

*The 20<sup>th</sup> anniversary of the Fundamental  
Principles of Official Statistics:  
Further promotion of worldwide compliance  
with professional, scientific and quality  
standards*

by Sibylle von Oppeln-Bronikowski and Irina Meinke<sup>1</sup>

**Abstract**

Almost twenty years after their adoption, the Fundamental Principles of Official Statistics are still as relevant today as they were in the past. They have become an integral part and a common reference in the global and national statistical systems. Global reviews assess periodically the implementation of the Fundamental Principles within the UN Member States, detecting best and least implemented Principles. In this context the following central question arises: *How can the worldwide implementation of the Fundamental Principles and compliance with professional, scientific and quality standards be further promoted?* The 20<sup>th</sup> anniversary of adopting the Fundamental Principles of Official Statistics in 2014 was used as an occasion to revise the preamble of the Fundamental Principles in order to take the new global developments of the past two decades into account and to enhance the practical implementation of the Fundamental Principles. To accomplish the latter, an international Friends of the Chair group developed implementation guidelines in early 2014 containing concrete recommendations of activities that enhance the practical implementation of the Principles. Concrete examples and experiences for implementation from UN Member States are integrated in this work. In the coming years, the implementation efforts will be strengthened for example by continuously improving and updating the implementation guidelines in order to integrate new developments as it is a “living document” with an open and flexible structure.

---

<sup>1</sup> Sibylle von Oppeln-Bronikowski is Head of Department “Strategy and Planning, International Relations, Research and Communication” of the Federal Statistical Office of Germany. Irina Meinke is Research Assistant Head of Section “Data Quality Management” of the Federal Statistical Office of Germany.

## 1. Global and national impact of the Fundamental Principles of Official Statistics

A milestone in the history of the global statistical system was reached when, on 29 January 2014, the UN General Assembly adopted a resolution concerning the Fundamental Principles of Official Statistics, which have been applied worldwide since 1994. It is the first time the Fundamental Principles have received such *high recognition at global political level* since their inception almost twenty years ago. The decision was a historic moment for the international statistical system and shows the importance of good statistics for the democratic society. The endorsement by the General Assembly increases the visibility and enhances the understanding as well as the awareness of the Fundamental Principles by bringing them to the attention of politicians, statisticians, users of official statistics and data providers. In 2013, on occasion of the 20<sup>th</sup> anniversary of the Fundamental Principles, the preamble was revised in order to take account of the new global developments of the past 20 years bearing in mind the critical role of high-quality statistical information, the necessity to ensure public's trust in official statistics and stressing that legal and institutional frameworks need to guarantee fundamental statistical values and principles.<sup>2</sup>

*Background information: The Fundamental Principles affect four groups*

*Statisticians: The Fundamental Principles provide sound guidelines for professional and impartial practices as well as scientific principles and quality standards.*

*Respondents: The Fundamental Principles guarantee that data are collected and used solely for statistical purposes and not for commercial use and ensure data confidentiality.*

*Users of official statistics: The Fundamental Principles form a transparent framework in regard of quality, relevance, utility and procedures of official statistics in order to retain trust of users.*

*Decision makers: The Fundamental Principles set out the role of official statistics, which provide impartial information needed in the decision making process of a society and used by the government, businesses and the public.*

Following the adoption of the Fundamental Principles, national statistical offices started explicitly to make reference to the Principles in various ways in their public communication. The Principles were translated into national languages and disseminated within the national statistical systems and on their websites. They became widely known and respected among users and producers of official statistics, both nationally and globally. Moreover, the Fundamental Principles have shaped the formulation of the statistical laws in many countries.

---

<sup>2</sup> The full text of the Fundamental Principles of Official Statistics with the revised preamble can be found on the [UN Statistics Division website](#).

Likewise, the Fundamental Principles form the basis for supranational adapted principles for official statistics like the European Statistics Code of Practice, the African Charter on Statistics and the Code of Good Practice in Statistics for Latin America and the Caribbean.

