

Assessing the quality statistics on Catalonia by meeting user needs

Enric Ripoll¹, Jordi Galter²

¹*Statistical Institute of Catalonia (Spain)*

²*Statistical Institute of Catalonia (Spain)*

Abstract

In this presentation we analyse the available empirical evidence on user ratings of official statistics in Catalonia. Assessing the quality of official statistics, a public good, requires measuring its multiple dimensions, therefore it is essential to rely on the assessment of its users. According to the principles of the European Statistics Code of Practice, relevance, accuracy, timeliness, punctuality, comparability, coherence, accessibility and clarity are the dimensions of the quality framework of the European Statistical System. On the other hand, the current concept of quality reinforces the consideration of official statistics as a public good and, as such, it is essential to have the opinion of its users. To obtain this valuable information, that provided a broad external assessment of the content of Catalonia's Statistical System, a structured consultation was carried out during the Spring of 2021 with the participation of more than 130 users who had to evaluate each statistical action and provide advice regarding the identification and prioritization of possible new contents to be included in the next Statistical Plan of Catalonia. We also consider analogies with the consultation carried out by the Spanish High Council on Statistics in 2011 and with the annual user satisfaction surveys conducted by Eurostat. The consultation collected suggestions for new statistical operations recommended by experts. In this context, the bulk of new economic statistics focus on economic accounts, emphasizing foreign economic relations and new satellite accounts. In turn, measures of mobility, increasing spatial disaggregation and raising the timeliness of data focus the proposals on demographic statistics. On the other hand, specific suggestions in the fields of education, health and social protection, where new statistics would focus on opportunities to enrich current statistical information with a combination of other non-statistical sources, also deserve attention. Finally, the suggestions made in the attention to the research activity of third parties emphasize the convenience of accessing (micro)data of statistical and administrative origin, from speeding up their availability and data resulting from processes of integration of multiple sources.

Keywords: European statistical quality, regional statistical information, quality dimensions, consultation

1. Introduction

The Statistical System of Catalonia (SSC) provides information for its territory, which is entrusted by the respective legal standards (autonomy statute, statistical laws, statistics plans and programs). The elaboration of the next Statistical Plan of Catalonia (SPC) aims to include the latest changes and innovations in official statistics such as the new sources of emerging data, the use of new technologies and to update the legal framework, among others, in compliance with the European Statistics Code of Practice.

As part of the preparatory work for the next SPC, at the beginning of 2021, the Statistical Institute of Catalonia (Idescat) set up several working groups to investigate different material that can be useful for the elaboration of the seventh SPC. The goal of these groups was to evaluate the quality of the current statistics production and make proposals that define the

vision for the direction of statistics production for the next years in a context where the economy and society are changing more and more rapidly.

One of the committees carried out a structured consultation addressed to users and experts from both inside and outside the Catalan public administration. A third working committee dedicated to analyzing the future challenges of statistical production took into consideration the work obtained by previous committees.

The paper briefly describes the results of the work carried out as well as some conclusions reached that have been included in the draft of the new SPC and some questions to be determined for future consultations.

2. Structured consultation

Assessing the quality of statistical information requires measuring its multiple dimensions and relying on the assessment of users and/or experts. According to the principles of the European Statistics Code of Practice, relevance, accuracy, timeliness, punctuality, comparability, coherence, accessibility and clarity are the dimensions of the quality framework of the European Statistical System. On the other hand, the current concept of quality reinforces the consideration of official statistics as a public good and, as such, it is essential to have the opinion of its users.

The detection of new actions in emerging or structural issues is essential to ensure that Catalan official statistics can cover them, both in fields that are not currently included in the current SPC and in those that, despite being present, lack development and, therefore, require further consolidation.

To do so, Idescat carried out an extensive external assessment of the current production of the SSC through a structured consultation addressed to the bodies of the SSC itself, specialized research centres, researchers, and other users of the official statistics. Based on the participation of more than 130 users from different public administration bodies, institutions, entities, and individual users, valuable information of their assessments and preferences has become available. Its objective was to provide a broad external assessment of the content of Catalonia's Statistical System and its dissemination, as well as the identification and prioritization of possible new contents to be included in the next Statistical Plan. In this sense, all statistical products included in the current plan were evaluated, as well as those potential operations available in some European statistical systems that are not included in Catalonia's current plan.

