

# Population statistics

**EU Twinning Project JO 21 ENI ST 01 22 -  
Activity 1.0**

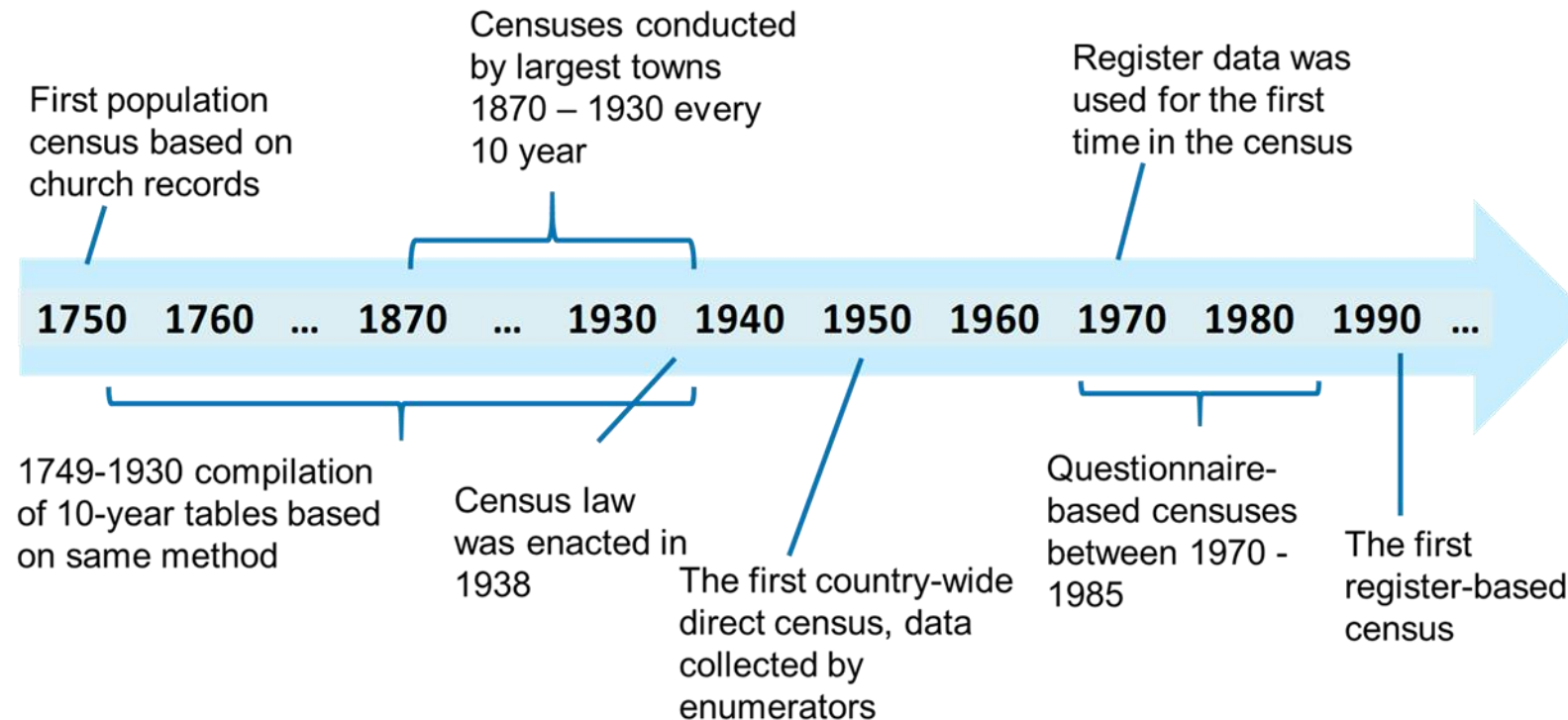
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# Role of the population information

