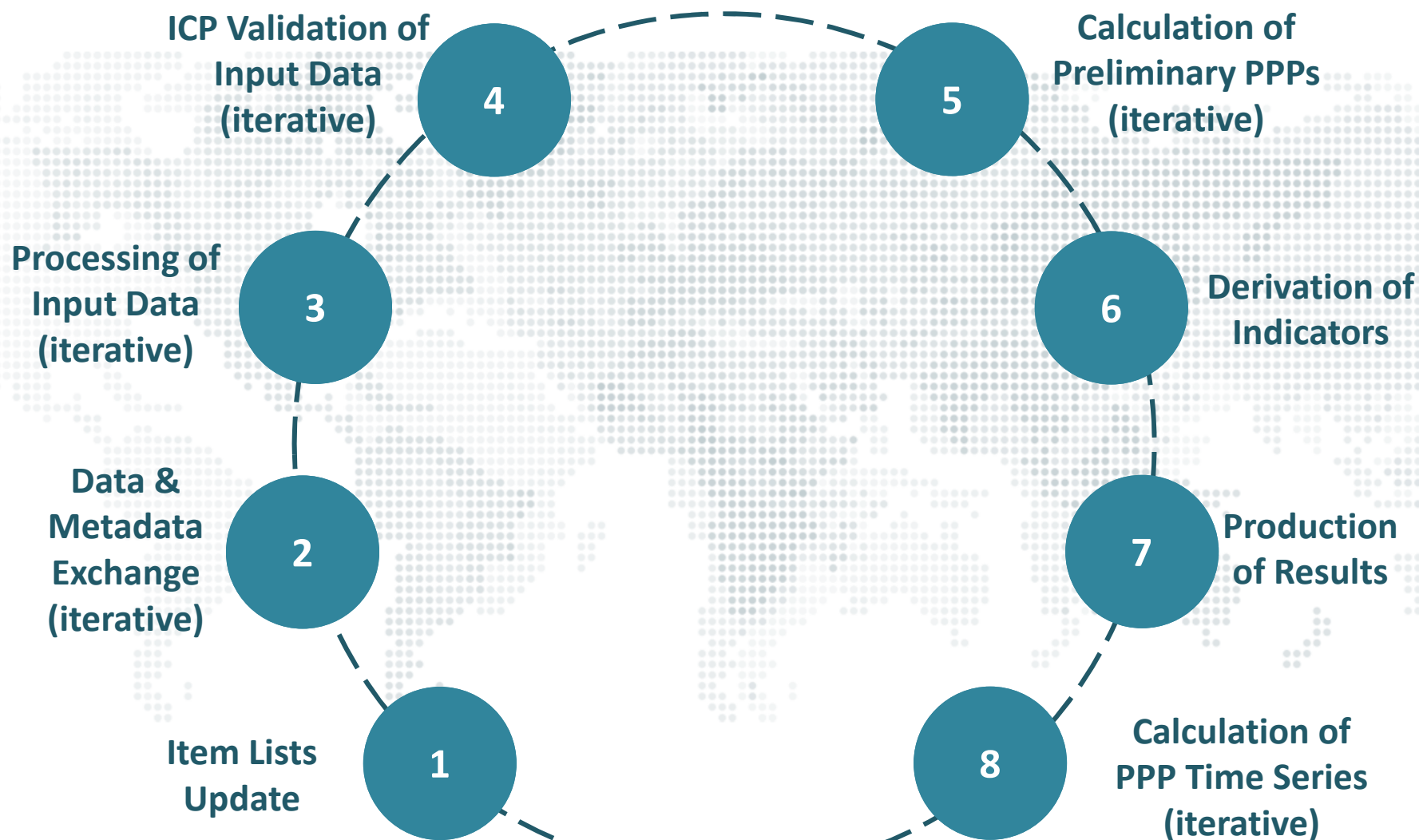



Session VI. Data Processing and IT Solutions

Overall ICP Tools Landscape

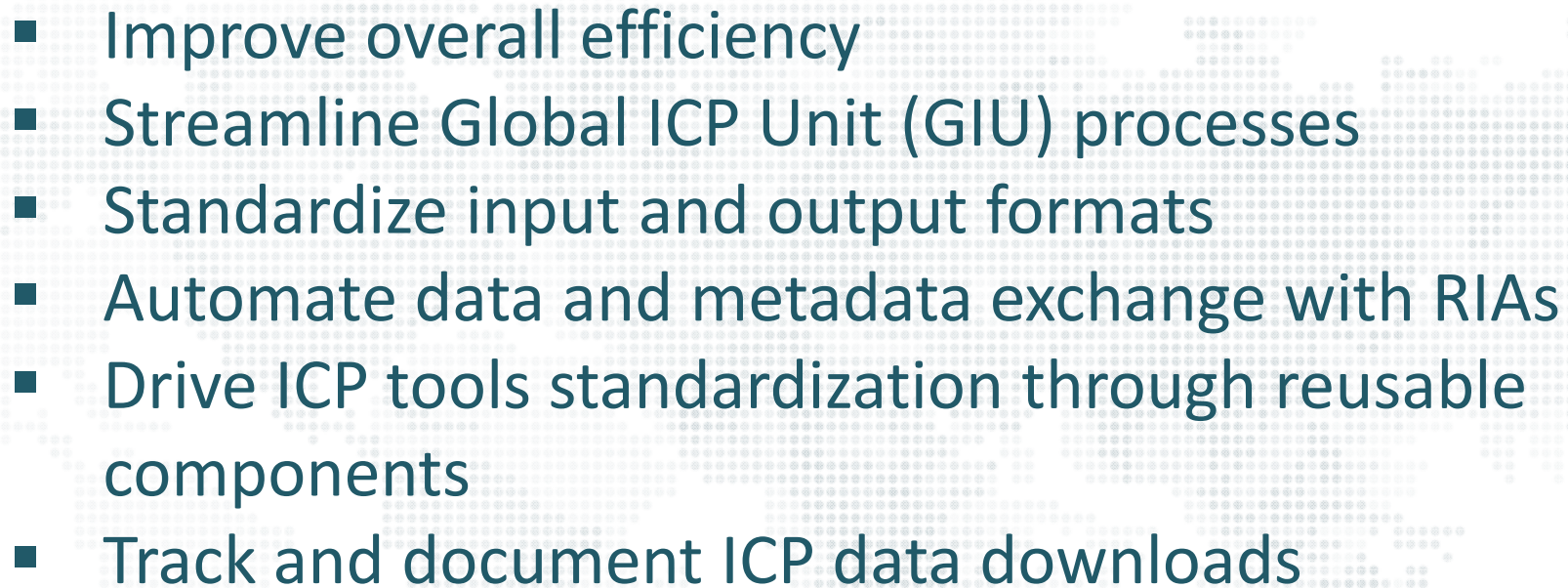
ICP Process Diagram



Challenges

- 
- Tedious data and metadata management
 - Disparity of input/output formats and tools
 - Manual processing takes precious time away from validation and quality assurance
 - Cumbersome archival and dissemination
-

Improvement Targets

- 
- Improve overall efficiency
 - Streamline Global ICP Unit (GIU) processes
 - Standardize input and output formats
 - Automate data and metadata exchange with RIAs
 - Drive ICP tools standardization through reusable components
 - Track and document ICP data downloads
-

Overview of Available Tools

Data & Metadata Management

- Item lists update
- Data & metadata exchange
- Processing of input data

WBG Data Collection System (DCS)

Eurostat PPP Tools:

- Item List Management
- Data Entry

Validation and Computation

- Validation of input data
- Calculation of PPPs
- Derivation of indicators
- Production of results
- Calculation of PPP time series

ICP Validation and Computation Tools

Eurostat PPP Tools:

- Aggregation Tool

Dissemination

- Global and regional reports
- Standard tables and charts

WBG Databank and online tools

Eurostat PPP Tools:

- Visualization Tool
- Reporting Tool

Available WBG Tools

Data Dissemination

World Bank
Data Site

Databank
Query Tool

Public Data Catalog
(subset of DDH)

Thematic data sites

WITS

APIs

Bulk downloads

Information flow per: Terms of use, Access to Information Policy, Security controls

