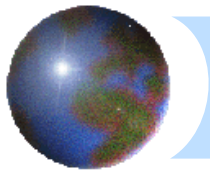


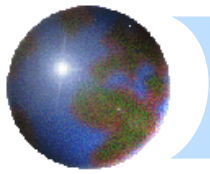
Economic Census :

The First Experience of Morocco



Outline

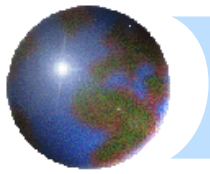
- I. Why an Economic Census?
- II. Planning and organisation of Economics Census
- III. Data Processing
- IV. Post-census activities
- V. Dissemination of Economics Census results
- VI. Future of Economic Census in Economic Statistics Programmes



I.1. Why an Economic Census?(1/3)

✚ **The main Administrative databases of enterprises/establishments consist of:**

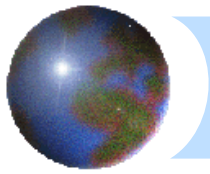
- Tax files
- Annual Statement of Social Security data file
- Trade (Business) register
- File of the industrial companies' survey



I.1. Why an Economic Census? (2/3)

These files are characterized by:

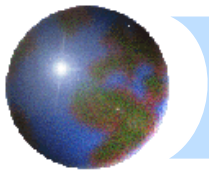
- ✚ Lack of a unique identifier
- ✚ Lack of link between the enterprise and its establishments
- ✚ Lack of a stratification variable in terms of :
 - Economic activities
 - Number of employees or Turnover



I.1. Why an Economic Census? (3/3)

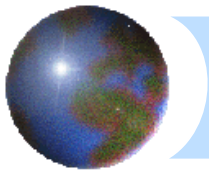
- ✚ Many issues are associated with these files:
 - Their obtention by the Statistics Department is very difficult (impossible for some of them)
 - Difficulties for their pairing
 - They are not regularly updated

- ✚ Another problem: lack of a general framework for business surveys.



I.2. Main objectives

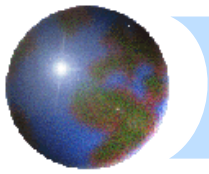
1. To set up the first framework for economic surveys **which include stratification variables**
2. To provide the first exhaustive panorama ever of establishments and enterprises
3. To establish a statistical data base of establishments and enterprises with a system of unique identifier



I.3. Statistical unit (1/2)

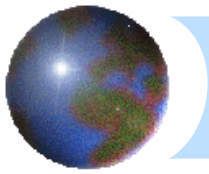
✚ **The observation unit is the establishment.**

- An enterprise or part thereof situated in a geographically identified place.
- At or from this place, economic activity is carried out for which one or more persons work for one and the same enterprise.



