ICP Technical Advisory Group

First meeting: 21 – 23 May, 2003
World Bank, Washington D.C.

Attendees

TAG
Edwin Dean: Chair
Silke Stapel: Vice-Chair
Alan Heston
Paul McCarthy
David Roberts
Sergey Sergeev
Kim Zieschang

ICP Global Office
Fred Vogel
Yuri Dikhanov
Edie Purdie
Jinsook Lee

Apologies

Erwin Diewert: Vice Chair
Prasada Rao

Item 0.1: Welcome by Shaida Badiee, Director, Data Development Group, World Bank

1. Ms Badiee welcomed the Technical Advisory Group to the World Bank. She said that she was very pleased that such a knowledgeable group will provide advice to the ICP Global Office. She noted that the ICP is a challenge and that the successful resolution of technical issues is fundamental to the program.

Item 0.2: Overview of progress to date

2. The Global Manager, Fred Vogel, provided a PowerPoint presentation illustrating problems that occurred in previous rounds; what has been achieved so far in this current round; and what remains to be done. The ring comparison; the scope, coverage and timing of prices, together with the preparation of Structured Product Descriptions; and the effects of constraints of both funds and time are among the issues that the TAG needs to consider. He thanked Eurostat and OECD for their help

to date, and stated that this help has been critical to the progress made by the Global Office.

3. A recent article in the UK Guardian newspaper referred to the World Bank's PPP computations and stated that these are of little use in poverty-monitoring efforts. Ms Badiee and Martin Ravallion, of the Bank's Research Group, have sent a letter to the Guardian refuting these claims. TAG members acknowledged the need for PPP practitioners to work closely with the Bank's poverty monitoring team. (Discussions during a lunch involving Mr. Ravallion, Ms. Badiee, and TAG members are recorded in an Annex, later in these minutes.)

4. The effect of SARS on the Asia ICP program was discussed and concern was raised about any further postponement of meetings for that region. The next meeting is due to take place on June 18-20 with the heads of the national statistical offices, followed by the workshop with the price statisticians and national accountants beginning on 28 July.

5. In discussion two other issues were aired: first, the Global Office has been asked to consider the measurement of change over time in PPPs: it is important to set out theoretically what this should entail (in terms of bases, composition and weights etc) before attempting to do this practically. Second, when defining items to be priced, quantifying the representivity of an item is complex and can not be done solely through an examination of the number of outlets through which the item is available—an item confined to one store may still be very popular within a country.

Item 0.3: Role of the Technical Advisory Group

6. The Chair, Edwin Dean, noted that the TAG is not the ultimate authority for the ICP (the Executive Board has that role) and thus the group should avoid too much discussion of management and implementation issues. TAG has two vital functions: first, it should render advice on technical issues, over the next three years, to the Global ICP office and to regional offices—both on its own initiative and in response to requests for guidance. Second, it should perform the function of independent evaluation of the ICP process; this second function will be particularly relevant around the time that PPP data are released (2006), but may also be appropriate at an earlier time. (The last comment in effect seconded an earlier statement by Fred Vogel.)

7. The TAG Chair proposed that the group meet between one and three times a year. The Global Office may meet with the TAG chair and vice chairs more often, if necessary. To facilitate electronic discussion the Global Office is setting up a password protected discussion site solely for TAG members' use.

Item 1: Data collection and estimation of parities at basic heading level. Consideration of EKS and SPDs (structured product descriptions).

8. The EKS method was favored, though the use of the CPD method without hedonics may be used in some circumstances. These two approaches were favored over the hedonics-CPD method. However, the hedonics-CPD may be considered for later rounds (see below).

9. In some countries, confidentiality requirements limit access to the prices recorded and their subsequent transmittal to others outside the national statistical system, such as the Regional and Global Coordinators. In these cases, countries are likely to enter the national annual average instead of individual observed prices; this practice would limit the analytical value of the whole dataset. Therefore, it is recommended that for these countries ICP staff should seek exceptions to gain access to the raw data. (TAG members noted that in the U.S., for example, a sworn agent can get access for specific purposes if confidentiality is guaranteed.)

10. The TAG discussed products to be priced and the preparation of SPDs. Members discussed the extent of work needed at the national, regional and global levels to finalize the survey list of products to be priced in each country. Identifying products that are both representative and comparable across countries will take much liaison between the coordinators. The Global Office and regions are preparing the first set of 800 Structured Product Descriptions for this purpose using the US Bureau of Labor Statistics' consumer prices survey check list as a beginning point. The burden of transmitting and editing these either by hardcopy or electronically was discussed: web form and excel spreadsheets were favored but it was noted that some countries may find paper copies easier to manage. In matching products across countries it was agreed that certain characteristics should be considered a priority and that others are less relevant. E.g., type of outlet may not need to match exactly (example given of a product sold at an Indian open market being sufficiently comparable to the same product sold at a Thai rural supermarket). It was noted that the BLS specifications of characteristics are not necessarily suitable for every country or region. The specifications have to be adapted to regional market conditions in the process of developing the regional product lists using the SPD approach.

11. A two-step process was defined for the finalization of the SPDs. The two stages were referred to as the "market study" and the "pre-survey questionnaire". The market study will be carried out with the participation of a small sample of representative "market study countries" in each region; this will help confine the amount of work necessary. The steps involve the regional coordinators and the national statistical offices. In outline, the "market study" steps are: 1. Distribution of a set of SPDs to the small number of representative countries in each region. The initial set of SPDs will apply to food and clothing only; SPDs for other goods and services will be distributed later. 2. After responses from each country to this initial set of SPDs, the regional coordinator will see which of the initial SPDs are available in the

representative countries. The Regional Market Study may, for example, take the form of a series of sequential country visits that arrives at a list of those SPDs that are available for purchase in the representative countries of the region. 3. Through this process, the regions will settle on a specific group of SPDs, some of them more tightly-specified than the original group.

