3

Organisation

3.1 Introduction

3.1 When the Eurostat-OECD PPP Programme was established in the early 1980s, only OECD Member Countries were covered, benchmark comparisons were made every five years and all data were collected over an 18 month period centred on the reference year. Organisation was straightforward. Eurostat was responsible for those OECD Member Countries that were also Members of the European Union and the OECD was responsible for those OECD Member Countries that were not. This division of responsibilities has changed with time mainly as the result of the enlargement of the European Union[1] (and, but to a lesser extent, of the OECD) and the sizeable jump in the number of countries participating in the Programme that occurred during the second half of the 1990s[2]. The evolution of Eurostat and OECD responsibilities is charted in Annex I which provides a brief history of the Programme.

3.2 The frequency of data collections and comparisons has changed as well. After the 1990 comparison, Eurostat and the OECD adopted the *rolling survey approach* for consumer goods and services. With this approach, data collection is continuous, but cyclical, with each cycle taking three years. The advantages of the approach are that it reduces response burden on participating countries, it enables them to include the price surveys in their regular programme of data collection and it fosters continuity of expertise in their National Statistical Institutes (NSIs).[3] Also, by "rolling" data collected in one year back to the previous year or forward to the following year, it is possible to make comparisons annually. Since 1990, Eurostat has been making comparisons every year, while the OECD, for reasons explained later, has been making comparisons every three years. The next joint comparison will be for reference year 2011.

3.3 This chapter describes the institutional framework and survey organisation in which the 2011 and subsequent comparisons will be carried out. It takes account of all the developments that have taken place since 1999. These include the division of participating countries into groups for the pricing of consumer goods and services, the two EU regulations relating to Eurostat comparisons (and, to a much lesser degree and only implicitly, OECD comparisons), the drafting and publication of a methodological manual and its subsequent revision, and the establishment of an integrated information technology (IT) system which facilitates the preparation of product lists, data entry and transmission, intra-country and inter-country validation, and the calculation and aggregation of basic heading purchasing power parities (PPPs).

3.2 Institutional framework

3.2.1 PPP Regulation

3.4 An important use to which the European Commission puts the PPPs for EU Member States involves the allocation of the Structural Funds. The overall aim of the Funds is to gradually reduce economic disparities between and within EU Member States. They account for some 30 per cent of the EU budget. The principal indicator determining allocation is PPP-converted regional GDP per capita. Thus, it is both politically and statistically important that the methods and procedures employed by the PPP Programme to produce PPPs for EU Member States are both harmonised and transparent. Methodological manuals and legislation are two ways of promoting harmonised and transparent statistics across countries within the European Union.[4]

[1] Since 1990, eight OECD Member Countries have left OECD comparisons for Eurostat comparisons, either because they became candidates for EU membership - Finland, Sweden, Czech Republic, Hungary, Slovakia and Turkey - or because they decided to harmonise their statistics with those of the European Union – Norway and Iceland. Currently, 25 of the 34 Member Countries of the OECD are co-ordinated by Eurostat. All but four – Iceland, Norway, Switzerland and Turkey - are EU Member States, although Iceland and Turkey are candidates for EU membership.

[2] The Eurostat and OECD comparisons of 1993, 1996 and 1999 covered 24, 32 and 43 countries respectively.

[3] The approach also has advantages for new countries joining the Programme. Either they can ease themselves in gradually over three years or they can adopt a "catch up" strategy by completing the survey cycle over a shorter period.

[4] Another important use of PPP data is determining the correction coefficients for the salaries of EU officials as required by Article 64 of the Staff Regulations.

3.5 In 2006, Eurostat and the OECD published a manual explaining the methods and procedures employed by the Programme at the time.[5] The manual was prepared because there was no single document covering the Programme in detail from start to finish and those directly involved in the implementation of the Programme frequently complained about the lack of such a document. The timing of the manual's preparation and publication coincided with the drafting of the *PPP Regulation* which, if adopted by the European Parliament and the Council of Europe, would require Eurostat to provide a manual describing the methods applied at various stages of PPP compilation including the methods employed to estimate missing basic information and missing parities.

