



**Economic and Social
Council**

Distr.
GENERAL

CES/1999/17/Add.7
14 April 1999

ENGLISH ONLY

STATISTICAL COMMISSION and ECONOMIC COMMISSION FOR EUROPE

CONFERENCE OF EUROPEAN STATISTICIANS

Forty-seventh plenary session
(Neuchâtel, Switzerland, 14-16 June 1999)

**HOW DO WE MEASURE THE PERFORMANCE OF AN NSI
AN NSI PERSPECTIVE**

Supporting paper presented by the Central Statistical Office, Poland

I. INTRODUCTION

1. The problem of performance indicators for National Statistical Institutes (NSIs), which is the subject of this session, is in fact the problem of measuring and monitoring activities of a statistical institution. The activities of an NSI are understood as a system of statistical data collecting, storing, generalisation and elaboration as well as dissemination of the results of statistical surveys as official statistical data.

2. From the point of view of an NSI this problem is perceived differently than by the users of the information, or in a broader sense, by the outside world. From the point of view of an NSI following problems are the key issues:

- What is collected and how, but also why and for whom,
- What is collected, how it is stored and how it can be accessed and how it is disseminated, and - what is even more important in statistics - how the current data relate to the historical files (for the continuity of time series and comparability of the results),
- How the data are generalised and edited, why and for whom,
- How official statistics are disseminated.

3. Providing answers to those questions refers to the whole system of official statistics, especially to its core statistical activity, due to the fact that this covers the legal basis of statistical surveys, the theory, the methodology, the organisation and implementation of surveys, as well as the data dissemination to the users.
4. It can be further stated that all problems related to the performance indicators in statistics have to refer also to the system of release and dissemination of official statistics. In this respect we always have to refer to the international standards, since one of the underlining principles of performance indicators is to measure the degree of harmonisation of a national system of official statistics with international standards at each stage of statistical activity.
5. This means that it is worth to measure performance of a NSI by means of monitoring, observation and measurement of the type, volume and quality of statistical services provided to the users. One may ask a question about what in fact is measured and monitored.
6. We aim towards measuring what kind of information, how and when is disseminated and to what degree the demand for information is satisfied. We attempt also to anticipate and estimate the future needs in terms of the type, level of detail and volume of information needed and the tools needed to satisfy the demand (programmes, resources, expertise).
7. Simplifying we can state that the performance indicators for an NSI boil down to ensuring provision of reliable, impartial and systematic information to the society, governmental bodies, public administration and economic entities about social, demographic and economic situation in the country and about the state of the environment.
8. In those terms performance means a good coverage of all social and economic areas observable with statistical surveys, on the basis of a coherent annual programme of surveys, in an efficient way and to the benefit of the society as a whole. Statistics should have the mandate to collect data from all possible sources and, what is the most important, all data sets, compilations and analyses collected within the framework of official statistics should be widely accessible and disseminated. In case of Poland those issues are provided for in the Polish Law on Official Statistics.
9. One should remember that an NSI does not operate in a social and economic vacuum, which means that the programme of activity is related to the specific situation of the country - political, economic, social and international. This concerns the legal framework for statistics, the programme of statistical surveys and the system of dissemination.
10. Assuming that in a democratic society statistics operates on the same principles common to a democratic world, than statistics is organised and is

performing in such a way as to satisfy information needs of the society. In such a case the performance of a NSI is measurement of the degree of implementation of the human right to have access to information. This means that the most important for statistics is to disseminate as much current statistical information as possible.

11. If we take Poland as an example, we can state that additional requirement for official statistics is to provide statistical information on transformation processes in economy, politics and society. In the recent period this means also the "statistical observation" of the results of the reforms currently implemented in Poland - the reforms of administrative division of the country, social security system, education system and health care system.

12. In this context a challenge and the most important task for statistics is to educate the society to understand and accept the social processes, which were triggered by the transformation processes and to assist individuals in finding their place in the new reality. Since the social acceptance for changes can neither be forced nor taken foregranted, for a long time the role of statistics will consist in increasing the knowledge on the reality and social and economic processes. One of the indicators should allow measuring to what extent statistics helps to understand the transformation processes.

13. In a wider sense this problem concerns the following issues:

- (i) The concept of the flow of information from statistics to the public opinion and monitoring the society reaction on this information.
- (ii) Passive forms of stimulating information needs and positive opinions from the users side.
- (iii) Active forms of stimulating an interest and needs for statistical information.
- (iv) The concept of the measurement of the influence of statistics on the public opinion.
- (v) Programming the influence of statistics on the public opinion and vice versa - the public opinion on statistics.
- (vi) The perspective of the social role of statistics both, in the process of social and economic transformation and in the process of integration with the European Union.

