

Demographic and Census data - Statistics Belgium.

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This presentation

- Introduction Statbel
- Official statistics - demography
- Input databases: population register – overall scope
- Processes, data flows and by-products
- Dissemination
- technical annexe:
 - Population register – technical scope
 - Census structure

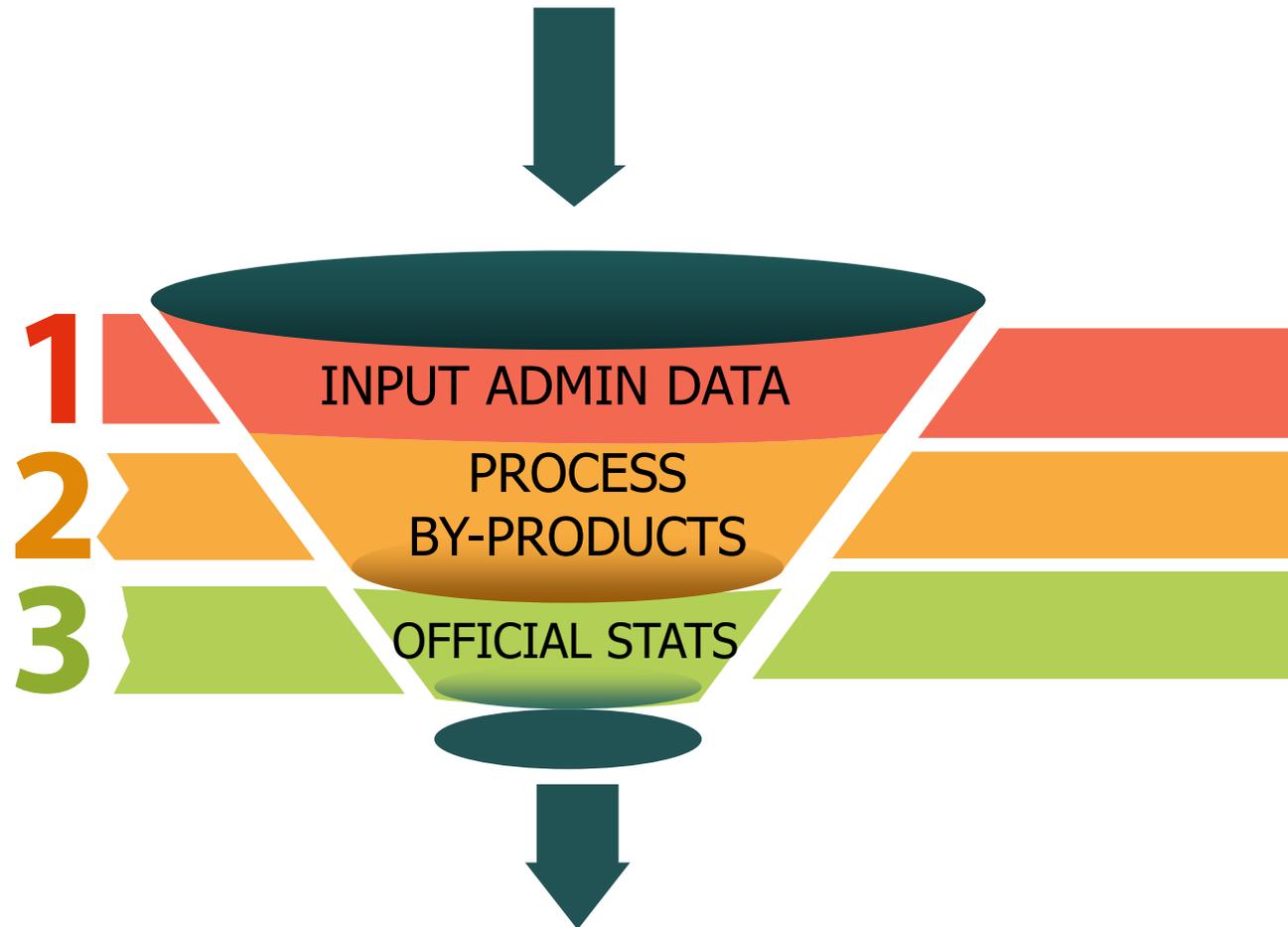
Statistics Belgium

- National Statistical Institute:
 - Ministry of economics, IIS, Eurostat
- Official statistics
 - Website: <https://statbel.fgov.be/fr>
 - Varying from CPI, official population figures, census, surveys

Statbel statistics: 'iceberg-principle'



Statbel production pipes: Funnel Design



Official statistics:

Important:

- Compulsory (European and Belgian legislation) – Statbel mandate
- Imply integration of many sources

Unimportant:

- As such limited scientific value
- Need for upgrading/elaboration through custom-made designs

Official statistics:

DEMOBEL:
Official
Demographic
Databases

- Legal population – structure 1992-2019
- Demographic flows: births, deaths, (internal) migrations, MDC 1992-2019
- Causes of death (COD), Births
- Census: population structure + education + dwelling + labour force

Input – admin. data : population register – general scope

- Source Rijksregister: Fod. Binnenlandse zaken - Algemene Directie Instellingen en Bevolking:
<https://www.ibz.rrn.fgov.be/nl/rijksregister/>
- Statbel gets on a yearly base an elaborate but not a complete cross-section of the population register
- We have uncoded (and coded) PINs, names, addresses
- We receive full registration histories