- Reliable and up-to-date information about the population is a core issue for society
  - Administrative data is used in different services in society (taxation, education, healthcare, social services, etc.)
  - Statistical population register as the basis of all social statistics production
- In Finland and other Nordic countries, these needs have combined
- Administrative population data/register is the basis (data source) on which all production of population and social statistics is build

# History of Finland's Population Censuses



# Towards register-based Population and Housing Census

## Our journey to a totally register based census

- took 20 years
- first time registers were used in the 1970 census
- step by step: the use of register data increased census by census
- full support of the Ministry of Finance and the management of Statistics Finland
- data quality checks: register data were compared with survey data in many connection (Censuses 1980, 1985, 1990 and LFS)

# Towards register-based Population and Housing Census

## Factors facilitating the increased use of administrative registers

- Use of uniform identification numbers
- Administrations own interest in building nation-wide databases
  - Benefits:
    - Reduction of response burden
    - Reduction of costs of statistics
    - To have total populations
- Legal basis: The Finnish Statistics act:
  - It is compulsory to use existing data (if suitable)
  - State government and social security institutions are obliged to deliver the data they have to Statistics Finland

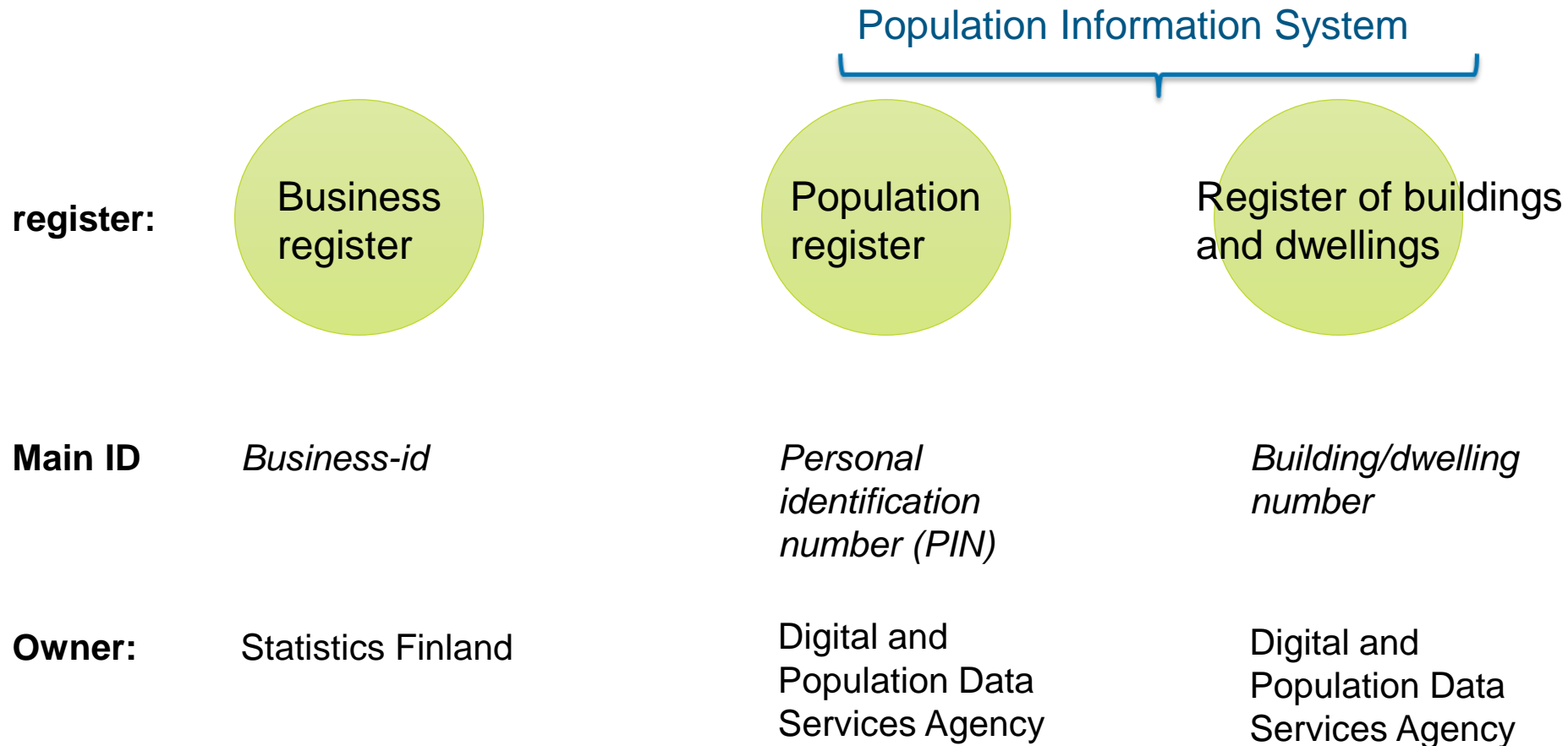
# Census data by the data source 1950 - 2020