II. THE FLOW OF STATISTICAL INFORMATION TO THE PUBLIC

14. We have assumed that the "regular" official statistics is impartial, independent and reliable, and conducts statistical surveys, collects data, generalises and disseminates results of the surveys. We have also assumed that adequate environment for the NSI's activity exists, in terms of the legal basis, programme of statistical surveys, organisational infrastructure and human resources. Finally we have assumed that the process of dissemination of statistical information is monitored and information needs are recognised and satisfied. Then the key factor of performance is the organisation of the data release, access to data and dissemination of the results.

15. The information resources at the disposal of an NSI have the main influence on the organisation of distribution of statistical materials. Those resources should consist of:

- the concept of the system of information,
- the system of servicing public and local authorities,
- the concept and the rules of functioning of the official statistics information centres,
- rules of servicing mass media,
- rules of servicing international organisations and institutes,
- the access to statistical information via Internet,
- servicing the economy and satisfying the needs of commercial information market,
- servicing scientific centres and promotion of statistical literacy.

16. The principles should also deal with the storing and maintaining of the archives and with the activity of statistical libraries. The principles the CSO adopted a few years ago specify the kind of materials which can be disseminated, the organisation of work, the forms of data presentation and the data dissemination policy and techniques.

17. Thus, the first indicator of performance of the NSI is the formulation of those principles, providing meaningful contents to them and following the adopted principles in the dissemination of information, implementing in practice a sort of code of good practices in this field.

18. The second indicator of the NSI performance is the maintenance of the system and its modernisation. The observation of those two principles is difficult as a rule, because it means being on alert all the time and being able to react immediately to the recognised information needs, and what is even more important, providing a quick feedback, which means that modifications are done even during the distribution of the materials.

19. The modernisation of the data dissemination system refers to both reacting to the needs and to the incorporation into the system of the results of the progress made in statistics in terms of research and organisation at the global level.

20. On the basis of almost six years of practical experience in maintaining a modern system of statistical data dissemination we can state that the third performance indicator of the NSI is the establishment of a user-oriented and user-friendly dissemination system.

21. The experience of all statistical institutions in the world indicates that the users of statistical information look for information about their situation and their status and for the answers to their specific problems and questions. The conflict always consists in the fact that the users, almost in all cases are looking for individual solutions, while statistics unchangeably provides a

statistical solution, i.e. describes the situation as an element of a bigger set of occurrences. Additional source of conflict is the fact that the underlining principle of statistics is the observation of the statistical data confidentiality.

22. Thus, another indicator of the NSI's performance is both the acceptance of the society of the principles of the confidentiality and striving for such a level of social education that the users `perceive` the social and economic reality as described by the results of statistical surveys and understand the processes by analysing the results (reading, listening and watching the statistical information). A critical factor in `understanding and acceptance` is providing all users with equal access to data. In other words, the political systems and the authorities should accept their equality with other users and should permit equal access to statistical data.

23. However, still one of the most important performance indicator for the NSI is, in all the countries all over the world, the acceptance of statistical information as the official information. This is a very difficult task, because a permanent element of the function of the data dissemination system is responding to the current demand for information. Revealing the results of consecutive surveys makes the previous information `not-so-fresh` and the users are tempted to formulate their opinions and forecasts well ahead the schedule of data release deadlines. Gaining a position of the producer and disseminator of the official data is one thing and maintaining this position is another thing. This requires not only a consequence in maintaining and implementation of the principles of the system of official statistics, but also political courage and determination. The latter problem is particular acute when statistics monitors difficulties, slowdowns, economic regress and social conflicts.

24. An important achievement of the NSI is the organisation of a flexible system that can adapt its performance to the needs and behaviour of various groups of the users of statistics.

25. After a period of tough fight for catching interest and building confidence in statistics among the users, there is a difficult moment of coping with a dramatic increase of the demand for statistics. In case of Polish statistics this refers first of all to satisfying the demand of mass media and responding to the demand of individual users. In case of mass media this means that we have the strategy of offensive promotion and supply of statistical information. We believe that the approach of `waiting for the journalists` which is applied by the majority of NSIs is not a good solution. The problem we are facing implementing this strategy is whether we can cope with two press conferences per month (each with over 40 different editors), respond to several topical issues put forward by them and disseminate every month many pieces of information, issue an own periodical, appear on TV and prepare radio broadcastings, disseminate information via Internet and monitor the reaction of mass media on statistical information.

26. Responding to individual requests (on top of providing the service to mass media) causes a technical problem of handling 800-100 telephone calls per day in the peak periods.

27. Concluding this part it can be stated that one of the performance indicators for the NSI is also coping with its own status and satisfying the social expectations with respect to the availability of statistical data.

