

An inventory of innovative tools and sources for smart Time Use and Household Budget Surveys

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1. INTRODUCTION

In 2017 Eurostat started a project on modernization of data collection in two diary-based social statistics domains: Household Budget Survey (HBS) and Time Use Survey (TUS). Two Task Forces (TFs), which consist of experts from National Statistical Institutions (NSIs) and university research centres are part of this project. TF members expressed the need to set up an inventory of innovative tools and sources that were being used or developed in the European Statistical System (ESS) in order to support the data collection for both HBS and TUS. In addition, the scope of the inventory comprised information on plans and projects on innovative sources of data and on tools in the early stages of conceptualisation.

The aim of the presentation is to inform the participants about the purpose of this inventory, its content, maintenance and update plan, as well as to provide practical information on how to access it.

2. THE INVENTORY

In this article, we present ‘the Inventory of innovative tools and sources for HBS and TUS’ (the Inventory) starting with its purpose, structure and content. We will describe the criteria used in a maturity model to assess candidate tools to become shareable at ESS level. Then we shall briefly discuss the work aimed at having standardized and comparable description of the tools listed in the Inventory based on recommendations of international standards. Going further, we will present our strategy to maintain and the Inventory information up-to-date. We will then conclude with practical information on how to access the Inventory.

2.1. Purpose

The purpose of the Inventory is to catalogue tools, sources and information on projects that can lead to new or updated tools. It supports tools’ assessment and comparison, as well as the management of information about them. The Inventory allows obtaining a better insight on the covered functions, the interoperability and shareability level of different solutions for data collection within the ESS statistical production process. Furthermore, it contributes to the continuous and further harmonisation of tools among different countries.

Information therein contained was collected through an online questionnaire, which was distributed to European National Statistical Institutions (NSIs) and to other interested parties, such as universities, public institutions, and private organisations. Though the bulk of information was collected during the first half of 2018, the process continued since then and information about new tools has been added regularly [1].

2.2. Structure and content

The Inventory is integrated within the external wiki platform of the European Commission: **Innovative sources and tools for living conditions surveys**¹. The wiki enables a number of functionalities such as user and content management, several macros and maintains Commission's visual identity.

The Inventory is structured into two main blocs: one for the tools and one for the sources. Tools are divided according to the survey they are used for, i.e. TUS or HBS. The information on tools is the same for both surveys. It has been grouped into eight main categories following a logical order from non-technical to technical description (Figure 1).

Currently the Inventory contains information on 15 tools for TUS collection and 11 tools for HBS. Nearly all the tools for HBS and about half of tools for TUS are developed by NSIs, while the rest by universities, research centres, and private companies. Eleven TUS and seven HBS tools are in production, i.e. have been used in data collection data (either in large-scale surveys or in pilots) [2].

In addition, the Inventory contains information on sources of data being investigated or planned for adoption in a number of European countries by NSIs, research centres, universities and private companies that have an interest on this kind of data.

The scope and interest for the inventory already go beyond the ESS. A tool for HBS developed by Statistics Canada is therein described. International organisations such as United Nations (UN Statistical Division) have been granted access.

The Inventory's content is displayed in individual pages, one for each listed tool. Within a page information is separated in distinct tabs (Figure 1). Users can navigate the Inventory either via a tree menu or by means of a series of clickable buttons. They can perform a quick search based on a given set of main functionalities, or compare two or more tools. A user guide facilitates the navigation and the use of the information in the Inventory. The user guide has in addition a glossary of the most used terminology.

2.3. Tools assessment criteria and maturity model

Eurostat and the TFs have defined a list of criteria to be used for assessing tools that might be considered as candidates to become shareable at ESS level [3]. These criteria are integrated in a model that allows the user to assign to each criterion its relative weight compared to the other criteria and its relative importance. A scoring system is used to have a ranking of tools from highest to lowest score.

2.4. Standardization efforts

In order to achieve a minimum of standardization, Eurostat and the TFs have agreed to adopt the recommendations of the Common Statistical Production Architecture (CSPA) in the descriptions of the tools. CSPA compliant descriptions are already available at the definition level [4]. Whereas tools that are being used in production will also be described at the specification level. The implementation level description will be carried out only for those tools that are continuously maintained and actively used in production.

2.5. Maintenance and updating

The Inventory is unique in that it provides information on tools and sources being planned, developed or already used in data collection within the ESS space and beyond.

¹ <https://webgate.ec.europa.eu/fpfis/wikis/display/ISTLCS/>

It needs to be maintained in order to offer an up-to-date view on the progress made in the ESS in modernisation TUS data collection at any time.

To this aim, a new questionnaire is available in the process of updating the Inventory. It is used to collect information on tools deployed in production, or tools that are in the pilot phase, or in a very advanced phase of development; In addition to that, other two questionnaires focusing respectively on new sources and on new ideas and projects in the early phases of development are available [5].

Moreover, a strategy that aims at updating the Inventory's information regularly is in place. It consists in contacting the system owners at regular time intervals and inviting them to check and update the information in addition to granting them editing rights in their tool's respective pages.