## **2. Periodic reviews of the implementation of the Fundamental Principles**

The Fundamental Principles provide some general guidelines for the functioning of statistical systems and therefore constitute a code of conduct for the global statistical community. They represent the core values of official statistics against which the work of the statistical agencies can be judged. In order to assess the degree of implementation and to report the experiences of the UN Member States with the Fundamental Principles, the UN Statistics Division conducted a first global review of the implementation of the Fundamental Principles in 2003/2004. The UN Statistical Commission agreed in 2011 that it was desirable to conduct *periodic reviews*. As a consequence a second global review was conducted in 2012/2013 within the framework of the reaffirmation of the Fundamental Principles.

*Background information: Questionnaire and response rate of the global review 2012/2013*

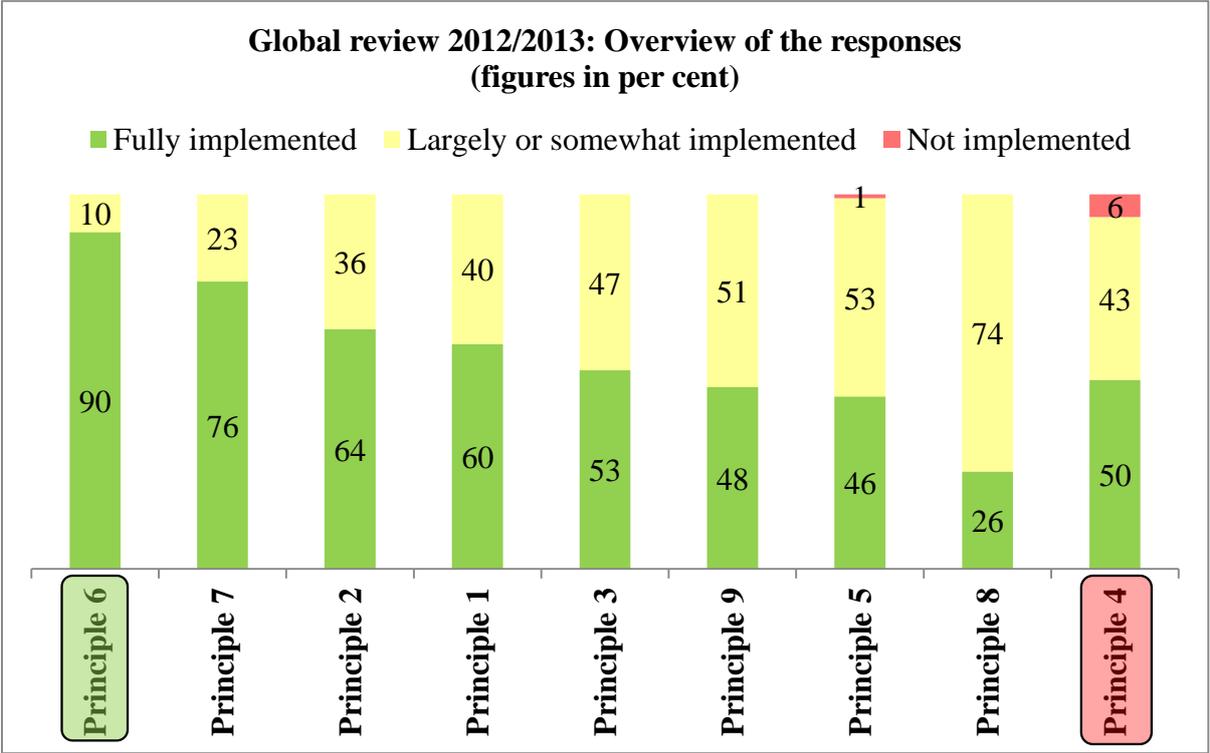
*The self-assessment questionnaire for the global review 2012/2013 was sent by e-mail to 193 national statistical offices and to the Palestinian Central Bureau of Statistics. By 31 January 2013 approximately 65% replied to the survey. That means that the results of the survey are based on 126 responses from UN Member States and the Palestinian Central Bureau of Statistics. The questionnaire consisted of 78 questions: four introductory questions, seventy-one questions structured according to the ten Fundamental Principles and three concluding questions.*

In general, the questionnaire of the global review 2012/2013 started with a general question to determine the level of implementation of the particular principle in the country (“In your country, overall, this principle is fully implemented, largely implemented, somewhat implemented or not implemented?”). The replies to these general questions are presented in the following figure. On the basis of the responses, it can be observed that in total the Principles are seen as remarkably well implemented. Especially, Principle 6 on confidentiality saying

