**Quality reviews of official statistics and the role of the external stakeholders: some initiatives from the NSI of Spain**

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**Abstract**

*Nowadays, the national statistical offices are moving a step forward from traditional quality assessment done by the offices themselves, towards a more complete quality system that involves external experts and other stakeholders. User Satisfaction Surveys (USS) have remained so far as the traditional tool; they are the core instrument when assessing quality and relevance of statistics. The INE has regularly conducted (every three years) a series of USSs to qualified users starting in 2007. The last round was completed in 2016. Now we would like to move towards a greater and intensive participation of different Stakeholders, through several improvement actions: First, a new procedure to evaluate routinely the statistical operations by the statistical system collegiate bodies, specifically the High Council of Statistics (HCS); second, the INE has started up the organization of seminars with experts (researchers and academia) focused in a specific statistic, within the yearly meetings co-organized with the "Statistics and Operational Research Society”. With these actions, the INE of Spain will set up a quality assessment system including external evaluations to the institution about its statistical products, even for the years between peer reviews. Finally, all these actions are being supplemented by new assessment procedures linked to the DIGICOM Project where the INE is involved. In this paper, all these initiatives are described, emphasizing the means and tools to incorporate experts' views in the quality management system of the INE.*

**Keywords:** quality reviews, external stakeholders, user satisfaction survey, external experts, collegiate bodies, users engagement.

**1. Introduction**

Today, the national statistical offices are moving a step forward from traditional quality assessment done by the offices themselves, towards a more complete quality system that involves external experts and other stakeholders. User Satisfaction Surveys (USS) have remained so far as the traditional tool; they are the core instrument when assessing quality and relevance of statistics. The INE has regularly conducted (every three years) a series of USS to qualified users starting in 2007. The last round was completed in 2016 and included a set of developments and extensions, such as weighing the different quality dimensions and then obtaining a global composite satisfaction index; or customization of the survey attending to different categories of users (i.e.; users from the media).

Now we would like to move towards a greater and intensive participation of different Stakeholders. In this paper, these initiatives are described, emphasizing the means and tools to incorporate experts' views in the quality management system of the INE.

The structure of the paper is as follows: section two, describes the role of Users’ Satisfaction Surveys as the cornerstone of all the system of user services taking as a reference the last round of this surveys (corresponding to 2016 year); section three outlines others INE’s procedures used to meet users’ demands on information, such as the number of downloads from the webpage or a specific procedure to measure the impact of INE’s releases on the media; section four includes some new several actions with the aim of including external stakeholders in the evaluation of statistical products.

**2. Main aspects and trends of INE's User surveys**

*2.1 An overview of the 2016 USS*

As of 2007, the INE carries out a User’s Satisfaction Survey (USS) on a triennial basis, which is addressed to "qualified" users. Qualified users are considered to be those that use statistics on a regular basis as an instrument for the performance of their professional and/or research activity.

The scope of these surveys is to assess the degree of satisfaction among the key users with the information provided by official statistics and dissemination services, broken down by statistical domains. The survey is adapted to the CoP dimensions of quality, by including specific questions to each of the main (product) dimensions: relevance, accuracy, punctuality, reliability, timeliness, coherence, comparability and accessibility.

New developments have been included into the new edition of 2016, with two main novelties: the addition of a specific module adapted to users from the media and the implementation of a user’s satisfaction index. Concerning the latter it is based on several elements. The first one is a new question, included in the USS 2016, by which users were asked on a self-reported weight for every dimension in quality, in a scale from 1 to 5 to those statistics they retrieve. The underlying assumptions are that qualified users are those capable of properly appreciate the characteristics of every dimension of quality; therefore, they can give priority to some aspects (dimensions) of quality over the others. The average weightings, for the six dimensions researched in the USS are graphically shown in chart 1.

**Chart 1 – Subjective weights for quality dimensions. User Satisfaction Survey 2016**

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Source: INE (2017)

Chart 2 shows, for each user group, the percentage differences between the weighting structure of each group and the structure for the whole. In cases where the user group in question gives more importance than the average, the bar corresponding to the dimension appears on the right-hand side of the graph; in the opposite case, it appears on the left-hand side.

