

Trust and confidence in official statistics

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Abstract.

Official statistics are produced for the public good, and it is essential that confidence and trust in these statistics and institutes remain high. Public confidence may impact both respondents and users of official statistics, and in the long run, it may influence policy making and society. It is further believed that high levels of public trust can lead to increased participation rates in surveys and confidence in statistical outputs.

Public confidence may be affected by the new survey landscape. This includes the blending of traditional and new data sources, as well as the use of AI in producing official statistics. These advancements present both opportunities and challenges for maintaining public trust.

We discuss the concepts of public confidence and trust and how they relate to other concepts and initiatives, such as professional codes of conduct, data ethics, inclusive data and evidence, and transparency. We give examples of methods and tools that National Statistical Institutes (NSIs) use to maintain, enhance, and measure public trust and confidence, and how these methods and results are communicated.

Keywords: public trust, public confidence, transparency, ethics, new survey landscape

1. Introduction

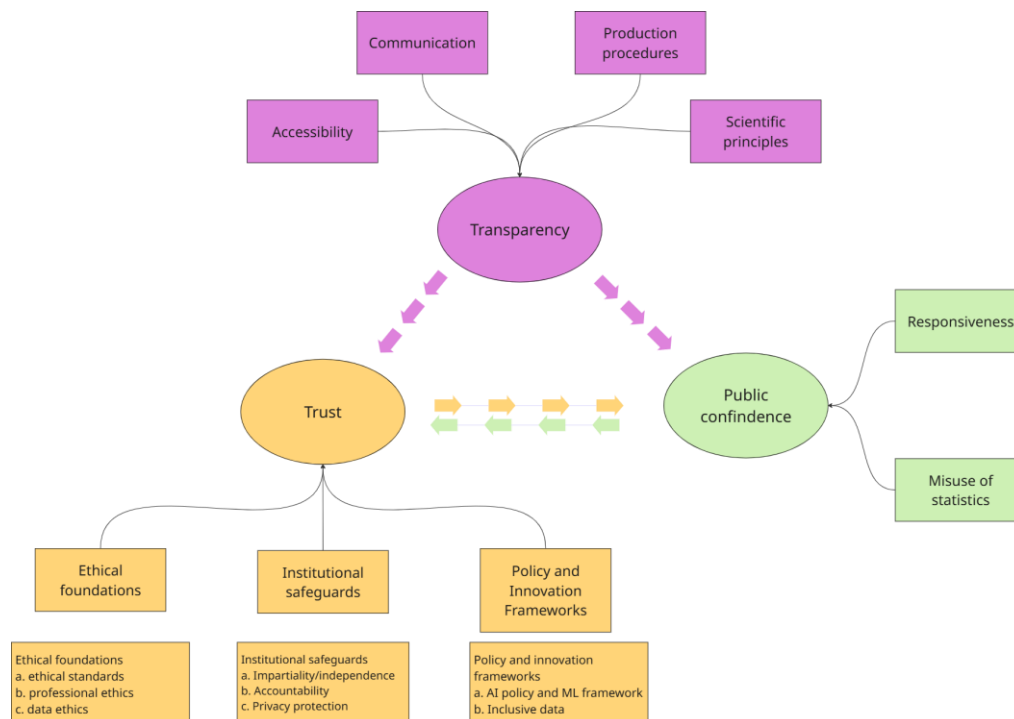
To gain, maintain, strengthen, and enhance the confidence and trust in official statistics and NSIs is a constantly ongoing undertaking for producers of official statistics. High trust in NSI may influence the confidence in statistical outputs as well as the willingness to respond to surveys. Confidence in official statistics may further impact trust in policy making and society as a whole.