Specifically, the consultation aimed to assess the current and potential statistical production / dissemination of the SSC in different aspects:

- Frequency of use and assessment of current statistical operations in terms of their compliance with the principles of official European statistics related to quality dimension.
- Assessment of potential statistical projects included in the questionnaire
- Identification and prioritization of possible new statistics
- Assessment and suggestions on Idescat's dissemination services and products

2.1. Results of the assessment of current statistics

The first part of the structured consultation included the evaluation of the 313 statistical operations programmed throughout the SPC 2017-2020 and which have already generated statistical results. Specifically, the consultation aimed to evaluate each current statistical operation by assessing different variables: frequency of use, compliance with the principles of European statistics and possible improvements in its provision. On the other hand, the respondents could also indicate whether they considered it appropriate to suggest improvements based on the following four dimensions: territorial disaggregation, periodicity, concepts, and classifications. Table 1 shows the rankings of the use of statistical operations.

Table 1: Rankings of the frequency of use of statistical operations

		Average frequency of use (*)
1	Labour force statistics	3,06
2	Statistics on affiliates and Social Security affiliations	2,83
3	Living conditions survey	2,79
4	Statistical Yearbook of Catalonia	2,71
5	Statistics of the Municipal Census of Inhabitants	2,66
6	Demographic indicators	2,48
7	Gross disposable household income. Territorial estimates	2,47
8	Indicator system (economic and EU situation and structure)	2,47
9	Salary structure statistics	2,46
10	Population and housing censuses	2,46
Total of all 313 statistical operations		1,69

(*) Null = 1; Low = 2; Average = 3; High = 4

If the results of the operations are analyzed according to the principle of relevance, Table 2 presents the rankings of the 10 statistical operations with the highest assessment of this principle.

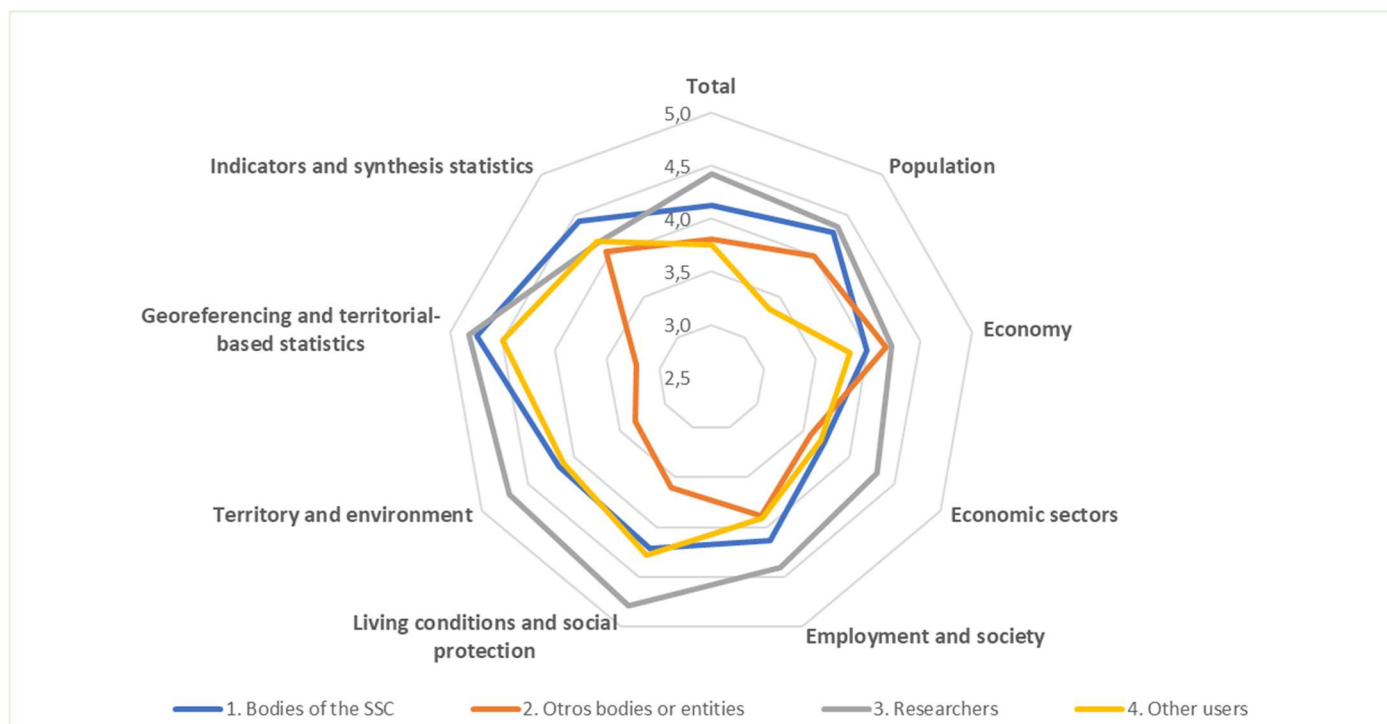
Table 2. Rankings of the statistical operations according to the principle of relevance

