Preliminary collection of questions which might be raised during the explanatory meeting on 17-18 July 2006

### **<u>1. Concering Classifications</u>**

## 1.1 Have you set up an implementation plan for NACE Rev. 2 in your country?

Classification	Date	Activities
NACE Rev. 2	May 2006	Draft translation has been completed
	June – July 2006	Controlling of draft translation
	Until August 2006	Reflecting the required changes to translation
		<ul> <li>Reflecting new modifications made in original NACE Rev.2</li> </ul>
	September – December 2006	<ul> <li>Adaptation to Turkey</li> <li>Creating codes at national level</li> <li>Adding supplementary explanatory codes</li> <li>Preparing keywords</li> </ul>
CPA 2008	August – December 2006	Completion of draft translation
	January - February 2007	Controlling of draft translation
	March – June 2007	<ul> <li>Adaptation to Turkey</li> <li>Creating codes at national level (Specially in Agriculture sector)</li> <li>Adding supplementary explanatory codes</li> <li>Preparing keywords</li> </ul>

#### Implementation Plan for NACE REV. 2 and CPA 2008

### 1.2 When do you intend to introduce NACE Rev.2 in your National Business Register and the respective statistical surveys?

It is planned to recode Business Register to NACE Rev 2 in 2008 for 2007 Registers. For SBS and PRODCOM surveys NACE Rev 2 will be implemented in 2009 for the reference year 2008.

## **1.3** Have you performed an analysis of users' needs in relation to the implementation of NACE Rev.2?

Main headings of NACE Rev.2 have been translated into Turkish and presented to users on classification server. Opinions and suggestions of users on NACE Rev.2 have been requested.

A training workshop concerning current situations and new revisions of classifications was held on 5-7 June 2006 in Ankara by participation of 45 representatives from 17 public administrations and non-governmental organizations. This workshop provided a platform for the determination of the users' needs.

### 1.4 Are the classifications used also by other administrative data sources?

According to the results of a mini survey among representatives in workshop on 5-7 June 2006, the following administrations and organizations stated that they were using NACE Rev1.1, PRODCOM and CPA 2002 classifications:

- Central Bank of the Republic of Turkey (NACE Rev 1.1)
- Small and Medium Industry Development Organization (NACE Rev. 1.1)
- Ministry of Industry and Trade (PRODTR 2005)
- Ankara Chamber of Industry (PRODTR 2005)
- The Ministry of Agriculture and Rural Affairs (NACE REV 1.1 and CPA 2002)
- Ministry of Finance (NACE Rev. 1)

## 1.5 What are your plans for back-calculation of statistical data produced in accordance with the old classifications?

After completion of the transition and adaptation studies, there will be a new study for the back-calculations.

## 1.6 How do you classify statistical units in your register and who is responsible for providing the correct classification code?

Ministry of Finance registration offices are classifying the units initially during the first registration. The activities of the units are updated by surveys.

### 2. Concerning Business Registers

## 2.1. How will you face the most important challenges concerning the revised BR Regulation?

Correspondence tables for NACE codes used by Ministry of Finance (MoF) will be prepared. These are used in Statistical Business Registers of Turkey (SBRT) system as source codes of NACE Rev. 1. 1 to target codes of NACE Rev.2. In MoF records, activities that are carried out by local units, are coded by 4125 sub-codes (required for MoF's own purposes) of NACE 4 digit codes. The correspondence table will be prepared if it is possible. The unmatched codes will be examined separately and and will be verified by turning to taxpayers again.

As the main administrative source of Business Registers, MoF records contain information for judicial bodies as shareholders and directors, including country codes. Enterprise Groups records will be derived by using this information. Following the completion of setting up of Business Registers, which is still on establishment stage, studies on Enterprise Groups will begin. Profiling study will be carried out by defining the Enterprise Groups.

### **2.2.** How do you plan to integrate enterprise groups into your future *BR*?

It has been mentioned in the previous answer.

## **2.3.** What kind of difficulties do you see concerning the extended compulsory coverage of NACE sections?

Since the enterprises, having activities defined at NACE A and B (Agriculture, Hunting, Forestry and Fishery) sectors, have some structural differences, their inclusion in Business Registers and maintenance will be a challenge. Majority of these kind of enterprises are operated by households in Turkey. Thus, there will be intense studies to cover these enterprises in Business Registers.

## 2.4. Which units are covered by your business register and how are they defined?

*Legal unit (LeU):* MoF keeps information in its registers for individuals and corporations. Each unit recorded in these registers is treated as a legal unit. In other words, a unique VAT number which has been given to the tax payers is accepted as a legal unit in SBRT.

*Enterprise (Ent.):* All legal units in SBRT are accepted as enterprise. Studies for using enterprise definition (which is defined in BR regulation) are underway.

*Local unit (LU):* All units, carrying out activities physically in other locations, are registered in MoF records even if they are not obliged to pay any taxes. Local unit information is complied by using information on these records

*Local Kind of Activity Unit (LKAU):* Local kind of activity unit information is obtained by attaining main activity code for local units.

## 2.5. What classification is used for the units in the business register?

NACE Rev 1.1 codes for local unit and enterprise have been given at four digit level.

### **2.6.** What are your updating procedures for the business register and which sources do you use for it?

MoF data is available and used frequently. After setting up "SBRT system software" these data will be used regularly.

Business Survey results are also used as an update source for some variables.

### 2.7. Which administrative sources do you have access to according to your statistical law?

According to the Article 9 of the Statistcal Law, No. 5429, TURKSTAT is empowered to use all administrative registers for statistical purposes.

### 2.8. Are there any links between the register and existing administrative sources?

There is no direct link between MoF records and BR.

## 2.9. EuroGroups Register: How is the availability concerning administrative and private data on multinational enterprise groups in your country?

As defined above (2.7), it is available to use all administrative sources but these sources do not contain all required variables.

