

# Session 9: Data quality issues - Norway

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# International quality issues in Norway vs a national perspective

- Some international issues are not particularly significant in Norway.
- Instead, we tend to underline some positive aspects that rarely are referred to internationally.
- Notice, changed translation: 'National Register (NR)'

# (1) Over/under counting

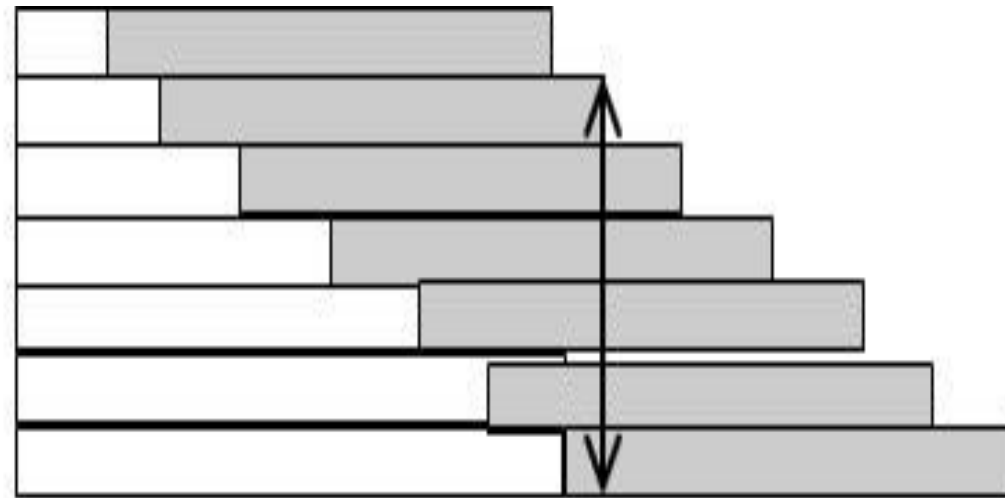
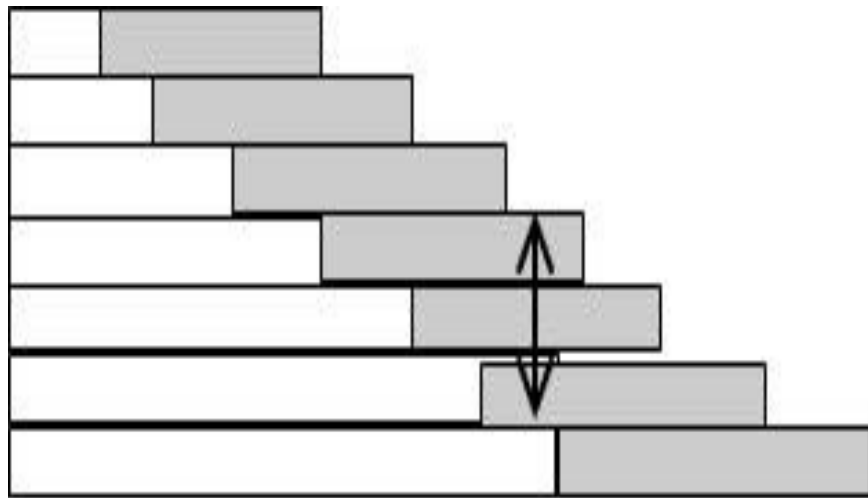
1. For Statistics Norway, “counting” refers to our internal rules for extracting the National Register data. Our term is *coverage*.
2. The registrations in the NR matters in the Norwegian society. For that reason, in principle, the NR is always correct.
3. However, they often talk about increasing the quality.
4. We do not bother with *undercoverage*. It is an issue only for the police.
5. Overcoverage: Leaving the country without notifying the NR causes challenges. (cont.)



# Overcoverage in Norway

- The Nordic Agreement on National Registration mitigates the problem.
- Due to that arrangement, a substantial share (20-30 per cent) of the emigration is captured.
- The National Register authorities work continuously to emigrate people administratively.
- In the long run, all emigration will be discovered. The only problem is delayed emigration dates and unknown country of destination.

