



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement des Innern EDI
Bundesamt für Sozialversicherungen BSV

Access to sensitive research data

Researcher/user experience

Workshop: Safe access to sensitive research data, 25.11.22

Bern, SNSF

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Data linkage in 2012...

Research: Immigration and Settlement of Germans in Switzerland

Data: Statistic of foreign nationals, Population and Household Register, Structural Survey

Sensitive data: demographics, origin (but no ethnic background)

December 2012	First contact with SFSO
June 2013 – February 2014	Data preparation and delivery (10x)
February – June 2014	Data linkage, rules based at the University

Data delivery: deposited for download on server (password protected)

Data protection contract: names of researchers, deletion on completion, no information on where the data had to be stored

Publication of results: no-identification clause



Data linkage in 2014...

Research: SNSF project on emigration & nccr – on the move

Legal framework: In January 2014, a new decree allows for the linkage of different data sources by the SFSO staff as well as for the involvement of external researchers.

June 2014	First contact SFSO
July – October 2014	Data preparation and stored on PC at SFSO (5x)
October – December 2014	Data “linkage”, preparation and validation at the SFSO

“Safe room” at SFSO





Data linkage in 2014...

Research: SNSF project on emigration & nccr – on the move

Legal framework: In January 2014, a new decree allows for the linkage of different data sources by the SFSO staff as well as for the involvement of external researchers.

June 2014	First contact SFSO
July – October 2014	Data preparation and stored on PC at SFSO (5x)
October – December 2014	Data “linkage”, preparation and validation at the SFSO

Data delivery: Hard drive

Data protection contract: names of researchers, deletion on completion, no information on where the data had to be saved

Publication of results: minimum N to be published



Data linkage in 2019...

Research: Economic well-being of the working- and retirement-age population in Switzerland (2019-2023)

Data

- Cantons: Tax data, 11 cantons (AG, BE, BL, BS, GE, LU, NE, NW, SG, TI, VS, 2011-2015)
- CCO/FSIO: pension register and income data
- SECO: Unemployment records
- SFSO: Population and Households, Buildings and Dwellings, Social Assistance, Structural Survey and Natural Population Change

Place of linkage and data validation: SFSO



Data access

Structure and content

- Extracts (11 thematic variable selections, total of 885 variables)
- Pool (12 additional data tables, total of 776 variables)

Use	Data access	Volume
<ul style="list-style-type: none">• FSIO mandated research• SFSO internal analyses• research projects of other institutions	data delivered by SFSO	6 projects 3 projects 11 projects
<ul style="list-style-type: none">• FSIO information for the political process	data access on SFSO-server (remote access)	2 extensive analyses 2 short data checks



Data protection

Sensitive data: origin, health-related, detailed financial information → all linked!

Data protection

- Data protection contract
- File Transfer System (password secured)
- Data storage check-list (local secure environment)
- Methodological constraints for research publications
- Signed confirmation of data deletion



Conclusions

- Important improvements have been made
 - “Safe room access” for data preparation, but not data analyses
- Cooperation between public administration and research (mutual “training”)
- Current system
 - is resource intensive for public administration and researchers (data delivery + deletion on completion)
 - and the “control” is limited



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Thank you!

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Data storage check-list

Erfüllt ¶
Nicht erfüllt ¶

-Es handelt sich nicht um eine öffentlich zugängliche Cloud-Umgebung. ¶
-Die Daten sind in der Schweiz gespeichert. ¶
-Die Daten sind während des Transports und der Speicherung verschlüsselt. ¶
-Der physische Zugang auf die Infrastruktur ist auf legitimierte Nutzer beschränkt. ¶
-Der logische Datenzugriff ist geschützt durch: ¶
 - → Eine 2-Faktor-Authentisierung und ¶
 - → auf legitimierte Nutzer eingeschränkte Zugriffsrechte. ¶
-Die Umgebung ist durch eine Firewall geschützt. ¶
-Die Zugriffsberechtigungen werden kontrolliert und aktuell gehalten. ¶
-Die Infrastruktur ist gegen Malware geschützt. ¶
-Die Software-Schwachstellen werden zeitnah überwacht und behoben (mind. 1 x pro Jahr). ¶
-Falls Backups gemacht werden, müssen sie verschlüsselt sein. ¶