#### 3. Concerning the Economic and monetary policy statistics

## 3.1. Themes 40 (Annual economic accounts), 41 (Quarterly accounts) and 52 (Money and finance): *Is the work under the national Action Plan, progressing as planned?*

The work under the national action plan for theme 41 (Quarterly national accounts) is progressing as planned. TURKSTAT is in the process of revising national accounts figures in accordance with ESA 95.

Regarding annual GDP estimates, aggregation of quarterly GDP estimates is used as annual GDP estimates. There is no independent annual GDP estimate.

2002 Supply and Use Table (SUT), compliant with ESA 95, will be published in 2007.

Bilateral meetings between the European Central Bank's (ECB) Directorate of Statistics and Central Bank of Turkey's (CBRT) Statistics Department were held in 2002 both in Frankfurt and Ankara to discuss the money and banking statistics of Turkey and their compliance with the ECB requirements. Since then, the studies for harmonization with the ECB statistics and particularly on Monetary Financial Institutions (MFI) statistics and the coverage of the sector are going on. The CBRT will continue bilateral contacts with the ECB's Directorate of Statistics and transmit money and banking data on voluntary basis with the aim of an early preparation for eventual membership in the European System of Central Banks.

# 3.2. Theme 42 (Financial accounts): Turkey does not transmit at present financial transactions data to Eurostat. We would welcome the intention to develop financial accounts and would be interested to receive a timetable for this action.

The Central Bank of Turkey (CBRT) is the responsible institution for the ESA 95 Financial Accounts of Turkey. The FA tables 6 and 7 are compiled by the CBRT on a test basis for the Monetary Financial Institutions (MFI) sector stock and transactions (non-consolidated and consolidated) only. No transmission is made to EUROSTAT until now. However it is possible to begin transmission partially. For all other sectors, a timetable for action has been decided between the CBRT and stakeholders of the Turkish FA namely the Ministry of Finance (MoF), Undersecretariat of Treasury, Banking Regulation and Supervision Agency (BRSA) and Turkish Statistical Institute (TURKSTAT). According to the Action Plan for Turkish FA, in 2006-2008 period the tables for the MFI sector will be completed. For financial intermediaries sector, comprised of leasing, factoring and consumer finance companies, BRSA started to compile data in June 2006 and will share the data set with the CBRT. Aggregation and quality tests will be done in 2007. Test studies for the integration into FA tables will be completed by the end of 2008.

Appropriate data sources and data will be determined for the sectors General Government, Insurance Companies and Pension Funds, and Non-financial Corporations. For this purpose, the stakeholders and the CBRT will cooperate and work closely and technical working groups will be established for the implementation of harmonized ESA 95 classification of sectors, instruments, and accounting rules. Working groups will meet regularly. In 2009-2011 period, data for the sectors General Government, Insurance Companies and Pension Funds, and Non-financial Corporations will be compiled, integrated into FA tables and test studies will be conducted. Non-consolidated and consolidated FA tables for stocks and transactions for all ESA 95 sectors of the economy will be produced starting from 2011 onwards.

## 3.3. Theme 43 (Monitoring Own Resources): When could you provide an inventory of sources and methods usable to estimate Gross National Income?

After GDP revision in accordance with ESA-95, it will be possible to prepare a detailed GNI inventory reflecting existing situation.

## 3.4. Theme 44 (Prodcom): How far have you progressed in preparing the Prodcom survey?

The first implementation of the Annual Industrial Production Questionnaire, which was redesigned according to Prodcom Legislation 3924/91 and 912/2004, was carried out as a pilot survey for 2004 reference year. In this work, Prodcom List was used and enterprises with 100 or more person employed in industrial sectors were covered.

The variables required by Prodcom Legislation have been collected through the questionnaire with this pilot survey.

## When do you expect to be able to send preliminary Prodcom data to Eurostat?

Data transmission to Eurostat will start with 2005 reference year data. Annual data will be sent systematically onwards. As the fieldwork and analysis of the 2005 survey are completed, data for this year will be sent to Eurostat within the first half of 2007.

### When do you expect to be fully compliant with the Prodcom Regulation?

Annual Industrial Production Statistics is fully compliant with Prodcom Legislation 3924/91 and 912/2004. The problem rests in the timeliness. In the survey for reference year 2005, volume and value of physical production and sales of the products are collected.

Enterprises with 20 or more person employed which have activity (primary or not) either in mining and quarrying (C) or in manufacturing industry (D) according to NACE Rev 1.1 are in the coverage of the survey.

## 3.5. Theme 44 (Structural Business Statistics): What is the progress achieved in implementation of the sampling methodology?

As an example for sampling methodology of 2003 Structural Business Statistics, sampling plan is given below:

**Geographical coverage**: Regardless of population size, all province and district centres and villages, which have municipalities in Turkey, were covered. Also, gas stations and organized industrial zones in interurban roads were covered in the survey.

**Sectoral coverage:** The following sectors, based on Statistical Classification of Economic Activities in the European (NACE) Rev1.1, constitute the coverage of 2003 Structural Business Statistics:

- C) Mining and quarrying
- D) Manufacturing
- E) Electricity, gas and water supply
- F) Construction

G) Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods

- H) Hotels and restaurants
- I) Transport, storage and communication
- J) Financial intermediation
- K) Real estate, renting and business activities
- M) Education
- N) Health and social work
- O) Other community, social and personal service activities

**Population coverage:** All enterprises within the sectoral coverage and all local units belonging to the covered enterprises.

**Sampling frame:** For 2003 Structural Business Statistics Survey, the updated 2003 Business Register as the sampling frame.

**Sampling unit:** Enterprise is the sampling unit. Enterprises with one and two local units were covered in the survey. If the enterprise was composed of only one local unit, this local unit was itself the enterprise.

**Observation units:** Enterprise and local unit.

Statistical analysis Units: Enterprise and local unit.

