



**HUNGARIAN
CENTRAL
STATISTICAL
OFFICE** 

Joint Safe Centre of the Hungarian Central Statistical Office and the Hungarian Academy of Sciences

on behalf of the team behind this achievement,

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Outline

- The story in a nutshell
- Where did we start? How far did we get?
- Legal/technical/procedural elements
- Share of tasks/responsibilities between the HCSO and the HAcS
- Benefits
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Driving force and motivation

- Feedback, ideas and constant support from researchers and especially the Hungarian Academy of Sciences (HAcS).
- Vision of where to go (HCSO strategy and clear vision and goals from the HAcS).
- Knowledge and dedication of experts on both sides (how to solve puzzles instead of being afraid of what might happen).
- Inspiration from the international community (past and present: DwB, EDAF, WGSC, UNECE community).

Where did we start?

- Real realisation that NSIs have rich datasets and the potential for improvement is huge.
- Facilitating the use of official statistical data and building integrated, service-oriented systems of data access are strategic priorities.
- Build on the needs and expectations of the research community.
- There are great opportunities for cooperation and further development of data access procedures.
- A new legal environment can greatly support further actions to be taken.

How far did we get?



New joint Safe Centre in the premises of the Hungarian Academy of Sciences.



What is the real achievement here?

- A brand new Safe Centre, responsibilities shared between the HCSO and the HAcS.
- Better services for official statistics with use of microdata.
- Opening new doors for future developments on data access (ideally remote-oriented solutions).
- Real cooperation with researchers: better understanding, better cooperation.
- Real success story for official statistics and researchers.
- Trust (!)