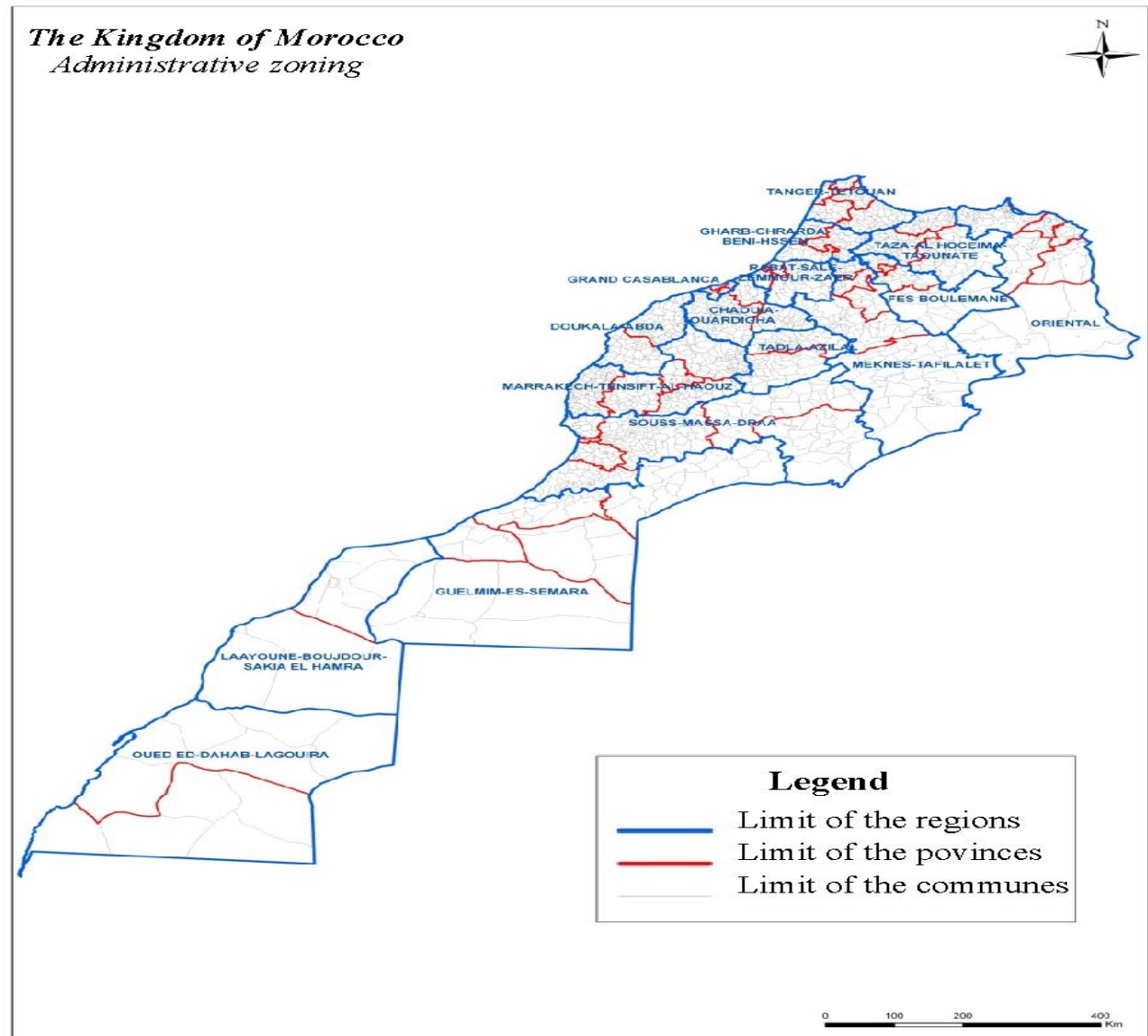
I.3. Statistical unit(2/2)

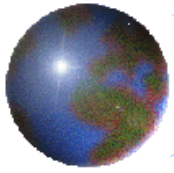
- ✚ In terms of premises, the establishment should be understood as a compound or part of compound, a floor, a fixed stall or any other clearly delimited place.
- ✚ Therefore, the establishment can be :
 - a workshop;
 - a factory;
 - a store;
 - an office;
 - a mine;
 - a warehouse, a depot, etc.



I.4. Coverage (1/3)

- Geographically, the EC covers the whole national territory, i.e.:
 - 16 regions
 - 61 provinces
 - 1547 communes

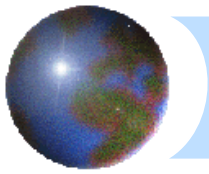




I.4. Coverage (2/3)

✚ Economic Census covers all non-agricultural economic entities operating in a fixed location and relevant to the following sectors:

- Industry
- Building and Construction
- Trade
- Services



I.4. Coverage (3/3)

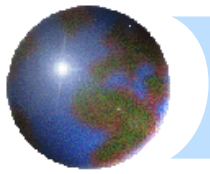
✪ The following entities will be excluded from the field of the Economic Census:

- Farms
- Economic units in households
- Economic units which do not operate in a fixed location, particularly:

Travelling salesmen and mobile traders

Fishermen without fixed place

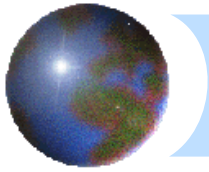
Drivers of the taxis, buses and trucks



II.1. Questionnaire (1/3)

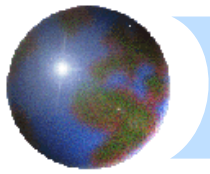
Contents

1. Geographical location code (region, province, circle, commune)
2. Name, address, phone and fax numbers, e-mail address of the unit
3. Licence, Tax, Trade, Social Security identifiers
4. Opening year of the unit
5. Name, address and licence identifier of the parent company (It is the link between the establishment and the unit on which it depends)



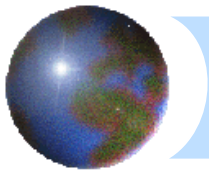
Contents (cont.)

- ✚ For an independent establishment :
 - Legal form
 - The degree of accounting organisations,i.e.
 - ✓ Informal: the legal unit does not hold an official accounts
 - ✓ Formal



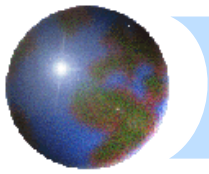
Contents (cont.)

- Description of the unit's economic activities unit (primary and secondary activities) and their classification in the 4-digit Moroccan Nomenclature of Economic Activities (NMAE 1999) which is linked to ISIC Revision 3.1.
- Number of employees in the unit



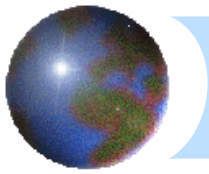
II.2. Field Work (1/5)

- ✚ The conduct of Economic Census supposes the existence of a recent cartography (i.e. the national territory delimitation into districts).
- ✚ The use of a recent cartography is necessary to:
 - Ensure an exhaustiveness of the Economic Census;
 - Provide a space distribution of the units in accordance with the new delimitation of the territory in districts;
 - Ensure a good quality of information collected without overlap or double counting.



II.2. Field Work (2/5)

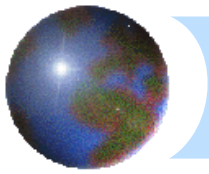
- ✚ The adopted method consists of carrying out the Economic Census in an integrated way with the cartography of the Population Census 2004. This approach will make it possible to:
 - Take all the local units;
 - Realise economies of scale resulting in an important benefit on the level of the human and material means.
- ✚ This integration will be total in rural areas and out of phase in urban areas.



II.2. Field Work (3/5)

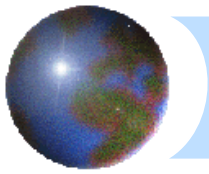
In urban areas

- ✚ The collection will be carried out in parallel with cartographic work of the last Population Census 2004.
- ✚ The cartographers carry out the first delimitation of districts.
- ✚ Once the zone of intervention is delimited in the presence of the controller, each enumerator will then carry out the raking of his\her district until all districts are exhausted.



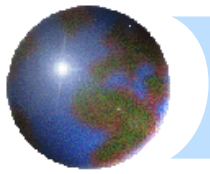
In rural areas

- ❖ Given the nature of these areas, the step to adopt for counting the units, consists in training joint teams of agents cartographers and enumerators of the Economic Census. These teams have at their disposal the maps of the communes and the drawing of communes and districts, and they must:
 - Suitably delimit the communes and possibly the districts with the assistance of the representatives of the local authorities;
 - Rake the districts systematically and carry out the filling of the questionnaires.



II.2. Field Work (5/5)

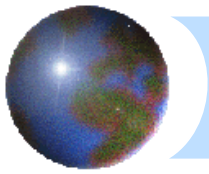
- ✚ Training is held in order to build the capacity of the staff at all levels: training of trainers and enumerators from central level; training at regional level in which staff from the region is invited.
- ✚ Technical training has been organized twice. The first training targeted 30 officers, who in turn, were in charge of training 400 controllers and enumerators
- ✚ The Economic Census was conducted in April 2001 to December 2002. There were about 50,000 districts that have been raked over this period by 1300 enumerators and controllers. The face to face interview was used for data collection.



