(a) Why Economic Census?

- Under what circumstances the Economic Census is conducted in your country. Why the economic census is necessary?
- What are the goals, scope and coverage of Economic Census in terms of units, activities and classifications, as well as in terms of geographical coverage; thresholds used etc.
- Approaches and methods used in Economic Census
- Uses of Economic Census results

Accurate and detailed information can be collected through the General Census of Industry and Business Establishments, in order to constitute a well-organized, highly competitive and sustainable industrial policy that should cover all of the aspects of economic, social, environmental and international developments in the light of the principle of the efficient use of resources, aimed in development plans.

This kind of information which would make international comparisons possible will be of beneficial use during the preparation of the development plans and annual programs, cast light on the process of taking measures and decisions as well as the measurement of the positive or negative effects of the economic policies, and eventually will be used in national accounts and calculation of national income.

The Last Economic Census of Turkey was The General Census of Industry and Business Establishments 2002.

The main goals of The Census were;

- To obtain data for the shaping of the five years development plans and programs,
- To extract the sector profiles,
- To enable the conduction of to Input – Output and National Income studies,
- To make supra-national comparisons possible by keeping in line with
international recommendations,

- To obtain data-sets on every non-agricultural sector compliant with the EU standards,
- to set up a “STATISTICAL BUSINESS REGISTERS SYSTEM” in accordance with the systems used in EU,
- to establish an updated and reliable frame and sampling criteria on the basis of legal unit, enterprise and local unit with the help of the register,
- to structure a basis for surveys, regarding statistical units that will be conducted in intermediate years.

**Statistical Unit:** Statistical Units were enterprise and local unit (establishment).

**Activity Classification:** Statistical Classification of Economic Activities in the European Community (NACE Rev.1) were used.

**Regional Classification:** NUTS (Nomenclature of Territorial Units for Statistics) level I, II and III were used. TurkStat has 26 Regional Offices in NUTS II Level since 2003.

<table>
<thead>
<tr>
<th>NUTS Level</th>
<th>Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTS I</td>
<td>12 Region</td>
</tr>
<tr>
<td>NUTS II</td>
<td>26 Region</td>
</tr>
<tr>
<td>NUTS III</td>
<td>81 Province</td>
</tr>
</tbody>
</table>

**Geographical coverage:**
2002 General Census of Industry and Business Establishments’ geographical coverage is the whole of Turkey.
Regardless of the population size all province and district centers with villages and,
- except for this places, gas stations and organized industrial areas on interurban roads are covered.
- for the first time, the localities which have population less than 2000 were also included in this census.

**Sectoral coverage:** All activities included in NACE Rev.1 divisions from *C to K and from M to O* are covered;

C  Mining and quarrying
D  Manufacturing industry  
E  Electricity, gas and water  
F  Construction and public works  
G  Wholesale and Retail trade  
H  Hotel, restaurant, cafe and pastry shop  
I  Transportation, storage and communications  
J  Financial Intermediation Activities  
K  Real Estate, Renting and Business Activities  
M  Education  
N  Health and Social Work  
O  Other Community, Social and Personal Service Activities  

Sectors excluded from the coverage  
A  Agriculture, Hunting and Forestry  
B  Fishing  
L  Public Administration and Defense, Compulsory Social Security  
P  Household Industry Activities  
Q  Extra – Territorial Organizations and bodies  

(b) Planning and Organization of Economic Censuses  

-  Legal provisions  
-  Financial and budget provisions  
-  Administrative arrangements  
-  Economic Census plan and activities, incl. scope and methodology used for conducted pilot survey and preliminary sample test, zoning enumeration districts, preparation and maintenance of the establishment list for surveys, etc.  
-  Staff recruitment and training  
-  Questionnaire development and design, in particular selection procedure of enumeration items  
-  Razing awareness and promoting the response to the Economic Census
- Field supervision and reappraisal of questionnaire responses

In Turkey eight censuses were carried out in 1927, 1950, 1963, 1970, 1980, 1985, 1992 and 2002. Turkish Statistical Institute was obliged to conduct in the years ending with three of the Decree Commanded as Law, No. 219 dated June 8, 1984 and as stated in the Item 2, Paragraph (d) of the Decree Commanded as Law, No. 357 dated January 27, 1989. In future it is not foreseen to conduct an economic survey.