12. The "pre-survey questionnaire" process will begin after the completion of the market studies. 1. Starting with the results of the market survey, the pre-survey questionnaire will list the products, each of which has been chosen from a specific SPD, and which have been suggested for pricing in the region. 2. The pre-survey questionnaire list of products will then be circulated to all countries in a region. 3. Countries will respond to the pre-survey questionnaire, indicating which of these products actually can be purchased and reliably priced within their countries; this will lead to new, country-specific, lists of products. This process will lead to more tightly-specified SPDs. 4. These new lists will be taken to regional meetings in December 2003. (In some cases, these lists may be examined and discussed through exchanges between countries and the regional office, and meetings may not be necessary.) At these meetings, a final list of products—each related to the various SPDs—will be produced; this new list will be specifically adapted to the region. This work is to be completed by December 2003.

13. The market studies and the pre-survey questionnaires may lead to new SPDs, not among the SPDs originally developed in the Global Office. If this happens, the new SPDs will be assigned to one of the basic headings, in order to preserve the classification system.

14. The primary effort should be to have the product lists and specifications for food and clothing items prepared for data collection to start on April 1, 2004. Data collection for the remaining basic headings will begin on July 1, 2004.

15. The remaining work on the initial coding and preparation of the SPD formats will be done in the Global Office so that the regional coordinators can concentrate on the preparation of the product specifications.

16. Following this TAG meeting, the Global Office should prepare a set of guidelines for the regional development of tightly-specified SPDs. These guidelines will be consistent with the broad guidance provided by this TAG meeting and described above, but will go into more detail concerning the SPD process.

17. **Recommendation.** The Global Office, the regional coordinators, and the countries should follow the above guidelines for the development of the regional product lists, using the SPD format.

18. The TAG discussed how to obtain national average prices. In most Eurostat/OECD countries, the national average prices have been obtained from collection in the capital cities and the application of spatial adjustment factors. The spatial adjustment

factors are based on the relationship between prices, at the basic heading level, between capital cities and national average prices. The adjustment factors are estimated by the countries' national statistical institutes. (For housing, genuine national average prices are available.) To improve these spatial adjustment factors, Eurostat is currently investigating urban-rural price differences. Studies carried out in India by Deaton and Tarozzi and Coondoo, Majumder and Ray have examined both rural-urban and regional price differences.

19. It was pointed out that many countries' CPIs are based solely on their capital cities. For some products such as white goods there is little diversity in prices across the country so the capital city is adequate. However there is more variation in goods consumed on a daily basis, and in some services and housing. Differences can occur between the capital city and the regions, and between rural and urban areas.

20. **Recommendation**: TAG agreed, first, that national average prices should be requested, and that countries be asked to clarify how they obtained these and what geographical collection took place, or how spatial adjustment factors have been estimated. Regional Coordinators should be consulted on how best to ensure that countries take this into account and what guidelines would assist in this process and assessment. Second, countries are also requested to explain how their national average prices have been put on an annual basis. Again the Regional Coordinator will assist in this process and assessment. The Handbook will need to provide recommendations for price collection within the country (capitals only, main towns, etc.) and during the course of the year (monthly, quarterly, a specific month, etc.) The Handbook should also provide guidelines for using CPI data, for example, to prepare the national average prices.

Item 2: Classification system: Definition and number of basic headings and related main aggregates. Problems with expenditure weights.

21. Potential problems occurring with countries that have insufficient expenditure weights were discussed. Countries should be omitted from the program if it proves impossible to estimate expenditure weights. However, it may be possible that expenditure allocations at the basic heading level can be derived from older expenditure structures without great loss of precision. Also, countries with inadequate measures of the level of total GDP may be omitted from the program as linking with other countries would not be possible.

22. "Own-account production" should be included, on a basis comparable to other expenditure estimates, in the derivation of expenditure weights. To ensure that countries have made estimates of own-account production, countries should be asked about such estimates, at least for basic headings for which the share of own-account production is potentially high. The request for these explanations should be made when countries provide their expenditure weight data.

23. To initiate work on expenditure structures, countries will be asked to provide the most current and detailed expenditures structure information currently available. This information can be analyzed, at the regional or Global level, to determine whether, for particular countries, technical assistance is necessary to improve data on the level and structure of GDP. This is very important as countries finally will be ranked worldwide by their volume indexes, not by their PPPs.

24. **Recommendation**. The OECD minimum classification—155 basic headings (BH)—should be followed by all countries in the ICP. They have the freedom to disaggregate further if re-aggregation to the 155 BH level is maintained (i.e. the re-aggregation should be additive). Countries cannot use weights aggregated at a higher level than the OECD minimum classification. The regional and national coordinators, alongside national accountants, should investigate this issue; the Global Office could send out a questionnaire to facilitate this process. The Global Office should arrange for the resources needed for the analysis of expenditure data and for subsequent technical assistance in the area of national accounts.

25. The "catch-all" [others] category in price collections is often ill-weighted. Within the ICP it will be difficult to compare this category across countries; so staff should avoid applying too great a weight. A reference PPP may be used for this.

26. **Recommendation**: Regional Coordinators should be made aware of this issue.

27. Net exports, change in inventories, net purchases abroad, and some other basic headings can have negative values. On occasion, even elements of GFCF can have negative values. Special treatment, during the aggregation procedure, is needed for BHs with negative values. This is especially important for the GK method, while the EKS method is less sensitive to this problem. This problem requires more care now than in the recent past because the new ICP/OECD GDP classification requires separate presentation of so-called "balancing categories" (e.g., separate listing of "exports" and "imports" is now required, in place of "net exports"). Presently the Eurostat/OECD procedures use exchange rates to overcome this problem.