q = census questionnaire	qr = for non-respondents from registers					
R = registers	Rq = register data supplemented with questionnaires					
Data Item	Year					
	1950	1960	1970	1980	1990	2000 ->
<b>Demographic data</b>						
Age (Date of Birth)	q	q	q	R	R	R
Sex	q	q	q	R	R	R
Marital Status	q	q	q	R	R	R
Mother Tongue	q	q	q	R	R	R
Citizenship	q	q	-	R	R	R
Country/place of birth	q	q	q	R	R	R
Religion	q	q	R	R	R	R
Usual Place of Residence	q	q	q	q	R	R
<b>Education Data</b>						
Completed Education	q	q	q	R	R	R
School Attendance					R	R

# Census data by the data source 1950 - 2020

q = census questionnaire	qr = for non-respondents from registers					
R = registers	Rq = register data supplemented with questionnaires					
Data Item	Year					
	1950	1960	1970	1980	1990	2000 ->
<b>Household and Family Data</b>						
Type of Household	q	q	q	R	R	R
Size of Household	q	q	q	R	R	R
Type of Family	q	q	q	R	R	R
Size of Family	q	q	q	R	R	R
<b>Dwelling Data</b>						
Number of Rooms	q	q	q	R	R	R
Kitchen	q	q	q	R	R	R
Water, sewage, toilet	q	q	q	R	R	R
Heating System	q	q	q	R	R	R
Tenure Status	q	q	q	R	R	R