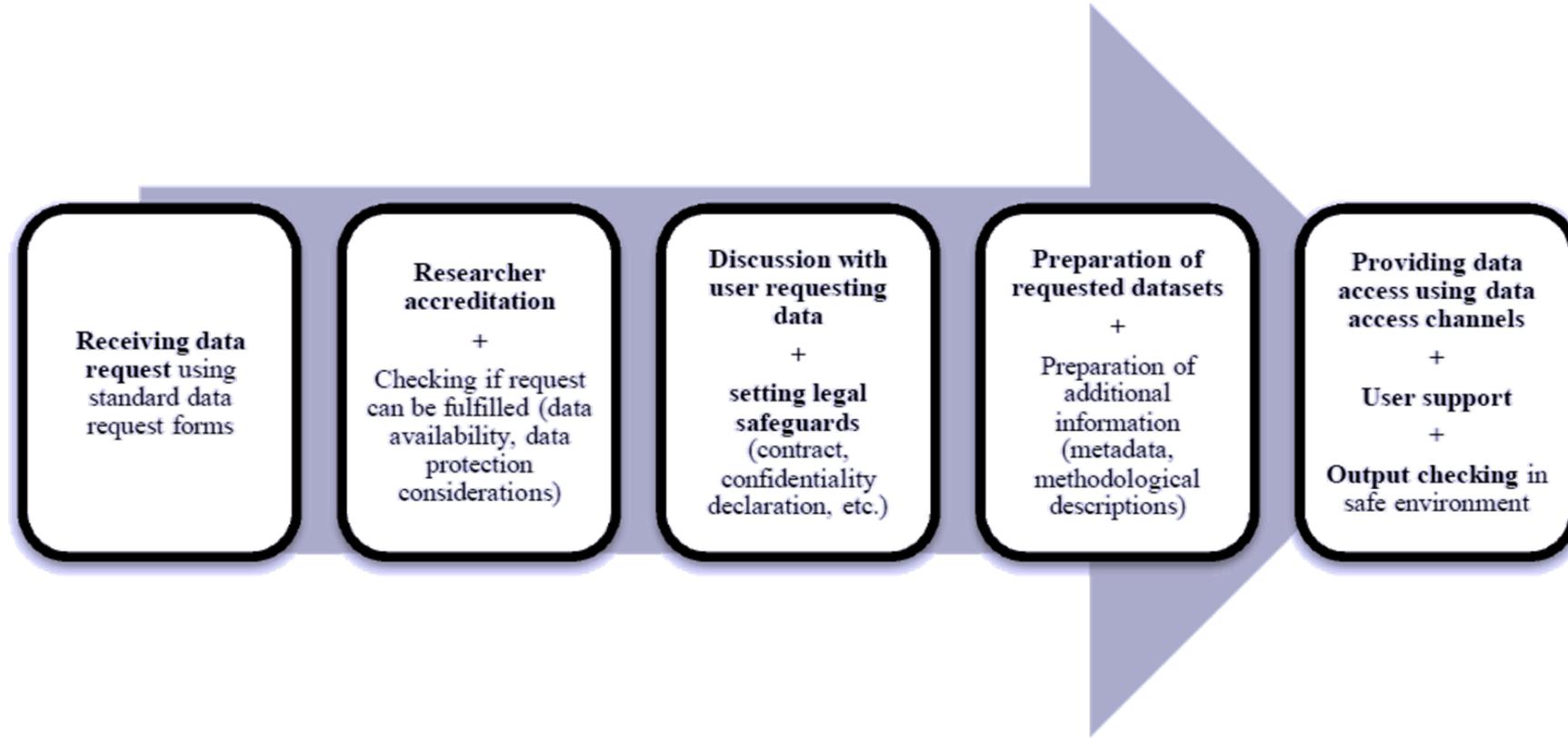
The legal background

- Article 23 of Regulation 223 makes it possible to access confidential data which only allow for indirect identification of the statistical units may be granted to researchers carrying out statistical analyses for scientific purposes by the Commission (Eurostat) or by the National Statistical Institutes (NSIs) or other national authorities, within their respective spheres of competence.
- The Hungarian Act on Official Statistics, which has been adopted in 2016, has for the first time **introduced the term microdata and access to microdata for scientific purposes.**
- The legal boundaries to establish such a solution must always remain within the confines of the above regulation. These boundaries are:
 - The ownership of the data must remain with the HCSO.
 - The control of the safe environment must remain with the HCSO.
 - The control of giving access to a specific researcher for a give project must remain with the HCSO.
 - Appropriate sanctions have to be put into place in case of breach of the rules of access.

Cooperation with the Hungarian Academy of Sciences

- The researchers of the Centre for Economic and Regional Studies of the Hungarian Academy of Sciences have been using the Safe Centre of the HCSO since 2014 and its anonymized microdata for even a longer period of time.
- **The fruitful cooperation between the two institutions throughout the years established the trust between them and resulted in a joint pledge** to collaborate for many more years. In this situation, a need to open a Safe Centre outside the premises of the HCSO was emerged from the HAcS's side. The new building of the HAcS was a perfect location for this new Safe Centre.
- Milestones:
 - 2015: signature of a cooperation agreement (cooperate in the process of the new Safe Centre's establishment).
 - 2016: the reconciliation of the legal, information technology and process organization parts of the new Safe Centre began.
 - 2018: opening of the new joint Safe Centre in the premises of the HAcS.

Access procedures



Procedure is managed using standard templates. All documents are available publicly on the HCSO website at http://www.ksh.hu/safe_centre_access

Who is entitled to use the new Safe Centre?

- Available **only for scientific purposes** and access is granted only for approved research projects that meet all researcher accreditation criteria.
- Furthermore, project leaders have to be in a legal relationship with the Centre for Economic and Regional Studies HAcS or Centre for Social Sciences of the HAcS. The project leader bears full responsibility for project participants entering the Safe Centre (researchers, co-authors, students and assistants).