**Estimation level:** The aim of the 2003 Structural Business Statistics Survey was to produce information on the basis of enterprise and local unit level. In this direction, information was obtained by the method of full enumeration for enterprises which had more than two local units. In case the enterprise was equal to local unit, information was obtained by sampling methodology. For all sectors, NACE-4 digit- national level estimations in terms of enterprises and NACE-2 digit–NUTS 2 level estimations in terms of local units were the target at the SBS survey.

Full-enumeration thresholds:

In 2003 Structural Business Statistics Survey, full enumeration limits were determined as follows:

- 1. All multiple enterprises consisting of more than two local units,
- 2. All enterprises having 20 or more persons employed,
- 3. Enterprises which have some NACE 4-digit activities were covered by full enumeration.

**Sampling method**: Stratified simple random sampling was applied for 2003 Structural Business Statistics Survey. All enterprises having the property of enterprises, which have at most two local units within sectoral coverage, were determined as the sampling frame. The enterprises in this frame were divided into parts according to their main sectors. Then the units within each sector were rearranged. For the selection of enterprises, probability proportional to size selection method was applied to all sectors. The "measure of sizes" for the sectors were determined as follows:

• In service sector, measure of size was taken as turnover

- In sectors of trade, transportation, hotel and restaurant turnover was the measure of size as in service sector,
- In manufacturing sector, average number of employees was the measure of size,
- In construction sector -because of the structure of this sector- an artificial measure of size created from turnover and number of employees.

**Sample size and selection of sample:** The criteria of producing estimates on the basis of NACE-4 digit and Turkey level for enterprises and producing estimates on the basis of NACE-2 digit and NUTS 2 level for local units, were taken into account while determining the overall sample size and allocating the sample size into the domains identified as Nace-4 x NUTS 2 level. For the sample allocation, Compromise Allocation method was applied to each sector seperately. After this allocation, the sample sizes for NACE-2 x NUTS 2 level and NACE-4 x Turkey level was checked in order to decide whether the size, determined at NACE4x NUTS 2, was sufficient for producing estimates on these levels. The sample size was increased in the cells, which were not sufficient for the estimation levels. Consequently the final sample size was reached at the end of this last check.

The aim of Compromise Allocation is to reach optimum allocation providing desirable level of estimations. The general formula of allocation into strata by this method is as follows;

 $n_{h} = \tilde{n} \left[ K^{2} + (1 - K^{2}) M_{h}^{2} \right]^{\frac{1}{2}}$   $\tilde{n} = average \ sample \ size \ per \ cell$   $M_{h} = N_{h} / (N / H) = H.W_{h}$   $K = \text{Re} \ lative \ impor \ tan \ ce$   $n_{\min} = K.\tilde{n} \ sample \ size \ per \ the \ smallest \ cell$  $h = number \ of \ stratum$ 

The use of this method allows a specific sample size in each domain, even if the total number of units was too small in the domains.

In 2003 Structural Business Statistics Survey, by considering cost and labour force the minimum sample size in strata was determined as nmin =3 and sample selection was done with probability proportional to size for each sector. The "nmin" was kept small because, allocation was done in more detailed level than the estimation level.

In each sector for each domain, sample selection of enterprises was done by sorting the enterprises firstly according to their provinces, within province according to their districts, within the district according to their measure of sizes.

**Estimations and notations:** Due to sampling selection proportional to size (PPS), there is a probability of selection of  $\underline{P}_i$  proportional with unit size  $\underline{s}_i$  for  $\underline{n}$  sampled units.

$$P_{i} = n \frac{S_{i}}{S}$$

$$S = \Sigma Si$$

$$S = Sum of the sizes occurring in the data population$$

If we improve these definitions in any selection; h = domain indice i = Indice of enterprise Si = i. Size of the enterprise. Selection probability of enterprise in any domain is as follows;  $P_{\text{bi}} = n, \frac{S_{hi}}{S_{hi}}$ 

$$\mathbf{P_{hi}} = n_h \frac{S_{hi}}{S_h}$$

The estimation ( $\hat{Y}$ ) of any characteristic (y) is given below;

$$\hat{Y}_{h} = \sum_{i} \left( \frac{y_{hi}}{p_{hi}} \right) = \sum_{i} \frac{S_{h}}{n_{h} \cdot S_{hi}} y_{hi}$$
$$\hat{Y}_{h} = \frac{S_{h}}{n_{h}} \sum_{i} \left( \frac{y_{hi}}{s_{hi}} \right) = \frac{S_{h}}{n_{h}} \sum_{i} \overline{y}_{i}$$

 $\hat{Y}_h = S_h \overline{y}_h$ 

Variance estimation formula is given below:

$$v(\hat{Y}_{h}) = S_{h}^{2} v(\overline{y}_{h}) = \frac{S_{h}^{2}}{n_{h}} \left[ \sum (y_{i} - \overline{y}_{h})^{2} / (n_{h} - 1) \right]$$
Total estimation is;  
$$\hat{Y} = \sum_{h} \hat{Y}_{h}$$

The variance about total estimation is

$$v(\hat{Y}) = \sum_{h} v(\hat{Y}_{h})$$

### What progress is made in the implementation and testing of editing and imputation techniques?

Web-based data entry software was developed and has been used for data entry since 2004 for the reference year 2003. It has many possibility and internal consistency checks for the selected ratios (such as, Turnover/ number of persons employed (1250/16110), Personnel costs/Value added at factor cost (13310/12150) for compiling more coherent data.

## What time frame is considered feasible before Turkey will be able 1) to send national data series (Series 1A, 2A, 3B and 4A as defined in EU Reg 2701/98)

The analysis on 2003 data set is in process. After the quality check of the results the series will be submitted.

2) to be fully compliant with the current regulatory framework.

It is expected to be fully compliant with the current regulation including size class and quality reports by 2011.

### Does Turkey consider participation in following development programs, provided that it is currently possible to obtain a grant for participation, if deliverables are sent:

**Business demography:** No participation to development programs planned but this is one of the topics of USST2 programme.

