



**INTERNATIONAL COMPARISON PROGRAM
PLANNING NOTE FOR THE 2017 COMPARISON AND FUTURE COMPARISONS**

NOVEMBER 2016

Contents

I. Background	2
II. Overview of the Rolling Survey Approach	2
III. ICP 2017 Comparison	3
IV. Future ICP Comparisons	5
V. Conclusions	6
Annex 1: Tentative Timetable for the ICP 2017 Comparison.....	7
Annex 2: Tentative Budget for the ICP 2017 Comparison (in USD)	10
References	11

I. Background

The United Nations Statistical Commission (UNSC), at its 47th Session¹, agreed that the International Comparison Program (ICP) should become a permanent element of the global statistical program, and that comparisons should be made at more frequent intervals. To promote these aims, the UNSC supported the adoption of the rolling survey approach², as suggested in the Friends of the Chair evaluation report³, starting with the 2017 comparison. A key feature of the rolling survey approach involves spreading the price data collection over a period of time, in order to ease the burden on countries for any given calendar year, while allowing regions flexibility to conduct surveys according to their specific circumstances. In addition, this approach would allow “catch-up time” for regions or countries that may fall behind schedule. In the long run, a successful implementation of the approach would lead to more frequent regional and global comparisons.

Subsequently, the ICP Inter-Agency Coordination Group (IACG) met on May 9-10, 2016 and on September 27-29, 2016, and discussed the plans for implementing the UNSC recommendations, applying the rolling survey approach, and conducting the ICP 2017 comparison. This note reflects the discussions and decisions of the IACG. It provides a brief description of the rolling survey approach, the agreed plan for conducting the 2017 comparison, and a possible scheme for future ICP comparisons.

II. Overview of the Rolling Survey Approach

The rolling survey approach was developed by Eurostat and OECD in the early 1990s. The approach is designed to make comparisons using a mix of actual and extrapolated data that have been collected over three years as shown in Figure 1. For any given benchmark year t , the price surveys for household consumption, which are the most workload-intensive of ICP surveys, are conducted over three years, namely: $t-1$, t , and $t+1$. For Eurostat-OECD comparisons, household consumption is divided into six separate surveys; in other words two surveys a year over the three year survey cycle. For each year, one survey is conducted during the first half of the year and the other during the second half of the year, while temporal adjustment factors, or in other words detailed Consumer Price Indices (CPIs), are used to calculate annual average prices.

The price survey data from year t are used directly for the benchmark year comparison, while those of years $t-1$ and $t+1$ are extrapolated or retropolated to year t . Extrapolation/retropolation is for one year only, thereby avoiding the limitations⁴ of long-term extrapolation/retropolation. At the same time, it reduces the data collection burden of countries in any given calendar year. Based on these rolling surveys, annual or tri-annual benchmark comparison results can be produced. Eurostat produces annual benchmark results, while, to date, OECD has been producing tri-annual benchmark results and extrapolating results in-between reference years. However, OECD has recently decided to move to annual benchmark results.

¹ <http://unstats.un.org/unsd/statcom/47th-session/documents/Report-on-the-47th-session-of-the-statistical-commission-E.pdf>

² Term “rolling survey approach” is used instead of earlier notation “rolling benchmark approach”.

³ <https://www.oecd.org/std/prices-ppp/PPP%20manual%20revised%202012.pdf>

⁴ <http://unstats.un.org/unsd/statcom/47th-session/documents/2016-9-FOC-group-on-evaluation-of-2011-round-of-ICP-E.pdf>

⁴ <http://siteresources.worldbank.org/ICPEXT/Resources/ICP-2011-report.pdf>

Figure 1: General rolling survey scheme for a given year t

	Rolling survey cycle for benchmark year t			
	Year t-1	Year t	Year t+1	Year t+2
HHC 1: Food, drinks and tobacco	X =>			PUBLICATION
HHC 2: Personal appearance	X =>			
HHC 3: House and garden		X		
HHC 4: Transport, restaurants and hotels		X		
HHC 5: Services			<= X	
HHC 6: Furniture and health			<= X	
Housing volumes and rentals survey		X		
Government compensation survey		X		
Machinery and equipment price survey		X		
Construction and civil engineering price survey		X		
CPIs, PPIs and national account deflators	X	X	X	
National account expenditures		X		

Legend: "X" direct use; "X =>" with CPI extrapolation; "<= X" with CPI retropolation; HHC: Household Consumption

Other surveys covering housing volumes and rentals, government compensation of employees, and gross fixed capital formation (i.e. machinery and equipment prices and construction and civil engineering prices) are conducted either every year or every other year for annual comparisons, and once every three years for tri-annual comparisons.

