



Economic Commission for Europe**Conference of European Statisticians****Sixty-seventh plenary session**

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Item 4 (d) of the provisional agenda

Satellite account for education and training**Results of the consultation on the draft *Satellite Account for Education and Training: Compilation Guide*****Note by the Secretariat***Summary*

The document summarizes the comments by members of the Conference of European Statisticians (CES) on the *Satellite Account for Education and Training: Compilation Guide*.

The UNECE Secretariat carried out an electronic consultation in April 2019. A total of 42 countries and 2 organizations replied to the request for comments. All respondents expressed full support for the Guide, the main recommendations and proposed future work. A number of comments and suggestions were also received. They are addressed in this note and incorporated in the final version of the Guide, available at <https://www.unece.org/index.php?id=48575>.

In view of the high level of support, the Conference is invited to endorse the *Satellite Account for Education and Training: Compilation Guide*.



I. Introduction

1. This document summarizes the comments on the *Satellite Account for Education and Training: Compilation Guide* that were received in an electronic consultation conducted in April 2019.
2. The Guide was prepared by the UNECE Task Force on Satellite Account for Education and Training (chaired by Norway) that was established by the Bureau of the Conference of European Statisticians in January 2017 as a follow up to the work on measuring human capital. The objective of the Task Force was to develop a framework and coordinate the pilot testing of satellite accounts on education and training (SAET) in countries with different economic circumstances and data availability. On this basis, it prepared a compilation guide that will help countries construct internationally comparable satellite accounts for education and training and, thus, lead to improved cost-based measurement of human capital.
3. In February 2019, the CES Bureau reviewed the Guide and commended the Task Force for the excellent work. It requested the UNECE Secretariat to send the document to all CES members for electronic consultation. In May, the Task Force reviewed carefully all comments received and amended the text of the Guide accordingly. The general and chapter specific comments are presented in the following sections of this document, together with the response by the Task Force. Other technical and editorial comments are directly incorporated in the updated Guide. The Task Force would like to thank all countries and organizations that provided feedback.

II. Summary of feedback

4. Forty-four replies were received in the electronic consultation on the Guide. The following countries and international organizations provided feedback: Albania, Andorra, Armenia, Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Colombia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Moldova, Russian Federation, Serbia, Slovakia, Slovenia, Sweden, Switzerland, Tajikistan, Turkey, Ukraine, United States of America, Eurostat and Organization for Economic Cooperation and Development (OECD). Most of the replies came through the standard comments form but 11 countries sent general comments and support for the Guide. Therefore, they are not always included in the counts on the individual questions below.
5. Thirty-six respondents explicitly supported the endorsement of the Guide by the CES plenary session subject to incorporation of the comments made in the electronic consultation. No country or organization objected to endorsement. The countries particularly appreciated the practical approach taken by the Task Force and the efforts to align the proposed SAET framework with existing data collection activities and ensure it is supported by available data sources. Several respondents highlighted that the Guide could assist countries not only in constructing of SAET but also in improving the quality of education sector estimates in the national accounts. At the same time, countries noted that this is an emerging area of work and for this reason they were not able to evaluate in detail all the recommendations. Additional questions could arise when more countries launch work on implementation of SAET.
6. A few of the general comments are presented below:
 - (a) Armenia: In general, the Guide is comprehensive and understandable. Questions and suggestions may arise when using it in practice.
 - (b) Australia: While we have not previously produced a satellite account for education and training, ABS supports the development of such guides that can assist countries with the implementation of satellite accounts to tackle policy challenges. Our review of the guide found that it is: i) clear and complete; ii) flexible and appropriate in

how it anticipates the implementation challenges that individual countries will face; and iii) provides practical guidance on applicable methodologies.

(c) Hungary: Supports the publication of the recommendations, which aimed at helping the production of SAET. An important aim in developing this guide has been to test the proposed framework and several country-specific case studies have been carried out, which can effectively support the national work.

(d) Mexico: We appreciate having the methodology on education and training. We agree with chapter 1 about the need of continuing the communication and coordination between national accountants and experts in education statistics at the international level. The objective is to share experiences regarding the implementation of the methodology and the challenges with data sources.

(e) New Zealand: The Task Force should be congratulated in their attempts to align their work with existing frameworks, and the high level of engagement across the statistical community. While New Zealand does not presently have any plans to develop a SAET, we are confident that this compilation guide will be a valuable asset if we were to undertake such a development.

(f) Netherlands: Statistics Netherlands welcomes the very useful and comprehensive Compilation Guide and congratulates the Task Force on Satellite Accounts for Education and Training with the excellent work done.

(g) Tajikistan: The Guide is useful for improvement of national accounts indicators. At present Tajikistan does not compile SAET but in future we will try to use this Guide in its work.