3.6 The European Parliament and Council of the European Union formerly approved the PPP Regulation in December 2007.[6] The Regulation establishes the rules for the collection and validation of data for PPPs as well as for the calculation and dissemination of PPPs and related price and volume measures. Eurostat comparisons are now supported by a legal instrument which clearly defines the roles and responsibilities of Eurostat and the EU Member States as well as the methods and procedures to be followed. The Regulation requires Eurostat not only to provide a methodological manual but also to revise it whenever a significant change to the methodology is made. Since publication of the manual in 2006, there has been significant advancement in the methodology employed for education[7] as well as important revisions introduced to the methods used for collective services and construction. There have also been changes in procedures. A new survey process for consumer goods and services is in place as are the tools of the new integrated IT system. These changes are described in this version of the manual which has been revised as required by the Regulation.

3.7 The Regulation can be found in Annex II. It consists of fifteen articles and two annexes. The articles cover topics such as objective, scope, definitions, roles and responsibilities, transmission of basic information, quality criteria, periodicity, dissemination and financing. The first annex describes methodology, principally: data requirements, collection, validation and transmission; PPP calculation, publication and correction. The second annex lists the basic headings for which PPPs are to be calculated. It is not shown in Annex II to avoid duplication with Annex III where basic headings are not only listed but defined as well.

3.2.2 Responsibilities

3.8 Eurostat and OECD comparisons are a co-operative endeavour between Eurostat, the OECD and the NSIs of participating countries. Eurostat and the OECD are responsible for:

- Managing, organising and coordinating the Eurostat-OECD PPP Programme overall;
- Coordinating the provision and validation of the basic data required to calculate PPPs;
- Calculating, aggregating and validating PPPs for GDP and its component expenditures;
- Ensuring the accuracy, relevance and timeliness of results (PPPs and price and volume indices);
- Ensuring that participating countries have the opportunity to comment on results prior to dissemination and that due account is taken of any such comment;
- Disseminating of results, including explaining results and how to use them to users and potential users;
- Developing methodology in consultation with participating countries;
- Drafting, updating and disseminating the methodological manual and other documentation on methods and procedures;

5 Eurostat-OECD Methodological Manual on Purchasing Power Parities, 2005 edition, European Communities and the OECD, 2006.

6 Regulation (EC) No 1445/2007 of the European Parliament and of the Council of 11 December 2007 establishing common rules for the provision of basic information on Purchasing Power Parities and their calculation and dissemination.

7 And also in health. The output-price approach being developed for hospital services is expected to be introduced in 2013.

- Developing and updating the IT tools used by practitioners for item list management, data entry, validation and aggregation;
- Providing support to users of the IT tools;
- Convening meetings with participating countries to discuss results, methodology, work programme, etc.

3.9 Participating countries are responsible for:

- Providing the national annual purchasers' prices required to calculate PPPs according to commonly agreed standards and timetable. This involves carrying out price surveys for consumer goods and services, actual and imputed rents, compensation paid to government employees producing collective services and hospital services, and capital goods;
- Validating survey data and providing written approval of the survey results for which they are responsible once the process of data validation has been completed;
- Providing the detailed breakdown of GDP expenditures required to calculate PPPs according to a common classification;
- Participating in the meetings convened by Eurostat and the OECD to discuss results, methodology, work programme, etc.

3.10 Eurostat outsources the co-ordination of the price surveys for consumer goods and services to *group leaders*. As explained later, the 37 countries participating in Eurostat comparisons are divided into four groups for organisational reasons. Group leaders prepare product lists (which includes carrying out market research), provide assistance to countries during pre-survey and survey phases of the price collection, make annual missions to their group members, validate the prices from their countries and convene group meetings twice a year. Eurostat also outsources the co-ordination of the capital goods surveys, because these surveys require specific technical expertise. Other tasks that Eurostat outsource include the collection and validation of data for housing and government services and the collection and validation of temporal adjustment factors and expenditure weights. In all cases, it should be remembered, that Eurostat is contracting out tasks not responsibilities: responsibility remains with Eurostat.