# Always some overcoverage due to delayed registration of emigration



## (2) 'Hard to count' population groups

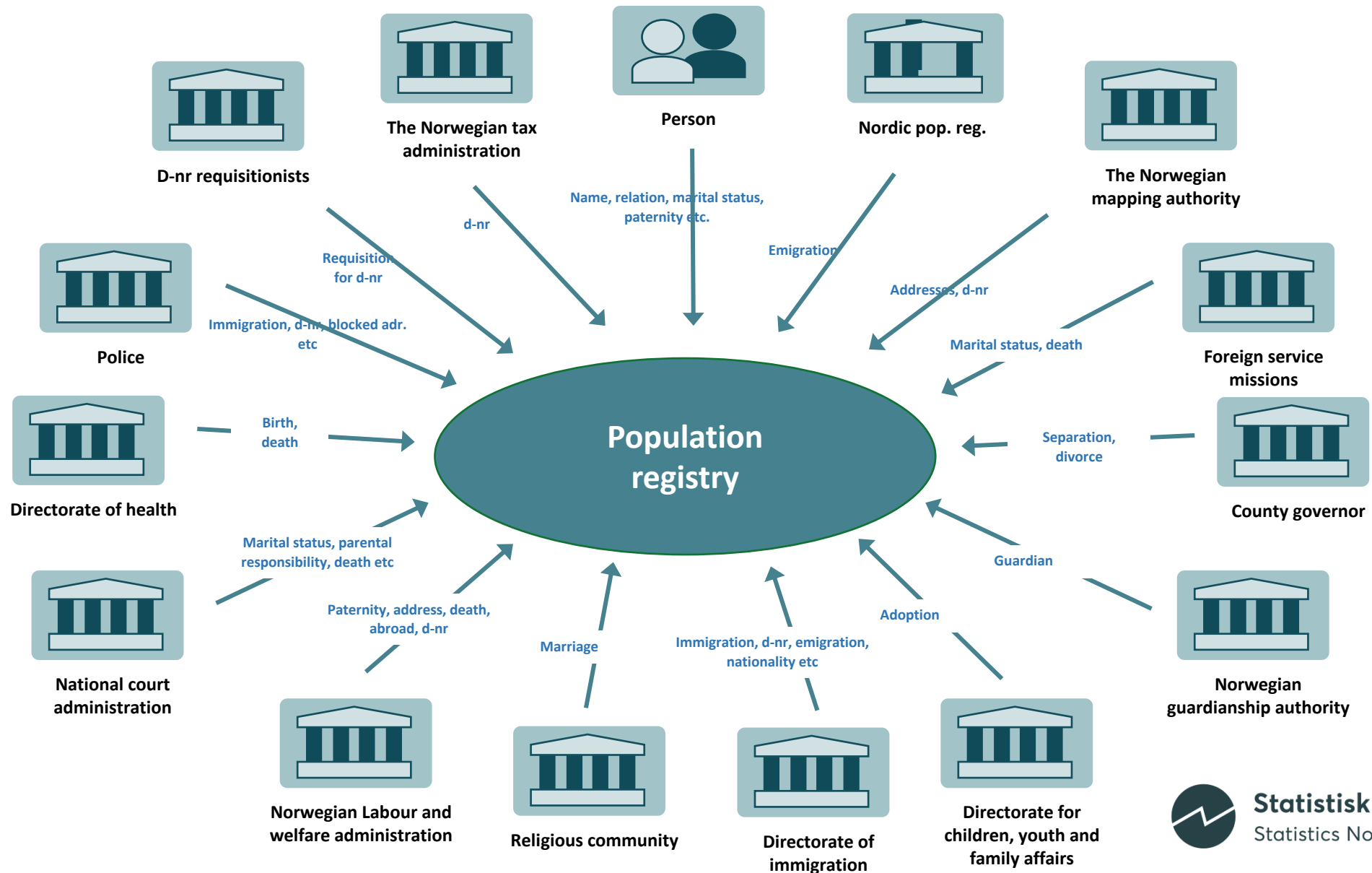
1. Should be rephrased 'Hard to register consistently by the national registration system' ...
2. Not surprisingly, *borderline* cases are the most challenging
3. E.g.: Should commuting workers from e.g. Poland, Lithuania and Sweden be considered non-resident commuters, or as immigrated (= residents)?