*“individual data collected by statistical agencies for statistical compilation (...) are (...) strictly confidential and used exclusively for statistical purposes”*

scores highest. A great majority of the respondents (90%) answered that overall this Principle is fully implemented. Looking closely at the replies to the more detailed questions under each

Principle<sup>3</sup>, the figures show that the practices to prevent disclosure of individual data (like suppression of information if the number of respondents allows for easy disclosure of data and application of software for checking tabulations and microdata against disclosure) are well developed. Furthermore, a large majority of respondents (87%) mentioned that confidentiality of data is guaranteed in the statistical law. According to the replies, confidentiality protection is part of the culture in statistical agencies in almost all countries and is “considered the foundation of the credibility in official statistics” as one respondent put it.



On the other hand, Principle 4 on prevention of misuse saying

*“the statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.”*

is the least implemented.<sup>4</sup> 6% of the respondents indicated that overall in their country this principle is not implemented. Compared to the figures of the other Principles (rates range between 0 and 1%) and considering that the answers of the global survey refer to a self-assessment (and not to a peer review or audit), this is a significant result. Looking closely at

<sup>3</sup> An analysis of the replies to the more detailed questions under each principle is available at the [United Nations Statistics Division website](http://www.un.org/News/Press/docs/2013/1308_20130814_StatDiv_Survey_2012-2013.html).

<sup>4</sup> This paper focuses only on the Principle on prevention of misuse, although there are other Principles which lack in implementation.

the replies to the more detailed questions under each principle, the figures show the following picture. Even though a great majority (90%) of the national statistical offices are entitled to comment on erroneous interpretation and misuse of statistics, the extent to which national statistical offices react to misuse or misinterpretation of data has a broad range. It varies from monitoring misuse and regularly writing to newspapers to reacting somehow only once in the last five years. Altogether, nine national statistical offices reported that they were not entitled to comment on misinterpretation of their data. Furthermore, most misinterpretations are reported to occur in the mass media. Many respondents reported problems of misinterpretation due to their users' lack of methodological knowledge. According to the replies to the more detailed questions, a great majority (90%) of the national statistical offices carry out activities to educate users. Some did so regularly, giving as many as 20-30 courses a year, and others provided such activities more intensively before conducting censuses and large surveys or when a major change of methodology had been adopted. On the other hand, some countries reported that they conducted such activities irregularly. One national statistical office stated that there is no tradition for such an initiative. According to the global survey, a main problem that prevented better implementation of this Principle includes the lack of financial and human resources for user education purposes (especially for developing countries).

### **3. Strengthening the practical implementation of the Fundamental Principles**

The UN Statistical Commission established an international Friends of the Chair group (FOC group) in 2011, among other things to revise and update the preamble (completed in 2013) as well as to strengthen the Fundamental Principles by developing a practical guide for their implementation. A first version of the *implementation guidelines* was finished in time for the 20<sup>th</sup> anniversary of the Fundamental Principles in the early 2014. The implementation guidelines contain concrete recommendations of activities that enhance the practical and effective implementation of the Principles and compile practice-orientated examples to enhance the sharing of good practices throughout the UN Member States. The nature and intention of the implementation guidelines allow this guiding tool to remain open to further development of activities. Currently, the FOC group is working on an improved second version of the implementation guidelines integrating further practical examples for implementation and concrete experiences from UN Member States other than from the Friends of the Chair Group members. The “living character” of the implementation guidelines ensures an adjustable and flexible use of the implementation guidelines in different

institutional and regional settings (centralized versus decentralized statistical systems throughout the UN Member States) and therefore meets the diversity and specific characteristics of all different UN Member States<sup>5</sup>.