3.2.3 Quality control and compliance monitoring

3.11 The PPP Regulation requires EU Member States to provide Eurostat with all the detail necessary to evaluate the quality of the basic information supplied for a comparison. It also requires EU Member States to provide quality reports on the price and other surveys for which they are responsible. The Regulation sets out the minimum quality standards for the basic information and for the validation of price survey results, but it has proved necessary to further define the quality criteria and the structures of the quality reports. These have been defined in a second regulation that was adopted by the European Commission in March 2011[8].

3.12 The regulation is reproduced in Annex II. It specifies the structure and content of the inventory of sources and methods that EU Member States are required to prepare for Eurostat. They are also required to update their inventory in January of each year if there have been any changes to their sources and methods during the previous year. The inventories allow Eurostat to assess whether the methods and procedures used by EU Member States meet minimum quality standards and whether they are comparable across countries. The regulation also specifies the structure and content of the reports that EU Member States have to submit to Eurostat after each survey of consumer prices. The reports enable Eurostat to assess the quality of the pre-survey, the price collection, the intra-country validation and the inter-country validation carried out by EU Member States for each price survey.

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8 Commission Regulation (EU) No 193/2011 of 28 February 2011 implementing Regulation (EC) No 1445/2007 of the European Parliament and of the Council as regards the system of quality control used for Purchasing Power Parities.

3.3 Survey organisation

3.3.1 Schedule of surveys

3.13 The consumer goods price surveys are organised following a rolling survey approach. This comprises a cycle or round of six surveys which takes three years to complete. The approach involves continuous price collection with the product lists for around one third of household final consumption expenditure being priced each year. For Eurostat and the OECD to be able to calculate PPPs for a reference year, they also require regular reporting of temporal adjustment factors at the basic heading level (to extrapolate the PPPs of basic headings for which new PPPs could not be calculated because no prices were collected during the year). Participating countries generally have temporal adjustment factors of sufficient detail and reliability with which to extrapolate the PPPs for consumer goods and services, as these are available from consumer price indices.

3.14 The rolling survey approach for consumer goods and services facilitates annual comparisons as follows. Let the starting point be the matrix of basic heading PPPs by participating country for the reference year, t. In the subsequent reference year, t+1, some of the basic heading PPPs for t are replaced by new PPPs calculated with prices collected during t+1 or t+2. The basic heading PPPs for t that have not been replaced are advanced to t+1 using temporal adjustment factors specific to these basic headings. Similarly, the basic heading PPPs for t+2 are taken back to t+1 using temporal adjustment factors specific to these basic headings. All the basic heading PPPs in the matrix now refer to t+1. By continuing the cycle of replacement, extrapolation and retropolation through t+2, t+3, t+4, etc., comparisons can be made for the reference years t+2, t+3, t+4, etc.

3.15 Of the other price surveys listed in Chapter 2, Box 2.1, the capital goods surveys are particularly expensive to conduct. To reduce this cost the OECD decided to price capital goods every three years. Eurostat adopted another solution – namely, the pricing of capital goods once every two years and estimating the PPPs for the interim year by extrapolation and retropolation. It has since returned to pricing construction projects annually using a rolling survey approach. Only equipment goods now are priced on a two-yearly basis. Eurostat organises the remaining surveys on an annual basis, the OECD every three years. A detailed description of how Eurostat uses the various price surveys in the calculation of PPPs is given Boxes 3.1A and 3.1B. In Box 3.1A, bold indicates data collected for the reference year; italics indicate data collected for a previous or a subsequent reference year.