**FATS** (foreign affiliate statistics): No participation to development programs but this is one of the topics of USST2 programme only for Inward FATS. For Outward FATS, Undersecretariat of Trasury has intentions to join pilot projects by Eurostat.

**Business services:** No participation to development programs but this is one of the topics of USST2 programme.

Demand for services: No participation to development programs.

## **3.6. Questions common to both Prodcom and Structural Business Statistics:** *How do you assess the quality of the business register?*

There are some changes, more than expected, faced about activity and size class of the enterprises during the surveys with respect to the records in BR. Since the system has already been established, these kind of accuracy problems should be considered as normal.

### Please specify the following points: - the coverage in terms of the legal form of enterprise units?

All legal forms are included in SBRT

## - the updating frequency and the inclusion delay for new enterprises?

New enterprises are added to the Business register yearly.

## - the sources used for initial size class information and the reliability of the size class administrative information,

The number of employees is used as an initial size class information, which is obtained from MoF records. Since the system has already been established some accuracy problems have been faced about size by nature.

## - the sources used for initial NACE attribution and the reliability assessment of the initial NACE information,

The MoF records are used for initial activity information. Since the system has already been established some accuracy problems have been faced about activity by nature.

## - the preparation to enable a recodification of the economic activity classification to NACE Rev 2

There is no preparation by the time being.

#### - does your business register include secondary activities?

Since local units are included in BR with their activities, the secondary activities of enterprises are available.

## 3.7. Theme 54 (Trade in services and balance of payments): Why the trade in services data covers only the partner "World", and the item total is allocated to one sub-item only?

The geographical breakdown of the trade in services data, which cover only the partner "World" at present, will be provided with the beginning of the 2008 data. The studies are underway regarding the provision of some of the sub-items. It is planned that it will be finalized by the end of 2007. This will be reflected in the 2008 BOP data. The work entails the compilation of the following sub-items through direct reporting: Passenger Services, Postal Services, Courier Services, Embassies and Consulates, Military Units and Agencies, Audio-visual and related services and Other personal, Cultural and Recreational Services. Other than the above-mentioned work, studies are in progress to compile the sub-items of the following services: Miscellaneous Business, Professional and Technical Services and Computer and Information services.

## Why no geographic breakdown is given for the quarterly BOP data and for the foreign direct investments?

#### **Quarterly BOP data:**

Regarding Current Account/Goods and Services, the geographical breakdown for the whole of the goods and services items is planned to be provided beginning with the 2008 data. As for the other items of the current account, studies are initiated to provide the geographical breakdown.

Regarding Financial Account/FDI, the geographical breakdown is already available on Level 3 basis. On the other hand, the work is in progress to provide the geographical breakdown of the Financial Account/Other Investment as requested in the Eurostat BOP Vademecum, Version November 2005. As for the Financial Account/Portfolio Investment (Net and Liabilities) and Official Reserve Assets, the data are at present provided on partner World (A1) basis as requested in the Eurostat BOP Vademecum, Version November 2005. However, for the Portfolio Investment/Assets, studies are initiated to provide the geographical breakdown on an Extra-EU (D4 and D5), Intra-EU (D2, D3) and Intra and Extra-Euro-zone (U2, U4) basis as requested in the Eurostat BOP Vademecum, Version November 2005.

#### Foreign direct investments:

The geographical breakdown is already available for flows and stocks except for the geographical breakdown under the activity breakdown, namely the geographical breakdown of the annual Questionnaires Y5 for flows and Y7 for stocks. However, the above-mentioned breakdown is planned to be provided beginning with the 2006 data.

As for the missing items, Questionnaire Y6\_R3/R4 for 2005 data (Direct Investment Income data) will be sent to Eurostat no later than October 2, 2006 and data for post 530 (Abroad, Other Capital) are planned to be provided beginning with 2007 data.

### 4- Concerning the Agricultural statistics

## 4.1. Theme 62 (Agricultural structures): How is the national statistical system set up, with specific emphasis on Farm Registers and the FSS?

Agricultural statistics are under the responsibility of TURKSTAT and compiled in collaboration with the provincial and district directorates of the Ministry of Agriculture and Rural Affairs (MARA).

Other data providers are Ministry of Industry and Trade, Ministry of Environment and Forestry, Turkish Tobacco and Tobacco Products and Alcoholic Beverages Marketing Regulatory Authority, Turkish Sugar Authority, Union of Chambers and Commodity Exchanges and producers' unions.

Agricultural statistics can be examined in two parts:

- 1. Current Agricultural Statistics
- 2. Agricultural Censuses

**1. Current Agricultural Statistics:** Agricultural statistics are collected in collaboration with the provincial and district directorates of the MARA. Turkey has 81 provinces and 801 districts where MARA has local directorates.

For animal production statistics, the data collection forms are sent to province directorates of MARA by TURKSTAT once a year, for crop production data collection forms are sent three times a year in the estimation periods. The data obtained from MARA are analyzed by TURKSTAT. For crop production, the data are approved by the Agricultural Statistical Committee.

For agricultural prices, MARA technicians in Directorates of MARA in provinces and districts collect the prices agricultural commodities sold by farmers at province and district producer bazaars every month and data collection forms are sent to TURKSTAT for analysis.

For agricultural holdings' wage structure statistics, data are compiled via questionnaires applied to farmers by face-to-face interview by regional office staff and the data for organized agricultural holdings in public sector are compiled by the questionnaires that are sent by mail.

Also, the statistics on organic production, fertilizer use, pesticides use are produced by MARA and sent to TURKSTAT.

After analysis, the statistics are published for crop production, animal production and agricultural prices annually by the publication titled 'Agriculture Structure (Production, Price, Value)' and agricultural wage structure statistics are published as Press Release annually.

**2. Agricultural Censuses**: TURKSTAT conducts agricultural censuses to determine the present potential in agriculture and to measure the changes in the agricultural structure.