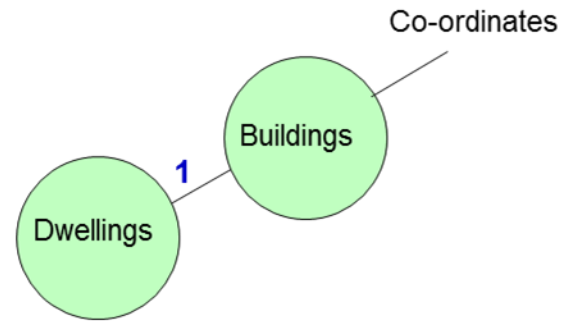
# Basic registers





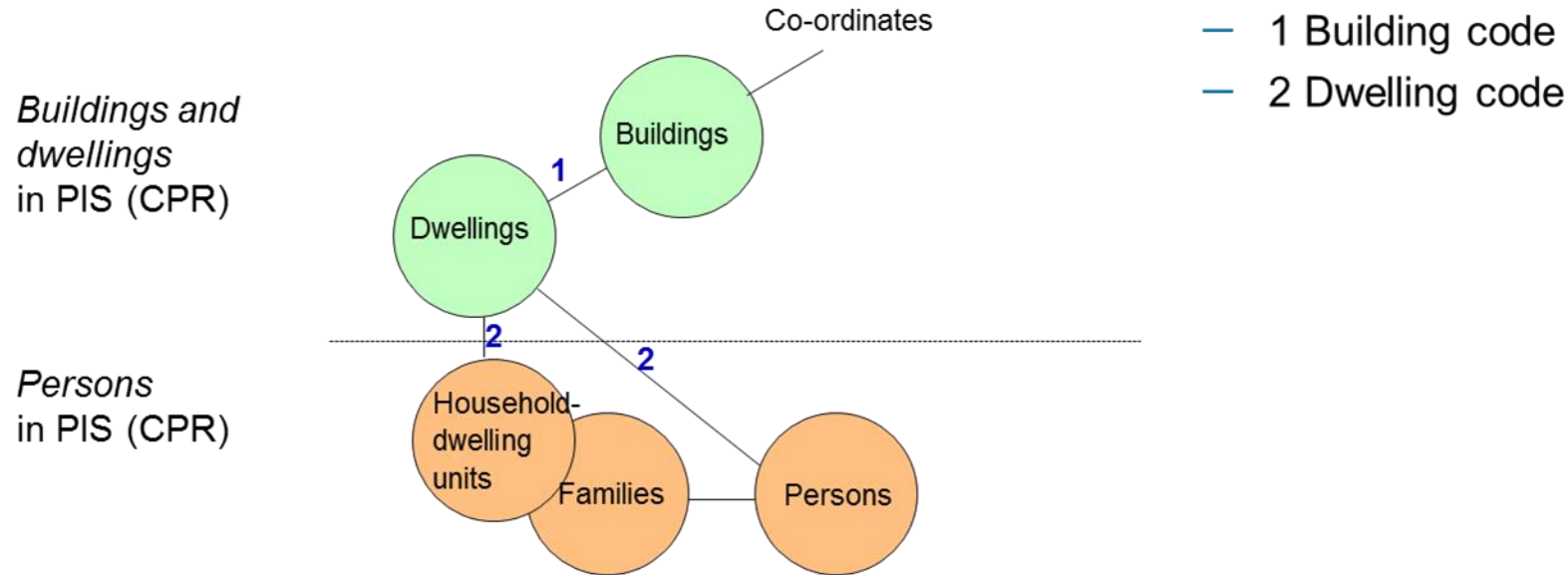
# The basic units of the register-based Census in Finland - and links between them