28. **Recommendation**: the ICP Handbook should include a discussion of this problem. Countries will be asked to collect total imports and exports and, where appropriate, detailed expenditure data for other headings. This problem requires research and the Global Office will lead the handling of this analytical issue. (See also the discussion of this problem under Item 7, the Research Agenda, below.)

Item 3: How to price government services, health and education (both public and private), rents, construction and major equipment items.

29. Broad agreement on the treatment of <u>collective services</u> provided by governments was achieved at the March 2002 Expert Group meeting. The conclusion was as follows: "For general government the base system is to use salary comparisons using

detailed occupational characteristics. The equal productivity assumption underlying this approach is the default approach."

30. For health and education services provided by government to individuals, it was recommended that the Global ICP follow Eurostat/OECD procedures. The ICP team should be aware, however, that there is a danger of grossly inflating these services in countries like India and China. To the greatest extent possible, the ICP should use market prices for health and education services; in some countries, prices for a fairly wide range of medical services are available.

31. **Recommendation**: investigate, through the research agenda, a quality adjustment procedure which takes into account the differing standards of health and education services between countries. The research should concentrate on what practical measures to take (i.e. indicators to collect) rather than a theoretical discussion.

32. The treatment of housing rents may differ according to whether there is a rental market in the country. If there is not, then imputed rents can be calculated using a user cost approach and the volume estimated directly from housing stock. The treatment of imputed rents for owner-occupied housing may differ according to whether there is a rental market in the country. 1. If there is a national rental market, it is recommended that rental comparisons be made of comparable dwellings and the PPP derived from that exercise be applied to owner occupied housing. 2. If there is only an urban rental market, it is recommended that rental comparisons be made of comparable dwellings and the PPP derived from that exercise be applied to owner occupied urban housing. 3. If the rental market does not represent the stock of owner occupied housing, it is recommended that user costs of various specifications of dwellings be used for comparisons with other countries. (It may be useful to examine the phase III report (World Product and Income—this may be found on the World Bank website), table 2-9, p. 56; in particular, refer to a set of cells regarding rents in this publication.)

33. There are two broad possibilities available for calculating PPPs for investment on equipment:

(i) an "adjusted exchange rate" approach may be applied for imported equipment. It may prove legitimate to apply this approach to all equipment in those countries where imported equipment is a very high proportion of the total; or

(ii) specification pricing for domestically produced equipment.

34. The Global Office will develop the specifications for equipment prices and the detailed procedures to be adopted for the adjusted exchange rate approach, in close co-operation with the regional offices. The TAG will consider the latter once the procedures are set out.

35. For construction, the Global Office will develop an approach using bills of quantities,

following along the lines of the Eurostat/OECD "truncated bills of quantities" approach.

36. **Recommendation:** The TAG recommends the implementation of the procedures described above for the activities discussed under Item 3.

Item 4: Ring countries and linking.

37. The TAG emphasized the necessity of the ring comparison to ensure the overall quality of the ICP results. It emphasized, too, that the ring comparison will be organised using the "matched-product-approach" in this round. Later rounds of the ICP may involve hedonic techniques. Ring countries should be representative of their regions in terms of price and expenditure structures (this conclusion arose from previous studies of global comparisons). The TAG agreed that the main function of the ring countries is to provide a link of price parities at the basic heading level. It is important, therefore, that a ring country have a wide range of goods and services that are likely to be fund in ring countries in other regions.

38. There are two principle possibilities for how the ring can be organised, which have different resource implications and require different workloads from the ring countries:

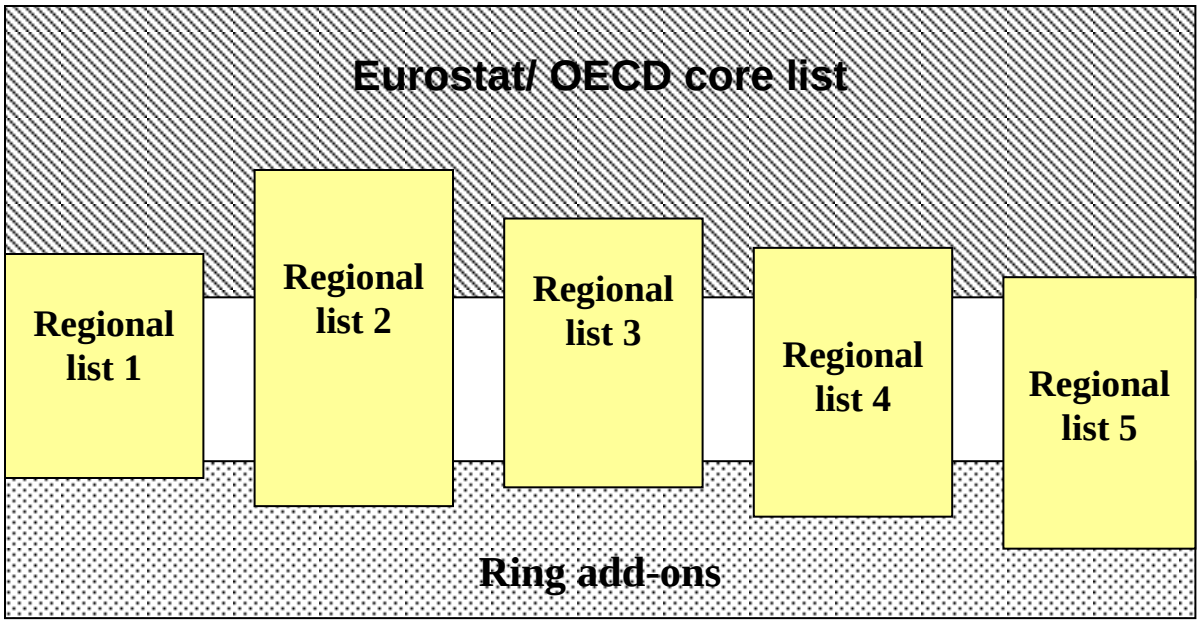
(i) The ring countries price a fully independent ring-list, consisting of as many overlap products as possible between them. This would require ring countries to price at least two full lists: the ring list and the list of their region. If they are an OECD member, they would have to price the Eurostat/ OECD list in addition. This option would require building the ring list <u>after</u> the regional lists are established and, therefore, lead to timing problems, as the pricing for the ring list should be done together with the pricing for the regional list; or