Data Collection and Management

Macro
datasets

Research

Sub
national

Micro

ICP

Trade

Geospatial

Unstructured
Data

Data acquisition
process

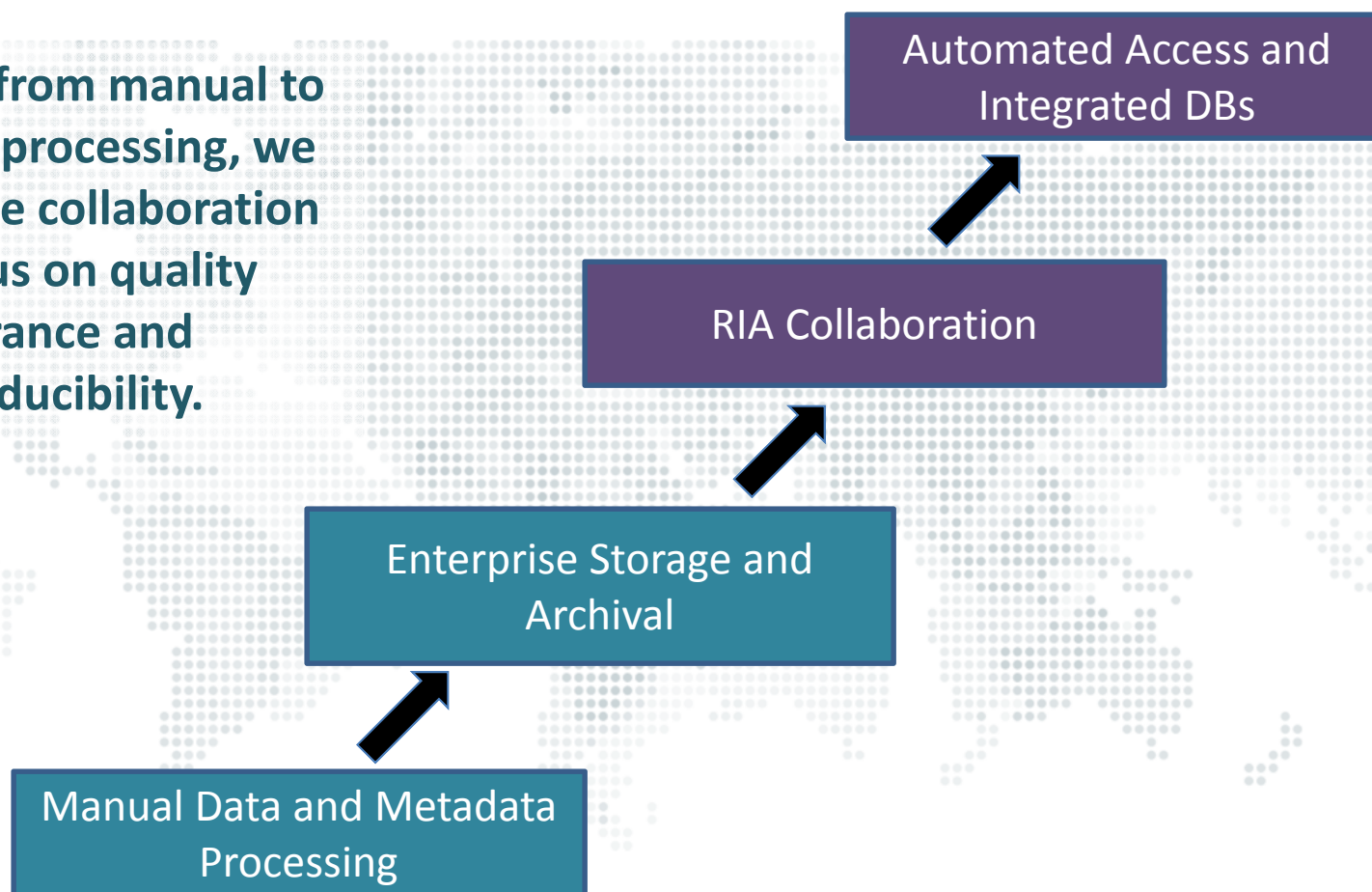
Data cleansing
and formatting

Metadata
processing

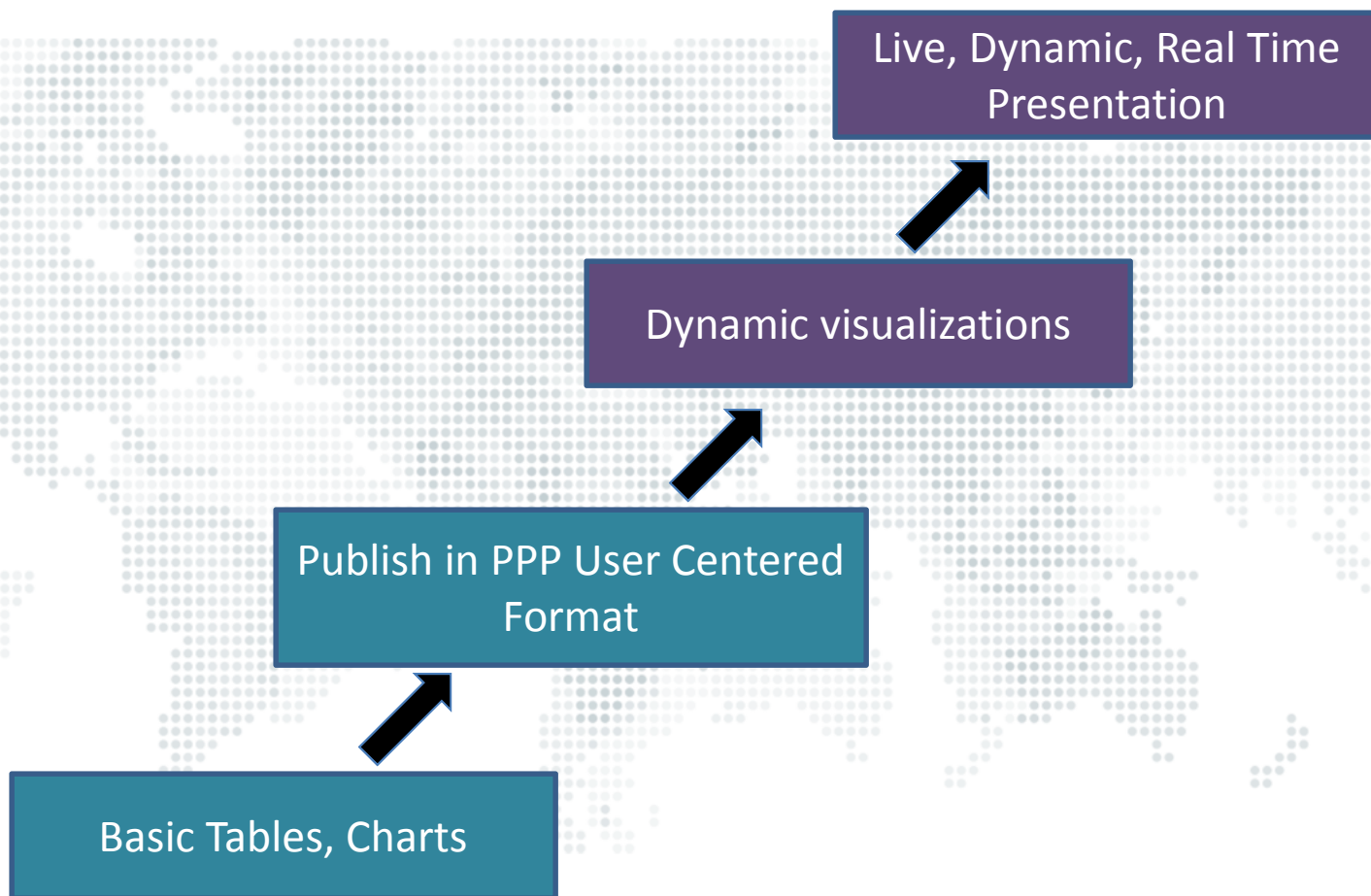
**Development
Data Hub
(DDH)**
A central data
catalog and
store

Increasing Collaboration and Automation

By moving from manual to DB-centric processing, we can improve collaboration and focus on quality assurance and reproducibility.



Reporting and Dissemination



How Are We Getting There?

