



THE SLOVENIAN
NATIONAL
STATISTICS

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Quality improvement of the Slovenian Business Register

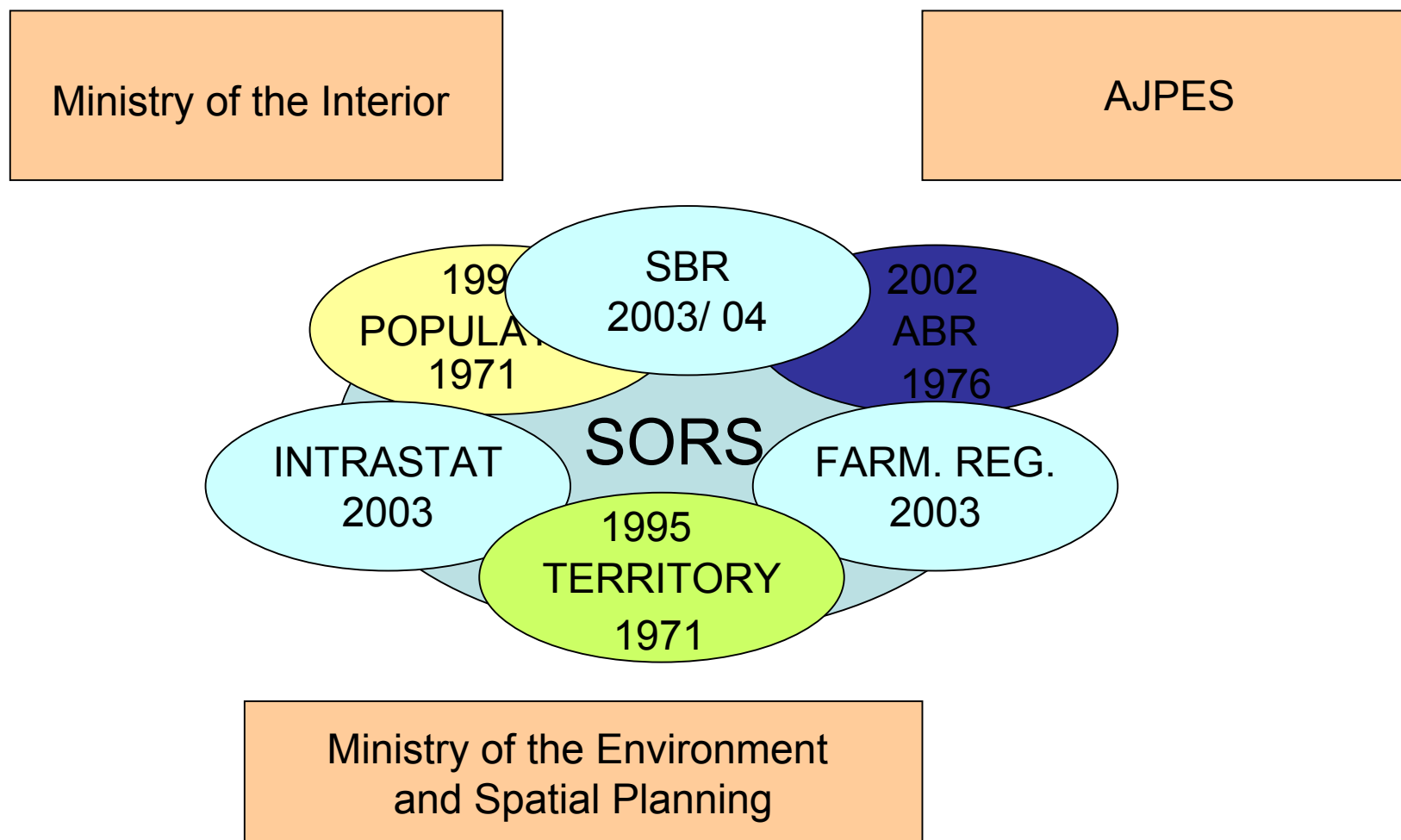
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Statistical Office of the Republic of
Slovenia (SORS)

Seminar on Registers in Statistics – methodology
and quality
Helsinki, May 2007

Content of the presentation

- Administrative registers
- Quality improvement of the Statistical Business Register 2003/2004
 - Transformation of administrative units into statistical one
 - Inclusion of missing variables
 - Quality improvement of existing variables
 - Quality measurement of NACE activity code
- Development of the new Statistical Business Register 2007/2008