III. Data Processing and Treatment of Nonresponse

To prepare Economic Census data for release to the public, the data are processed in three primary ways:

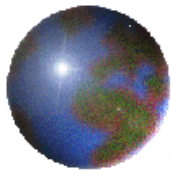
1. Data Edits to detect reporting errors and other problems
2. Nonresponse Imputation to estimate missing data
3. Tabulation and Analytical Processing to tabulate and analyze summary data .



III.1. Data Edits

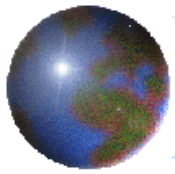
Data Edits software

- ✓ Was developed with Visual Basic and Oracle as Data Base management System.
- ✓ Economic Census data must be edited to identify and correct reporting errors and other problems.
- ✓ Data edits detect and validate data by considering factors such as proper classification for a given record: *To assign a valid kind-of-business or industry classification code to the establishment .*
- ✓ After classification codes are assigned, a "*verification*" operation is performed to validate the industry, geography, ZIP Codes, starting date of activity, etc.
- ✓ After an establishment has been assigned a valid kind-of-business or industry code, the data edits further evaluate the response data for *consistency and validity*. For example, assuring that employment data are consistent with Legal form or Type of accounting.



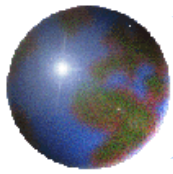
III.2. Nonresponse Imputation

- ✚ Nonresponse is handled by estimating, or imputing, missing data. Imputation is defined as the replacement of a missing or incorrectly reported item with another value derived from logical edits or statistical procedures.
- ✚ There are two types of nonresponse:
 - ✓ Unit nonresponse occurs when an eligible unit fails to provide sufficient data to be classified as a response.
 - ✓ Item nonresponse occurs when some but not all data have been collected for the respondent.



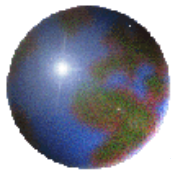
III.3.Tabulation and Analytical Processing

- ❖ Individual establishment records are tabulated in different ways based on data product and analytical needs.
- ❖ Tabulations include data organized by:
 - Industry (Industry, Construction, Trade and Services)
 - Specified geographic areas (region, province and commune)
 - Establishment-size (small, medium and large)



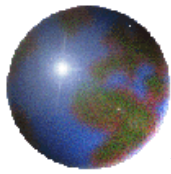
IV. *Post census activities*(1/2)

- ✚ From the Economic Census, a file of the formal enterprises and their establishments, containing all information (identification, classification and stratification), has been created.
- ✚ This file was used as punt forms set up of business register and database of business surveys.
- ✚ The set up of business register supposes the contribution of several administrations. Unfortunately, the Department of Taxes which has the principal sources for updating did not support the project, which could not be developed.
- ✚ To face this situation, the Department of the Statistics sought private or public sources for the update, but these sources are not exhaustive and are generally limited in terms of information.