National account expenditures, as per the agreed classification, detailed CPIs, and national account deflators are collected annually. PPPs and real expenditures for the benchmark year t can be expected at the end of t+2 when estimates of gross domestic product for t become available.

III. ICP 2017 Comparison

Since the completion of the ICP 2011 round, several regions have conducted, or are in process of conducting, interim regional comparisons, i.e. comparisons between the global benchmark years. These include: Asia and the Pacific 2015 and 2016; Commonwealth of Independent States (CIS) 2014; and Western Asia 2012, 2013 and 2016. In addition, Eurostat and OECD are conducting their permanent comparisons.

The IACG agreed that regions could use the data they are collecting in 2016, in addition to surveys planned for 2017-2018, for producing the ICP 2017 comparison results, as illustrated in Figure 2 below. Price data collected in 2016 can be extrapolated to 2017, while data collected in 2018 can be retropolated back to 2017 or could refer to 2017.

Figure 2: Survey schedule for the ICP 2017 comparison

	ICP 2017 Comparison			
	2016	2017	2018	2019
Household consumption price surveys	X =>	X	< = X	PUBLICATION
Housing volumes and rentals survey		X	< = X	
Government compensation survey		X	< = X	
Machinery and equipment price survey		X	< = X	
Construction and civil engineering price survey		X	< = X	
CPIs, PPIs and national account deflators	X	X	X	
National account expenditures	X	X	X	

Legend: "X" direct use; "X =>" with CPI extrapolation; "< = X" with CPI retropolation

Annex 1 provides a summary timetable for the ICP 2017 comparison, as agreed by the IACG. The results for the benchmark year 2017 should be available in late 2019. In the interim, global PPP time series for the years 2012 to 2016 can be produced by the end of 2018 based on the various regional interim activities.

The specific data requirements for the ICP 2017 comparison and the interim global PPP time series are as follows:

- *Household consumption*: prices (extrapolated or actual) for 2017 and other available years;
- *Housing, government and gross fixed capital formation*: prices and other data for 2017 and other available years;
- *Detailed national account expenditures*: time series for 2011 to 2017;
- *Detailed CPIs, producer price indices (PPIs) and national account deflators*: time series for 2011 to 2017;
- *Regional PPPs*: for 2017 and other available years;
- *Exchange rates*: time series for 2011 to 2017; and
- *Population figures*: time series for 2011 to 2017.

Given the differences in the regional survey schedules, a clear challenge will be linking the various regional comparisons to produce global 2017 PPP estimates and interim global PPP time series. In addition, for the Eurostat and OECD comparisons, which follow an output approach for health and education and the bills of quantities approach for construction and civil engineering, specific linking procedures are being discussed with Eurostat and OECD. Technical solutions to address these challenges will be developed by the ICP Technical Advisory Group (TAG), specialized Task Forces, and the IACG.

Finally, it should be noted that several countries do not directly estimate the gross domestic product from the expenditure side. As a result, providing the national account expenditure time series can be challenging. Thus, an important aspect of the work program will be to review methods for generating the expenditure time series, and to provide additional support and technical assistance, as needed. Furthermore, many countries do not produce PPIs, or produce PPIs with very limited coverage, presenting an additional challenge for identifying suitable extrapolators for some headings.