In Turkey, General Agricultural Censuses were conducted in 1927, 1950, 1963, 1970, 1980, 1991 and 2001. In the 2001 Census of Agriculture, data on the following items were also collected: the size classes of agricultural holdings, their types, land use, number of parcels, usage of fertilizer and crop chemicals and pesticides, composition of household etc. This census also aimed at constituting farm register system, which form a frame for the surveys on agricultural holdings in intermediate years by obtaining exhaustive data about all agricultural holdings and by Agricultural Holdings List.

Three different studies were applied in coverage of 2001 Census of Agriculture that aimed to harmonize with European Union norms and improve agricultural statistics with the 2001 Census of Agriculture. These studies are:

- Agricultural Holdings List: was applied in all the villages and settlements having less than 25,000 inhabitants. The information was obtained from the heads of villages of each village.
- Village Information Census: was applied in all the villages and centres of provinces and districts having less than 25,000 inhabitants. The information was obtained from the heads of villages of each village.
- Agricultural Holdings (Households) Survey (explained under Farm Structure Survey heading)

#### Farm Register Systems in Turkey

The 2001 General Agricultural Census (GAC) was the 7th census. In this census, TURKSTAT conducted the Agricultural Holding List in order to develop a farm register system. The Agricultural Holding List has been filled out by the "muhtars" (heads of villages) of all villages and settlements having less than 25,000 inhabitants and contained around 3.2 million records.

The decision of Council of Ministers No. 2000/267 on the implementation of Direct Income Subsidy (DIS) and Farm Register System as a new agricultural support

instrument was entered into force in 2000. This system will be under the responsibility of MARA.

The objective of this decision is to set up a mechanism for identifying farmers who are eligible for payments under the DIS, and a mechanism for delivering those payments. After the completion of the pilot project on DIS in 2000, it has been implemented nation-wide since 2001. Under the DIS, about 90% of total number of farmers has been registered.

The farm register system of the Ministry of Agriculture and Rural Affairs (MARA) was accepted as an administrative source of statistics and as a starting point for the completion and updating of the Statistical Farm Register.

Additionally, updating of the farm register has been implemented in selected settlements all over Turkey since October 2005.

#### Farm Structure Survey in TURKSTAT

Data related to structure of agricultural holdings have been obtained during agricultural censuses, by the Agricultural Holdings (Households) Survey which was one of the three studies in the framework of the 2001 Census of Agriculture: Agricultural Holdings List, Village Information Census, Agricultural Holdings (Households) Survey.

Agricultural Holdings (Households) Survey in 2001 was the survey that was conducted respecting FSS characteristics in EU regulation as well as FAO recommendations.

2001 Agricultural Holdings (Households) Survey;

- From 5,000 sample villages and district centers having less than 5,000 inhabitants, 50,000 agricultural holdings (households) selected from the 2001 Agricultural Holdings List were surveyed.
- In addition, agricultural holdings over a determined physical criteria related to size of land and number of livestock in the province and district centers having 5,000 and more inhabitants were surveyed by complete enumeration.
- The information was compiled from agricultural holdings by face to face interviews.

**Variables** under following headings are obtained from the Agricultural Holdings (Households) Survey:

- ✓ Legal status of households,
- ✓ Other activities of households together with crop production and animal husbandry,
- ✓ Use of land,
- ✓ By parcel, cultivated land, type of crops, type of seeds, production system, successive cropping, crops under contract and insurance of crops,
- ✓ Irrigation situation of land,

- ✓ Type of fertilizers and pesticides by crop,
- ✓ Number of agricultural equipment and machinery,
- ✓ Cultivated land with tractors or animals,
- ✓ Harvested land with combine harvester,
- ✓ Number of livestock,
- ✓ Yield of animal production and fodder consumption,
- ✓ Buildings and other structures,
- ✓ Employment status of household members and number of occasional workers in agricultural holdings.

#### Achievements and plans for FSS

- Within the frame of the harmonization studies, FSS studies have been carried out.
- The questionnaire, data entry program, handbook and tabulation have been prepared for FSS to be conducted in 2006. By this survey, all of the variables given in characteristics list for 2005 were covered.
- Field application will be conducted in September-October 2006.

### 4.2. Theme 64 (Crop Production): Is there any important production which is presently not covered by EU statistical legislation?

Turkey is a major tea producer as the fifth biggest producing country with a ratio of about 6 % in total world production. This product is not covered by the current EC data transmission tables as a separate item; it is now headed under "other. The data are available for many years.

## Theme 65 (Animal Production): Is there any important production which is presently not covered by EU statistical legislation?

#### No

### 5.1 Theme 69 (Fishery statistics): What is the relationship between the fisheries administration (responsible for the monitoring of fishery activities) and national services responding to EU requirements for fishery statistics?

MARA is the responsible institution in the management and monitoring of fishery activities in Turkey. TURKSTAT is in charge of compiling and sending the data to EUROSTAT. Fishery statistics consist of information on sea products, freshwater and aquaculture:

- Data on sea products are compiled by Marine Survey, annually by TURKSTAT (Vessels registers of MARA are used as a frame for this survey).
- Data on fresh water and aquaculture are compiled by MARA and sent to TURKSTAT (a protocol signed between two institutions).

Additionally, the Fishery Information Center (FIC) will be built where all data on fishery in the scope of "Project on Juristically and Institutional Consistency to European Union Acquis on Fishery Sector" will be collected. This center covers the Fishery Vessels Registration System, Fishery Vessels Monitoring System and Fishery Information System:

- Fishery Vessels Registration System will involve all the information on licensed fishery vessels
- Fishery Vessels Monitoring System will involve the information obtained on satellite-based monitoring system
- Fishery Information System will involve cruising notebook, landing declaration, transfer certificate, storage certificate, sales declaration with received information and their controls.

FIC will also have the properties of reporting and inquisition of these systems within and between each other. A protocol between TURKSTAT and MARA on the cooperation about Fishery Information System has been signed. In the scope of this protocol, the data obtained by FIC will be shared by TURKSTAT.

