



# **PROPOSED 2017 GDP EXPENDITURES VALIDATION PROCESS**

**6<sup>th</sup> Meeting of the ICP Inter-Agency Coordination Group  
September 24-26, 2018  
Washington, DC**

# Outline

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- **Objective**
- **Timetable**
- **Background**
- **National Accounts Compilation (MORES)**
- **National Accounts Intra-Country Validation**
- **National Accounts Inter-Country Validation**
- **Discussion**

# Objective

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- Review suggested national and regional validation steps for expenditures
  - Review proposed global validation steps/tools for expenditures
  - Discuss regional plans for expenditures compilation and validation
  - Discuss how the Global ICP Unit (GIU) can assist countries and regions, where needed
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# Timetable

Activity	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>National Accounts Expenditures</b>												
Africa												
Asia												
CIS												
LAC												
Western Asia												
Eurostat-OECD												
Submission to GIU							<del>PS: Jul</del>		PS: Jan		FS: Jul	
Global validation												
CPQ Submission to GIU							<del>PS: Jul</del>		PS: Jan		FS: Jul	

Global ICP Unit (GIU); National Accounts Country Practice Questionnaire (CPQ); Preliminary Submission (PS)

- No preliminary data submitted to GIU as of today
- When would regions be able to submit preliminary data to GIU?

# Background

## Levels

### 1. National

### 2. Regional

### 3. Global

## Types of Validation

### Intra-Country Validation

National implementing agencies (i) review and evaluate expenditures and relevant metadata, and (ii) validate against SNA requirements vis-à-vis previous data

### Inter-Country Validation

Regional implementing agencies review the expenditure values across countries & regions

### Global Validation

GIU reviews expenditure values of all countries across regions and combine them into a global dataset

# Validation at National Level - Suggested

## SNA Compliance

- Completeness checks (non-zero values)
- Check that the correct sign (+ or -) has been assigned
- Arithmetic basic checks

## Economic likelihood

- Verify per capita Basic Heading (BH) expenditures
- Verify BH shares of GDP
- Verify extreme cases

# Validation at Regional Level - Suggested

## Clustering similar Economies

Identifying clusters of economies according to similar economies or neighboring countries and comparing them

### 1. Share of GDP

- Compare shares of GDP contributed by each BH (nominal and real expenditures)

### 2. Per Capita Real Expenditures

- Compare per capita real expenditures for each BH
- Variations in per capita real expenditures for each basic heading between economies in each cluster

# Compilation & Validation tool: MORES 2017

## MORES (Model Report on Expenditure Statistics)

### Purpose

- To assist countries to **estimate and compile** detailed GDP expenditure
- To help countries **understand ICP Classification** and compile 'hard-to-estimate' BH expenditures
- To initiate **validation** process

**Several regions found it very useful in ICP 2011 and continue to use it for ICP 2017**

**Updated to reflect ICP 2017 classification**

# MORES: Years

**LY**

- **Latest Year** available that a country has completed national accounts expenditures to Basic Heading level

**CY**

- **Current Year** that PPP exercised is conducted
- Referred to as Reference Year
- For this cycle : 2017

# Completed MORES

1. Fill in much detail (Year : Western Calendar Year)

Step 1		Completing Expanded Form 1			Year	Country	Currency Unit
(1)	(2)	(3)	(4)	(5)			
ICP Code	Heading	Initial Expenditure Value	Estimated Expenditure Values	Discrepancies			
100000	GROSS DOMESTIC PRODUCT	345234.00	4151525.79	-3806291.792			
110000	INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS	31023.00	4151525.79	-4120502.792			
110100	FOOD AND NON-ALCOHOLIC BEVERAGES	2341.00	4151525.79	-4149184.792			
110110	FOOD	2356.00	4151525.79	-4149169.792			
110111	<u>Bread and cereals</u>	234323.00	4151525.79	-3917202.792			
1101111	Rice	345.00	4199.79	-3854.792388			
1101112	Other cereals, flour and other products	346.00	4147326.00	-4146980			
1101113	Bread	44.00	0.00	44			
1101114	Other bakery products	31.00	0.00	31			
1101115	Pasta products	2.00	0.00	2			