IV. *Post census activities* (2/2)

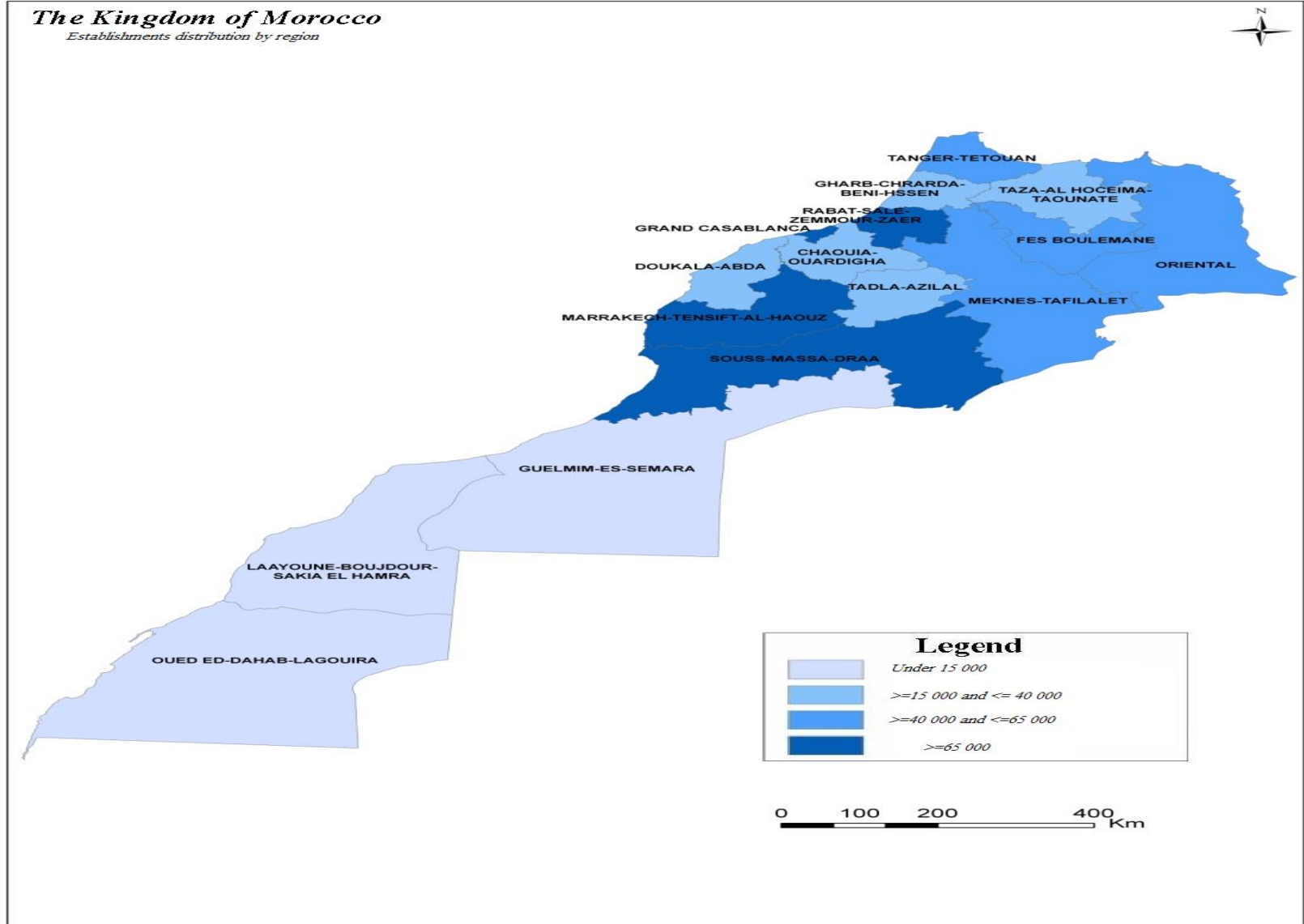
- ✚ The updated file was used as a basis for the annual business surveys 2004, 2005 and 2007, and the structure business surveys 2006. It is also intended to be used for the coming years.
- ✚ A first evaluation of the results of the annual surveys showed that:
 - For the large enterprises, with more than 20 employees in the trade and services and with more than 10 employees in the construction, it seems that the sources of updating make it possible to correctly update the file.
- ✚ On the other hand, these sources do not allow the correct update of the list of the small companies with less than 20 employees in Trade and services or 10 in construction.