The total cost of the ICP 2017 comparison, including both global and regional budgets, is estimated at \$24 million. This figure presents substantial reduction in funding relative to the ICP 2011 round budget, which amounted to around \$45 million. The World Bank and regional implementing agencies have initiated their fund-raising efforts in order to secure the needed funds; however a good portion of the required funding remains unsecured. It is to be noted that, at the global level, there are positive indications from the International Monetary Fund and the United Kingdom Department for International Development that they will contribute additional funding for the ICP to help fill the funding gap. Annex 2 provides some details on the tentative budget to conduct the 2017 comparison, both at the global and regional levels, with an indication of the funding gap.

IV. Future ICP Comparisons

The 2017 comparison will be the starting point for more frequent global comparisons, applying the rolling survey approach, and producing benchmark results every three years, i.e. for years 2020, 2023, etc. For these future comparisons, a global survey scheme, such as the one in Figure 3, can be adopted. However, regions would have the flexibility of structuring their survey schedules over each three-year period, as they see feasible in their regions. PPPs for the years between benchmark years will be estimated based on an improved extrapolation approach, which will be developed by the ICP TAG, specialized task forces, and the IACG. It is to be noted that the aspiration is to work towards producing annual benchmark results in the long run.

Figure 3: Possible survey scheme for future ICP comparison cycles

	ICP 2020 comparison					ICP 2023 comparison			
	2019	2020	2021	2022		2022	2023	2024	2025
Household consumption price survey	X=>	X	<=X	PUBLICATION OF 2020 RESULTS	X=>	X	<=X	PUBLICATION OF 2023 RESULTS	
Housing volumes and rentals survey		X				X			
Government compensation survey		X				X			
Machinery and equipment price survey		X				X			
Construction and civil engineering price survey		X				X			
CPIs, PPIs and national account deflators	X	X	X		X	X	X		X
National account expenditures	X	X	X	X	X	X	X		

Legend: "X" direct use; "X =>" with CPI extrapolation; "<=X" with CPI retropolation

Overall, it is to be noted that the TAG, in collaboration with the IACG, will set forth a comprehensive technical research agenda to inform future ICP comparisons. In order to ensure comparability of PPP estimates between rounds, the short-term agenda of the TAG will focus on methodological aspects related to building PPP time series, as noted above, and fine-tuning established methods and procedures to improve the quality of the estimates. Moreover, technical assistance will need to be provided in various regions to improve data availability and quality for problematic headings.

V. Conclusions

With the latest decision of the UNSC and the implementation plan devised by the IACG, there is a good momentum for implementing the ICP as a permanent program starting from the 2017 comparison. However, medium-term risks still persist. They mainly relate to the need for a psychological shift within agencies and countries to consider the ICP a part of their regular statistical programs, and the need for further data openness, as required by several key uses and users of PPPs. Thus, over the next three years, the Governing Board is called upon to help advocate with agencies and countries to ensure that the ICP becomes a truly permanent program, more integrated with their regular price and national accounts activities, that increased regional and national funding is secured, and that the ICP adopts a more open data access policy.

Annex 1: Tentative Timetable for the ICP 2017 Comparison

ICP 2017 Activities	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GOVERNANCE MEETINGS																
Governing Board				Nov	Mar				Mar				Mar			
Inter-Agency Coordination Group		May	Sep			Apr	Sep			Apr	Sep			Apr	Sep	
Technical Advisory Group						Apr				Apr				Apr		
OPERATIONAL MATERIALS																
Operational materials: Preparation and distribution ¹				D		D ¹										
NATIONAL ACCOUNTS IMPLEMENTATION (for ICP)																
Basic heading expenditures: Compilation																
ICP-Africa																
ICP-Asia																
ICP-CIS																
ICP-LAC																
ICP-Western Asia																
Eurostat-OECD PPP program																
Basic heading expenditures: Submission to GIU													PS		PS	FS
Global validation of basic heading expenditures													PS		PS	FS
Quality Assurance Questionnaire: Submission to GIU													PS		PS	FS

¹ Machinery and Equipment survey materials are finalized in Q2 2017. All the other operational materials are finalized and distributed in Q4 2016.