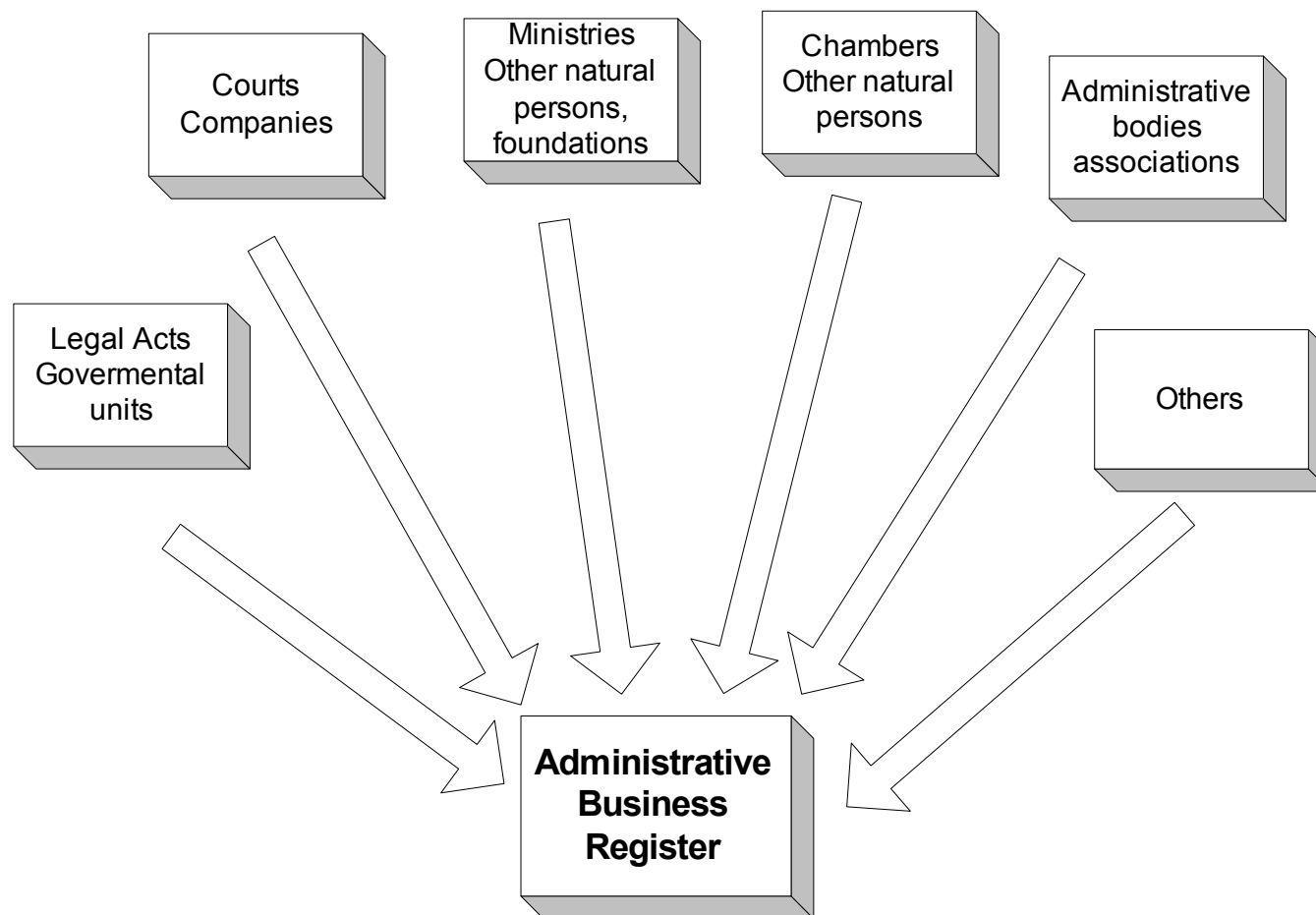
History of SORS's administrative and statistical registers