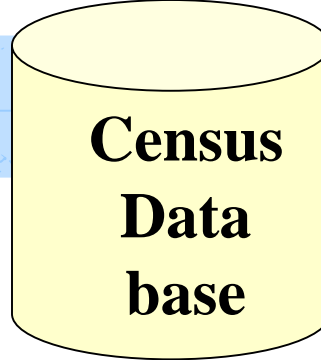
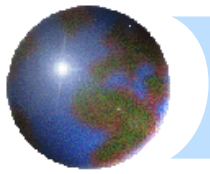


V. Dissemination of results(1/2)

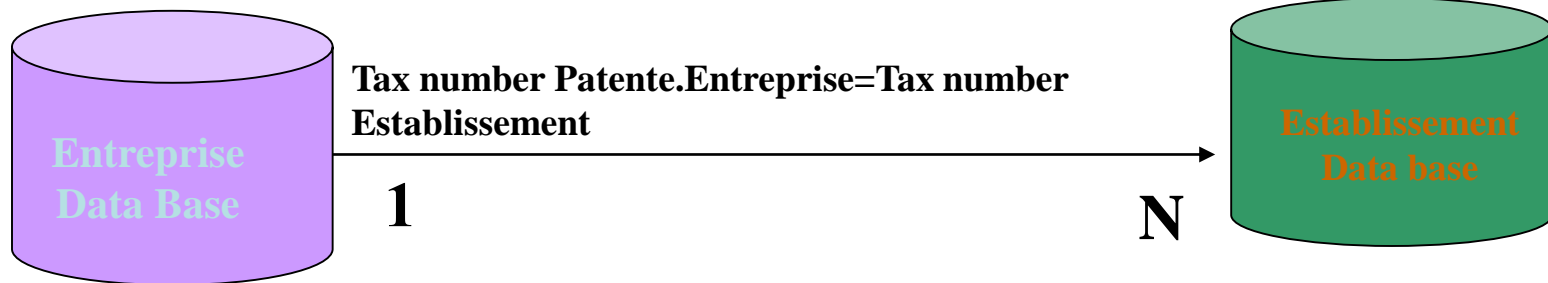
<i>Type of Dissemination</i>	<i>Target</i>
Report	Public, enterprises, Related institutions, etc.
Website	Internet User : http://www.hcp.ma
Seminars	Academic Purposes, Businessmen, Researchers, etc.
Executive summary	Official Government, Parliament,
Press Release	Press
Thematic Maps	Official, Businessmen, Researchers, Press, etc.

V. Dissemination of results(2/2)

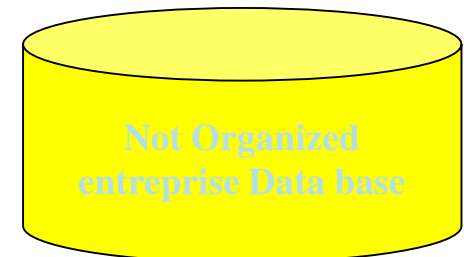
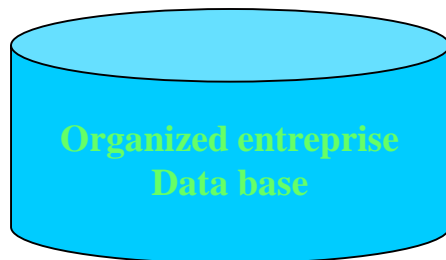


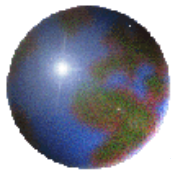


Step1 : To link each establishment to its parent company , by this link we aggregate employment at the enterprise level, the Tax number is the key used to link the établissement to the entreprise.



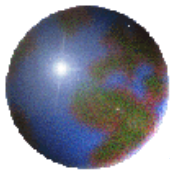
Step2: From databases of enterprises and on basing on the variable of accountancy type, we have dissociated the databases into two databases: databases of the organized companies and databases of the not organized companies .





VI. Future of Economic Census

- ✚ The first Economic Census was conducted in 2001/2002
- ✚ The next Economic Census will be implemented in 2011/2012.
- ✚ Economic Census is intended to be conducted on a decennial basis in the future



Thank you