III. STIMULATION OF INFORMATION NEEDS

28. Implementation of the tasks of official statistics resulting from the `statutory` obligations is only a part of the story, because a good programme of statistical surveys is the programme that creates demand for information. However, the creation of the demand for additional information does not refer only to the programme of statistical surveys, the technology used, the capacity or the qualification of the dissemination staff, but this is mainly the problem of the willingness to cope with the ungrateful role of the performer who has to do some extra work, which the user is unwilling or unable to do. The attempts `to make statistics do the work` are as old as the official statistics. Equally old is the problem of treating statistics not as a source of data, but as a source of inexpensive sets of information for own research. This is especially frequent in case of the scientific circles, which tend to ignore some stages of research and make use of the materials that allow to economise on time and resources.

29. This is a difficult problem and working out proper co-operation with the scientific circles on the terms of mutual benefits is very difficult. It is obvious that materials from many statistical surveys have to be made available, must be the public property and must be disseminated (e.g. materials from population and housing censuses, registers, classifications, etc.). A performance indicator in that case is developing such forms of co-operation in which on each occasion when materials are made available there is also some gain to statistics in terms of the methodology and transfer of the know-how. This can be done by arranging joint surveys, analyses and publications. In my opinion this problem is faced by all statistical institutes around the world.

30. Coming back to the programme of stimulating demand for information it can be stated that it is implemented by means of the following:

- Dissemination of information on planned surveys and analyses
- Dissemination of queries and offers of co-operation
- Permanent monitoring of the acceptance of statistics and manifesting readiness to answer all questions and to clarify all doubts.

31. This leads us directly to the user satisfaction survey in terms of the demand for information on the one side and the assessment of the degree of satisfying the demand, on the other side. Leaving aside the philosophical problem if the demand for statistical information is in fact the demand for education we can state that developing and implementing such surveys require

time and financial and human resources. Implementation of such surveys always is done (or in fact has to be done) at the expense of the underlining activities, which means the limitation of the dissemination of the information, smaller number of users provided with our services or a smaller number of problems solved. Attempts to conduct such surveys are done, but there are almost no convincing examples, reliable results or data sets that can be widely used. However, it is clear that a success of the NSI in this case is the development, implementation and generalisation of such surveys. In everyday life situations e.g. in the cinema the audience `votes with their feet`, in supermarkets with the volume of purchased goods, while in statistics the users vote with `the use of statistical information` which is much more difficult to observe, assess and even more difficult to verify. A banal temptation to collect opinions is a kind of a cul-de-sac, because the information needs change as often and as drastically as the environment, conditions and everyday needs. Thus, the choice is between aiming at a total coverage of all phenomena or conducting well-focus professional surveys at an academic level.

IV. ACTIVE FORMS OF GENERATING INTEREST IN AND DEMAND FOR STATISTICS

32. Together with the economic development, the progress of transformation and the strengthening of the market economy the social and economic information starts to be a relevant element of the problem-solving in everyday life.

33. This is done in different forms, the most widespread one is using statistical information (indicators, data) as reference points for various types of estimations - e.g. valorisation, compensation, equivalence rates, etc. In case of Polish official statistics in over 100 legal acts statistical indicators are used as a basis for various kinds of estimations (the printout alone of the list of those indicators takes several pages). One may raise a question what is the role of statistics in this case and the fact that those indicators are so frequently used is a success of statistics and statistical institutions. While the reference to statistics alone manifests the usefulness of statistics, the definition of those indicators, their interpretation as well as their availability is an important task of statistics.

34. Equally important task is the supply of statistical information for the needs of economic activity. This is a vast and diversified field of application. It refers, first of all, to the information from economic and territorial registers, data banks, local databases, economic balances, classifications, nomenclatures, etc. A major achievement of statistics is satisfying such needs.

35. A different, but equally important area is the supply of comprehensive sets of data, synthetic measures of the economy or its particular sectors.

36. A related activity is a comprehensive evaluation of selected phenomena (business cycles, health status, poverty, unemployment, national accounts). All forms of active creation of the demand for statistical information can be fully appreciated when the information is available in the form and on the media

preferred by the users, which boils down to the development of comprehensive multi-medial forms of presentation of statistical information, such as Internet, CDs, data banks, etc.

37. A performance indicator for official statistics in this case is the ability to develop such products and satisfy the demand in the user-friendly way.

38. This overview of performance indicators of official statistics indicates that the most important is a gradual filling in with a concrete substance of the statutory obligations of the statistical services. This includes also the capability of gaining new areas of activities and efficient implementing of new functions. However, I believe that the official statistics should measure its performance with its capability to fulfil its obligation to collect, store, generalise and disseminate the results. This is the governing principle for the present time and for the future. There is no doubt that maintaining time series and data comparability is closely related to the monitoring of new phenomena and new occurrences.