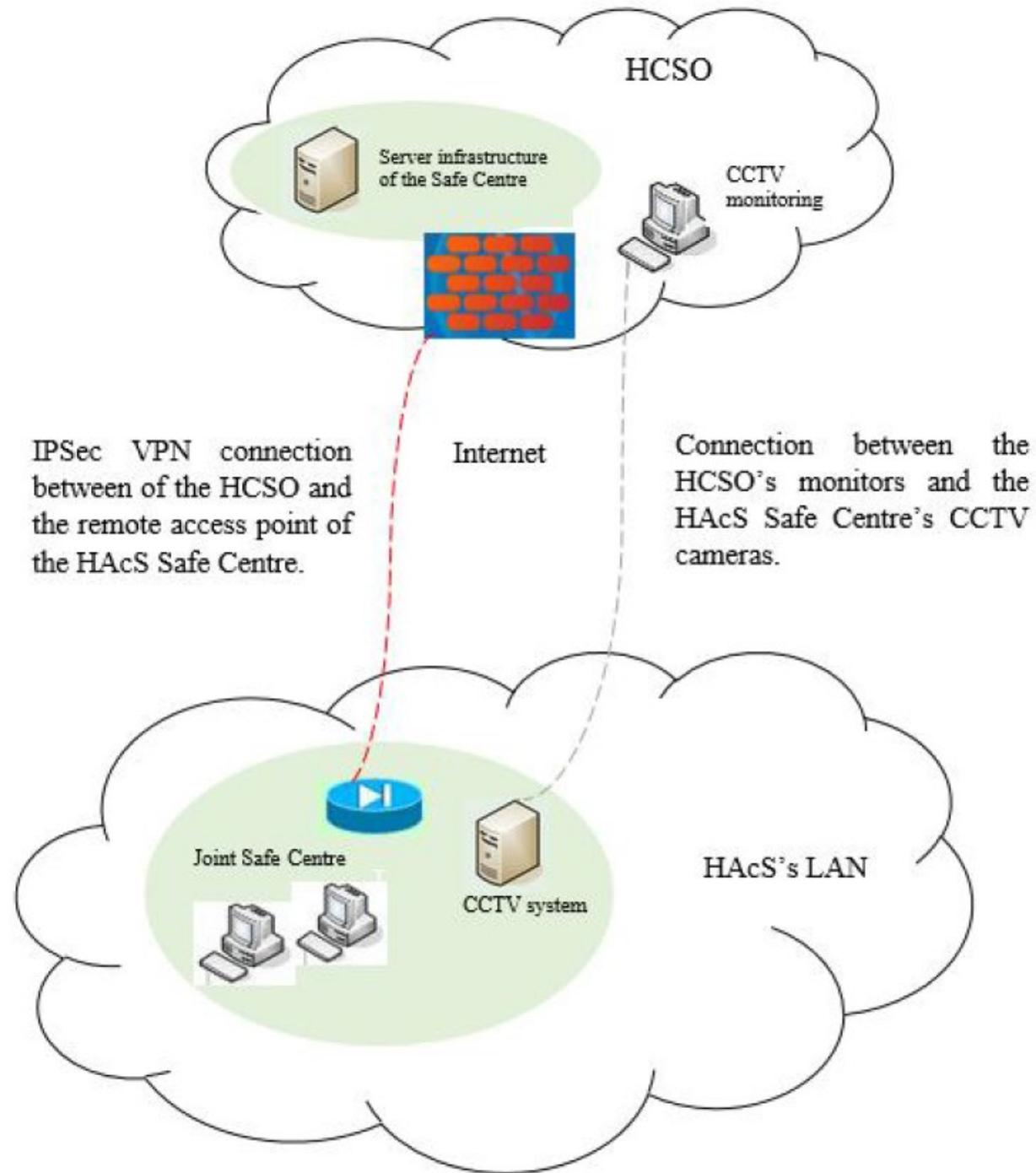
What kind of data are available in the new Safe Centre?

- Access is provided to **deidentified microdata sets only for scientific purposes**, which means that direct identifiers (e.g. unique identification numbers, phone number, e-mail address, etc.) are removed or replaced with artificial technical numbers.
- Numerous, **ready-made standard datasets** are available for researchers, e.g.: Labour Force Survey, Household Budget Survey, European Health Interview Survey, Time Use Survey, Population and Housing Census.
- If no appropriate standard datasets are available for a given research purpose, **specific datasets can be requested for a fee**. Examples: live birth, death, marriage, divorce, fetal losses, internal/external trade, corporate tax reports, product-level trade data, etc.

The IT solution

12 zero clients
20 virtual computers

STATA, R, MS Office



Share of tasks and responsibilities (what's new)

- The researchers need to make an **appointment in the registration system** created by the HAcS for this specific purpose. This system is operated and maintained by the HAcS, who give regular reports to the HCSO on the use of the Safe Centre by the researchers.
- The HAcS keeps in touch with the HCSO continuously, tracks the microdata needs, does the administration and coordinates the process. They facilitate the tasks of the researchers regarding the Safe Centre, basically **they act as a mediator between the researchers and the HCSO**.
- They **monitor the CCTV cameras** during the opening hours to avoid any incidents. If, for any reason an incident happens, they immediately report this to the HCSO and prepare a formal report. This report is forwarded to the HCSO for further processing. However, the HCSO also has the opportunity and obligation to monitor the CCTV cameras and check in with the colleagues at place if they spot anything out of the ordinary.