The results obtained in this very basic analysis seem to confirm the consistency of the opinions collected in the survey, since they offer results within the “expected” a priori: In the University group, both geographical and time comparability of statistics are valued above the average, and a slightly higher than average importance is given to accuracy as an indication of quality; in the Public Sector group, it should be noted that practically the only dimension to which they attach less importance than the average is time comparability; in the group of “Other users”, the opportunity is valued above the average . It should be remembered that those included in this group are representatives of private companies, business associations or institutions who most frequently use a quick short-term analysis, and therefore demand instant information.

Chart 2 **Relative importance of each quality dimension per user group: differences in % compared to the overall average**

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*2.2 Identification of unmet statistical needs*

Besides the measurement of satisfaction, the USS also have a complementary question, in order to fulfil the "relevance" dimension: to identify statistical needs not covered by the current statistical output, an open response question ("What statistics would you be interested in but are not currently available among those produced by the INE") has been regularly included in the USS. Of the 272 respondents to the survey, 117 completed this question, which represents a 43% response rate. In addition, the 117 responses have resulted in 133 suggestions for possible new research (as some users indicated more than one proposal). These are very significant response rates that, in addition to their usefulness for the institution, reveal a level of interest and involvement of users when participating in the survey, which deserves to be highlighted.

By type of suggestions (table 1b), the predominant requests are those relating to new statistics and/or variables suggested by users, which accounted for 31.6% of requests (with novel topics such as Big data, sharing economy, etcetera) and a greater geographical disaggregation (by Autonomous Community, province, municipality) with 25.5% of suggestions. By groups of statistics (table 1b) it is worth noting the number of requests concerning population statistics and social statistics, closely followed by those related to aspects of the National Accounts. In any case, all these suggestions collected in the questionnaire constitute one of the reasons for the existence of user surveys, due to their usefulness for the planning of the activity of the INE: once their feasibility has been analysed by the corresponding units, they can constitute an input in the future activities and in the design of statistical plans.

**Table 1. Distribution (%) of responses on needs not covered by the INE**

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| **a) By type of request** | **% of responses** |  | **b) By groups of statistics** | **% of responses** |
| New statistics and/or variables | 31.6 |  | Demography and population | 14,7 |
| Territorial breakdown (Spain)  | 25.5 |  | Social statistics | 13,8 |
| Sectorial breakdown | 14.3 |  | National accounts | 12,8 |
| Methods | 10.5 |  | Labour Market | 9,2 |
| Time breakdown | 9.8 |  | Tourism | 9,2 |
| Micro-data | 8.3 |  | Science and Technology | 8,3 |
| **TOTAL** | **100,0** |  | Services | 7,3 |
|  |  |  | Other | 24,9 |
|  |  |  | **TOTAL** | **100,0** |

Source: USS 2016,

**3. Other INE's tools for detecting user´s needs and expectations**

As stated previously, the USS is the main tool for measuring users' perceptions and opinions but it is not the sole instrument. Therefore, alongside the USS, additional tools and indicators are managed to go beyond the self-reported assessment by the users, such as Web analytics data on visits and downloads from the INE’s Webpage. Table 2 shows as an example, the percentage ~~%~~ of downloads from the INE´s Webpage in 2017 by group of statistics.

**Table *2*. Users’ downloads (%) from the INE' Webpage by statistical products (2017)**

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| **Statistics** | **% of downloads** |
| Demography and population | 28,4 |
| Labour market | 15,9 |
| Social statistics | 10,9 |
| Consumer Price Index | 8,9 |
| Services | 7,5 |
| Economics accounts | 7,0 |
| Other | 21,4 |
| **Total** | **100,0** |

A very specific and singular tool is the assessment of statistics impact on the media according to a "monetary-value" methodology.

As of 2013, the Press Office conducts a daily follow-up among 1,327 written publications (newspapers and magazines), 18 radio stations, 28 TV channels and 6,410 digital channels, to estimate the impact of the “INE brand”, both as a global trademark as well as detailed by short and long-term statistics.