3. CONCLUSIONS AND PRACTICAL INFORMATION

The scope of the inventory, and its use as a reference point, are obviously not limited to the members of the two TFs. In fact, the Inventory, as a unique collection of information on tools and sources being used within ESS, has generated a growing interest that goes beyond the scope of the Innovative tools and sources for HBS and TUS project.

3.1. Practical information to access the inventory

The Inventory is hosted in the projects' wiki page within European Commission's external wiki platform:

<https://webgate.ec.europa.eu/fpfis/wikis/display/ISTLCS/INVENTORY>

To access the inventory the steps below need to be followed:

1. Obtain your EU Login (if you do not have one): <https://webgate.ec.europa.eu/cas>
2. Login in a first time to the wiki in Confluence (if you have never done it before):
<https://webgate.ec.europa.eu/fpfis/wikis>
3. Contact Eurostat by e-mail at ESTAT-F4-INNOVATIVE-TOOLS@ec.europa.eu

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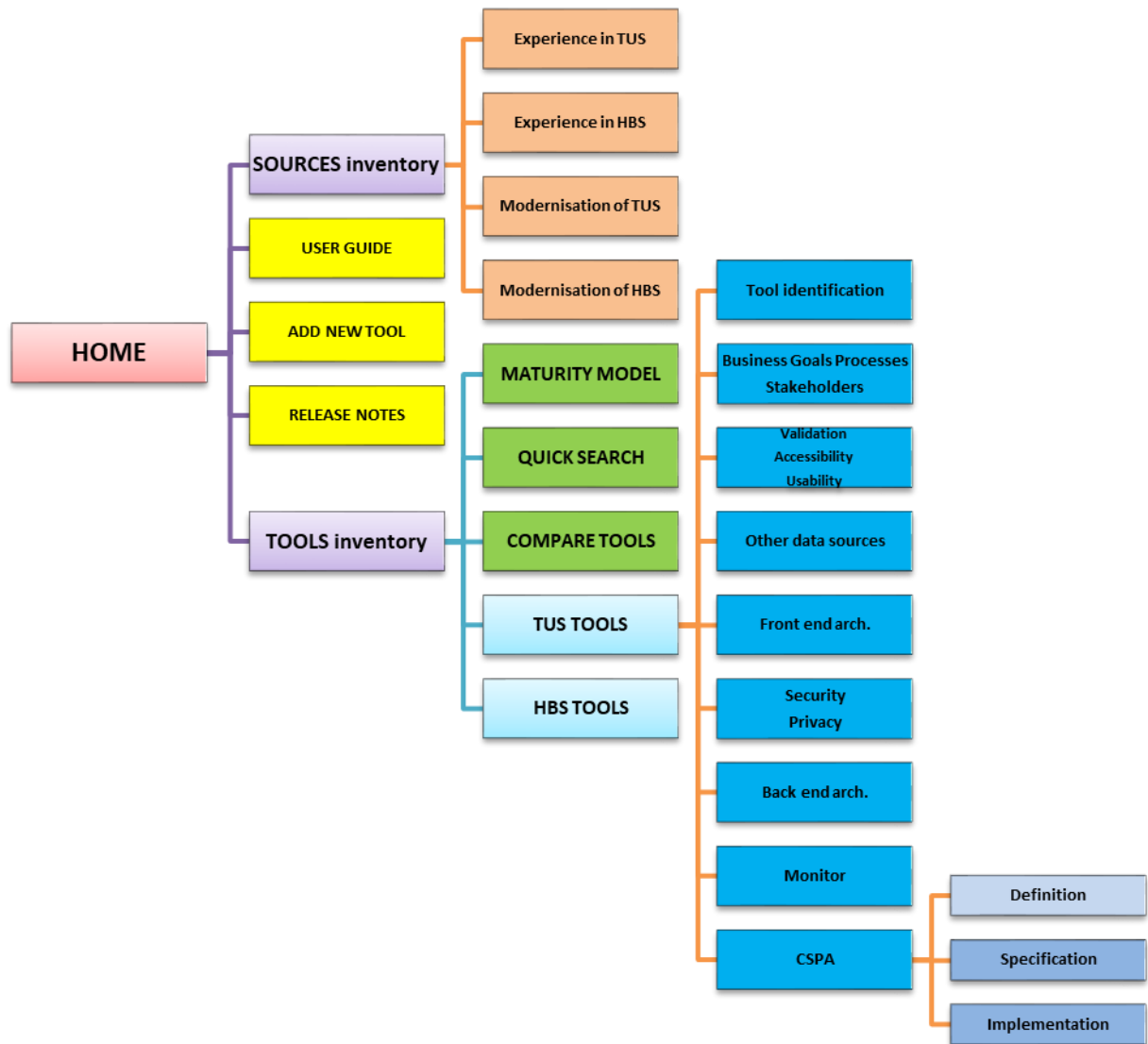


Figure 1. Structure of the Inventory of Tools and Sources.