(ii) The Eurostat/ OECD list is taken as the starting point for a Ring list and items of other regions are added on for pricing by ring countries. These "add-ons" have to be selected carefully to ensure equi-representivity and un-biased PPP. Ring-countries which are not members of the OECD would be asked to price, in addition to their regional list, the Eurostat/ OECD list and the "add-ons". Ring-countries which are OECD members would be asked to price, in addition to the Eurostat/ OECD list, the add-ons for the ring. As the core Eurostat/ OECD list already exists, the work on the "add-ons" and the market study visits to the ring countries could start without delay. (However, see the discussion below of the current status of the Eurostat/OECD list.) Particularly, the non-OECD ring countries would have to be visited first to evaluate the extent to which they are able to price the Eurostat/ OECD list.

39. **Recommendation:** The TAG chose the second alternative, the use of the Eurostat/OECD list as the starting point for the ring comparison. This alternative achieves the goals of the ring country comparisons with a smaller burden on the ring

countries. The ring comparison will be organised using the "matched-product-approach".

40. The picture below summarises the relations between different types of lists, under the procedure where the Eurostat/OECD list serves as the starting point for the development of the list for the ring. There will be different degrees of overlap between this Eurostat/OECD core list and the regional lists, and the regional lists and the ring add-ons. The size of the overlap finally determines the overall pricing workload of individual countries.



41. The resulting pricing workload for different types of participant countries in the ICP is given in the table below.

Type of ICP participant (number of countries)	**List(s) to be priced**		
	Regional list	**Eurostat/ OECD**[1]	**Ring add-on's**
Non-member OECD, no ring-country	**x**		
OECD Member, no ring-country		**x**	
Eurostat co-ordinated countries, no ring-country		**x**	
Non-member OECD, ring-country	**x**	**x**	**x**
OECD Member, ring- country		**x**	**x**
Eurostat co-ordinated countries, ring-country		**x**	**x**

42. The work on the ring-list should start without delay and with appropriate resources to allow for missions to about 18 countries in very short time. The work involves evaluating the extent to which non-OECD ring-countries can price the Eurostat/ OECD list and the definition of the ring add-ons to be added to the core list to represent the markets of the non-OECD ring-countries.

43. The process for developing the final ring list will be similar to the one for the establishment of the regional lists: it will involve a market study, a draft list, and a final list of items to be priced. From this perspective, the ring-countries form an additional region of the ICP.

44. The pricing for all types of lists should happen at the same point in time.

45. The TAG discussed the selection of the ring countries. It defined the following criteria as guidance for its discussion about possible candidates for being a ring

[1] According to normal survey cycle.

country. It was understood that not all possible candidates would be equally strong with regard to all criteria:

(i) having developed markets and a open economy;
(ii) having a wide range of goods and services that are likely to be found in ring countries in other regions;
(iii) being able to participate in the full GDP comparison;
(iv) being able to conduct the rental survey;
(v) having acceptable price data and expenditure weights;
(vi) being able to derive annual and national average prices;
(vii) willingness to act as ring-country.

46. Based on the criteria above, the following candidates and possible replacements are proposed.

Region	**Candidates for ring countries** (possible replacements)
Latin America	Mexico, Chile, Costa Rica
Africa	South Africa, Senegal, Tunisia
Asia	Pakistan, Singapore, (India), (Thailand), (Malaysia)
West-Asia	Jordan, Oman, Egypt
CIS	Russia, Ukraine
Eurostat/ OECD	US, (Australia), UK, Slovenia, (Estonia), Japan

47. **Recommendation:** The Global Office will discuss the proposals with the Regional Coordinators; will contact the candidates officially very soon (with an indication of financial support, where needed; and will ask for their agreement. The Global Office and IMF will undertake special efforts to get the US on board as a ring-country.

Linking the ring

48. **Recommendation.** The TAG recommended that basic heading parities for the ring countries be estimated from the product prices of the ring countries. This means that for the ring countries a matrix of fully transitive and multilateral PPP will be established. The method to be applied does not need to be decided yet, but there was a

preference for an EKS-type of method. It was noted that, however, the EKS and the CPD (without hedonics) yield very similar results.

Linking the countries in the regions

49. **Recommendation.** The recommendation, above, for the ring applies also for the regions. If a region decides to work with sub-regions, they will be linked at the basic heading level, based on product-level comparisons carried out for a set of link countries.

Linking the ring with the regions

50. The TAG decided that the ring-countries in a region and the other countries in their region will be linked at basic heading level.

51. For this purpose, scaling factors are calculated at BH level as follows:

(i) At BH level, the factor of the average PPP of the ring countries belonging to a region to the average PPP of all ring countries is established. The unweighted geometric mean will be used for this calculation.