- Improve GIU internal processes
 - Integrate GIA processes and tools into WBG infrastructure (Files -> DCS (purpose) / Databank (dissemination)) for more efficient archiving
- Improve data and metadata exchange with RIAs
 - Implement Eurostat PPP Tools w.r.t.:
 - Item List Management
 - Data Entry
 - Validation
- Enhance ICP quality assurance processes
- Gather feedback and requirements from RIAs

Improving Efficiency

International Comparison Program **PPP Item List Management Tool**

Homepage > Household Consumption 2017 > Initial list (WB) > 11.04.51.1 Electricity

Services Survey List Items Reports View Characteristics Administration Help

Pivot View Column View Characteristics

Edit Delete Recode/Rename New SPD Question Notes Export

11.04.51.1 - Electricity (134)

Code	11.04.51.1.01.01	11.04.51.1.01.02	11.04.51.1.01.03
Label	Electricity: 600 kWh annual consumption	Electricity: 1200 kWh annual consumption	Electricity: 2500 kWh annual consumption
Method of calculation	(S) Basic fee, rent of meter, and all other related charges, including tax	(S) Basic fee, rent of meter, and all other related charges, including tax	(S) Basic fee, rent of meter, and all other related charges, including tax
Price includes			
Reference Quantity	1	1	1
Reference unit of measurement	Kilowatt-hour	Kilowatt-hour	Kilowatt-hour
Service	Annual total household consumption (equivalent to 50 kWh monthly consumption)	Annual total household consumption (equivalent to 100 kWh monthly consumption)	Annual total household consumption (equivalent to 208 kWh monthly consumption)
Specify Targeted annual total consumption	600	1200	2500
Unit of measurement	Kilowatt-hour	Kilowatt-hour	Kilowatt-hour
Notes			

ONLINE COLLABORATION

Data Collection System

View Edit

Database Selection Variable Selection

Country [381 / 381] Series [2 / 3195] Time [6 / 101]

Hierarchy

- All
 - Basic
 - Aggregate Only
 - Derive Only
 - Both
 - Hierarchies

Primary Database: WD1 Final

View/Edit (1)

File Edit 381 Scale 0

Country Series Scale 2011

Alghanistan PPP conse... 0 17.1142

DATA PROCESSING & STORAGE

Summary short-term changes of ICP Tools

		WBG-GIU (Before)	WBG-GIU (ICP 2017)
Step 1: Item Lists Update	Tool(s)	MS Excel	Item List Management Tool (ILMT)
	Platform	PC	Web
	Requirement(s)	MS Excel	JAVA-enabled browser
Step 2: Data & Metadata Exchange	Tool(s)	ICP Kit (Country Module)	Data Collection System (DCS) & Data Entry Tool (DET)
	Platform	PC	PC
	Requirement(s)	MS Excel	JAVA-enabled browser
Step 3.1: Intra-country Validation	Tool(s)	ICP Kit (Country Module)	Data Entry Tool (*)
	Platform	PC	PC
	Requirement(s)	MS Excel	JAVA-enabled browser
Step 3.2: Inter-country Validation	Tool(s)	ICP Kit (Regional Module) & Dikhanov Tool	Validation Tool (*)
	Platform	PC	Web
	Requirement(s)	MS Excel w/ VBA Macros	JAVA-enabled browser
Step 4: Calculation & Aggregation	Tool(s)	Dikhanov Tool	Dikhanov Tool
	Platform	PC	PC
	Requirement(s)	MS Excel w/ VBA Macros	MS Excel w/ VBA Macros
Step 5: Reporting & Dissemination	Tool(s)	MS Excel	Databank / ICP Website
	Platform	PC	Web
	Requirement(s)	MS Excel	Modern browser

Current Status as of October 2017

- ICP-Kit modules are no longer updated/upgraded, however minimal maintenance and support available
- Integration with WBG environment completed
- Standardized input and output formats
- GIA adopting ILMT, DET and Validation tools as first step (see next presentation, incl. benefits)

Submission forms

- New submission forms that allow for more efficiency in data processing and management
- Allow for two submission formats to accommodate different regional situations:
 - Individual country files
 - Regional matrix files

The image features a central globe constructed from a grid of small, colorful photographs depicting various aspects of daily life, such as food, travel, and nature. This globe is set against a background of a world map rendered in a light gray, dotted pattern. The overall composition is clean and modern, with a teal accent bar at the top right.

THANK YOU