Based on this data on audience, there is an additional estimation of a so-called "economic impact of INE's news". This is calculated by assigning a "value" to every piece of news connected to INE data, which corresponds to the cost of a standard advertising spot. Such cost is assigned depending of the type of medium and its related audience panel-driven measurement (for example, News on broadcasted media are valued according to the number of seconds, press news is weighed considering newspaper or magazine’s circulation, as registered in official circulation rankings, etcetera). Measuring the impact on the media provides an innovative method for assigning a value to every statistical output since its metrics is underpinned by market prices, though neither quality dimensions nor their perception is monitored whatsoever, thus such technique should be regarded as an ancillary tool for understanding how much a statistical product is worth.

**4. New (but "traditional") initiatives to include Stakeholders in the INE Quality assurance**

Beside the above mentioned methods, ranging from the traditional ones (user surveys) to the more innovative ones (INE´s impact on the media) the INE of Spain continues looking for new methods with the aim of including external stakeholders in the evaluation of statistical products.

To that aim two actions were implemented: firstly, a new procedure was developed by the INE to evaluate routinely the statistical operations by the statistical system collegiate bodies, specifically the High Council on Statistics (HCS); secondly, the organization of seminars with experts (researchers and academia) focused in specific statistical domains.

In fact, these approaches are closely linked to the recommendation formulated in the last Peer Review to most of the European National Statistical Institutes, in line with indicator 4.4 of the European Code of Practice~~s~~: the European Statistical Institutes should develop and implement measures to involve external experts in reviewing of key statistical outputs.

*4.1. A further involvement of High Council on Statistics in the Quality assessment.*

The HCS is an advisory body gathering producers and customers of official statistics in a balanced representation. It brings together institutional users, trade unions, business and consumer associations, media and scientific community, and thus it includes all the main stakeholders of the NSI.

**Chart 3 Scheme of the Statistical Plan development at the INE: the role of users ‘opinions and needs***[[1]](#footnote-1)*

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The HCS has a crucial role in the Spanish statistical system and in its quality system assessment, because one of its functions is to participate in the making, analysis and approval of the National Statistical Plans of Spain (NSP).

Within this framework, the INE has initiated a new action, to involve the HCS stakeholders' representatives in the quality assessment of the statistical production.

It should be reminded that, among the statistical operations compiled by the INE, in the case of the “European Statistics”, whose operation is established by a European Regulation, there are a couple of quality assurance tools that should be compiled periodically according to those regulations: firstly, the NSIs have to prepare and send periodically to Eurostat a quality report following the European recommendations (in line with the ESQRS or similar patterns); secondly, based upon such reports by the NSIs, the Commission (Eurostat) should compile~~d~~ and present periodically before the European Parliament and the Council, a summarized report on the quality of those statistics for the European countries.

Taking into account~~s~~ the above elements, the Quality Unit presented to the HCS in May 2017, a methodology to evaluate the quality of the statistical products (included as "European Statistics"). The proposed procedure consist of the following steps:

- A statistic out from the European Statistics is selected by the INE. The selection is based on the availability of updated "European quality reports".

- The elaboration, by the Quality Unit of the NSI, of a document about the quality of the selected European Statistics, based on: the above mentioned European reports, and some information on quality aspects, compiled internally within the Quality Management system of the INE.

- Presentation before and deliberation in the HCS of the aforementioned documents, relative to the selected statistical operation. A final report is produced and issued to the Unit in charge of the selected statistic for analysis, and to take corrective actions, if necessary.

The first pilot test of this procedure analysed on the Labor Cost Index and was undertaken in 2017. There were several reasons to choose this statistic~~s~~: availability of recently updated reports, both in the case of ESQRS Eurostat report (dated in 2016, with data from 2015), as well as the report from the Commission (Eurostat) to the European Parliament and the Council[[2]](#footnote-2). The report based on the information available was presented for discussion to HCS in September 2017.