Box 3.1A: Eurostat schedule of input data used for different reference years

Data	Survey	Reference year			
		2011	2012	2013	2014
Prices	01. Food, drinks and tobacco	*2012-1*	**2012-1**	*2012-1*	*2015-1*
	02. Personal appearance	*2012-2*	**2012-2**	*2012-2*	*2015-2*
	03. House and garden	*2010-1*	*2013-1*	**2013-1**	*2013-1*
	04. Transport, restaurants and hotels	*2010-2*	*2013-2*	**2013-2**	*2013-2*
	05. Services	**2011-1**	*2011-1*	*2014-1*	**2014-1**
	06. Furniture and health	**2011-2**	*2011-2*	*2014-2*	**2014-2**
	07. Equipment goods	**2011**	*2011,2013*	**2013**	*2013,2015*
	08. Construction projects	**2011**	**2012**	**2013**	**2014**
	09. Compensation of government employees	**2011**	**2012**	**2013**	**2014**
	10A. Housing	**2011**	**2012**	**2013**	**2014**
Quantity and quality indicators	10B. Housing	**2011**	**2012**	**2013**	**2014**
	11. Education	**2011**	**2012**	**2013**	**2014**
Expenditures	12. GDP expenditure weights	**2011**	**2012**	**2013**	**2014**
Other	13. Spatial adjustment factors	*2010*,**2011**, *2012*	*2011*,**2012**, *2013*	*2012*,**2013**, *2014*	*2013*,**2014**, *2015*
	14. Temporal adjustment factors	*2010*,**2011**, *2012*	*2011* **2012**, *2013*	*2012*,**2013**, *2014*	*2013*,**2014**, *2015*
	15. Global rate for VAT paid on capital goods	**2011**	**2012**	**2013**	**2014**
	16. Global rate for tips to waiters, etc.	**2011**	**2012**	**2013**	**2014**
	17. Annual average exchange rates	**2011**	**2012**	**2013**	**2014**
	18. Annual average resident population	**2011**	**2012**	**2013**	**2014**

Box 3.1B: Eurostat schedule of input data used for different reference years (contd.)

1. The table shows the data on which the comparisons for 2011, 2012, 2013 and 2014 will be based. Each comparison uses either new data collected for the reference year or data "rolled over" from a previous reference year or "rolled back" from subsequent reference year. For example, in 2012, the PPPs and real expenditures for 2011 will be calculated with:

   - The national or capital city prices for the consumer products covered by surveys 01 and 02 that were collected respectively in the first and second halves of 2012. The capital city prices have been converted to national prices with the spatial adjustment factors reported in 2012 for the two surveys. The national prices have been converted to annual prices with the temporal adjustment factors for 2012. The annual prices have been used to calculate PPPs for 2012 for the basic headings covered by the two surveys. These basic heading PPPs for 2012 have been taken back to 2011 with the temporal adjustment factors for 2011.
   - The national or capital city prices for the consumer products covered by surveys 03 and 04 that were collected respectively in the first and second halves of 2010. The capital city prices have been converted to national prices with the spatial adjustment factors reported in 2010 for the two surveys. The national prices have been converted to annual prices with the temporal adjustment factors for 2010. The annual prices have been used to calculate PPPs for 2010 for the basic headings covered by the two surveys. These basic heading PPPs for 2010 have been advanced to 2011 using the temporal adjustment factors for 2011.
   - The national or capital city prices for the consumer products covered by surveys 05 and 06 that were collected respectively in the first and second halves of 2011. The capital city prices have been converted to national prices with the spatial adjustment factors reported in 2011 for the two surveys. The national prices have been converted to annual prices using the temporal adjustment factors for 2011. The annual prices have been used to calculate PPPs for 2011 for the basic headings covered by the two surveys.
   - The national annual (2011) prices for the capital goods covered by surveys 07 and 08 that were collected in 2011. The prices are without VAT. They have been adjusted by the global rate for non-deductible VAT actually paid on capital goods in 2011 that was reported in 2012 (survey 15).
   - The national annual (2011) prices for compensation of government employees producing hospital services and collective services from survey 09 that were reported in 2012.
   - Either the national annual (2011) prices for rents from survey 10A or, if the rent market is small or unrepresentative, data on housing stock from survey 10B that were reported in 2012.
   - Data on student numbers by education level (survey 11) for 2011 extracted from the joint Eurostat-OECD-UNESCO education data base.
   - The GDP expenditure weights (survey 12) for 2011 that were reported in Q3 2012 for the preliminary calculation, in Q3 2013 for the intermediate calculation and in Q3 2014 for the final calculation.
   - The global rate for tips (survey 16) for 2011 reported in 2012. This has been used to adjust prices paid in restaurants and cafés (survey 04) and to hairdressers (survey 02), which were reported without tips.
   - Average annual exchange rates (survey 17) for 2011 compiled by the European Central Bank and the International Monetary Fund.
   - Average annual resident population (survey 18) for 2011 extracted from Eurostat and OECD population data bases.