The United Nations Fundamental Principles of Official Statistics (UN fundamental principles for short) lists ten principles at a high level, intended to ensure reliable statistics that adhere to professional and scientific standards (United Nations 2014, Willis-Núñez and Cwiek 2022). They form a starting point for us as we aim to review the methods and tools used by selected NSIs and how they are communicated on NSI websites. We did not at this stage carry out a full survey of NSIs. The focus is on good practices at NSIs where information is available on NSIs websites.

2. Concepts and definitions

We see transparency, trust, and public confidence as key concepts, but the literature relevant for official statistics production also mention many related or similar concepts. The same word can be used with different meanings, or several words will in essence relate to the same concept. We have found it useful to define a working model that helps us to relate concepts to each other and to elements meant to enhance them, and ultimately to connect the concepts with practices for communicating with the public (Figure 1). Since this is ongoing work, the model does not offer an exhaustive list of possible concepts or elements.

Figure 1: The relation between trust, transparency, and public confidence, and elements to enhance them



The meaning of transparency may differ depending on context. For official statistics, a useful interpretation is given in Rancourt (2019, p 550): "... it means that approaches, methods, decisions, and information are made available to users, researchers, stakeholders and citizens".

In the UN fundamental principles, it is stated that information on the sources, methods and procedures of the statistics should be presented by the statistical agency (Principle 3), and that laws, regulations and measures under which the statistical systems operate should be made public (Principle 7).

While transparency can be defined and carried out through systematic practices, trust is a more elusive concept. It pertains to the statistical institutions as the belief that they act competently, impartially, transparently, and according to ethical and scientific standards.

It takes a long time for any institution to build trust, and it can be quickly lost if practices undertaken by the institution are deemed unacceptable in the public eye. Being

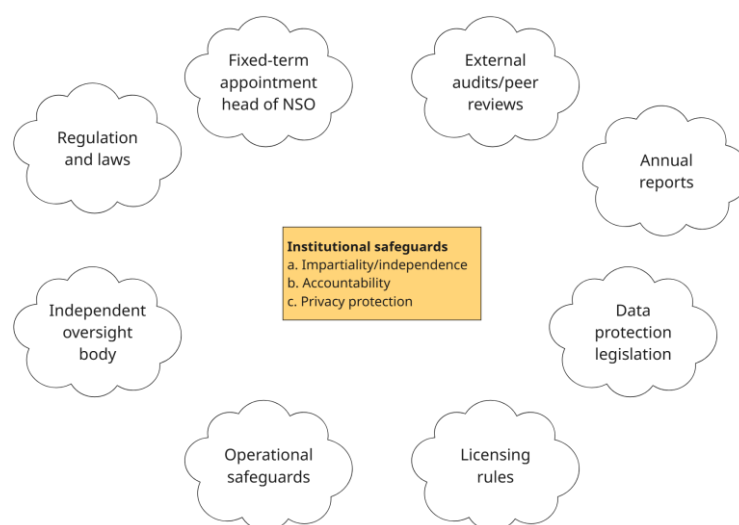
transparent is a key element in building trust, but trust can be further enhanced by committing to ethical standards and codes of conduct that will ensure professional independence and accountability. Trust is explicitly mentioned in Principle 2 of the UN fundamental principles, where it is stated that to retain trust, statistical agencies need to decide according to strictly professional considerations.

Public confidence also encompasses the extent to which people believe the statistics that are produced are accurate, reliable, and useful, and are willing to rely on them for decision-making. Trust, transparency and related concepts as described above aim at enhancing public confidence in the statistics, and in the statistics producers. They are internal in the sense that it is up to the statistics producer how and when to promote public confidence through planned activities. In addition, it is necessary for the statistics producer to act on external factors that influence the public perceptions of the statistics and the statistics producers.

3. Actions to enhance trust and confidence

We use Institutional safeguards as an example of how the model in Figure 1 is expanded to include practices and actions taken by NSIs to enhance trust and confidence. Figure 2 shows elements of institutional safeguards that are communicated on NSI websites, further elaborated on below.