*4.2 Seminars with experts in the annual conferences of the Statistical Association*

The second type of activity focuses specifically in other groups of stakeholders/ users: universities and research institutions. The research ~~&~~ academic sectors are significant users of data from the National Statistical Institute but, at the same time, they could also represent a basic source of advice to the Institute; thus they could constitute a kind of *cooperative stakeholders* to the INE.

Within this global strategy[[3]](#footnote-3), and to strengthen it, the INE has started up a new procedure consisting of the organization of periodical seminars with experts (researchers and academia) focused in a specific statistic. These seminars will take place in the yearly meetings of the "Statistics and Operational Research Society” (association of Spanish researchers/ academics in statistics), co-organized with the INE.

A monographic session has been included in these conferences, focusing on specific INE's statistical domains and arranged as a "round table session". It would allow ~~to~~ the INE to collect qualified opinions and would constitute a subsidiary element for the evaluation of statistics.

The Consumer Price Index (CPI) has been chosen as the product to be evaluated this first occasion, it is a statistic of unquestionable importance, both due to the social and economic significance of the phenomenon it measures (inflation), and the high reputation of quality and methodological consistency it holds.

**5. A final comment: new challenges**

Focusing on user’s point of view is a milestone in the INE´s policy: Credibility and reputation on statistics rely on users’ perception. These are pre-requisites to involve users and other stakeholders in data collection, the main challenging area in the INE´s tasks: growing demands of information must, at the same time, face decreasing resources and reluctance from respondents (i.e. users) to collaborate (due to excessive burden, confidentiality concerns, and lack of statistical culture). Even in the case of expert users, as the NSI provides more and more micro-data (anonymised) freely downloadable from the Web, this imply a loss of contact and knowledge between NSI and this type of users.

So far, the USS has played a major role when collecting information on users' satisfaction and needs. The INE has also developed a range of tools for assessing this issue and there is a need to continue exploring and making efforts to know the user’s views and needs; both through conventional means (USS) as well as exploring new ways and technologies.

However, the actions previously described should not need set aside specific research on users: the traditional USSs are being supplemented by new assessment procedures linked to the DIGICOM Project, where the INE is involved. The DIGICOM project intends to modernize dissemination of the European Statistical and to improve the communication with users of statistics. For this purpose a set of tools and instruments have been set up (focus groups, Qualitative interviews) to collect direct feedback form users and to have a deeper and more extensive understanding of users' feelings and needs.

**References**

Cañada, A.; Muñoz, L. (2017): "Re-using the users´ information on products and services to improve the Quality Management System at Statistics Spain (INE)". Workshop on Implementing Efficiencies and Quality of Output, Geneva 27-29 September 2017, UNECE.

Eurostat (2018): “Analysis of user perception and communication of official statistics in the EU”. DIGICOM WP4 meeting 20 March 2018- Item 4

Freeman, R.E. (1984): Strategic Management: A Stakeholder Approach" Boston: Pitman. 1984.

INE (National Statistics Institute of Spain), (2017): “User Satisfaction Survey Report. 2016”. INE, 2017. <http://www.ine.es/en/ine/codigobp/InformeEncuesta2016_en.pdf>.

Koskine, V. (2016): "Tools for measuring perceptions of various actors". Statistics Finland, Helsinki, 2016.

1. Although HSC supervises the Plans, we can mention other institutional bodies involved in the Planning process, and in which users/ stakeholders are represented, such as the Inter-ministerial Statistical Commission (CIME) and the Inter-Territorial Statistical Committee (CITE). [↑](#footnote-ref-1)
2. European Commission (2017): "Report from the Commission to the European Parliament and the Council on the implementation of Regulation (EC) No 450/2003 of the European Parliament and of the Council concerning the labour cost index (LCI). [↑](#footnote-ref-2)
3. Since 2000, the INE has constituted some regular working groups with the participation of different experts and stakeholders. The main group in force is the Labour Statistics working group, composed by representatives of researchers, academia, trade unions and business associations. In those groups, every novelty to be introduced in the correspondent statistics is analysed. This has helped to achieve greater participation of those skilled users in official statistics.. [↑](#footnote-ref-3)