

Modernization of Population and Housing Censuses:

Growing Reliance on Administrative Sources

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Combined and register-based censuses: Advantages and challenges



Advantages



Lower per capita costs



Quicker



Reduced burden & non-response



Increased frequency or continuous census



Improved internal coordination



Frees time & resources for innovation



(Potentially) increases flexibility & agility

Challenges



Dependency on data providers



Discrepancies in concepts & definitions



Timeliness



Reference period



Privacy & security concerns (real or perceived)



Hard-to-reach groups

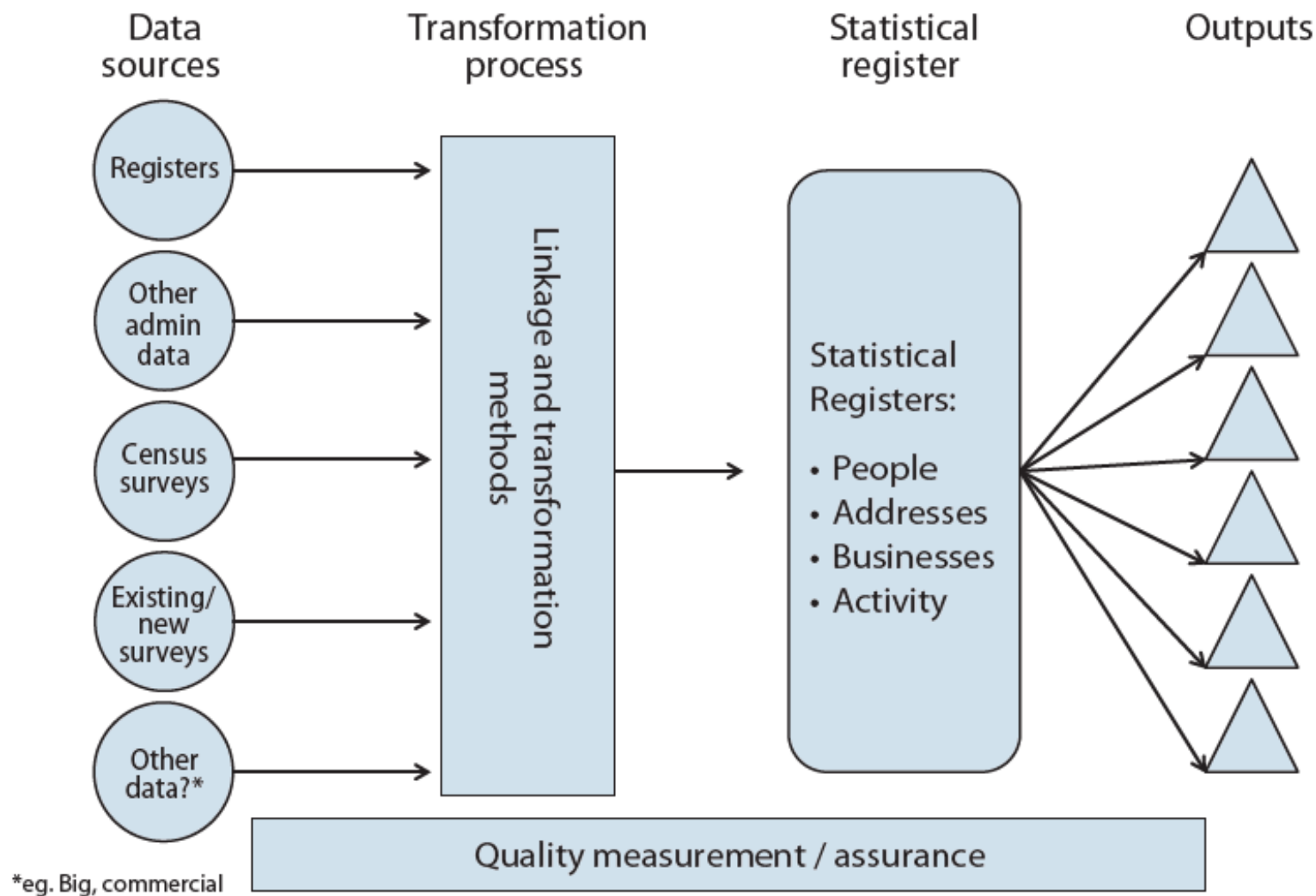


Maintaining up-to-date knowledge & tools



Maintaining support & interest

Framework for register-based and combined censuses



Source: UNECE 2018.
[Guidelines on the use of registers and administrative data for population and housing censuses](#), p 17