(ii) At BH level, the factor of the average PPP of the ring countries belonging to a region to the average PPP of all countries in the region is established. The unweighted geometric mean will be used.

(iii) At BH level, the scaling factor for countries in the region to the ring is established as ratio of (i) and (ii) above.

52. Given the procedures just described, it will be possible to express the basic heading parities in each region in a numeraire currency. If, for illustration, the US dollar is the numeraire currency, the ring country basic parities will provide a link to express the basic heading parities in each region in relation to the US dollar.

Aggregation above BH level

53. The steps described above provide a basis for allocating the world GDP, developed from a world aggregation, among the world's regions. They also provide the basis for allocating the regional GDP among the countries of a region.

54. The TAG was of the opinion that at this stage there is no need to decide immediately on an aggregation method above BH level. The possible methods include the EKS, GK and a number of other possibilities. (For further discussion of this issue, see Item 8 below in these minutes.)

55. It is however important that finally only one set of official results will be published. The OECD approach to publishing EKS and GK results for different analytical purposes maybe considered.

56. The TAG concluded that when linking regions to the world, regional fixity will be applied.

57. **Recommendation.** The TAG recommends the application of the procedures described above for linking the ring with the regions and for determining world and regional GDP.

58. Some TAG members stated that they believe there is a need for further thought and/or research on the Ring Comparison approach. The problems that they believe need further consideration include the following: (1) The Eurostat/OECD list. It was noted that the current Eurostat/OECD list refers to three different years, 2001-2003, due to the rolling benchmark approach applied. In effect, some products (especially branded durables and semi-durables) probably will not exist in 2004 and 2005 (although the lists for food and clothing will be available this coming fall). The use of this list as a core list for the Ring Comparison is, therefore, a kind of moving target. (2) Timing of market studies of Ring countries. There is some doubt about the feasibility of conducting missions to 15 or 18 Ring countries in the next few months to determine the "add-on" lists. However, this problem may be mitigated if the Regional Coordinators were to include the Ring countries in the regional market studies. The Ring countries may qualify as appropriate candidates for the initial market studies, because they will tend to be countries with large diverse markets. (3) Possible bias in U.S. prices for "add-on" products. There appears to be a need for the U.S. BLS to use hedonics extensively in estimating prices for non-OECD products in the ring list. These hedonic regressions may have to be based on items that are fully representative of the U.S. market. These prices, therefore, would tend to be lower than prices provided by countries which price the products directly, because these countries will be making compromises between representivity and comparability in selecting the products that they price. Hence, U.S. prices may be biased downward.

Inclusion of Non-European OECD countries in the regional comparisons.

59. The issue is whether Australia, Korea, New Zealand, and Japan should be asked to take part in the Asian comparison which would involve them in pricing items on the list prepared for that region. Several factors were discussed before coming to a recommendation.

60. These countries are routinely involved in the OECD comparison, with PPPs computed and published based on their comparisons with countries across the OECD. In other words, the relative sizes, rankings and per capita measures are based on the products matched with those from other countries in the OECD comparison. Their inclusion in the Asian comparison with a different group of countries with different economic structures could change the PPPs and the relative rankings of these countries, compared with the outcomes measured and ranked by the OECD

comparison. Australia and New Zealand, because of their market structures, would have difficulties pricing the Asian list as well. (Australia was scheduled to participate in the Asian region in the 1980 ICP but was not able to do so because of the difficulties encountered in pricing a significant number of items on the Asian list.)

61. The Ring Comparison described above, and recommendations regarding its use, were revisited. It was agreed that the Ring Comparison with the countries as recommended would provide a proper linkage of the Asian comparison with the rest of the world and that results for the four Asia/Pacific region OECD countries will be able to be incorporated into the regional results.

62. **Recommendation**: Australia, Korea, New Zealand, and Japan should not be asked to price the regional Asian lists with a view to being directly included in the regional comparison. However, Japan will be asked to be one of the Ring Countries. Australia may also be asked to take part in the Ring Comparison depending on the extent of participation of other non-European OECD countries in the Ring comparison.

Item 5: Timing and coverage of next ICP round.

63. The following are the main steps to be taken prior to the beginning of price collection:

- developing product lists;
- working out how best to sample products and outlets;
- identifying methods of adjusting for regional differences in price levels to arrive at national average prices, given the fact that in many countries it will not be possible to collect prices from rural areas;
- identifying methods to adjust to annual average prices, including the frequency of pricing in 2004-05; the use of the CPI, etc.
- recruiting and training price collectors.

64. It was noted earlier that the TAG is to focus mainly on technical matters, rather than on managerial or administrative issues. Nonetheless, the TAG felt compelled to review the work plan and available resources as they affect the technical program. Two issues are a concern—staffing and funding. One conclusion reached, based on input from those familiar with the requirements of managing a large statistical program, is that more technical staff will be needed in the Global Office. An important requirement of these staff is that they should be prepared to stay for the duration of the project, including some for the evaluation during 2006. At present, no-one is dedicated full-time to the work necessary to set up the ring comparison. There is also an urgent need for an office manager who can handle all aspects of the ICP work and make decisions while the global and deputy global managers are out of Washington on missions. Further, there is a need to add staff to work full-time on

solving problems relating to national accounts and to developing GDP expenditure weights. This requires the addition of 2 or 3 full-time staff persons with long-standing national accounts experience.

65. Various options were discussed concerning the trade-off between the resources likely to be available for running the central operations and the requirement for a full ICP comparison by all countries capable of doing so. Alternatives considered were requesting extra staff and funding, reducing the number of countries participating, restricting the level of the comparison to actual final consumption expenditure (AFCE) rather than GDP, and adopting a rolling program of price data collection. Each of these options was discussed in more detail.

