to as the 'officialisation' of non-official statistical data or metadata. Data and metadata perceived as official and published in legal acts or other documents, for many users actually do become official statistical data.
5. As the institutional interventionism of state authorities and international institutions deepens, and considering the growing use of modern information technologies, government agencies and other institutions compile statistics on their own or outsource it to scientific units or commercial entities. A threat then arises to the quality of these data, especially in terms of the rigorous observance of official methodological and meta-information standards.
6. Due to the spread of modern ICTs among the public sector and business entities, information resources are created which can be used directly as sources. These resources are often referred to as *big data*. Access to these data by official statistics could enhance a number of statistical surveys, significantly reduce their costs, and, above all, create opportunities for low-cost and continuous statistical monitoring of important phenomena and processes not limited to periodic statistical surveys. However, official statistics still encounters, although increasingly rarely, legal barriers and restrictions or organisational limitations in obtaining access to such data.
7. A relatively small proportion of final users, even professional ones, seek publications and databases managed by institutions of official statistics to obtain statistical information. Most final users of statistical data do not directly turn to official publications and databases, but to more readily available secondary sources of information, mainly the Internet, mass media, different professional publications and even to sources of a propaganda, promotional or advertising nature. These sources include a combination of both official statistical data and metadata, and information of unknown origin or of a difficult to verify quality, exhibiting the formal character of official statistical data and metadata. End users may have

a problem with distinguishing real official statistics from 'officialised' data and metadata. They may be unaware that they are encountering unreliable information and information that does not meet the quality criteria set by authorised national or international statistical bodies. If faulty data are found together with real official data in one message, the label of poor statistical quality falls also on the existing side-by-side reliable information, undermining the trust in both official statistics and professional statisticians themselves.

The FPOS clearly define the rights and obligations of all stakeholders involved in official statistical processes. The observance of these rights and obligations makes it possible to avoid both old and new threats that are increasingly often polluting the public information space. These threats have emerged as a 'by-product' of the globalisation of the economy, commercialisation of information processes in the knowledge-based economy and ousting of democracy by 'demagocracy' in the modern ICT environment.

In this context, it seems necessary to construct specialised information environments that produce, store and deliver, as a public good, information adhering to the FPOS. This way the constantly progressing pollution of the public information space in a globalised world can be counteracted, at least in the scope of quantifiable phenomena and processes occurring in politics, the economy and among the society.

3. FPOS – ethical and legal preconditions of information quality

In the global knowledge-based economy and in democratic states under the rule of law, the condition for sustainable social and economic development and political collaboration is the existence of a 'clean' global information environment. It should contain only information that meets two basic quality criteria, i.e. the criterion of truth and the criterion of social utility.

Political, social and economic globalisation requires the harmonisation of information on a global scale, and universal access to relevant, reliable information as a public good. Amid the widespread modern global ICTs and the resulting emergence of rapidly growing commercialised information sectors, there are many social information environments which generate, capture, store and share information that often do not guarantee compliance with the quality criteria necessary for the end users.

In a globalised information society, particularly important roles are played by entities that act as intermediaries between information producers and users, i.e. they manage the systems involved in the sharing and dissemination of information on a local, regional or national scale, and more and more often also on an international and global scale. Dominant among these entities are the electronic mass media, the

Internet and institutions of mainstream education. It is these entities that determine the quality of social information environments. These environments form 'information cages' for most of the stakeholders of information processes. Many of them do not realise that they actually live in such cages and remain unaware of the information barriers their cages create for them. The observance of the FPOS by the organisations managing social information environments means that they should creatively adjust the stakeholders' information cages to their real needs. They should additionally protect their information environments from information that does not meet the quality criteria of truth and social utility.

Most end users obtain information produced by official statistics primarily through the above-mentioned intermediary entities. Under these circumstances, it is necessary for all stakeholders of statistical processes to adhere to common rules that determine the quality of statistical information and the functioning of official statistics systems.

In many countries, governments and other authorities as well as large corporations and organisations seek to create their own information environments in order to control all other information environments that may impact their activities and position. They are also interested in producing and disseminating selected statistical information, especially interpretations of official statistical data by controlling the mass media, including the Internet. Thanks to modern ICT, influencing the behaviour of even large populations of citizens, voters, buyers, employees, etc. through their information environments is very low-cost and the effects can be powerful and long-lasting. Therefore, it is not uncommon to observe the phenomenon of the deliberate polluting of social information environments with information, often in the form of statistical data and metadata, which do not meet the basic criteria of quality, i.e. the criterion of truth and the criterion of social utility.