ICP 2017 Activities	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
HHC DATA COLLECTION, VALIDATION AND SUBMISSION																
HHC price data ² : Data collection																
ICP-Africa																
ICP-Asia																
ICP-CIS																
ICP-LAC																
ICP-Western Asia																
Eurostat-OECD PPP program																
HHC price data ² : Submission to GIU							PS		PS		PS		PS		FS	
Global validation of HHC price data ²																
Housing (rentals and volume): Data collection																
ICP-Africa						R			V2017							
ICP-Asia									R2017	V2017						
ICP-CIS										V2017	R2017					
ICP-LAC								R		V2017						
ICP-Western Asia						R		R		V2017						
Eurostat-OECD PPP program						R				V2017						
Housing: Submission to GIU									PS		PS		PS		FS	
Global validation of Housing (rentals and volume)																
Survey Framework questionnaire: Submission to GIU											PS		PS		FS	
GOVERNMENT DATA COLLECTION, VALIDATION AND SUBMISSION																
Government Compensation: Data collection																
ICP-Africa										2017						
ICP-Asia											2017					
ICP-CIS											2017					
ICP-LAC									2017							
ICP-Western Asia																
Eurostat-OECD PPP program																
Government Compensation: Submission to GIU									PS		PS		PS		FS	
Global validation of Government Compensation data																

² Including private health and private education.

ICP 2017 Activities	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GROSS CAPITAL FORMATION PRICE DATA COLLECTION, VALIDATION AND SUBMISSION																
Machinery and Equipment: Data collection																
ICP-Africa																
ICP-Asia									2017							
ICP-CIS																
ICP-LAC									2017	2017						
ICP-Western Asia																
Eurostat-OECD PPP program																
Machinery and Equipment: Submission to GIU									PS		PS		PS		FS	
Global validation of Machinery and Equipment data																
Construction: Data collection																
ICP-Africa																
ICP-Asia									2017							
ICP-CIS									2017							
ICP-LAC																
ICP-Western Asia																
Eurostat-OECD PPP program																
Construction: Submission to GIU									PS		PS		PS		FS	
Global validation of Construction data																
SUBMISSION OF AUXILIARY DATA (Global Extrapolation)																
CPI, GDP deflator, GDP expenditures, population and exchange rate time series: Submission to GIU					S		S		S		S		S		S	
PREPARATION OF REGIONAL AND GLOBAL RESULTS																
Global PPP time series for the years 2012 - 2016													FR+P			
Regional results: calculation, validation and publication													PR		PR	FR+P
Global results: calculation, validation and publication													PR		PR	FR+P

Acronyms: [D] Distribution to RIA, [FS] Final Submission to GIU, [HHC] Household Consumption, [PS] Preliminary Submission to GIU, [S] Submission to GIU, [PR] Preliminary Results, [FR] Final Results, [P] Publication, [R] Rental, [V] Volume

Annex 2: Tentative Budget for the ICP 2017 Comparison

International Comparison Program Global and Regional Budgets and Status (USD)				
	ICP 2017			ICP 2011
	<i>Budget</i>	<i>Secured</i>	<i>Unsecured</i>	
Global¹	5,000,000	25%	75%	11,500,000
Regional	19,100,000			33,600,000
Africa	4,200,000			12,500,000
Asia	2,500,000	40%	60%	3,200,000
CIS	1,050,000	61%	39%	2,300,000
Eurostat	7,500,000	100%	0%	7,500,000
LAC	1,750,000	71%	29%	3,600,000
OECD	1,000,000	100%	0%	1,000,000
Pacific Islands	-			1,200,000
Western Asia	1,100,000	57%	43%	2,300,000
Total Budget	24,100,000			45,100,000

¹ Excludes potential grants to regions, to avoid double-counting

References

Eurostat and OECD (2012), Eurostat-OECD Methodological Manual on Purchasing Power Parities, Eurostat Methodologies and Working Papers, Luxembourg.

United Nations Statistical Commission (2016), Report on the Forty-Seventh Session, United Nations, New York.

United Nations Statistical Commission (2016), Final report of the Friends of the Chair on the evaluation of the 2011 round of the International Comparison Programme, United Nations, New York.

World Bank (2014), Purchasing Power Parities and the Real Size of World Economies: A Comprehensive Report of the 2011 International Comparison Program, World Bank, Washington, DC.