# **(3) Inconsistencies in concepts and definitions across data sources**

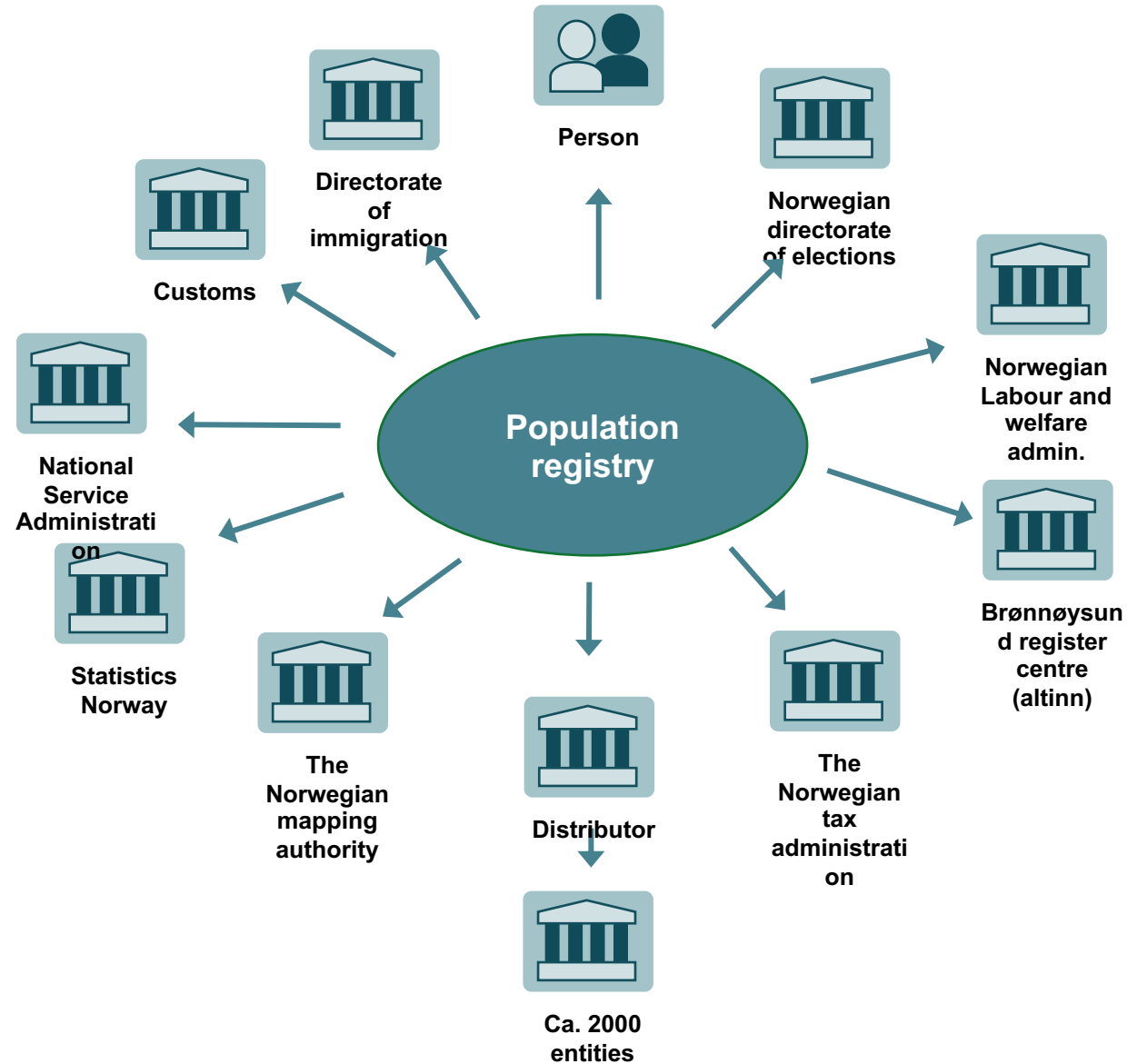
1. Not an unknown issue, but it is limited.
2. The division of labour between Norwegian administrative registers is driven far. It means that data are produced in only one register, and then shared with other registers that need the information.
3. The role of the National Register means that most of the core population data is aligned before they reach Statistics Norway.

# Suppliers of information to the NR





# 20 000 consumers of NR data



# The National Register has strengthened its position as a hub for core population data in Norway

- In 2016, the NR was given more authority to require data and collaboration from other agencies
- A formalised division of labour between the producing agencies
- The NR is a **“Common component in the national IT infrastructure”**.



# Seamless flow of data between the National Register and other registers

- From the producers to the NR, and back again. Flows takes seconds.
- More automatization: Robots process the cases.
- From the NR directly to the consumers, or for those who prefer an easier solution: Via the distributor (an IT company)
- Consumers have access to data in real-time



## (5) Missing data

1. We have all the persons and events.
2. However, some of the *variables* attached to them may have a higher percentage of 'unknown' than desirable.
3. One example: Due to the administrative emigration a third of emigrations lack a country of destination. Our biggest missing data problem.



## (6) Double records

1. Duplicated persons are discovered by the NR continuously.  
The annual number of cases is 50-100.
2. The NR registers one of the duplicate persons as Replaced, and establishes a link to the version that shall continue to exist.
3. Double records among transactions and events is a different issue. Cleaning up is included in our processing of the received data.

# Thank you!

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