### 6. Concerning free movement of workers and social statistics

## 6.1. Theme 32 (Labour market statistics): What is the situation as to the legal issues for data transmission (change in 2006)? Is the questionnaire being analysed? What about ad-hoc modules?

Micro data transmission is allowed according to the Statistical Law (Law no. 5429). Preparations on the LFS micro data set are still going on. Q1 2006 data set may be sent in September and it would be possible to send on due time starting from Q2 2006.

The 2006 Labour Force Survey Questionnaire was sent to Eurostat in May 2006.

Implementation of ad-hoc modules will be started with 2007 module on "accident at work and work related health problems" next year, the first application of the ad-hoc modules has been covered within the framework of USST 2 Project and required consultancy would be taken.

### What is the actual situation and future plans concerning Structure of Earning Survey, Labour Cost Index and annual collection of labour costs and earnings?

Structure of Earnings Survey (SES) and Labour Cost Index have been covered within the framework of USST 2 Project. SES will be conducted in 2007 using 2006 as reference year and required consultancy will be taken on this issue. SES will be repeated in every four year timely with EU. Feasibility studies will be realized for calculating LCI within the framework of USST 2 Project and possible data sources will be determined. Annual updates will be considered after getting the results of LCS and SES.

## 6.2. Theme 36 (Distribution of incomes and living conditions): Is methodological information available?

TURKSTAT started studies on SILC in 2003. Pre-test studies were carried out in 2003 and 2004 to test the questionnaire, survey methodology, field application etc. In 2005, SILC survey was implemented as a pilot survey.

After revision of the questionnaire, data entry program and checking procedures based on interviewer feedback during 2005 application, the first wave of SILC was conducted between April and June in 2006 with 12 872 households to have estimates on rural and urban breakdown and at 12 regions at NUTS 1 level by following all process of EUROSTAT.

#### Questionnaires Used At the Survey

Questionnaire of this survey was designed according to EUROSTAT standards. Six different questionnaires were used in the application:

Household register form Tracing form of household and their member (for longitudinal base) Personal register form Household questionnaire Individual questionnaire Agricultural holdings questionnaire

Concept and Definitions: To comply with EU norms, "EU-SILC 065/04 - Description of Target Variables-Cross Sectional and Longitudinal" document has been examined. In determination of questionnaire, survey methodology, concept, coverage and definitions and all target primary variables in the Commission Regulation (EC) NO 1983/2003 were covered.

Data Collection: Data of SILC are collected annually within the period of April-June. Face to face interview with portable computer (CAPI) is used as data collection methods.

#### Sampling Design

Geographical Coverage: All settlements, except settlements having less than 100 population.

Population Covered: All private households and their members, except institutional population.

Sampling Method: Stratified two-stage cluster sampling.

Final Stage Sampling Unit: Household

Sampling Frame: Sampling frame is obtained from two sources:

- For the settlements, which have municipality; Population Forms 1 which were formed and updated in enumeration studies made in 2000. (Population Forms are the lists which the type and address of the places such as households, establishments, governmental buildings and etc are registered.)
- For the settlements which do not have municipality; 2000 general population census results were used.

Estimation Level: For the cross-sectional base, the estimation level is national, urban - rural and NUTS 1; for longitudinal base, estimates on the base of national, urban and rural levels.

Sample Size: 12.872 households in respect of the estimation dimension, objects and target variables of the survey.

Determination of Sample Households: Two stage sample design:

- If the settlements have municipalities; first stage, sampling units are the blocks including approximately 100 households. If the settlements do not have municipalities; first stage sampling units are list of the villages.
- At the final stage, sampling units are the households.

Units are the households at the final stage sampling.

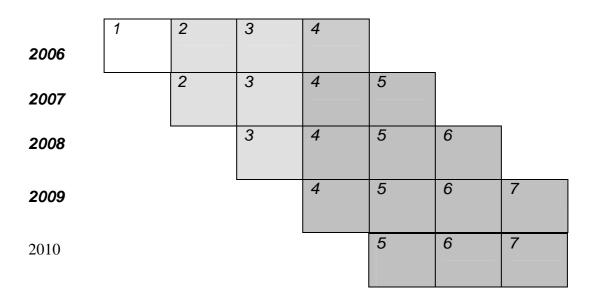
Households were selected after the listing study for the selected blocks. The aim of the listing study is to update the addresses for the selected blocks.

Substitution Principle: Substitution will not be used since the sampling size is calculated by considering non-response situations.

Rotation Pattern and Subsamples' Application Time: The survey is designed to produce estimates for both cross-sectional and longitudinal base. The longitudinal dimension consists of a rotating four-year panel.

On annual basis, 4 subsamples will stay in the application and one year later one subsample will be removed from the application and replaced by a new subsample to provide estimates for longitudinal base. By this way 75% coincidence will be provided.

1 **2 3 4** --- Subsamples



## Is the legal issue of transmission of confidential micro data solved?

Transmission of SILC micro data has been allowed according to Statistical Law, No. 5429.

## Will Turkey be able to send first 2005 data according to Regulation timetable and provisions in 2006?

In 2005, SILC survey was implemented as a pilot survey and thus micro data will not be transmitted to EUROSTAT. Because, there were some data quality problems with some type of incomes such as entrepreneur income, income from agriculture as much as tax and social security premium information. There were so many missing value for tax and social security premium information. TURKSTAT is planning to transmit 2006 SILC cross sectional micro data to EUROSTAT at the end of 2007.

## 6.3 Theme 37 (Social Protection): Can you send annual update (for year 2005) of qualitative information before June 2007 together with quantitative data?

Annual updating (2005) of qualitative information will be sent before June 2007 together with quantitative data.

## Do you assume that the quality and timeliness of the qualitative ESSPROS information will be sufficient for free dissemination together with the ESSPROS quantitative data?

The quality and timeliness of the qualitative ESSPROS information will be sufficient for free dissemination together with the ESSPROS quantitative data.