66. **Recommendation**. The TAG suggested that the Executive Board be informed of the urgent need for a full complement of staff to be recruited for work in the Global Office in Washington and also of the need to address funding shortages to ensure the full ICP can go ahead as planned.

67. The TAG considered the second option, reducing the number of countries participating in the ICP. It decided that the disadvantages of reducing the number of countries outweigh the likely savings; hence, this option was not considered in any detail. The TAG also noted a comment that, at its first meeting, the Executive Board was adamant that the number of countries participating in the ICP not be reduced.

68. **Recommendation**: The number of countries participating in the ICP should be maintained at a high level and other options for reducing the resources required should be investigated.

69. Reducing the level of the comparison from GDP to AFCE (Actual Final Consumption Expenditure of Households) was considered as a possible fall-back position to cope with insufficient resources and was debated in some depth. The main advantage of this approach is that the difficult and resource-consuming areas of investment and parts of government services would be outside the scope of the comparison. In particular, construction prices would almost certainly be provided under a consultancy arrangement rather than by the participating countries and, in a large number of the developing countries, the prices for equipment would be calculated using the adjusted exchange rate approach, as developed directly by ICP staff or by a consultant. Therefore, the direct costs of hiring a consultant or World Bank staff would be saved by restricting the scope of the comparison in this way. On the other hand, the savings would be reduced somewhat because two significant parts of government final consumption expenditure (health and education) are still within the scope of AFCE, even though they are not in Household Final Consumption Expenditure (HFCE). The main disadvantage is that the PPP for AFCE would probably be applied to GDP by users interested in making comparisons at that level, and experience has shown that there can be significant differences between the PPPs for AFCE and the investment and government components of GDP and therefore for total GDP itself in some cases.

70. **Recommendation**: It is too early to decide if this fall-back option to save resources needs to be considered more closely. It will be re-examined at a later meeting of the TAG, if necessary.

71. Several ways were discussed of possibly staggering the prices collection to reduce the impact on both NSOs and the Global Office. They ranged from a relatively minor change in the timing of the HFCE prices collection to a fundamental revamp of the whole collection timetable, with significant implications for the timing of the completion of the ICP. The minor change is to collect food and clothing prices between April 2004 and March 2005, as currently planned, but to collect the rest of the HFCE components between July 2004 and June 2005. Government salary details could be collected in 2005 and the timing of collecting the investment price data would remain as the second half of 2004, in respect of the mid-point of 2004. An extreme alternative was also briefly discussed: to collect prices for food and clothing between July 2004 and June 2005; to collect the rest of HFCE between July 2005 and June 2006; and to collect investment and government prices between July 2006 and June 2007. This alternative would have a major impact on the timeliness of the final ICP products.

72. A major problem in relation to these proposals is that, to be feasible, they would require time series CPIs at a detailed level. Such time series are used by the OECD and Eurostat for their rolling program of price collection. Such an approach requires CPIs at the 110 ICP basic heading level for consumption, in order to project prices collected in respect of periods other than the ICP reference year. In many countries, the lack of sufficiently detailed CPIs currently would prevent the use of a rolling program for collecting prices.

73. **Recommendation**: The TAG reiterated its earlier decision regarding the collection of prices for food and clothing between April 2004 and March 2005, and for price collection for other HFCE components between July 2004 and June 2005. No other changes should be made to the currently proposed timing for collecting prices, unless some significant problem occurs—e.g., the spreading of SARS or the non-availability of essential financial or human resources—that will make changes unavoidable.

74. Possible ways of tackling some problem areas were discussed. Rents and medical services have proven to be problematic in the past and are likely to be difficult and costly to sort out. Eurostat has been implementing successfully the collecting of volume data for rents and calculating the PPP for rent by dividing current price rents as reported in the national accounts by directly-estimated volumes. This direct volume estimate for rental services was done for countries not having a representative rental market due to a very high level of owner occupancy or state rent regulation. Medical services is also a very difficult area; Kim Zieschang has approached the World Health Organisation (WHO) for assistance. The WHO is due to respond on possible alternatives in July 2003.

75. **Recommendation**: These issues should be revisited at the next TAG meeting.

Item 6: Review of the ICP Handbook

76. Some general comments were offered on the ICP Handbook. There should be a set of references to guide the reader to the extensive literature available regarding PPP theory and methods; this literature has expanded greatly in recent years. It was also agreed that a glossary will be needed. Silke Stapel offered the one prepared by the Eurostat program. Alan Heston will also make a glossary available.

Chapter 1

77. The purpose of this chapter is to provide a broad overview of the entire ICP, to give the reader a digest of the whole program. Suggestions offered to improve the chapter were:

a. There should be an example comparing exchange rates with PPPs over time. It was suggested the example comparing the Japan and US economies based on exchange rates and PPPs be used.

b. There should be a simple example of a price matrix at the basic heading level illustrating how PPPs are computed, how PPPs are imputed for missing cells, and how representivity enters into the computations. The "worked example" prepared by the OECD may be useful in this connection. (However, because this worked example is 23 pages long, if it is used in its entirety it should be placed in an Annex.)

c. The example should illustrate the importance of the expenditure weights.

d. Some examples in the current draft are misleading because they indicate that PPPs can be applied in a very simple way to solve complex problems. One example is the claim that employee salaries can be made comparable internationally by using PPPs; the example should say that PPPs are one of several indicators that need to be used to compute internationally-comparable salaries.