In 2002 General Census of Industry and Business Establishments, Buildings Tables, Avenue, Street Control Table and administrative registers were used as address sources. All of establishments in the coverage were enumerated by interviewers.

The census was applied with two questionnaires: “The 2002 General Census of Industry and Business Establishments Scanning Questionnaire” and “The 2002 General Census of Industry and Business Establishments Questionnaire”. The former was applied to businesses in non-municipal villages with less than 2000 population, while the latter was applied to businesses in other areas.

With the 2002 General Census of Industry and Business Establishments, for the first time, the administrative records were used. At the end of the studies, it was agreed that business registers used by Ministry of Finance are the most comprehensive records in terms of content and coverage especially when their usage for statistical purposes is taken into account.

In order that the registers of Ministry of Finance could be used in the 2002 General Census of Industry and Business Establishments, information in the province, county subdistrict, village, sub-level municipality, quarter, avenue, street columns of approximately 5 million address records in the registry were revised by about 200 operators by using various address dictionaries through 5 month of work.

Before the Census, two pretests and a pilot study were implemented.
Prime Ministry Circular 30.07.2002 No B.02.0.PPG.0.12-320-11817 on the implementation of the General Census of Industry and Business Establishments was sent to relevant institutions and organizations.

Following the PM Circular; Province Census Committees under presidency of Province Governors and their deputies in all provinces, County Census Committees under presidency of District Governors in all counties and Census Bureaus in all provinces and 243 counties were founded. Authorized staff of the relevant institutions and organizations was commissioned in these Committees and field organization of the Census was achieved through high collaboration.

The Census was carried out in two stages according to street-scanning method. In the first stage, each business in streets within the ‘census districts’ which had been formed according to the relative nearness of streets, was enumerated by using ‘building tables (Form Population 1) maps and plats. In order to assure consistency, Tax numbers from the record of Ministry of Finance (MoF) were matched by computers in Province Census Bureaus with the ones in the questionnaires filled in the local units. Local units that existed in MoF records but not in fieldwork were re-checked in the field. Also, questionnaires for those whose activities is not in a stationary workplace, for instance hawkers, stallholders, individual goods and passenger transporters, whose registered address in MoF records appears as their home address, were filled in their home address.

The Census was carried out simultaneously in provinces by two groups: one in centrums and the other in counties.

The Census for businesses in villages with less than 2000 population and without a municipal body was carried out by Province and County Agriculture Directorates.

Staff commissioned in the census were

In provinces and counties

- Regional coordinator
- Province responsible
- Province responsible assistant (İstanbul)
➢ Region responsible (İstanbul, Ankara, İzmir and where province responsible thinks necessary)
➢ County responsible
➢ Controller
➢ Census officer

Villages with less than 2000 population and without a municipal body
   Province Director of Agriculture
   County Director of Agriculture
   Staff of County Directorate of Agriculture

Application period was April-July 2003

Cooperating / supporting institutions and organizations were:

Ministry of Finance: Giving efficient support for the implementation of the Census by helping with the usage of its administrative records, province and county organization of MoF provided coordination with tax and finance offices to which taxpayers are registered in case of a problem in fieldwork.

Ministry of Industry and Trade: Province and county organization have been active participants and helped with the usage of their records.

Ministry of the Interior: Having been commissioned as the president of the Census Committees, Province and District Governors managed to achieve success in preparation studies before the Census, during the Census, and in transmitting the results to the center in the aftermath of the Census. Assistance from Municipalities was demanded on administrative records, when necessary.

Ministry of Agriculture and Rural Affairs: Implementation and organization of the Census for businesses in villages with less than 2000 population and without a municipal body have been achieved through cooperation with Province and County Agriculture Directorates. County Agriculture Directors were trained on questionnaires and were held responsible for the training of their staff
(c) Data collection and data processing

- Data items collected
- Methods of data processing; wireless data transmission from field; principle of data collection and imputation by types of establishment (head offices and branch offices); guidelines for profiling multi-establishment enterprises, etc.
- Use of Registers and Administrative data, for example use of tax data for the purpose of Economic Census
- Use of sampling in Economic Census; sample survey application to small establishments (less than 5 employees)
- Technological Innovations for reducing costs of Economic Censuses (web based data collection system, internet survey)
- Quality assurance for the Economic Census Process

The questionnaire contained 31 questions on identification variables, address variables, stratification variables, relationships, ownership, activities, economic figures etc. Filled questionnaires first collected in census bureaus and the comparison with MoF registers were done immediately by computer based programme. All questionnaires sent to the Head Quarter where all were scanned and automatically stored in database by using ICR (Intelligent Character Reader) technology. Checks were realized and data were evaluated.