When do you plan to send the pension beneficiaries data for 2003 and 2004?

The pension beneficiaries data for 2003 was sent to EUROSTAT in August 2004. The pension beneficiaries data for 2004 and 2005 together with the qualitative information will be sent before June 2007.

## 7. Concerning Right of establishment and freedom to provide services

### 7.1. Theme 50 (Tourism): Why no data has been provided?

Up to now, there was no official demand for Tourism statistics by Eurostat.

**Inbound Tourism:** There has been some work between 1996 and 1998. Departing Visitors Survey has been conducted quarterly at selected border gates since 2001. Results of this survey have been released to public at internet quarterly. Also, a publication has been published annually. Data for 1996-1998, 2001-2006 2nd quarter is available quarterly and annually. However, there is a frame problem. General Directorate of Security registers foreign and Turkish visitors according to their nationality (according to the country where the passport issued).

**Outbound Tourism:** Arriving Citizens Survey has been conducted quarterly at selected border gates since 2003. Results of this survey have been released to public at internet quarterly. Also, a publication has been published annually. Data for 2003-2006 2nd quarter is available quarterly and annually. However, there is also a frame problem in this study. General Directorate of Security registers foreign and Turkish visitors according to their nationality (according to the country where the passport issued).

### 8. Concerning the Transport statistics

## 8.1. Theme 48 (Transport): How is the compilation of transport statistics organised?

TURKSTAT is responsible for the statistics of transportation sector. Data source is the administrative registers of approximately 20 institutions. Economic statistics of transportation sector (data on costs, value added and employment) are compiled from Structural Business Statistics.

In the context of transportation statistics, road, railway, maritime, air and pipeline transformation statistics are compiled.

Road motor vehicle statistics are compiled by the General Directorate of Public Security.

Road traffic accident statistics are compiled by General Directorate of Public Security and the General Command of Gendarmerie. Lengths of highways, state and province roads data are kept in the General Directorate of Highways and the data of lengths of rural roads are kept in the Ministry of Agricultural and Rural Affairs.

Statistics on natural gas and petroleum transportation are produced by the Petroleum Pipeline Corporation.

All statistics related with the railways are compiled by the Turkish State Railways.

Data on maritime transportation are compiled by the port administrations under the Undersecretariat for Maritime Affairs.

In the context of air transportation, freight and passenger transportation in the domestic and international lines, number of foreign and Turkish aircrafts landing and taking off data are compiled by the General Directorate of State Airports Authority. Statistics on aircraft accidents and number of aircrafts according to the types are produced by the Directorate General of Civil Aviation.

## What are the plans to implement legal and voluntary requirements in different transport sectors?

Road Motor Vehicles Statistics are compiled by NUTS 3 level. Studies on compiling data on the motor volume, load capacity and horse power are still continuing.

In order to produce road freight and passenger transportation statistics, "U-NET" project is put into force by the General Directorate for Land Transport so as to record the companies which are dealing with domestic and international transport. Within this system, compilation of detailed data on road freight transport is planned.

Studies on compiling the International Regional Statistics of Rail Transport are carried out by the Turkish State Railways.

Studies on usage of classifications in registrations software are going on to use new classifications in maritime statistics.

Studies on producing statistics according to the flight stages and origin destination of the transportation are still continuing.

## What activities are going on concerning intermodality, passenger mobility and cost of infrastructure?

Within the scope of the intermodal transport, studies on compiling data on freight and passenger transfer statistics in the connection points of transportation modes are carried out by Turkish State Railways and General Directorate for Land Transport.

In order to improve intermodal transportation, it is planned to establish logistic villages which can meet the logistic requirements and suitable for technical and economic improvements, in the areas which has active road transportation that can be preferred by the users.

Also licences given by the General Directorate for Land Transport were formed under the coverage of Road transport legislation. These licences are R1 (domestic) and R2 (domestic and international). The owners of these licences are obliged to inform the Ministry of Transport about their activities and as a legal charge. Statistical data of the companies will be sent to the Ministry of Transport by July 2006 for R2 and by January 2008 for R1. It is planned to produce statistics on intermodal transport by evaluating these statistics in 2009.

Studies on initializing and generalizing the Ro-La transportation (transporting the road vehicles by train) are started by Turkish State Railways.

For the maritime, statistics on Ro-Ro transportation which belongs to the intermodal transportation is compiled.

At the issue of cost of infrastructure, the statistics as to bid prices realized by Ministry of Transport and related institutions and maintenance expenses are recorded in the registers of institutions.

### 9. Concerning the Energy statistics

## 9.1. Theme 45 (Energy): Why there is no breakdown of heat consumption?

Combined Heat and Power Statistics is one of the subjects of the USST I. Some improvements were achieved under this project. By the completion of this study, the breakdown of heat consumption of 2006 data will be available by the end of 2007.

## Why no monthly M-3 statistics (oil, gas, electricity, coal) have been submitted?

Monthly Electricity Statistics (M-3) are partially produced. Monthly Solid Fuel Statistics of Energy (coal) data are not currently compiled at EU standarts. Studies on methodological aspects of Monthly Gas and Oil Statistics (MOS) are also going on.

#### What are the plans to develop price systems?

At present, an energy price statistics system is available which meets the IEA requirements. Methodological studies are going on to produce price statistics which will be in compliance with EU standarts.

### **10.1 Concerning regional statistics**

## 10.1. When can Turkey submit census data for local administrative units?

Since most of the villages in Turkey are small scale and the population is in very small size (less than 250, 15.580 villages out of 37.366), bulk of the cells in the tables containing information on these villages will be confidential.

### <u>11. Concerning statistics in environment, consumer and health</u> protection

## 11.1. What is the situation as to the regular collection of COD, Health Care, SHA and ESAW phase 3 data and as to the EHIS (2007-2008 and then every 5 years)?