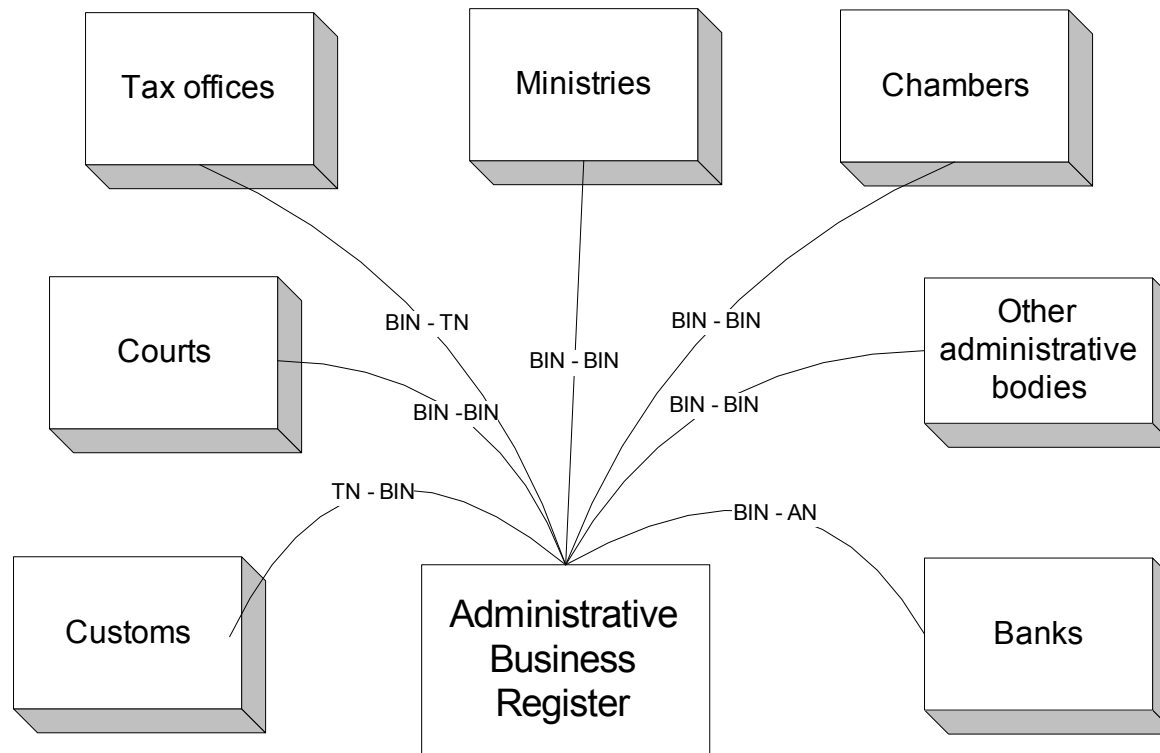
Administrative Business register (ABR)

- Central data base on all registered business entities in Slovenia (more than 100 registration points) – up dated daily as an OLTP database
- Units: legal units, legal (administrative) local units of domestic business entities (LKAU level), affiliates of foreign business entities
- All sections of NACE (family farms kept in a separate statistical register)
- Legal base: Act on the Business Register (1976, new 1995)
- Used for administrative, statistical, commercial etc. purposes
- Data is public available to all