		Average (*)
1	Educational statistical series	4,64
2	Statistical indicators of the education system	4,48
3	Living conditions survey	4,55
4	Labour force statistics	4,54
5	Gross disposable household income. Territorial estimates	4,53
6	Statistics of the Municipal Census of Inhabitants	4,52
7	University education statistics	4,50
8	Annual economic accounts of Catalonia	4,47
9	Territorial indicators of risk of poverty and social exclusion	4,47
10	Statistics on affiliates and Social Security affiliations	4,45
	Total of all 313 statistical operations	3,98

(*) Very low = 1; Low = 2; Average = 3; High = 4; Very high = 5

In terms of eight general thematic areas, ratings of their relevance vary considerably according to their content and type of users or respondents.

Figure 1: Evaluation of (the principle of) relevance by topics and respondents

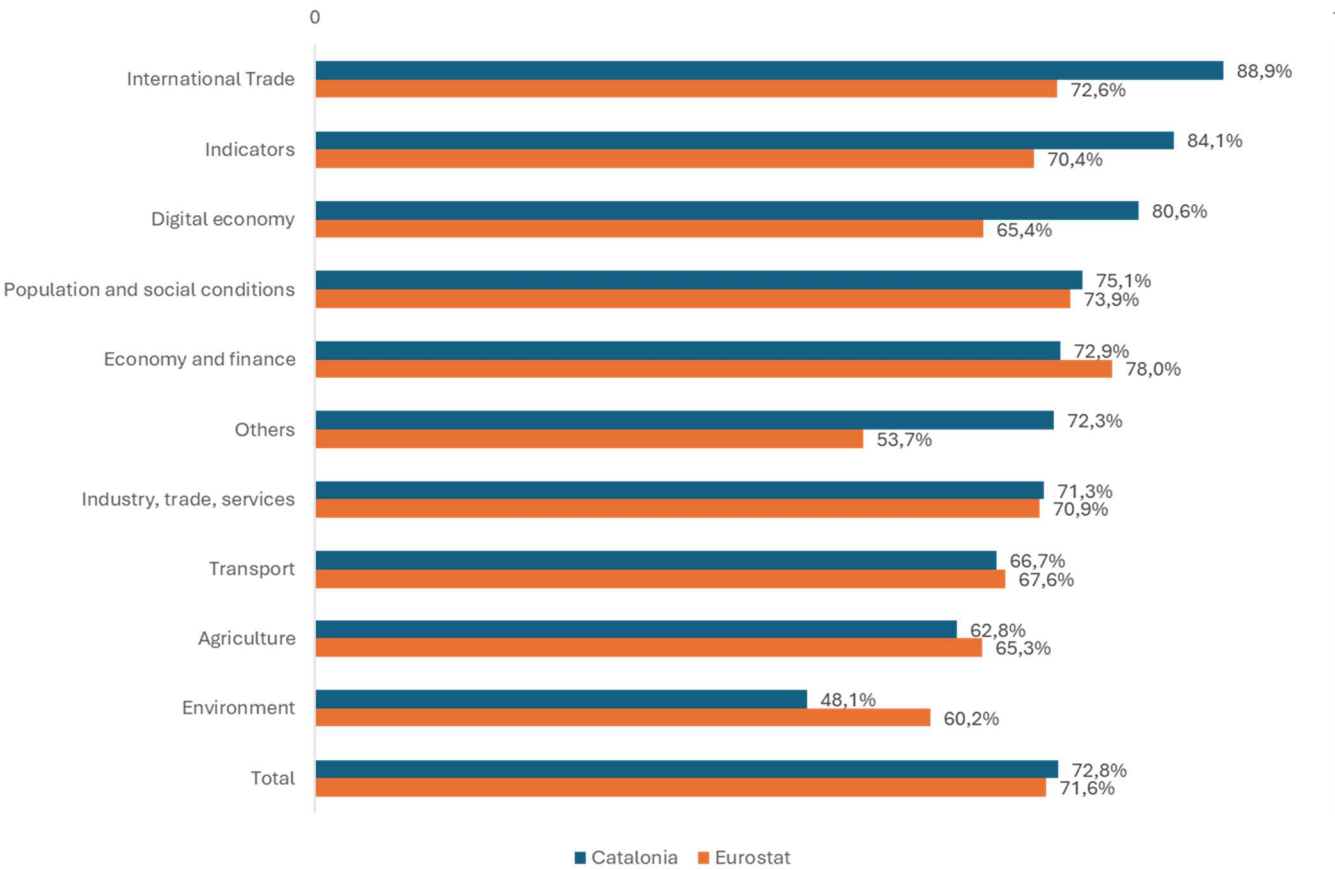


In the Figure 1 we can see the areas with the highest quality in terms of relevance are the **territorial base** statistics (with a value of 4.3 out of 5), followed by the **indicators and summary statistics** (4.2). On the other hand, the area of **economic sectors** presents the

lowest evaluation (3.7). If we look at the relevance by respondents, researchers value most highly the areas of living conditions, territory and environment, work and society, and economic sectors (i.e. the more sectoral or specific areas). “SSC bodies“ value indicators and summary statistics better. It should also be noted that the “other organizations“ make a good assessment of the statistics on **economy**.