*Background information: Mandate, members and chair of the FOC group*

*The Friends of the Chair group on Fundamental Principles of Official Statistics comprises senior statisticians from Australia, Colombia, the Dominican Republic, Germany, Italy, Mexico, Norway, the Philippines, South Africa, the United Kingdom of Great Britain and Northern Ireland, the United Republic of Tanzania and the United States of America. The Statistical Offices of the European Communities and of the Economic Commission for Europe serve as observers. Katherine Wallman (United States) serves as the chair of the group, Sibylle von Oppeln-Bronikowski (Germany) has been serving as interim chair since the end of July 2013.*

*Mandate of the FOC group: (1) Drafting a revised preamble of the Fundamental Principles (completed in 2013). (2) Carry out together with the UN Statistics Division a global review of the implementation of the Principles by UN Member States in 2012/2013. (3) Formulating guidelines on how to strengthen implementation of the Fundamental Principles. (4) Formulating guidelines on how to ensure the full independence of national statistical systems. (5) Explore ways to effectively address perceived violations of the Fundamental Principles. (6) Reflect upon how the applicability of the Principles could be extended beyond the realm of official statistics, specifically to the private sector<sup>6</sup>.*

In the following, this paper focuses on the implementation guidelines, taking as an example one of the Fundamental Principles, namely the least implemented one on prevention of misuse and erroneous interpretation of statistics. The implementation guidelines (in combination with the global review) list several *actions to prevent misuse and misinterpretation of statistics*, which a Statistical Institute is advised to take into account when aiming at improving the implementation of this principle or when developing this principle further. Concrete examples complement these recommended actions.

**According to the implementation guidelines, misuse and erroneous interpretation can be prevented by...**

**... defining clear provisions, which might be laid down e.g. in national or supranational policies and frameworks or in statistical law**

---

<sup>5</sup> Originally the Fundamental Principles were designed to meet the needs of the New Independent States after the fall of the Berlin Wall, but they were soon also applied by the established national statistical institutions in Europe and in many other countries.

<sup>6</sup> This paper focuses particularly on the task of formulating guidelines to strengthen the practical implementation of the Fundamental Principles of the FOC group.

These clear provisions should make reference to the right of the head of the National Statistical Office or Statistics Authority or head of the regional body to comment publicly on the misuse or erroneous interpretation of official statistics.

*Good practice example: The [South Africa's Statistics Act from 1999](#) (section 14, subsection 8) specifies that “the Statistician-General may at his or her own instance or at the request of the Council, the Minister or any other Minister, review and comment on the (...) interpretation and use of official or other statistics of any other organ of state; and after consultation with the head of that organ of state, publish any such (...) comments thereon as he or she considers necessary or appropriate”.*

### **... embedding the principle into statistical practice and publicly comment on the misuse in a timely, unambiguous and transparent way**

While statistics can be acceptably used and interpreted in many different ways, it is important that trust in official statistics is maintained and that they are accepted as being credible. Hence good practices include that statistical agencies should draw attention to, and if necessary comment on, obvious public incorrect use or interpretation. Clear provisions facilitate embedding this principle into statistical practice. The response should take place in a timely, unambiguous and transparent way, e.g. by submitting letters to the editor, holding press conferences or issuing press releases or comment misuse and misinterpretations on one's own website (e.g. on a page entitled “for the record”).

*Good practice example: The [media center of UK's Office for National Statistics](#) provides links to letters written to publications correcting inaccuracies or common misconceptions about the Office for National Statistics and its work. The letters cover the period from the beginning of 2006 to the present day.*

### **... releasing education programs for users and improving documentation on metadata**

In order to increase the users' awareness and knowledge of official statistics several actions can be taken: furthering “literacy on statistics” and deepening the general public's understanding of statistics and their importance by publishing manuals, guides, booklets and giving courses or seminars to the users, explaining statistics and their methods by doing user-producer dialogues or workshops and designing user-friendly websites with specific pages (“corners”) for certain user groups and with a different degree of explanation, using social media to inform users about statistics, etc.

*Good practice example: The [U.S. Census Bureau provides electronic press kits](#) for key operational milestones surrounding the 2010 Census. These kits package the relevant information the press will need to write about the census, including media contact information, press releases and fact sheets. For example, the U.S. Census Bureau developed a [video informing the users regarding the methods used in the Population Census](#) (coverage measurement).*

### **... formulating a transparent publications policy (e.g. error policy)**

Erroneous interpretation of statistics can be caused by errors in published data, which cannot always and entirely be avoided although all staff members of a statistical agency take great care in doing their job. To maintain confidence in official statistics in such a case, it is important that the statistical agency reacts reasonably and in a uniform and transparent way. Errors detected in published statistics should be corrected at the earliest possible date and the whole procedure should be publicized (e.g. by means of an error policy informing users about errors in the same manner and to a comparable extent).