Sources for ABR



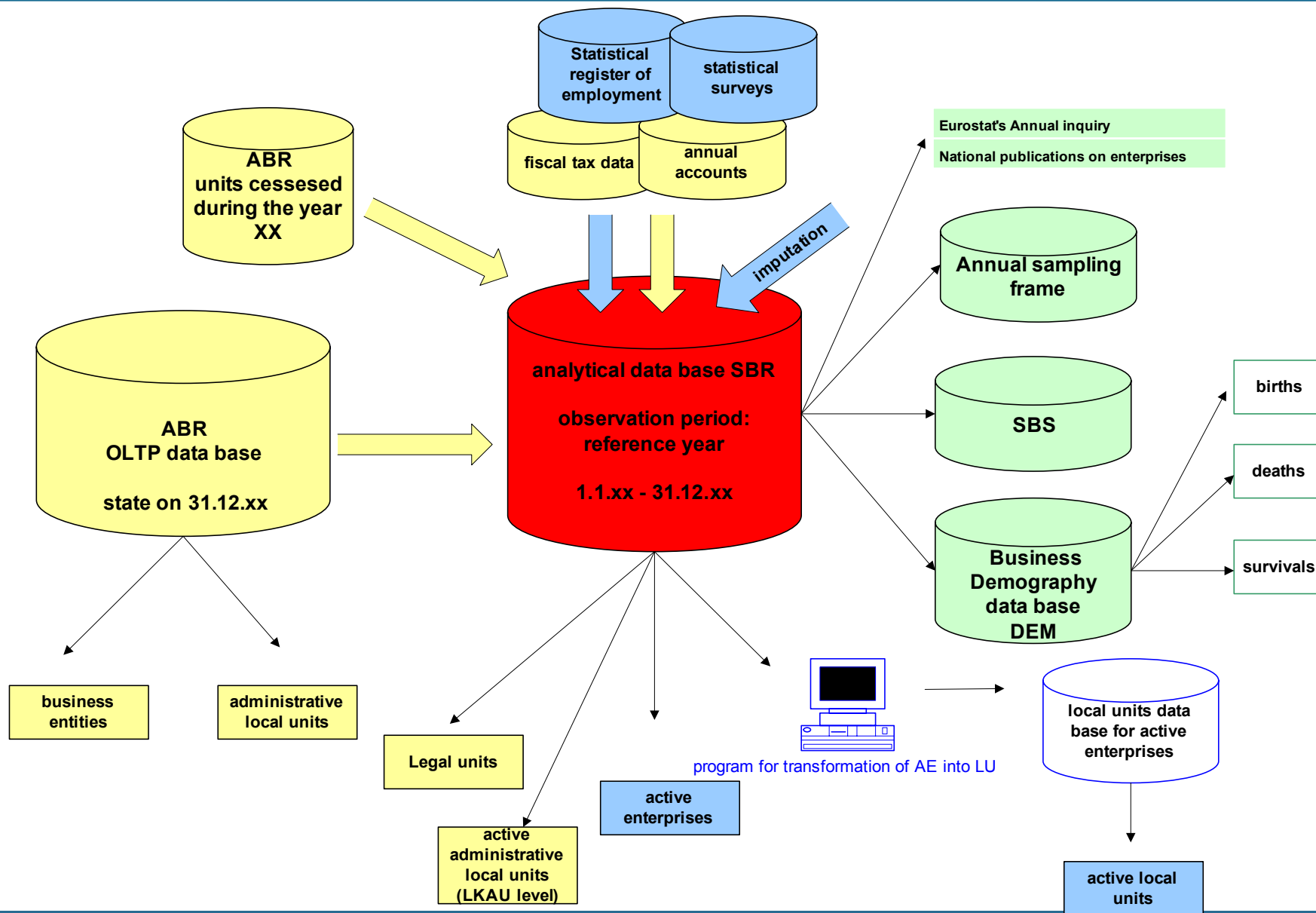
Administrative business ID as a linking element among different administrative registers



BIN	stands for	Business Id
TN	stands for	Tax Number
AN	stands for	Account Number

Statistical Business Register (SBR)

- Set up as an analytical database (2003/04)
- Sources used: administrative and statistical one, missing data imputed
- Updated twice a year
- Observation period – reference year 1.1.-31.12.XX
- Coverage: all NACE sections (family farms and private households ex.)
- Oracle 9i RDBMS database
- Used only for statistical purposes
- Units:
 - » Legal units
 - » Active enterprises
 - » Administrative local units (LKAU level)
 - » Active administrative local units (LKAU level)
 - » Active Local units



Quality improvement in SBR comprised

- Transformation of administrative units into statistical one
- Inclusion of missing variables from CR 2186/93 for statistical units
- Improvement of the quality for some existing variables

