



Remote access to European microdata

UNECE EXPERT MEETING ON STATISTICAL DATA
CONFIDENTIALITY

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Standard access modes

- **Public use files** (*fully anonymised; neither direct nor indirect identification*): free access via **Eurostat website**
- **Scientific-use files** (*‘confidential data for scientific purposes to which methods of statistical disclosure control have been applied to reduce to an appropriate level and in accordance with current best practice the risk of identification of the statistical unit’*): restricted access for researchers of recognized research entities, download to / storage and use **at entity**
- **Secure-use files** (*‘confidential data for scientific purposes to which no further methods of statistical disclosure control have been applied’*): **Eurostat safe centre**

Motivation for remote access

- Issues with traditional access to secure-use files:
 - Travel to Luxembourg, limited research time in safe centre, 'host' at Eurostat required...
 - Impossible during COVID-19 periods (lockdowns, travel restrictions...)
- Aim: facilitate the use of confidential data for scientific purposes (secure-use files) while preserving the confidentiality and integrity of the data
- Eurostat developed conditions of remote access in collaboration with a task team of representatives of NSIs
- European Statistical System Committee (ESSC) approved the idea of providing remote access to European microdata in 2021

Legal basis

- Commission Regulation (EU) No. 557/2013 on access to confidential data for scientific purposes defines general conditions of access to:
 - Scientific-use files
 - Secure-use files
- Access to secure-use files is only allowed from/within (Art.7,8):
 - European Commission access facilities such as Eurostat's safe centre
 - **Other access facilities accredited by the European Commission**
- Research output checking is required for secure-use files (Art.7)

Implementation

- Access via **accredited access points** at the premises of **recognised research entities**
 - Separate room for the operations (such as Eurostat's safe centre)
 - Access point compliant with organisational, technical and computer settings requirements
- Confidential data remains in Eurostat secure environment
- Access through DIGIT/Eurostat remote access system ('KIOSK', using CITRIX virtual desktops)
- Output checking through Eurostat

Organisational requirements for access points

- Person responsible for access point designated
- Use by authorised persons only, i.e. researchers with validated research proposals mentioning remote access
- Compliance with baseline security and technical requirements for access point and computers
- Organisation, monitoring and documentation of access point use
- ...

Technical requirements for access points

- Separate, secure room located in premises of recognised research entity
- Lockable door
- May be used for other (non-conflicting) purposes when not used as access point for secure-use files of European microdata

Computer settings requirements for access points

- Broadband internet connection
- **Dedicated fixed public IPv4 address** only usable by access point computers
- Firefox (minimum version ...)
- Remote access to the computer disabled
- No connection of external storage devices, no screen capture and sharing capabilities
- No videoconferencing tools

Current situation

- Recognised research entities in **EU / GDPR area** and
- Secure use files of two domains (**CIS, SES** – same as at Eurostat safe centre)
- Request to host an access point possible in advance (no running research project using secure-use files required)
- Service free of charge as any other access to European microdata
- Accreditation approval by Eurostat and National Statistical Authorities

Current situation

- Several commercial and open source tools available in KIOSK:
 - STATA®, SAS®, R Studio, Tau Argus, Mu Argus, Office automation suite
 - ACRO tool (Automatic Checking of Research Outputs): proof-of-concept software based on STATA®
- Pilot implementation: JRC-ISPRA
- Other: University of Copenhagen

Experiences and challenges

Not very popular (yet):

- Strict requirements (e.g. dedicated fixed public IPv4 address)
- Limited offer of secure-use files
- Link between research entity hosting access point and researchers using it
- ...

Directions for further development

Secure-use files for additional domains (Eurostat and National Statistical Authorities)

- EU-LFS, EU-SILC...
- Content: secure-use files should offer ‘significantly’ more than existing scientific-use files to justify investment in remote access
- Coverage: enough countries allowing access to the respective secure-use files with their country data via remote access (in general / for certain projects)

Directions for further development

Output checking (Eurostat)

- Eurostat resources limited -> more automation
- ACRO:
 - Availability for more platforms than just STATA®
 - Extended functionality

Thank you



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