2. Fill in much detail

Transferred from Tab 2

Automatically calculated

# Completed MORES

4. If formula is written & calculated then "OK" -> transferred to tab 1

1. Fill as much data as possible

Transferred from Tab 1

Step 2

Estimation of Basic Heading Expenditures [Form 2]

MORES TEMPLATE

Indicator1	Source1	Year1	Value1	Unit1	Defined Name		
			Year				
			Country				
			Currency Unit				
Code	Name	Indicator Name	Source Name	Year	Value	Unit	OK
1101111	Rice	1 Total Expenditure in Rice	ICP 2005	2005	2452	Currency	
		2 Population of 2005	UNFPA report	2005	2890	ppl	
		3 Projected Population of 2009	NSO	2009	450000%	%	
		4 Price index	NSO	2009	0.1		
		5					
		6					
		7					
		8					
		9					
		10					
		Estimated expenditure	1101111		4199.79		

Splitting Approach

Please indicate all the approaches used in calculation of expenditure for this basic heading. Enter a number (1-5).

→	2	Extrapolation
→		
→		
→		
→		

2. See Tab 7 for Approach Codes (Can enter more than one)

3. Write formula for expenditure calculation (to use above indicators)

# MORES

If MORES is being used to compile national accounts, please also submit individual country's MORES to GIU for validation purpose.

# 2011 Intra-Country Validation Tool

## SNA Compliance

- Additivity Check (Up to aggregates = GDP)
- Should be Non-Zero (Basic Headings)
- Should be Negative (Basic Headings)
- Should be Positive (Basic Headings)

## Structure

- Shares above 5% GDP (Basic Headings)

## Temporal

- Shares above 5% GDP (Basic Headings)
- Per capita skewedness

# 2017 Intra-Country Validation Tool: Updated

## SNA Compliance

- Additivity Check (Up to aggregates = GDP)
- Should be Non-Zero (Basic Headings)
- Should be Negative (Basic Headings)
- Should be Positive (Basic Headings)

## Structure

- Shares above **variable** 5% of **ANY aggregate level** ~~GDP~~ (Basic Headings)

## Temporal

- Shares above **variable** 5% of **ANY aggregate level** ~~GDP~~ (Basic Headings)
- ~~Per capita skewedness~~

## Enhanced Validation

- **Added Price – Expenditure reporting consistency analysis**

## Updated Classification

- **Updated to be used with ICP 2017 classification**
- **Harmonized data input tabs**

# Intra-Country Validation Tool

**Open Intra-Country Validation Tool (excel) for demonstration**

# Intra-Country Validation Tool

- National/Regional implementing agencies are welcome to suggest and use their own validation approaches and tools
- Global validation will be conducted once data is submitted to the GIU and findings will be shared with regional implementing agencies
- Upon request, Intra-Country Validation Tool can be provided to regions as early as November 2018 to be used in various workshops

# 2017 Inter-Country Validation Tool

One Inter-country (region-level) validation for each region or sub-region

## Per Capita

- Compares per capita nominal expenditures (USD)
- All aggregate levels

## Correlation

- Reviews correlation between countries
- Based on per capita nominal expenditures (USD)
- Three aggregate levels: GDP, Individual Consumption Expenditure by Households and Food and Non-alcoholic beverages

## Temporal

- Measures temporal changes of correlation between countries
- Based on per capita nominal expenditures (USD)
- Basic Heading levels; Between time (LY to 2017)
- For each BH and each year, regional quintile groups are calculated and the temporal changes are computed

## Updated Classification

- Updated to be used with ICP 2017 classification
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# Discussion

- **Discuss regional plans for national accounts compilation and validation**
- **Discuss how GIU can assist countries and regions, where needed**