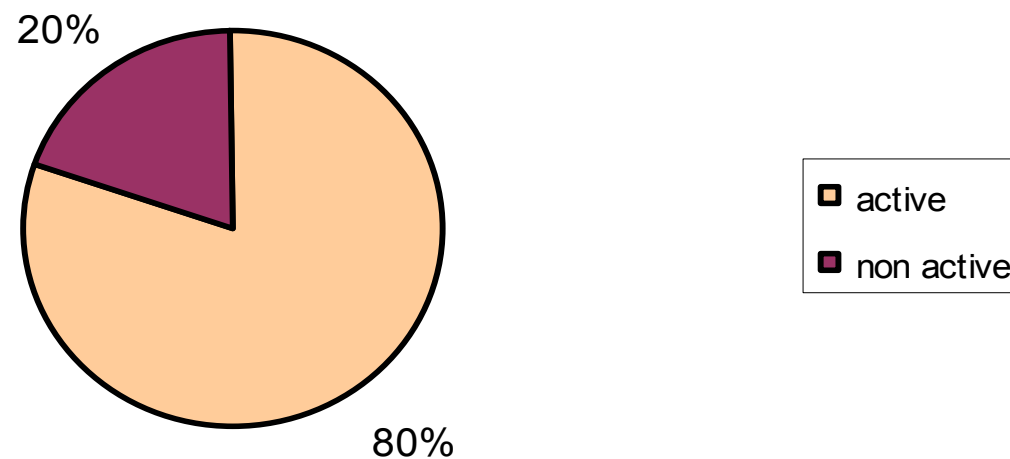
Legal unit – Active enterprise

An active enterprise was defined as a legal unit that in the observation year had either employment or has created turnover

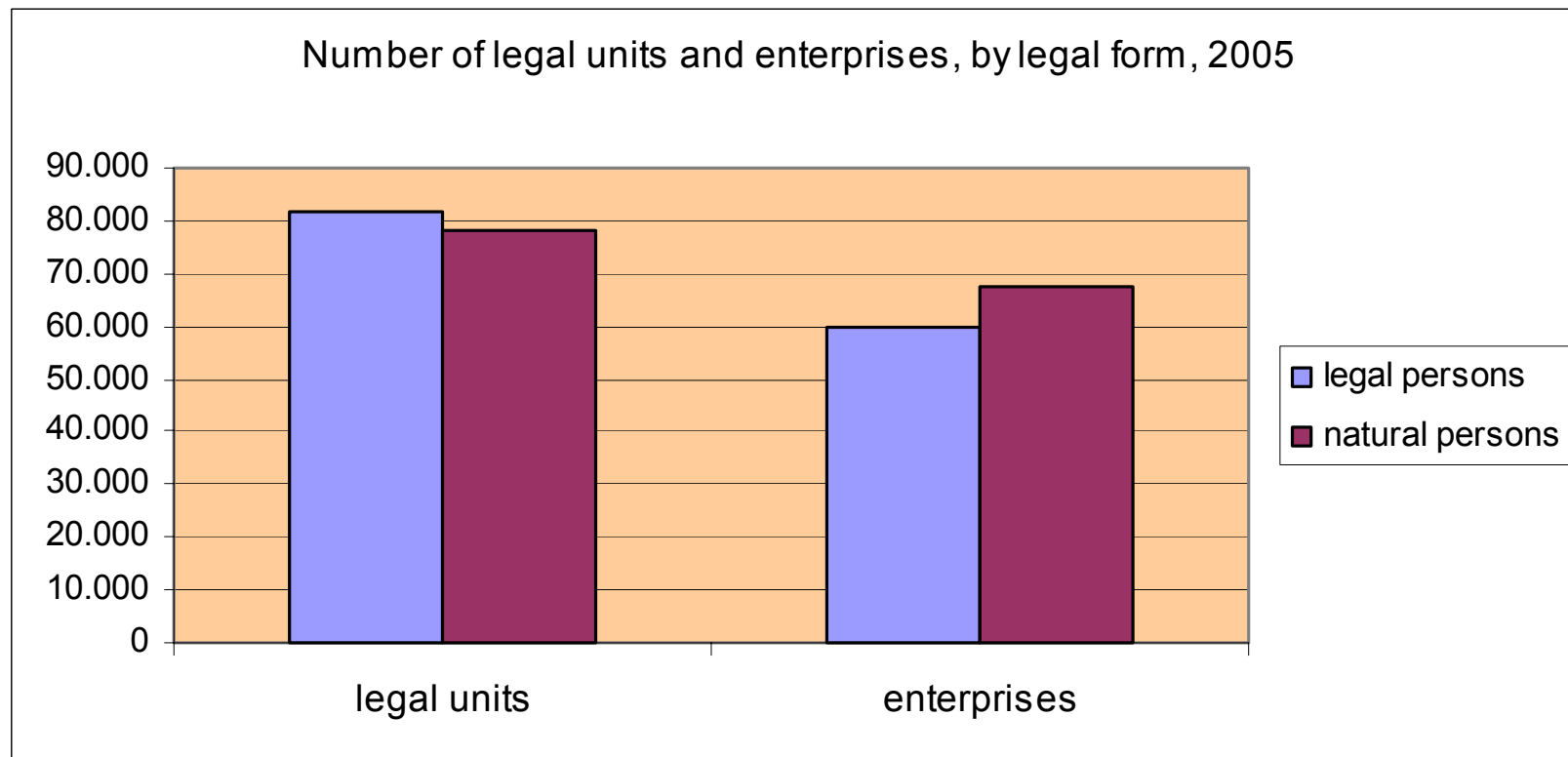
? Business Demography approach

Results of transformation (1)