Chapter 2

78. The purpose of Chapter 2 is to provide an overview of the governance of the ICP. This includes the policy to use Memoranda of Understanding to guide the working relationship between the global, regional and national offices and to describe their respective responsibilities. The chapter is also to provide an overview of the timetable. Other recommendations follow:

a. There should be a table showing the country participation in all of the previous ICP rounds.

b. A complete set of references should be prepared and included in the electronic version of the handbook.

c. The complete MOU should be in an annex. The data sharing policies can be in the main chapter.

d. The governance discussion should include a discussion of problems in previous ICP rounds that led to the current structure.

e. The timetable to be included in the handbook should only show the major milestones and not the detailed activities required to meet them. A detailed time table will be on the website.

f. Some references to DECDG should be changed to reflect the World Bank's role.

Chapter 3

79. There was general agreement that this chapter is well written and meets the requirements. One point raised was that it should more strongly emphasize the concept that prices are imbedded in the expenditure data and that these imbedded prices are the prices that should enter the international price parities.

Chapters 4 and 5

80. There is considerable overlap between the two chapters as currently written, so they were discussed together. One problem handicapped the authors of these two chapters: in recent months, recommended procedures related to the SPD concept have evolved and have changed the focus of product definition. Chapter 4 currently covers a tremendous amount of material including price concepts, establishing the product list, the use of SPDs, the pre-survey process, the use of hedonics, and finally the Ring Comparison. Chapter 5 covers some of the same ground, and in addition briefly summarizes sampling, survey and data editing issues.

81. The TAG also discussed specific problems in Chapters 4 and 5. In particular, the TAG discussed whether the chapters should present information about what potentially could be done in an ICP program as well as prescribe what is actually to be done for this round. The conclusion was that the chapters should primarily prescribe what is to be done. The TAG recommended that the Global Office and the Handbook editor should consider whether the discussion of the use of hedonics and the adjustment for quality differences should be in an annex. There was some concern about the presentation of the price differences between branded and non-branded products: the role of branding in price determination may presently be over-simplified. It was suggested that the presentation of brand levels might be done in a matrix presentation, as in the Eurostat pricing guidelines. Also, Chapter 4 might emphasize too strongly the CPI and should focus more on PPPs. Also, data validation at country and regional levels needs much more attention. Finally, some factual problems need to be corrected.

82. **Recommendation**: Chapters 4 and 5 should be divided into three chapters, to be designated Chapters 4, 5 and 6.

New Chapter 4

83. Sections A through D of the current chapter 4. This would include Price Concepts, defining Representivity and Comparability, and a discussion of quality differences. As already noted, the TAG recommends that the material on hedonics and quality differences in Section F be included in an annex. However, the current section F.3.3 on brands may need to be in the text of the Handbook, associated with the material presently in section G.

84. **Recommendation.** The issue of using three levels of item importance (highly representative, representative, and not representative) vs two levels (representative and not representative) was discussed. The recommendation is that for this round, only two levels should be used (representative and not representative.) This would be consistent with the Eurostat/OECD approach.

New Chapter 5

85. Sections G through K of the current chapter 4. This would provide a description of the SPDs, the coding structure, and the reasons for using this approach. The pre-survey process would involve the use of the SPDs following the steps outlined in previous sections of these minutes and in Annex 2 attached.

86. The Ring Comparison (currently section 4 L) should be documented in a new chapter to be determined later. This chapter should include the countries to be included in the ring and the preparation of the ring lists of items to be priced. The chapter should also describe the methods to be used for linking the ring with the regions.

New Chapter 6

87. This chapter should include the material on how to deal with confidentiality issues; the need for countries to follow the time table; and how to use country CPIs for guidance on survey and sampling issues.

88. The chapter should contain sections providing guidance on the following issues:

a. A discussion of what constitutes the population for ICP purposes—emphasize how the ICP population differs from the CPI population.

b. Define the sampling frame, how the country needs to determine the different outlets and their relative importance for different items to be priced

c. Guidance on how to determine how many outlets of the different kinds to include in the price collection. This should include guidance on sampling across a country over time to obtain average annual prices and across space to obtain national average prices.

d. Survey overview. The handbook should provide an overview of several difficult problems that will be faced during the survey: the closing of outlets, products no

longer being available, etc. A more detailed version of this section may need to be prepared for the price collectors.

e. Data editing at the country level. This should include a description of the tables marked as Annex 4 and Annex 5 as used by Eurostat countries. Countries will be encouraged to transmit individually reported prices to the regional coordinators. If confidentiality restrictions do not allow that, at a minimum, they will need to submit the information shown in Annex 5.

f. Data editing at the regional level. The handbook should provide an overview of the use of the Quaranta editing tables. There should be a separate editing manual prepared for the regional and national offices that provides very detailed examples of data problems and instructions describing how to deal with them. One example of the kind of problem to be described is when a country's PPP becomes an outlier because of another country's price. The editing manual should completely describe the iterative process required to ensure that all countries agree with the final prices and the basic heading parities.

g. The Global Office should make the necessary arrangements to have this editing manual in place, at least in draft, for the November training course of the regional co-coordinators. (Alternatively, the material written for the Eurostat PPP model may be used for this course.)

Item 7. The Research Agenda

<u>Progress to date in the IMF-WB research on collating EU-OECD item codes with the U.S. BLS CPI checklists</u>

89. Food and clothing are about 90% completed. Overall, about 400 of the almost 800 "clusters" have been finalized. However, another iteration is required because the data model is still being refined.

90. A "type of business" code is to be included in the SPDs and Eurostat is going to provide some feedback on this work.

<u>Methods of aggregation across headings for future ICP rounds (i.e., rounds after the current round)</u>

91. **Recommendation**: The implications of using alternative aggregation methods cannot be assessed until the 2004 ICP data are available in 2006.