(d) Post-census activities

- Post-enumeration checks
- The Economic Census as a basis for subsequent sample survey programmes

Annual Industry and Service Statistics (AISS) Survey had started to conduct after The General Census of Industry and Business Establishments 2002.

The purpose of this survey is;
• To determine structure of industry and service sector which constitutes important part of national economy and changes of the country’s social and economic structure,
• To compile data to determine structure of the sectors,
• To compile data for international comparison and to meet national and international demand for data,
• To make available international statistical comparisons,
• To compile sector based data compatible with EU Structural Business Statistics regulations.

**Estimation dimension:** The aim of AISS is to produce information based on enterprise and local unit. For all sectors, statistics in terms of enterprise **NACE 4-digit level** and in terms of local units **NACE 2-digit level regional estimations** are produced.

**Full enumeration limits:** After estimation dimensions and the structure of the sectors are taken into consideration during the studies of AISS, full enumeration limits are determined as follows:

§ **All enterprises having 20+ employees,**
§ **In terms of sectors, some NACE 4 digit activities are covered by full enumeration.**

**Sampling frame from BR and Sampling Size for AISS in year 2003-2008**

<table>
<thead>
<tr>
<th>Year</th>
<th>Frame (BR)</th>
<th>Sampling</th>
<th>Full Enumeration</th>
<th>Total Sampling Size</th>
<th>Estimation Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1.872.701</td>
<td>38.310</td>
<td>44.841</td>
<td>83.151</td>
<td>4 - digit</td>
</tr>
<tr>
<td>2004</td>
<td>2.418.979</td>
<td>37.548</td>
<td>51.961</td>
<td>89.509</td>
<td>4 - digit</td>
</tr>
<tr>
<td>2005</td>
<td>2.932.914</td>
<td>9.593</td>
<td>65.012</td>
<td>74.605</td>
<td>2 - digit</td>
</tr>
<tr>
<td>2006</td>
<td>2.978.514</td>
<td>38.106</td>
<td>63.879</td>
<td>101.985</td>
<td>4 - digit</td>
</tr>
<tr>
<td>2007</td>
<td>2.982.108</td>
<td>38.248</td>
<td>61.504</td>
<td>99.752</td>
<td>4 - digit</td>
</tr>
<tr>
<td>2008</td>
<td>3.101.506</td>
<td>38.165</td>
<td>61.815</td>
<td>99.980</td>
<td>4 - digit</td>
</tr>
</tbody>
</table>
(e) Dissemination of Economic Census results

- Economic Census reports
- Forms of dissemination
- Confidentiality issues
- Evaluation, analysis and acceptance of Economic Census results

The first results of the Census released by news bulletin.
Forms of dissemination of The Census are book, CD and web.
Confidentiality issues: If the number of the statistical unit in any cell of the data table formed by aggregating the individual data is less than three or one or two of the statistical units are dominant even if the number of units is three or more, the data in the concerned cell is considered confidential.
Some variables published by economic activity code or regional breakdown such as; annual average number of persons, employees, owners and partners, unpaid family workers, legal status of enterprise, locality, employment size class, number of local units.

(f) Future of Economic Census in the Economic Statistics Programmes

- Future Plans
- Key Issues

Business Register was constructed by using General Census of Industry and Business Establishments results and Ministry of Finance records. Updates were realized by MoF records and annual inquiries.
For the New Statistics Law of Turkey 2005 there is not any statement for economic census or any other census to conduct specific years. If an economic census needs to be conduct it will be evaluated in the Statistical Council, but it is not foreseen that to conduct an economic survey in Turkey. Instead of a census it is planned to produce statistics from Business Register.

The aims of TurkStat in business statistics are:

- to finalize establishment of statistical Business Register,
- to decrease response burden and production cost,
- to use more administrative records/data instead of survey,
- to increase data quality and timeliness,
- to adapt European Statistical System