39. As any area of social life statistics has the natural need to observe its influence on the social and economic life.

V. A CONCEPT OF MEASURING INFLUENCE OF STATISTICS ON THE SOCIETY

40. I have already mentioned difficulties that emerge during surveying of statistical information and the assessment of the level of satisfaction of the users' needs. I have also stated that this is a problem, first of all, of having professional statistical surveys at the academic level. I am aware of the fact it is necessary to undertake such topics directly by official statistics.

41. Statistical information is an important factor in creating public opinion and influencing the understanding of phenomena and processes, providing explanation for many tensions and problems. If it is so, than it is very important to find out the contents of those processes and to find out to what extent statistics is the 'property' of a specific historical period, system, authority or circles. Its relation to the reference period for which the data are collected and presented means the participation in the social, political and economic processes.

42. Its eternal character consists in the fact that the surveys conducted in a proper way will be still 'valid' in one, five or fifty years. The question is whether it is possible for statistics to observe itself and to generate information about itself.

43. The measurement of the influence of statistics on the society is not only the influence on the public opinion. Equally important is its influence on the economy, character of economic processes, rate of development, education and the increasing on the general level of education.

44. An obstacle to development, as important as financial resources, is the level of statistical literacy of the society. Frustrated and uneducated society is a bad prognosis for the capability to solve problems, tensions and difficulties. Statistical literacy means understanding basic concepts and economic categories. An importance performance indicator for official statistics would be a development and implementation an educational programme, not at the level of social elite, but at the level of microeconomics of the households, which allows them to understand such concepts as inflation, credit, price, stock exchange, taxation ratios, etc.

VI. PREFORMANCE INDICATORS IN STATISTICS IN THE CONTEXT OF TRANSFORMATION AND EUROPEAN INTEGRATION

45. The question how to measure performance indicators in statistics is answered by our experts in a very concise way: obviously with the quality of information provided, the quality measured throughout the whole process of data collection, editing, generalisation, storing and dissemination. One should keep in mind that only statistics which is alive and widely available is the statistics of the future.

46. Last year during a special session on the relations between the NSIs and governments we have spoken a lot about the observation of the fundamental principles of official statistics. Referring to that session I would like to state that the future of official statistics in all countries depends on the application of those principles on the one hand and the development of a flexible programme of statistical surveys implementing modern theory and methodology of surveys, perfect organisation of work, modern hardware and software and an efficient system of data dissemination, on the other hand. All this has to be done in the conditions of increasing demand for information and difficulties related to the scarce financial and human resources.

47. An external condition is the integration and co-operation within the framework of the European statistical system, especially the integration of the transition countries.

48. In brief one can say that in the nearest future the most important task of official statistics in general is the implementation of the programme of statistical surveys which can satisfy the users` needs at the turn of the century in the best possible way with the limited and decreasing resources we have at our disposal.

49. In terms of dissemination policy this means the following activities for our office:

- Integration of all areas of information policy: regular data dissemination, service to the governmental bodies, mass media, scientific circles and public opinion,
- Development of multi-functional organisational structures allowing integration of all dissemination activities,

- Establishing teams for the research and analysis of the information needs of the users and observation of the perception of statistics,
- Implementation of the system of promotion of statistical information,
- Upgrading of the know-how and equipment of dissemination services of statistics,
- Co-ordination of the national system of the dissemination of statistical information,
- Development of the system of promoting statistical literacy among the society.

50. Those activities are very urgent although not very easy ones, because they require not only changes in the organisation and programming, but also acceptance on the part of the authorities and the society as well as the statisticians themselves. This also requires a support of international organisations dealing with statistics.

51. The need for changes on the one hand and the need to maintain continuity on the other hand, cause that all activities have to be `safe` for statistics itself. This forces us to take into account in the programme of activities such aspects of the functioning of the system of official statistics as the legal system, organisation, programme of statistical surveys, data processing system, storing, computing infrastructure, data release system, dissemination system, etc.

52. From the point of view of a NSI in the coming years the influence of statistics on the society and the NSI's performance will be measured with its efficiency in observing phenomena, monitoring changes and disseminating results. New phenomena will create new problems that will require new research methods and methodologies, new methods of analysis and finally new forms and techniques of the presentation of statistical information.

53. The system of statistical indicators with which we observe social and economic changes to a higher degree will have to play the role of the `sensors of changes` so they will not only describe the phenomena and processes but also inform about the likelihood of change.

54. Concluding, I can state that the performance indicators in statistics boil down to the scope and coverage of surveys, the comprehensiveness and depth of the analyses and the accuracy of the diagnoses.