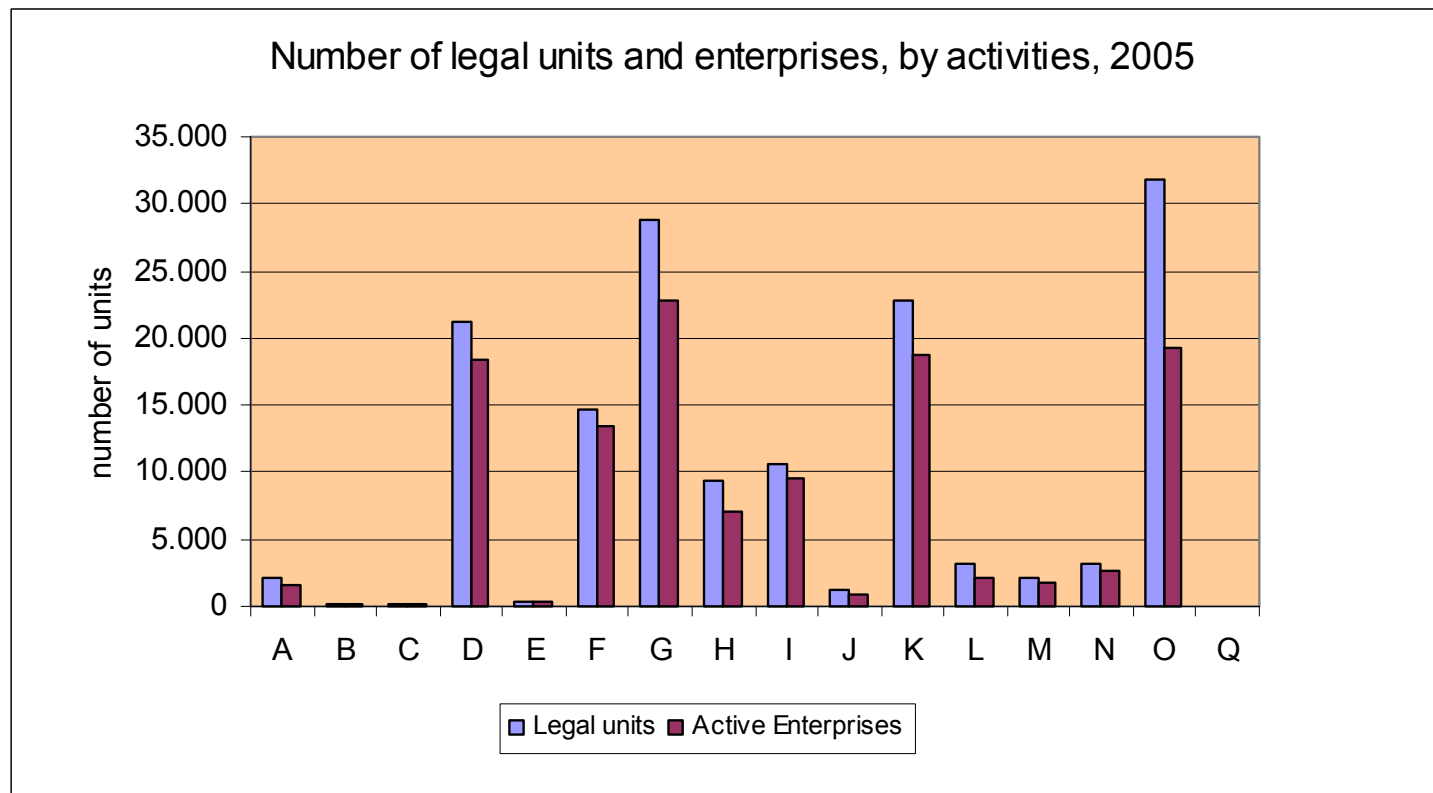
Shares of active / non active legal
units, 2005