It is also worth comparing these ratings with Eurostat's User Satisfaction survey, an annual survey that has been carried out since 2007.

Figure 2: Assessment of principles of relevance/quality: % of "high" or "very high" responses by topics. Catalonia-2021 and Eurostat-2020



- Almost 72% of the users of the European statistics consider its overall quality to be "very high" or "high", that is, only one point below the assessment of the Catalan consultation in 2021.
- At a more disaggregated level, "Economy and finance" received the highest rating (78.0% of responses). "Population and social conditions" and "International trade statistics" also scored well above 70%. Even the lowest domain ("Environmental" statistics) got more than 60% positive ratings.

- In the 2021 Catalan consultation, the areas of "International trade", "Indicators" and "Digital economy" have clearly higher ratings than those of the European survey. In contrast, the environmental statistics are clearly underrated (less than 50%).

2.2. Potential statistical operations

The potential statistical operations that form part of the questionnaire are presented grouped by thematic areas and were selected according to criteria of novelty: because they have never been considered in the framework of official Catalan statistics or because they have been included in the latest annual programs of activities, which means that they are in a very incipient phase. Most of the proposals stem from the identification of new statistics that already provide results in certain nearby statistical systems. Other proposals come from the analysis of the degree of alignment of Catalan official statistics with the EU statistical compendium.

Table 3: Rankings of potential statistical operations

		Average evaluation (*)
1	Territorial indicators of active population	3,45
2	Consumer Price Index / Harmonized Index of Consumer Prices	3,41
3	Demographics of Social Security affiliation	3,33
4	Housing price index	3,29
5	Population studies statistics	3,25
6	Labour force projections / activity rates	3,25
7	Labour and geographical mobility statistics	3,25
8	Submerged economy statistics	3,24
9	Territorial statistics of companies and establishments	3,17
10	Sustainable Development Goals (SDGs) indicators	3,16
	Total of all 215 statistical operations	2,58

(*) Null = 1; Low = 2; Average = 3; High = 4

2.3. Suggestions for new statistical operations

The consultation also collected suggestions for new statistical operations recommended by experts and users. In this context, the bulk of new economic statistics focus on economic accounts, emphasizing foreign economic relations and new satellite accounts. In turn, measures of mobility, increasing spatial disaggregation and raising the timeliness of data focus the proposals on demographic statistics. And in the labour market context, the proposals are centred on statistics on self-employment and self-employment.

On the other hand, the specific suggestions in the fields of education, health and social protection also deserve attention. And new statistics on these would focus on opportunities to enrich current statistical information with a combination of other non-statistical sources.

Finally, the suggestions made in the attention to the research activity of third parties emphasize the convenience of accessing (micro)data of statistical and administrative origin, from speeding up their availability and the data resulting from processes of integration of multiple sources.

3. Conclusions and questions to be addressed

3.1. Findings from consultation

The following findings can be made from the results of the structured consultation:

- The statistical areas with the highest frequency of use are labour, demography, living conditions and social protection.
- According to the principle of relevance, educational statistics, which are part of the field of labour and society, are considered the most relevant. It is also worth noting the statistical actions around living conditions and social protection.
- The improvements proposed by the consultation experts are in the context of the areas of labour and society, population, and economic situation.
- Finally, the result of the comparison with other similar consultations (i.e., the 2010 Spanish consultation) indicates that the actions that form part of the areas of living conditions, education, social protection, health, social services, economic accounts, and labor market are more relevant in Catalonia than in other territories.

3.2. Questions on design and usefulness

- Include entities/persons irrespective of their actual status as users of official statistics.
- Weight respondents' ratings according to the frequency of use of each statistic assessed.
- Assess all statistics (current or/and new) or only those that are known/used. Effects on the "relevance" dimension: propensity to rate only the most relevant statistics and high correlation with frequency of use.
- Include an overall assessment of the set of statistics produced (either by areas or by thematic sub-areas) and for each statistic considered.
- The exogenous character of the principle of relevance vs. the rest of the dimensions of statistical quality: implications for modeling the overall quality (by components).