Benefits for official statistics and the researcher community

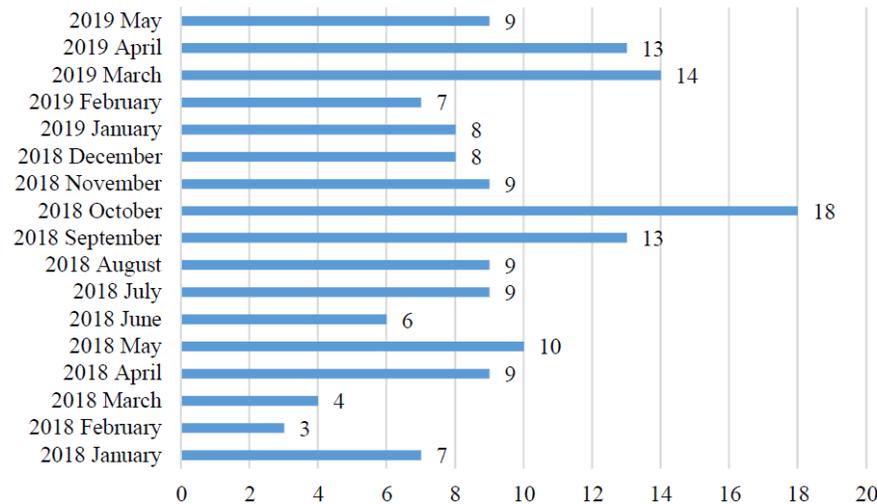
HCSO	Researchers
The relationship between the two institutions is strengthened, the cooperation is more efficient	
As there is a constant contact with the users (researchers), their needs and problems with the datasets come to light earlier	With cooperation and daily communication, the HCSO is notified much earlier about the emerging research needs and issues
The HCSO is able to get more experience , which enables to support the work of the National Statistical Service more efficiently regarding the data requests for scientific purposes	Time-saving! The researcher can save the time of traveling to the HCSO's Safe Centre. There was a 400% increase in Safe Centre usage when it moved to the HAcS building
Wider use of official statistics	The research facility is able to provide the necessary microdata to its researcher community
Methodological benefits in the field of output checking: the only way to get experiences and to develop new methods is to check more and more outputs	"Output saving" : the research leader can check the outputs locally, and only the necessary outputs are taken out

Okay... but what about costs?

- Setting up the Safe Centre costs about 450.000 € on the part of the HAcS.
- This amount covered the price of two high-capacity servers (owned by the HAcS but operated in the HCSO computing centre), establishment of the remote control system, and costs of the first set of data made available for research.
- The Academy pays an annual fee of about 30.000 € for server operation, preparation of the data sets, the cost of adding new waves to the existing data, and output checking. The costs have so far been covered by the central budget of the Academy of Sciences. The services are provided free of charge.

New Safe Centre in numbers

- We registered 6342 sessions in the Safe Center since 2014, the opening of the first room in the HCSO's building. A total of 93 researchers working on 43 projects used the data since then. Moving the room to the premises of the HAcS resulted in a major growth of usage (3815 sessions between February 2018 and June 2019).



Number of outputs.

In the last year, 105 outputs were created.

This number has changed to 51 (till the end of May, 2019).

Messages

- It is important that the research community communicate and stress the need for microdata sets, and that **the NSI should be very open** to fulfill these needs.
- The framework of the Safe Centre and **the collaboration between the two parties need to be flexible enough**, so as to be extendable not just from information technology side, but from research institution side, i.e. other research institution should have the chance to use the new Safe Centre. This helps to avoid the situation of monopoly.
- The new Safe Centre helps to **create a new, young generation of researchers** where the data usage gets more and more relevant than before.
- The research institution gives lectures to the researchers where they can study statistical software used in the Safe Centre to analyze the data (e.g. STATA). These lectures are open to the colleagues responsible for output checking at the HCSO as well. This makes the process of **output checking more effective**.

Plans for the future

- As for the future plans, it is **vital to identify the non-practical and rigid elements** of the data access at the new Safe Centre. To do that, continuous monitoring and revision are required. This allows to increase the quality of service the Safe Centre can offer.
- Part of our short term plans is to **establish a new Safe Centre** outside the capital city. Pécs is a very prominent candidate as this is the centre of the Institute for Regional Studies. If a Safe Centre is established in Pécs, all co sciences of HAcS get access to it.

*„that which is imagined can never be lost”
(Clive Barker)*

Thank you!

on behalf of the team behind this achievement,

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