In the so-called democratic states under the rule of law, the 'freedom of expression' and prohibition of censorship doctrine is established. 'Freedom of expression', understood as the right to freely pollute social information environments with fake news that fails to meet any quality criteria, in some countries leads to chaos, and in others to imposing self-censorship as more effective than institutionalised censorship.

In times of the globalisation of information, economic processes and deep institutional interventionism in states under the rule of law and international organisations, the information security of the country, society and economy depends on good laws. These laws should define the standards of information quality and develop a system guaranteeing the effective enforcement of these laws. The principles described in the legal act of the FPOS (as a resolution of the UN General Assembly) constitute such good and universal laws for the governance of political, social, economic and ecological information.

Narrow interest groups managing global information systems use modern ICTs and socio-technical methods to influence societies. In these circumstances, after several centuries of destruction and exploitation, it is necessary to apply towards social information environments approaches similar to those which were already developed and attempts were made towards their application. *Information ecology* seems to be a concept that captures well the essence of this approach. The FPOS form a good basis for a modern, pragmatic *information ecology* in the subjective and objective scope that modern statistics encompasses.

Information infrastructure is the basic layer of each country's social information environment. It provides verified, high-quality information as a due public good. It is the inherent duty of a state based on law (but only a state based on good law), to develop its information infrastructure. We must remember, as the eminent representative of Polish political thought of the 16th century, Rev. Piotr Skarga (1597/1936) said, a bad law is worse than the meanest tyrant, as the tyrant can either change, be persuaded or die, and his tyranny ceases. An evil law, on the other hand, always persists, always kills and does harm, both to the soul and to the body. It is like a lion, an ignorant beast which will not be persuaded until it is killed. The same applies to evil law: it does only harm to people, while it should benefit them. Thus, all established laws must be good or they are not laws.

If real democracy, social freedom and state sovereignty are to prevail, the pollution of the social information environments must be penalised. This penalisation should be adequate to the social, political and economic consequences caused by the pollution and it should concern all entities involved: the ones shaping this environment and the ones functioning within it. It should deter governments and interest groups that seek power over other states and nations. The FPOS should be the basis for formulating good laws penalising the pollution of social information environments with data and metadata that do not meet our civilisation's criteria for quality: the criterion of truth, the criterion of social utility and the criterion of minimal redundancy. With all the stakeholders adhering to the FPOS, official statistics would be able to and should play an important role in controlling the quality of data disseminated in social information environments by providing information that meets the above-mentioned quality criteria.

Last but not least, the prerequisite of sustainable development in the globalised world is the ability of governments, businesses and professionals to communicate effectively in languages that have common semantics and pragmatics. The UN and other international organisations have acknowledged some ethnic languages as international languages, but the globalised world needs global professional languages with, as mentioned above, common semantics and pragmatics, embedded in different ethnic languages. These requirements are met by the language of official statistics.

In politics, economy and scientific research, official statistics has become an international, precise tool of communication for all countries and nations. This internationalisation of the statistical language was achieved by adopting common, precisely defined metadata, common methods of observation and measurement of political, social, economic and many other phenomena, as well as by adhering to the rule of information quality check and the rules of the representation of empirical quantifiable information in ethnic languages. Not only does official statistics produce statistical indicators, but also – or rather first of all – it creates concepts and definitions, classifications, nomenclatures, terminologies and glossaries of indicators which are used directly to make important political, social and economic decisions.

The FPOS as the *Statistical Decalogue* form the foundation of the above-mentioned functions of official statistics. The language of official statistics can and should provide a common semiotic (especially lexical and semantic) basis for all ethnic languages used in international communication and in those fields of modern statistics where it is a research tool and a method of knowledge mapping.

The adoption of the FPOS by the UN General Assembly created legal and political conditions for official statistics to fulfil the function of an international language – the professional language for politics, economics and social and ecological phenomena and processes, the modern ‘lingua franca’, commonly used not only by professionals, but by the whole community of information society in our ‘global village’.

References

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