2. The PPPs and real expenditures for 2012, 2013 and 2014 will be similarly calculated except that:

   - For 2012 and 2014, the basic heading PPPs for equipment goods will be estimated by extrapolation and retropolation using the 2011 and 2013 basic heading PPPs for 2012 and the 2013 and 2015 basic heading PPPs for 2014.

3.3.2 The 2011 comparison

3.16 Together the Eurostat and OECD comparisons for 2011 will cover the 47 countries listed in Box 3.2. Eurostat is co-ordinating the collection of data in 37 countries: 27 EU Member States, three Member Countries of the European Free Trade Association (EFTA), one Acceding Country, four EU Candidate Countries and two Western Balkan countries. The OECD is co-ordinating the data collection in ten non-European countries of which nine are OECD Member Countries. The cycle of price surveys for the 2011 comparison started in 2010 and will finish in 2012. But data collection will not be complete until the third quarter of 2014 when countries report their final detailed expenditure estimates of GDP for 2011. Preliminary results of the comparison will be released at the end of 2012. Intermediate results will be released at the end of 2013 and final results at the end of 2014. The intermediate results will be included in the world comparison that the Global Office of the International Comparison Programme (ICP) in the World Bank will be publishing at the beginning of 2014.

Box 3.2: Countries participating in the 2011 round of price surveys

EUROSTAT (37 countries)	27 EU Member States	*Austria*, *Belgium*, Bulgaria, Cyprus[*], *Czech Republic*, *Denmark*, *Estonia*, *Finland*, *France*, *Germany*, *Greece*, *Hungary*, *Ireland*, *Italy*, Latvia, Lithuania, *Luxembourg*, Malta, *Netherlands*, *Poland*, *Portugal*, Romania, *Slovakia*, *Slovenia*, *Spain*, *Sweden*, *United Kingdom*
	3 Members of EFTA	*Iceland*, *Norway*, *Switzerland*
	1 Acceding Country	Croatia
	4 EU Candidate Countries	FYR of Macedonia, Montenegro, Serbia, *Turkey*
	2 Western Balkan Countries	Albania, Bosnia and Herzegovina
OECD (10 countries)	10 Other countries	*Australia*, *Canada*, *Chile*, *Israel*[**], *Japan*, *Korea*, *Mexico*, *New Zealand*, Russian Federation, *United States*

- Although not shown, Kosovo (as defined by the United Nations Security Council Resolution 1244 of 10 June 1999) also participates in as much as it conducts the price surveys for consumer goods and services.
- The 34 OECD Member Countries are those in *italics*.
- Iceland is also a candidate country.