Preconditions for a successful transition to a register-based or combined census



1. Legal base
2. Public approval
3. Stakeholder approval
4. Cooperation between the NSO and other authorities
5. Comprehensive and reliable statistical register system
6. Unified identification system
7. Knowledge of administrative sources
8. Transparency

Censuses of the 2020 round in the UNECE region



- 52 (out of 56) UNECE countries conducted a census in the 2020 round (2015-2024)
- 14 censuses fully register-based
- 19 combined: enumeration and administrative sources
- 19 censuses collected data through enumeration only

UNECE: 56 member States in Europe, North America and Central Asia

UNECE 2026. [Measuring population and housing: Practices of UNECE countries in the 2020 round of censuses](#)

Number of UNECE countries by census design in the 2020 round



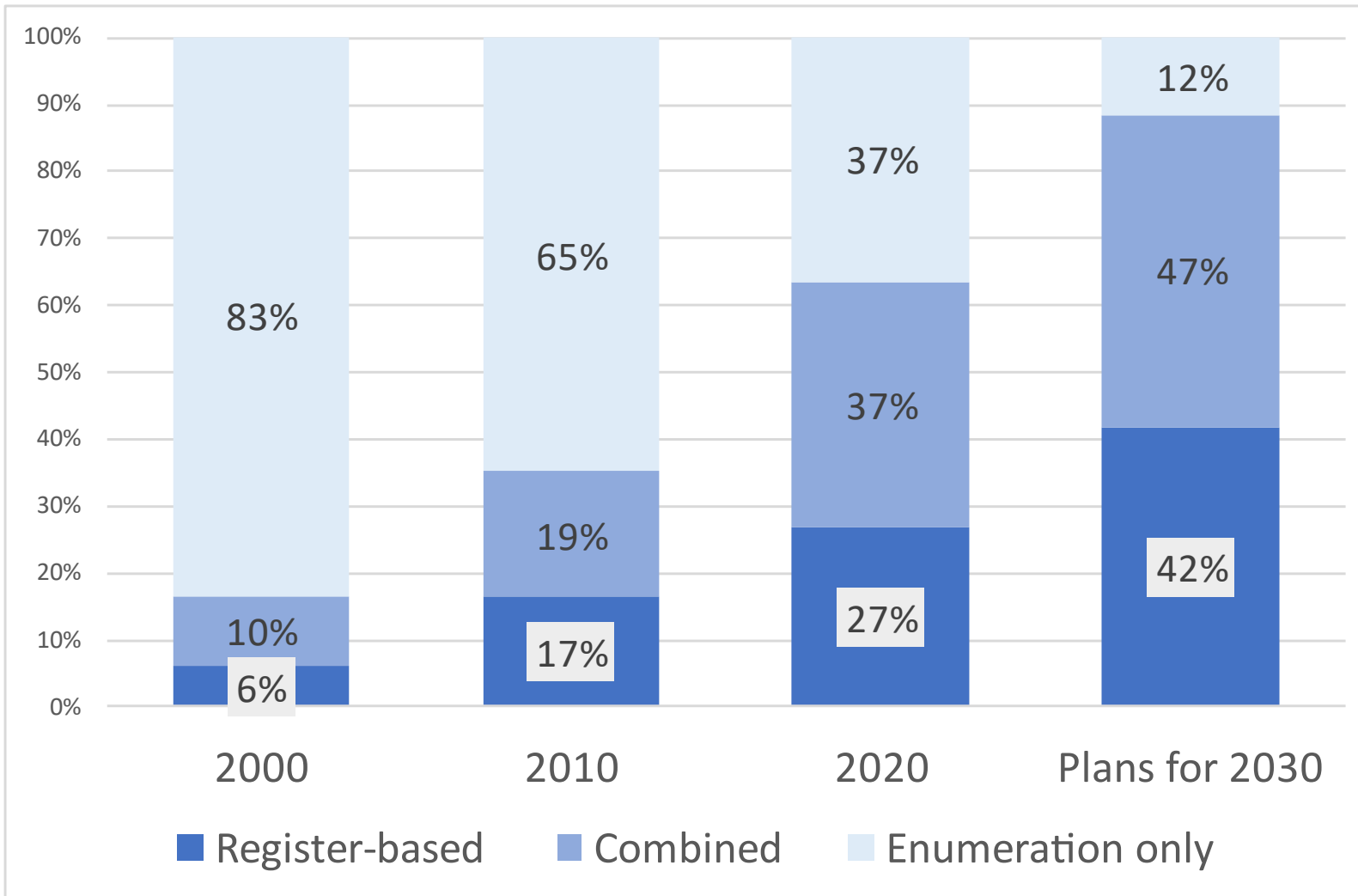
Field enumeration censuses	19
Full field enumeration without using register information	9
Full field enumeration supported by register information used only as frame or control	8
Rolling census (cumulative continuous survey)	1
Full field enumeration with yearly updates of characteristics on a sample basis	1
Combined censuses	19
Combination of register data with census-specific sample field data collection	8
Combination of register data with complete field data collection	11
Register-based censuses	14
Fully register-based	11
Register-based using data from existing sample survey(s)	3