CoD statistics are collected for province and district centers by using ICD 8 classification with summarized 150 causes. There will be a pilot study for two provinces to test new CoD questionnaire in October 2006. ICD 10 will be used and the coverage of data will be completed fully by 2009.

Health care (non-expenditure) are complied by the Ministry of Health. Diseases statistics are collected ICD 10 with summarized 298 diseases since July 2005 for inpatients. There is no information on full-part time breakdown for manpower statistics. Only head-count information is available. Also, there is no information on daily cases. A pilot study will be applied for hospital statistics at 8 hospitals in October 2006. Questionnaires that will be used at the pilot study are in harmony with EU recommendations. Hospital statistics will be fully collected by 2009.

Ministry of Health conducted a national health account survey in 2003 for the 1999-2000 data. Results are in comply with the OECD System of Health Account (SHA). TURKSTAT obtained 2001-2004 health expenditure statistics only for financial agents and providers. Data are given only in the following detail:

- Medical Goods and Apparatus
- ✓ Ambulatory Treatment Services
- ✓ Hospital Services
- ✓ Social Health Care
- ✓ Research and Development Services Concerning Health Care
- ✓ Other Health Care

By 2009, health expenditure statistics will be collected that will be in comply with SHA.

Only Social Insurance Institution has collected statistics on accidents at work for insured persons since 1946. These statistics are in comply with ISCO 88 and branch of activities (for economic activity). There will be a pilot study to obtain ESAW Phase 3 data in 2006 for 2005 SII data by TURKSTAT regional offices. According to the Social Security Law (No. 5502), all social insurance institutions will be combined into one institution within three years. Coverage and missing variables problems will be solved then.

The modules of health determinants (EHDM), health care (EHCM) and background variables (EBM) will be finalized in the first quarter of 2007. Questionnaires and methodological documents will be prepared and a pilot study will be carried out in 2007. The field application of EHIS will be carried out in 2008.

## 11.2. What are the plans to improve the response rate in the Joint Questionnaire?

TURKSTAT initiated environmental statistics according to framework of the OECD core set of environmental data and indicators in 1990. OECD/EUROSTAT Joint questionnaires have been filled regularly.

Data on water, wastewater, waste, and environmental expenditure and revenues have been collected from manufacturing industry establishments, thermal power plants, organized industrial zones and municipalities via annual surveys.

TURKSTAT has been conducting surveys in all municipalities annually since 1994: Followings are the issues: public water supply by sources, wastewater discharged by receiving bodies, population served by drinking water networks/sewerage, population served by treatment plants, number, type and capacity of water/wastewater treatment plants, and amount of water/wastewater treated, population served by municipal waste collection services, municipal waste collection, disposal/recovery, medical waste collected and disposed/recovered separately, type and capacity of disposal/recovery facilities.

TURKSTAT has been conducting surveys on manufacturing industry establishments since 1992 and thermal power plants since 1994. The followings are the issues: water supply by sources, cooling water, wastewater discharged by receiving bodies, number, type and capacity of wastewater treatment plants, amount of wastewater treated, treatment sludge production and disposal, amount, type and disposal methods of hazardous and non-hazardous industrial waste.

Until 2000, data on waste were collected without hazardous/nonhazardous breakdown of waste. In 2000 questionnaires of industry sector, data were collected according to ECE draft waste classification. 2004 data were compiled according to Annex 3 of Waste Statistics Regulation.

Data on current expenditure and investment expenditure (also end of pipe technologies) have been collected from public organisations, municipalities, manufacturing industry establishments, and thermal power plants since 1997, from organized industrial zones since 2000 by TURKSTAT via annual surveys. And also environmental revenues of municipalities have been compiled since 2003.

Data from public specialised producers have been compiled since 2003, and data from private specialised producers have been compiled since 2005 according to environmental domains; water services, sewerage services, wastewater treatment services, waste services and other environmental protection services.

Related to fees and purchases; payments to municipalities or private firms for the collection, transportation and disposal of waste and wastewater treatment were compiled for the first time from industry sector for 2004.

Existing surveys on water, wastewater, waste and environmental expenditure will be continued. Methodological studies on data collection for the missing sectors in the above mentioned environmental domains will continue as it is included in USST II programme.

### **12. Concerning the Science, information, education statistics**

## 12.1. Themes 33 (Education), 34 (Culture) and 73 (Science and technology): What progress has been achieved in implementing the various surveys and what is the expected time table?

The R&D Statistics are produced by using various surveys for different sectors. The development of the R&D Statistics methodology is in process. The Technological Innovation Survey has been conducted in compliance with Oslo Manual and CIS4 methodology.

Some questions related with **life-long learning** were added to the new Labour Force Survey (LFS) questionaire in 2004. Structural indicators, obtained from LFS with this additional questions, are given as follows:

- Early school-leavers by sex
- Youth education attainment level by sex
- Life-long learning by sex

Quarterly education data from the labour force survey are also transmitted to EUROSTAT. Preparations for the data collection and implementation of survey for Adult Education Survey will be in 2007.

TURKSTAT is planning to conduct **Continuing Vocational Training Survey** in enterprises in 2008 in order to produce indicators on this subject.

In order to improve educational finance statistics, Ministry of National Education (MoNE) have two projects. One is E-Investment Project. MoNE will collect all educational investments from educational institutions (except tertiary level), from the financial year 2006. The other one is Income and Expense Information Management System Project. MoNE will collect educational incomes and expenditures from all educational institutions, via internet, at the end of financial year 2008 in line with the UOE data collection manual definitions.

Within the 2007-2011 Official Statistics Programme, some subjects in **cultural statistics** (cultural heritage, libraries and performing arts) will be revised and some other subjects (archives, books, visual arts, audio and audio visual media/ multi media) will be newly studied. The administrative registers and the address framework for all data resources will be build up. The questionnaires will be revised or newly designed. Cultural employment data will be derived from 2010 Census of Population. 2006 Household Time Use Survey data will be used for only individual participation in cultural activities (not in detail).