Input admin.data: Population register

POPULATION REGISTER: Fod binnenlandse - Algemene Directie Instelling en Bevolking - Rijksregister:

<https://www.ibz.rrn.fgov.be/nl/rijksregister/>

BASILINE REGISTRATIONS		registration by municipal authorities (who) - compulsory (verplicht)
CONCEPTUAL COVERAGE		municipality and adres, seks, (date of) birth, death, migration, (de)registration, citizenship, country of birth, household, descent
TECHNICAL STRUCTURE	DB STRUCTURE	Normalized databases - ID = national number
	TEMPORAL SCOPE	Full registration history
	COVERAGE	Legal population (exhaustive)
	STATBEL INTEGRATION	yearly and two-weekly
OFFICIAL STATISTICS		Legal population and flows, Census

Baseline demography - process: essential steps

- Identification population, births, deaths, migrations
- Longitudinal follow-up (1)
- Register status (identification asylum seekers)
- [Cleaning]
- Elaboration:
 - Linkage (4) via PIN
 - covariates + adresses (2) + households (3)
- Publication and dissemination

5. INNOVATIVE DESIGNS

Adding value through by-products:

1. Conceptual elaboration: adding variables through internal and external linkage (4)
2. Conceptual aggregation: adding an extra conceptual dimension through aggregation f.ex. households (3)
3. Longitudinal elaboration: follow-up (1)
4. Spatial elaboration: adresses (2)

Demography by-products: follow up (1)

- Complete registration histories (exact dates)
- Flexible longitudinal designs
- exposures (including migration)

Demography by-products: addresses (2)

- Geolocalisation of addresses
- Flexible geospatial distribution of Belgian demography

Demography by-products: conceptual aggregation (3)

- Households, marriages, divorces
- Geography (sectors)
- Periods

Demography by-products: conceptual elaboration: linkages (4)

- Census: education, dwellings, labor
- Surveys: HIS, EU-SILC, LFS
- Income: tax register data (IPCAL)
- External databases: BCSS (KSZ), IMA, BCR ...

Innovative designs (5)

- Four – dimensional space to innovate in:
same set of sources can lead to very different innovative designs.
- Low hanging fruit:
Data exist, No ‘rocket science’ needed,
extremely cheap
- Challenges and future plans:
 - Prioritisation, Ressources
 - Bigger engagement of scientific community - taskforces

Data protection: legislation:

- ❑ **GDPR:** Verordening (EU) 2016/679 van het Europees Parlement en de Raad van 27 april 2016 betreffende de bescherming van natuurlijke personen.
- ❑ **Kaderwet:** Wet van 30 juli 2018 betreffende de bescherming van natuurlijke personen met betrekking tot de verwerking van persoonsgegevens
- ❑ Wet van 5 september 2018 tot oprichting van het **informatieveiligheidscomité...**
- ❑ **Statistiekwet:** Wet van 4 juli 1962 betreffende de openbare statistiek

Dissemination – aggregate and micro level data

- ❑ Official statistics: website(s) -
<https://statbel.fgov.be/nl/open-data>
- ❑ Custom-made statistics:
Demos@economie.fgov.be
- ❑ Micro data:
 - Strictly scientific purposes only!
 - Application: <https://statbel.fgov.be/fr/propos-de-statbel/vie-privee/microdonnees-pour-la-recherche>
 - Please contact us:
Patrick.Lusyne@economie.fgov.be

Population register: technical annex

Central Population register:

- 1985: centralization of municipal population registers
 - Technical centralization! Registrations remain at municipal level
 - Same platform but not the same software
 - Legally compelled harmonisation of rules and practices
- Central Population Register:
 - ministry of the interior
 - Collection of 80+ tables / PIN / no RDB
 - Backbone of the Belgian administration

Central Population register: structure

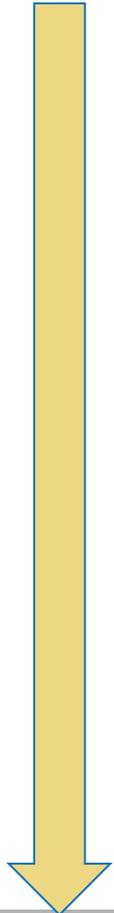
□ Structure of tables:

- Pin
- Event driven:
 - Registration of (new) status
 - Registration of time at event
- Status - normalization:
 - ✓ Sex, municipality, adress, date of birth and country of birth, nationality, household composition
 - ✓ Not present: education, occupation, income, social security, subjective information
- Uni-temporal registration of time
 - ✓ corrections, delayed registrations!

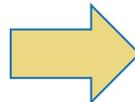
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0000013B9AE4A142C92E672811A60FC1	23Sep1980	19Feb1990	34022	4

Population Register – integration of flows –
PLATFORM APPROACH

Civil Registers

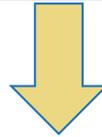


DEMO STATS



DEMO STATS

CPR



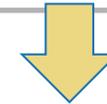
Cross-section



DATA PLATFORM
Statistical registers



FRAMES



SURVEYS



Mutations



Data4Research: Statbel – données démographiques et du census - un état des lieux

Données du census – un aperçu