*Buildings and dwellings in PIS (CPR)*

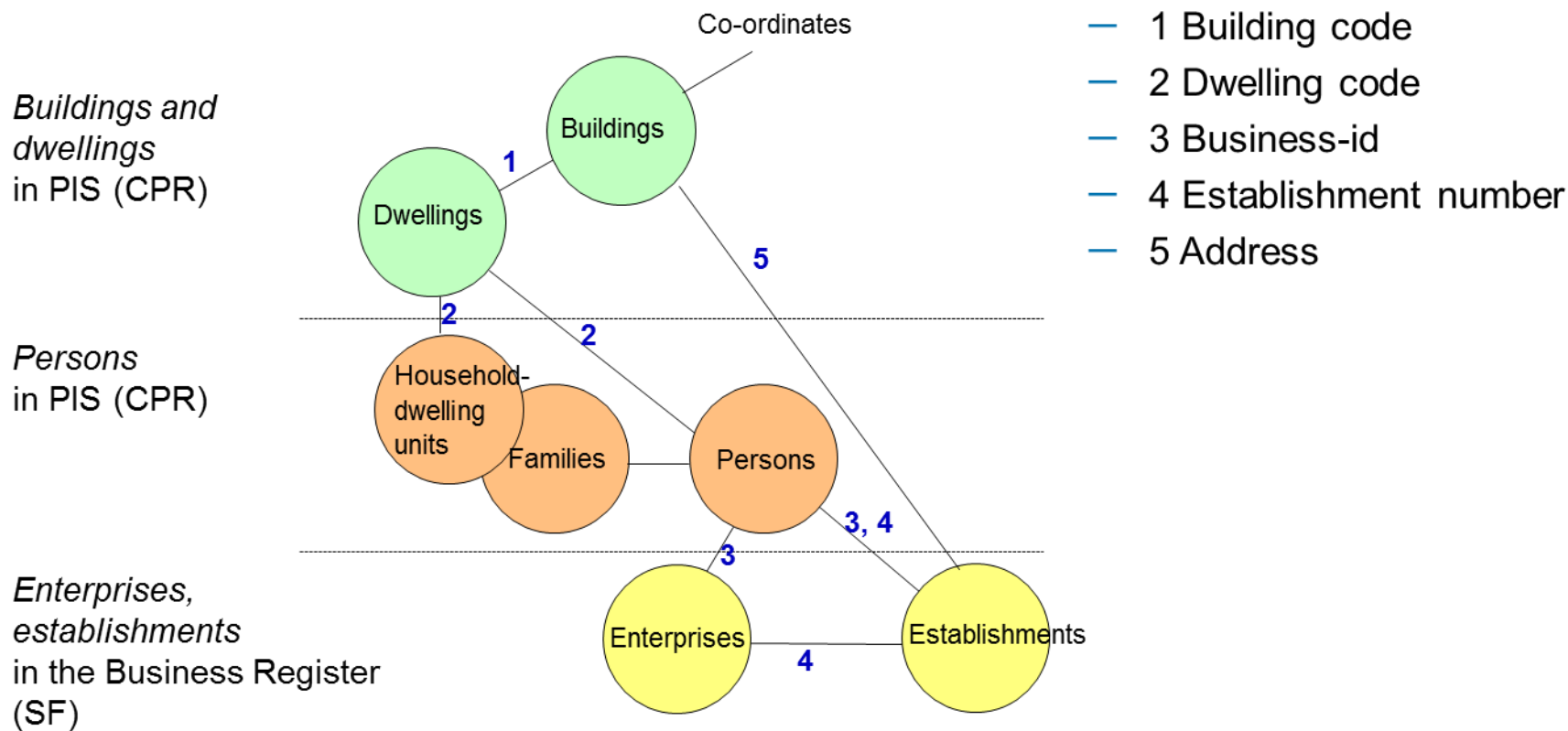


— 1 Building code

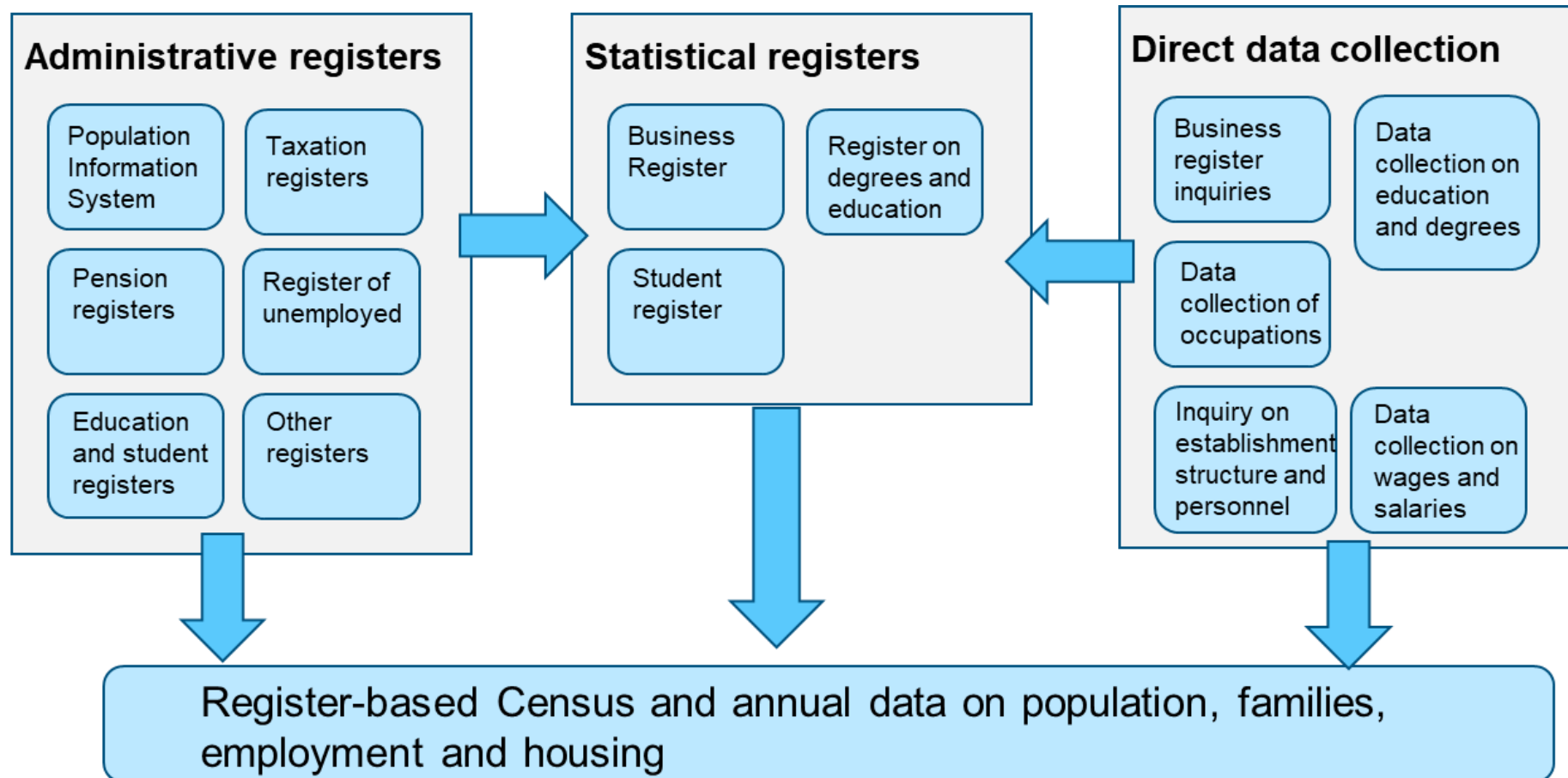
# The basic units of the register-based Census in Finland - and links between them



# The basic units of the register-based Census in Finland - and links between them



# Data sources in the register-based Population and Housing Census



# Registers as an input for the Census in the Nordic Countries

*The year of establishing registers/introducing registers in census statistics in Nordic countries*

Register data	Denmark		Finland		Norway		Sweden	
	Established	First used in Census	Established	First used in Census	Established	First used in Census	Established	First used in Census
Population	1968	1981	1969	1970	1964	1970	1967	1975
Business	1975	1981	1975	1980	1965	1980	1963	1975
Dwellings	1977	1981	1980	1985	2001	2011	2008	2011
Housing conditions	1977	1981	1980	1985	2001	2011	2008	2011
Education	1971	1981	1970	1975	1970	1980	1985	1990
Employment	1979	1981	1987	1990	1978	2001	1985	1985
Family	1968	1981	1978	1980	1964	1980	1960	1975
Household	1968	1981	1970	1975	2001	2011	2011	2011
Income	1970	1981	1969	1970	1967	1980	1968	1975
Totally register-based Census		<b>1981</b>		<b>1990</b>		<b>2011</b>		<b>2011</b>

# Conclusion

- Using administrative population data as a source register for statistical population base is cost-effective and reasonable
  - No extra data collections, timeliness, high quality
  - Co-usability i.e. common population base for all population and social statistics
  - Sample frame
- Challenges
  - Under coverage
    - Persons who do not register their arrival
    - Persons who apply the residence permit, and the process lasts over one year
    - Under-coverage can be estimated based on the number of residence permit applications etc.
  - Over coverage
    - Persons who do not report their departure
    - Over-coverage can be investigated and controlled with the help of data from different data sources (signs of life -method)
  - If the information is not registered, it is expensive and even impossible to collect from the whole population => Survey data collections for that kind of ser needs



# Thank you!