<u>Alternatives for parity estimation within the ring country framework</u>

92. The broad approach to the ring country comparison is described in minutes above.

93. **Recommendation**: Detailed consideration of alternatives for the estimation of parities for ring countries cannot be considered until the Ring Coordinator is appointed. In any case, estimation cannot be undertaken until data become available.

Issues in the valuation of housing services

94. The lack of consistency between rental prices and the corresponding national accounts values have led Eurostat to set up an investigation into alternatives to the approach used in the past. It has become clear that a well-developed rent survey is essential. (Alan Heston and Eurostat both have material that should assist in setting up such a survey.)

95. **Recommendation**: The Global Office needs to start work immediately on identifying the implications of the alternative approaches to collecting rents and developing a rents questionnaire.

Problems in the estimation of comparison-resistant services

96. **Recommendation**: An assessment should be made during 2003-04 by the ICP team of whether some sort of productivity adjustment should be made between countries for items whose PPPs are based on input prices (e.g., education and health). This issue should be reassessed at a TAG meeting in 18 months or so.

Parities for construction

97. Pricing construction projects will be contracted out to consultant(s) under the guidance of the ICP team.

98. **Recommendation**: No special research is required at this time.

Quasi and non-benchmark countries

99. A method should be developed for imputing a PPP for GDP based on the PPP for AFCE for such countries. It will probably be based on shares of expenditures and regressing against income.

100. **Recommendation**: Investigating this issue should be deferred until 2005.

Extrapolations: moving benchmark estimates backwards and forwards

101. Eurostat is currently investigating the consistency of extrapolating between benchmarks. However, from an ICP perspective, the issues are somewhat broader

because they need to cover the possibility of extrapolating results in the longer term based on a rolling ICP benchmark.

102. **Recommendation**: Given the potential uses of PPP data, this is an important issue and needs to be examined in some detail. Research should be scheduled for 2004-05.

Theoretical underpinnings of the ICP

103. Many major statistical surveys are examined and improved in the light of conceptual models that underlie them (e.g., consumer theory for the CPI; production theory for productivity measures). However, apart from the literature on index number methods—most of which does not deal with an underlying economic theory—there has been little examination of an appropriate underlying theory for the ICP.

104. **Recommendation**: Work on identifying an economic model underlying the ICP should be undertaken in 2004-05.

Potential additional research items

105. A paper needs to be produced on how to handle negative national accounts items.

106. **Recommendation**: The papers on this topic by Sergei Sergueev and Jim Cuthbert should be reviewed during 2004-05.

Item 8: Aggregation techniques above the basic heading level

107. Alternative aggregation methods were discussed in some detail earlier in the meeting.

108. **Recommendation**: [see also the minutes above]. The TAG is of the opinion that at this stage there is no need to decide on an aggregation method above BH level. Several aspects of this problem were nonetheless discussed. It was suggested that for a main index at the global level, it might be possible to use an index such as the EKS, which is a non-additive index and free of the Gerschenkron effect. An additive decomposition of GDP contributions—computed possibly by the GK method—might be published separately for purposes of analysis. It was noted that in future discussions of the fixity issue, the TAG will need to examine the issue of which concrete ratios—e.g., PPPs, volume ratios for GDP, or volume ratios for categories—should be fixed.

109. **Recommendation**: The tables to be presented at the regional level need to be examined further in conjunction with the regional coordinators.

Note on this Annex. This Annex is based on notes taken during the May TAG meetings. It can be considered part of the minutes.

Annex 1. Lunch with Martin Ravallion, World Bank (Research Group)

110. The TAG requested a meeting with Martin Ravallion to discuss the integration of PPP work with poverty monitoring. This meeting took place at a lunch on Thursday, May 22. Martin explained to the TAG the uses of PPP data in his group. He said that in the country poverty work only national poverty indicators are used and PPPs are not employed. PPPs, however, are employed when regional or global issues are considered. He mentioned the problem he had with switching bases in the poverty comparisons (from Penn World to the Bank database): his office discovered large discrepancies and had to re-compute historical series. Then he explained that the $1-a day (actually, $1.08) international poverty line is arrived at as an average poverty line for six poor countries. He elaborated on the debate on how to correct household surveys for under-reporting; this correction is especially critical at higher income levels and this correction is not being made for the Bank poverty numbers. He also explained that, in his view, household surveys are better for determining changes in national consumption than the national accounts. [TAG members found this not entirely convincing due to the aforementioned under-reporting.]

111. In discussion, it became clear that both quality improvements in the ICP data in general, and the use of SPDs, will help significantly in producing better poverty numbers. However, it was indicated to Martin that in this ICP round the urban/ rural PPPs will not be computed (even though information could be collected through using the ICP ToolPack). Moreover, some of the participating countries might collect information only in capital cities. Most important, it was indicated that the issue of expenditure structure of the poor cannot be addressed by the ICP, and has to be obtained from the household surveys. The TAG felt that a significant part of the deviation of the PPPs for the poor from the average PPPs will be coming from differences in expenditure patterns.

112. Both before and after the meeting with Martin Ravallion, the TAG discussed the interests of his group and poverty PPPs generally. TAG members clearly agreed that no special pricing for poverty purposes should be attempted in this ICP round. This would over-burden the data-collection work. However, it would be possible to meet much of the criticism of the Bank's poverty work if basic heading parities were re-weighted by expenditures for poverty purposes. The new ICP can potentially meet this need. Also, putting food and clothing up front has the serendipitous advantage of an orientation toward poverty weighting.

113. It became clear during the discussion with Martin Ravallion that the poverty group may have access to expenditure surveys that would be useful for participating

countries. Knowledge of these should be made available to the TAG, regional coordinators and to national statistical offices. In general, the ICP Global Office, the regional coordinators, and national statistical offices should know about the data that the Ravallion group has for various countries.