(h) Turkey: The Guide is remarkably comprehensive and provides helpful guidance on the compilation of a SAET.

(i) United States: This is a very detailed description of a much needed SAET. Efforts to improve education expenditure data particularly from private schools are long overdue and much needed in the US.

(j) OECD: We look forward to seeing how this work evolves. We are particularly curious to see how the work on improving availability of data sources of in-house training will evolve given the fact that direct data sources are not available in all countries.

Response by the Task Force

7. The Task Force has made significant efforts to align the proposed SAET framework with the existing data sources and established international data collections for education statistics. Exercises to reconcile the various data sets are currently on-going at the international level and a recommendation to follow the outcomes of this work is included in the research agenda of the Guide.

8. The Task Force recognizes the need of further testing the proposed framework in practice and encourages other countries to join in the exercise and share their experience. This is well highlighted in the research agenda (paragraph 1.42 6) and a proposal that the joint UNECE/Eurostat/OECD Group of Experts on National Accounts provides a forum for countries to share their experiences regarding both the setup and presentation of the accounts and challenges regarding data sources is made. The paragraph has been extended to emphasize the need to test alternate data sources, which could lead to expanded recommendations and improvements to the Guide in future.

III. General comments

9. The countries were also asked to evaluate the usefulness and completeness of the Guide and the clarity of the main recommendations. All respondents found that the document provides very useful guidance for compilation of SAET. The country case studies

with examples of how the framework could be applied in practice and discussion of concrete measurement challenges were considered particularly valuable.

10. Twenty-nine (out of 31) respondents believe that the Guide addresses all relevant issues related to compilation of SAET and that the main recommendations are clear and coherent. In addition, 2 countries while agreeing that all important issues are covered in the Guide, asked for further clarifications to be added in the text.

11. Portugal pointed out that the Guide provides very useful guidance on the compilation of SAET, but it assumes an existing knowledge of national accounts methodology, not explaining some basic concepts like the calculation of market and non-market output. More detailed explanations or references for calculations would be useful as some countries may not have implemented the full system of national accounts.

12. Armenia, Colombia and Turkey stated that chapter 1 presents a very good and comprehensive summary of the measurement issues and the recommendations of the Guide and provides a clear link to the broader objective of measuring human capital. OECD suggested that the introductory chapter would benefit from an explanation of the advantages of this new method vis a vis the current exercises such as UNESCO National Education Accounts (NEA) and UNESCO-OECD-Eurostat (UOE) data collection on formal education.

13. Luxembourg highlighted that countries already have established reporting obligations for national accounts and the UOE data collection on formal education, so more explicit recommendation on the institution (or unit) that should be in charge of SAET is needed. Also, the Guide recommends a variety of data sources that could be used for compilation of SAET, but these sources may have different coverage and methodology and should be used with great caution, for example combining data on formal and non-formal education.

Response by the Task Force

14. The Guide takes as a starting point the System of National Accounts, 2008 (2008 SNA) and applies consistently the 2008 SNA accounting concepts to develop SAET. This is clarified in paragraph 1.16 of chapter 1 and further explained in the introduction of chapter 2, which sets up the principles and definitions of SAET. The text has been reviewed and where appropriate the references to the 2008 SNA have been reflected. Chapter 5 has also been amended to indicate that some countries may not have fully developed system of accounts.

15. While the links with UNESCO NEA and UOE data collection and the advantages of SAET are well presented in the Guide, the Task Force agrees with the suggestion to advance this explanation to the beginning of chapter 1. Paragraph 1.6 has been extended to present the role of SAET as a bridge between NEA and UOE frameworks and the national accounts.

16. The Guide advises that there should be close collaboration between the organizations and units in charge of source data on education and training and those responsible for national accounts and lists possible players that need to be consulted. The Task Force, however, considers that there could not be a specific recommendation on the distribution of responsibilities as countries differ and they should choose how to advance with SAET in respect to their institutional set up and specific national circumstances.

17. The Guide reflects the experience of 5 countries that managed to produce pilot SAET estimates. Chapters 1 and 7 elaborate the challenges they met in combining different data sources and covering all elements of the accounts. As a result, one of the proposals for further work is to continue the pilot testing and share insights on the methods and results. As already presented in the previous section the text of this recommendation was strengthened to specify the need of testing and reconciling alternative data sources.

IV. Specific comments

18. Several more specific comments on individual paragraphs or chapters have been raised by countries and addressed by the Task Force. These include:

(a) Portugal pointed out that producing data from both the supply and use sides of education and training services allows confrontation of the alternate measures to improve of the quality of estimates. It is important to emphasize this in the beginning of the Guide. This recommendation was added to paragraph 1.19.