Results of transformation (2)



Results of transformation (3)

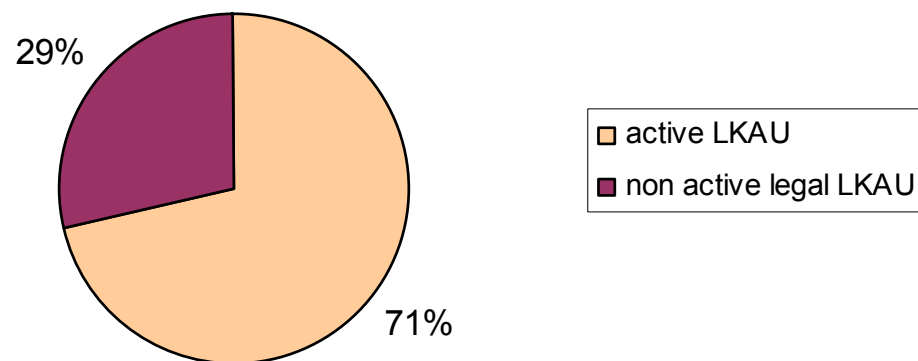


Administrative local units – active LKAUs

- Administrative local units are broken down in terms of location and activity
- Status of activity of LKAU is based on the employment during the observation year

Results of transformation of legal LKAU

Shares of active / non active legal LKAU, 2005



Difficulties in transformation

- Sections A, B, L, M, N and O
- The same criteria were used for all sections (CR 696/93 Section IV)
- Harmonized data for sections C-K

Transformation as an impact on economic indicators

NACE	Average number of employees per unit		Average turnover (1000 EUR) per unit		% of increase
	Legal unit	Enterprise	Legal unit	Enterprise	
A	2,8	4,8	222	382	72
B	0,7	0,9	56	69	24
C	28,1	30,4	1571	1703	8
D	11,3	12,9	1027	1173	14
E	26,2	33,8	4678	6041	29
F	3,3	3,8	269	307	14
G	3,6	4,3	770	932	21
H	2,7	3,7	115	155	35
I	4,6	5,1	461	507	10
J	14,0	17,9	1296	1664	28
K	2,3	2,8	211	253	20
L	16,7	24,3	34	50	46
M	27,0	30,9	170	195	14
N	13,1	15,3	200	234	17
O	0,7	1,0	40	60	52
Total	4,7	5,9	412	517	26

Share of enterprises, by the fulfilment of the activity criteria

	Total	Natural persons	Companies	Other legal persons
Turnover	25	32	20	48
Employment	12	78	17	5
Turnover & employment	63	57	39	4

Inclusion of missing variables and quality improvement of existing variables

- Additional administrative sources were used
 - Different types of Annual accounts
 - Fiscal tax data
- Statistical Register of Employment
- Statistical surveys started to be used as a source
 - Statistical reports for turnover of insurance companies
 - Feedbacks from STS surveys for main activity code
- Imputation methods were developed for missing variables
- Priority list of sources for different variables was defined

Future challenges in the field of statistical business register (2007-2008)

- Setting up a new Information System for Business Statistics
 - Survey design module (for questionnaire and other metadata design)
 - Data collection module (e-reporting channels)
 - Statistical business register
 - Statistical processing module (manual and automatic data editing and statistical imputations)

Main functionalities of new SBR (1)

- introduction of a new statistical identifier (STID)
- the possibility to follow up daily centrally and continuously the main changes of the reporting units during their period of operation (status of activity, main activity code, demographic changes, names, headquarters, contact data, etc.)
- maximum use of feedback from the surveys in combination with other available administrative and statistical databases (sources)

Main functionalities of new SBR (2)

- central source for definition and preparation of lists of respondents for individual business statistical surveys
- improving the quality of the list of respondents and decreasing the number of non-respondents
- integration with the Statistical Enterprise Groups Register
- review of burden on statistical units in terms of inclusion of units in different statistical surveys

Enterprise Group Register (main sources used)

- Central Securities Clearing Corporation – Register of dematerialised securities and monetary settlement of securities transactions
 - Court register
 - Bank of Slovenia – Statistical reports on capital investment among resident and non-resident
- ? no need to use commercial sources but strong need to link the data with the Euro Group Register