[*] *Footnote by Turkey:* "The information in this document with reference to « Cyprus » relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the 'Cyprus issue'".
Footnote by all the European Union Member States of the OECD and the European Commission: "The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

[**] The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

3.3.3 Organisation of groups

3.17 Prior to 1999, a meeting was held before each price survey for consumer products at which participating countries, together with Eurostat and the OECD, selected the products to be priced during the survey. An essential input into the selection process was the pre-survey that participating countries were required to conduct to familiarise themselves with the situation in their domestic markets with regard to the products about to be surveyed. Experience showed that the effectiveness of these meetings depended on the number of products to be considered, the number of countries at the meeting and the thoroughness of the pre-survey conducted by countries prior to the meeting. The three variables interacted. As the number of countries increased, the number of products increased. As the number of products increased, the quality of pre-survey work decreased.

3.18 When the number of countries Eurostat co-ordinated rose from 21 to 31 in 1999, it was clear that meetings to select consumer products involving 31 countries reviewing some four to five hundred products per survey would be unmanageable and detrimental to the quality of the comparison. For the purposes of organising the surveys of consumer prices, Eurostat divided the 31 countries into three groups. Each group was headed by a group leader. The composition of the groups, the group leaders and their subsequent evolution is described in Annex I. Since 2010, countries co-ordinated by Eurostat have been divided into four groups with the countries co-ordinated by the OECD constituting a fifth group. Box 3.3 gives the composition of the five groups and the group leaders for the 2011 comparison. Note that group leaders are only involved in the six price surveys dealing with consumer goods and services.

3.19 The group meetings have also evolved. From being the place to decide on the products to be priced in the forthcoming survey, they have become meetings in which countries evaluate previous surveys, validate the prices collected in recent surveys, adopt the products list and survey guidelines for the forthcoming survey and discuss the way the future surveys should be organised. In addition, group members exchange experiences and discuss the problems they encounter in their daily work.

Box 3.3: Country groups and group leaders for 2011 comparison

EUROSTAT				OECD
Northern group	Western group	Eastern group	Southern group	OECD group
Denmark Estonia Finland Iceland Latvia Lithuania Norway Poland Sweden	Belgium Czech Republic France Germany Ireland Luxembourg Netherlands Switzerland United Kingdom	Austria Bosnia and Herzegovina Bulgaria Croatia Hungary Montenegro Romania Serbia Slovakia Slovenia	Albania Cyprus FYR of Macedonia Greece Italy Malta Portugal Spain Turkey	Australia Canada Chile Israel Japan Korea Mexico New Zealand Russian Federation United States
Group leader	Group leader	Group leader	Group leader	
Finland	Netherlands	Austria	Portugal	

3.3.4 Integrated information technology system

3.20 Eurostat is responsible for developing and updating the information technology (IT) tools used for its comparisons. As a result of a major overhaul recently completed, all product selection, data collection and validation, and PPP calculation are carried out in one integrated set of IT tools. The most important tools are:

- *The Item List Management Tool* (ILMT): The on-line tool for the preparation of the item lists, the carrying out of the pre-survey by countries, and the translation of item lists by countries. Used for all surveys.

- *The Data Entry Tool* (DET): An off-line tool (meaning that it is installed in user's own PCs) for the recording and intra-country validation of the price observations and the preparation of the data file to be sent to Eurostat. Used for all surveys except the capital goods surveys.

- *The Validation Tool* (VT): The on-line tool for the inter-country validation of the price observations, primarily by means of Quaranta tables. Used for all surveys, including the capital goods surveys.

- *The Aggregation Tool* (AT): the on-line tool for the aggregation of basic heading PPPs, the estimation of reference PPPs, the extrapolation of survey PPPs to non-survey years and the preparation of dissemination files.

Eurostat is also responsible for providing participating countries with the support they need when employing these IT tools.

3.21 In addition, when reporting data to Eurostat, participating countries are required to do so via eDAMIS (electronic Data files Administration and Management Information System), Eurostat's central and secure data transmission system.

3.22 The diagram in Box 3.4 depicts the connections between the various IT tools described above and the way data flow through the system.

Box 3.4: Architecture and data flows of the integrated PPP system