(b) Portugal asked that the Guide explicitly identify the core tables on which countries should focus their efforts. The Task Force considers as core the main tables on education and training output, expenditure, financing and cost structure. This was clarified in paragraph 1.23.

(c) In response to comments from Belgium and Finland on the coverage of the category “Early and Pre-primary childhood education” and difficulties in splitting the child care from education component, the text of paragraph 1.41 point 8 has been amended. Paragraph 3.17 was also extended to clarify the link with UOE data collection.

(d) Belgium felt that further clarification on the scope of the accounts and the treatment of part-time and special needs education is needed. The Task Force has expanded the footnote 2 in chapter 2 to make clear that part-time and special needs education is included in the scope of SAET.

(e) Referring to a comment from the United States on the treatment of capitalized interest, a footnote was added to chapter 2, and the section discussing total expenditure was extended to explain that while interest paid on student loans could have been recognized as an expenditure related to the investment in human capital, for practical reasons it was decided to keep student loans, including interest paid and eventually part of student loans that are not paid back, outside the scope of the SAET.

(f) Following a question from Israel, the text on internships and apprenticeships in paragraphs 3.35 and 4.38 was redrafted to make it clear that the wages paid to the interns or apprentices are not included in education costs but the firms training costs are included.

(g) The United States noted it would be very useful to have a greater age group breakout in the supplementary tables, while Israel proposed adding statistics on teachers, class size, wage of teachers and various quality indicators such as PISA. The Task Force has revised paragraph 4.56 to advise that countries could adjust the variety of indicators, dimensions and level of detail in the supplementary tables to their own needs, provided sufficient data are available.

(h) Colombia suggested new innovative methods could be considered to develop estimates of on-line courses. A reference was added to paragraph 5.54 discussing sources for informal learning and e-courses.

(i) Austria remarked that the country pilots make up for a considerable part of the document and suggested to publish them in an online version only. This would also facilitate any further updates. The Task Force agrees that the country case studies may need more frequent review. However, it also noted that these practical examples were highly appreciated by several countries. For this reason, it decided to keep them in the Guide. As the pilots are presented as annexes to the last chapter, any updates could easily be added to the electronic version of the publication.

(j) Further detailed comments from Portugal and technical comments by Colombia, Estonia, Israel, Mexico and OECD were directly incorporated into the Guide.

V. Further work

19. The countries that pilot tested the framework – Belarus, Canada, Israel, Norway and United Kingdom intend to continue compiling SAET. Norway reported that they already disseminated statistics based on the SAET in March 2019 and plan to produce such

estimates annually. Altogether in all 5 countries the new estimates were very well accepted by the users. Some other countries (such as Albania, Hungary, Slovenia and Turkey) are considering work on SAET in the coming years. In addition, several countries plan to use the Guide in order to improve the coverage and detail of their estimates of the education sector.

20. More than 30 countries indicated the research agenda of the guide is complete. Two countries proposed additional items to be covered on the agenda, these are mainly linked to the difficulties in the treatment of some units or providing the necessary detail/split for education purposes.

21. Noting that SAET is a new area, most of the countries identified as top priority for further work the testing of the proposed framework and developing data sources, including efforts to integrate additional classifications and breakdowns in national accounts and government statistics with respect to education purposes. In respect of concrete items, the following are considered as priority for the research agenda:

- Work on ensuring broad consistency between SAET and UOE data on formal education as well as with other data collections of education statistics
- Developing sources and methods to estimate in-house training of enterprises
- Work on improving the data sources and the coverage of other non-formal training courses.

22. Other areas for future work that were highlighted in the consultation include e-learning, improving the estimates for the import and export of education and training services and constant price estimates.

Response by the Task Force

23. The Task Force agrees with the comments made by countries and the highlighted areas for further work. It welcomes the efforts of countries to further test the proposed framework and share the results, challenges and any solutions they develop. The joint UNECE/Eurostat/OECD Group of Experts on National Accounts should serve as a forum for exchanging such experience. This would provide the basis for future improvements to the Guide. A recommendation in this sense is already made in chapter 1, paragraph 1.42 and was further strengthened to reflect the feedback of countries.

24. All concrete items suggested by the countries are already covered by the broad areas for further work summarized in section 1.4 of the Guide. In order to respond to the specific focus on improving coverage and data sources for non-formal and informal education and training a separate item on the research agenda was introduced.

VI. Proposal

25. The task Force has reviewed in detail the comments received in the consultation and has introduced the amendments presented in this document in the updated version of the Guide (available at: <https://www.unece.org/index.php?id=48575>).

26. In view of the support by countries and organizations, it is proposed that the Conference of European Statisticians endorses the updated *Satellite Account for Education and Training: Compilation Guide*.