Number of countries by type of registers used in the 2020 census round



Type of register	Type of census	
	Combined census	Register based census
Total countries using registers	18	14
Population register	15	14
Education register	11	14
Building register	9	13
Employment register	11	12
Social security register	14	10
Tax register	8	10
Address register	13	9
Business register	5	8
Other registers	6	7

Census designs in UNECE countries



Source: Calculations based on

- UNECE 2026. [Measuring Population and Housing: Practices of UNECE Countries in the 2020 Round of Censuses](#), table 3
- UNECE 2014. [Measuring population and housing: practices of UNECE countries in the 2010 round of censuses](#), table 2.2
- UNECE census survey 2023
- Reported census plans at UNECE meetings

Transitions to register-based censuses



By 2000

Denmark
Finland
Netherlands*

2000 → 2010

Austria
Belgium*
Iceland*
Norway
Slovenia
Sweden

2010 → 2020

Latvia
Lithuania
Monaco
Spain
Türkiye*

* Using data from sample surveys not directly linked to the census, to produce census variables not available from registers.

Transitions to combined censuses



By 2000

Belgium
Latvia
Norway
Slovenia
Spain

All fully register-
based in 2020

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2000 → 2010

Estonia
Germany
Israel
Liechtenstein
Lithuania
Poland
Switzerland
Türkiye

8

2010 → 2020

Andorra	Italy
Armenia	Luxembourg
Belarus	North Macedonia
Cyprus	Republic of Moldova
Czechia	Romania
Hungary	Slovakia
Ireland	

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Guidance



- 2025: [Conference of European Statisticians Recommendations for the 2030 Round of Population and Housing Censuses](#) (UNECE)
- 2025: [Principles and Recommendations for Population and Housing Censuses, Revision 4](#) (UNSD)
- 2022: [Handbook on Registers-based Population and Housing Censuses](#) (UNSD)
- 2021: [Guidelines for assessing the quality of administrative sources for use in censuses](#) (UNECE)
- 2018: [Guidelines on the use of registers and administrative data for population and housing censuses](#) (UNECE)



Thank you for your attention!

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unece.org/statistics