*Good practice example: The guideline on [“how to deal with publication errors” of the German Federal Statistical Office](#) represents a good practice example of good error policy.*

### **... using “Open Copyright” as an incentive for users to refer to official statistics**

Dissemination and duplication of official statistics will be allowed free of charge if the source is mentioned correctly (as long as the rights of third parties remain untouched). Free access is an incentive for users to rather refer to official statistics.

*Good practice example: [Open Copyright of the German Federal Statistical Office](#) permitting to store, pass on (also in parts), reproduce and distribute information, provided that the source is mentioned and the information must not be modified or falsified.*

## **4. Conclusion and outlook**

Since the inception of the Fundamental Principles almost twenty years ago, *a lot has been achieved*: The Fundamental Principles have become an integral part and a common reference in the global and national statistical systems, although improvements in the implementation of the Principles are still needed, especially concerning the Principle on prevention of misuse and misinterpretation which is the weakest implemented throughout the UN Member States. Periodic reviews are conducted to assess the degree of implementation of the Principles so that actions to be taken can be identified to improve compliance with the Principles.

Recommendations of such actions are compiled in the implementation guidelines to improve and assist practical implementation of the Fundamental Principles. Developing such implementation guidelines was the first step to *further promote the worldwide implementation of the Fundamental Principles and compliance with professional, scientific and quality standards.*

For the years to come, the Friends of the Chair group has been asked to continue its work to further advance the practical and effective implementation of the Fundamental Principles: The *UN Statistical Commission encouraged* the FOC group to make further reflections on the question of how to ensure the full independence of national statistical systems, to explore ways to effectively address perceived violations of the Fundamental Principles and to reflect upon how the applicability of the Principles could be extended beyond the realm of official statistics, specifically to the private sector.

Furthermore, the *UN Statistical Commission agreed* in early 2014 that in the coming years the implementation efforts should be strengthened by continuing the monitoring of the implementation of the Principles at the national, regional and global levels. The latter should be done in intervals no longer than 5 years and using various modes, such as self-assessment or peer review, as appropriate. This is a crucial agreement on a first step towards a more effective implementation. Additionally, the implementation efforts will also be strengthened by furthering the development of the first version of the implementation guide. Currently, an improved second version of the implementation guidelines is being prepared, integrating further practical examples for implementation and concrete experiences from UN Member States. Continuously revising and updating the content of the implementation guidelines is possible and desirable. The implementation guidelines will remain a “work in progress” that needs further input and regular updating. Whether the implementation guidelines will become a reference document at global level depends on the statistical community.

## 5. References

European Commission (2014): Statistics Explained. Statistics in development cooperation - quality in statistics.

Statistisches Bundesamt (2014): UN General Assembly endorses Fundamental Principles of Official Statistics.

United Nations Economic and Social Council (2011): United Nations Statistical Commission. Forty-second session (22 – 25 February 2011). Report on the implementation of the Fundamental Principles of Official Statistics.

United Nations Economic and Social Council (2013): United Nations Statistical Commission. Forty-fourth session (26 – 1 March 2013). Background document. Implementation of the Fundamental Principles of Official Statistics.

United Nations Economic and Social Council (2013): United Nations Statistical Commission. Forty-fourth session (26 – 1 March 2013). Report of the Friends of the Chair on the implementation of the Fundamental Principles of Official Statistics.

United Nations Economic and Social Council (2014): United Nations Statistical Commission. Report on the forty-fifth session (4 – 7 March 2014).

United Nations Economic and Social Council (2014): United Nations Statistical Commission. Forty-fifth session (4 – 7 March 2014). Report of the Friends of the Chair on the implementation of the Fundamental Principles of Official Statistics.

United Nations Economic and Social Council (2014): United Nations Statistical Commission. Forty-fifth session (4 – 7 March 2014). Implementation guideline of all the United Nations Fundamental Principles.

United Nations Economic and Social Council (2014): United Nations Statistical Commission. Report on the forty-fifth session (4 – 7 March 2014).

United Nations General Assembly (2014): Sixty-eighth session. Resolution adopted by the General Assembly on 29 January 2014.