Figure 2: Elements of institutional safeguards



a. Impartiality/independence

Impartiality is typically addressed by clearly describing independence from political or governmental influence. In Europe, Regulation (EC) 223/2009 (as amended in 2015) requires that each member state's NSO have its independence specified in law, and countries like Sweden, Germany, France, Portugal, Denmark, and Ireland have statutory provisions to that effect.

In some countries, independent authorities oversee ethical standards in official statistics. France's Autorité de la Statistique Publique (ASP), established by law in 2008, monitors professional ethics and methodological rigor. It ensures adherence to "principes déontologiques" and safeguards the integrity of statistical methods. Portugal's Statistical Council have a similar role and report on the state of official statistics.

To protect statistical offices from political interference, many NSIs have governance structures designed to ensure institutional independence. A common safeguard is the fixed-term appointment of the NSI head, who cannot be dismissed without cause, thus helping to shield the role from undue political pressure.

b. Accountability

Like any government agency, NSIs should be held accountable for what they do. That is, the agency should be able to justify their actions and answer for the consequences (Hand 2018). Transparency is thus in the interest of the NSI, not only for gaining confidence but also to help defending the procedures and methods that are used.

In addition, accountability systems bolster confidence: external *peer reviews* (under the European Statistical System) and audits scrutinize each NSO's adherence to standards, and the findings are usually made public.

c. Privacy Protection

Privacy protection is addressed primarily through clear policies and guidelines governing how personal data are collected, processed, stored, and published.

Licensing rules, training and expert guidance, as well as data protection legislation are important parts of the privacy protection at many NSIs.

Many NSIs explicitly reference compliance with national and international data protection legislation, such as GDPR. One example is Statistics Norway that explicitly describes how they ensure confidentiality by limiting employee access to identifiable data, employing encrypted cloud solutions, and clearly explaining their anonymization processes.

Protecting respondents' privacy and data confidentiality is non-negotiable for all NSIs. Each NSI operates under legal frameworks that impose strict confidentiality obligations. For example, Ireland's Statistics Act 1993 sets "stringent confidentiality standards: information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business may be divulged to any other government department or body." Similarly, in France, the cornerstone law of 1951 (on statistics) enshrines "secret statistique" forbidding the disclosure of any individual data gathered in surveys. France has a Committee on Statistical Confidentiality (Comité du secret statistique) created by that law, which must approve any microdata access for research.

Many NSIs publish privacy notices or inform respondents how their data will be used and protected. For example, Statistics Korea's Fundamental Principles explicitly include "protect confidentiality" as one of the core values, stating that data about individuals or businesses "shall be strictly protected" and used only for statistics.

4. Discussion

For NSIs, transparency is considered vital for maintaining public trust. The assumption is that openness enhances credibility and fosters trust. However, insights from other fields suggest the link between transparency and trust is more complex. A relevant example comes from journalism, where similar arguments are made. A recent article (Latvala 2023) critically examines journalistic transparency by showing how journalism is done as a response to declining public trust. Initially meant to build credibility by educating audiences, research and interviews indicate that transparency often has little or no effect and can even undermine trust (Karlson 2016). The article argues

that trust in journalism is shaped by broader political, cultural, and emotional factors beyond journalists' control. This perspective invites reflection within official statistics: as in journalism, transparency may be necessary but not sufficient. When institutional trust is already low, even detailed information may go unnoticed. In this light, transparency functions more as a professional and ethical standard than a guaranteed strategy for building trust. Recognizing this can help statistical institutions better align their expectations with the complex realities of public confidence.

Survey practices are facing new challenges as response rates are declining and new types of data sources and methods emerge. The multitude of data, computational power and social media platforms mean that many actors are competing for the attention of the public. To maintain public confidence, producers of official statistics need to evolve, for example by adapting existing quality frameworks, actively taking part in discussions of the pros and cons of using AI, explaining the implications of increased use of models, or finding alternative channels for communication.

5. References

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