



# Using Metadata Standards to Improve National and IMF DATA<sup>1</sup>

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- › The IMF experience demonstrates how metadata standardization leads to greater efficiencies and lower costs in global exchange and internal production of data.
- › Use of metadata standards enhances the accountability of countries for providing quality information about their economy.
- › Metadata standardization improves consistency of data and understanding of data by users.

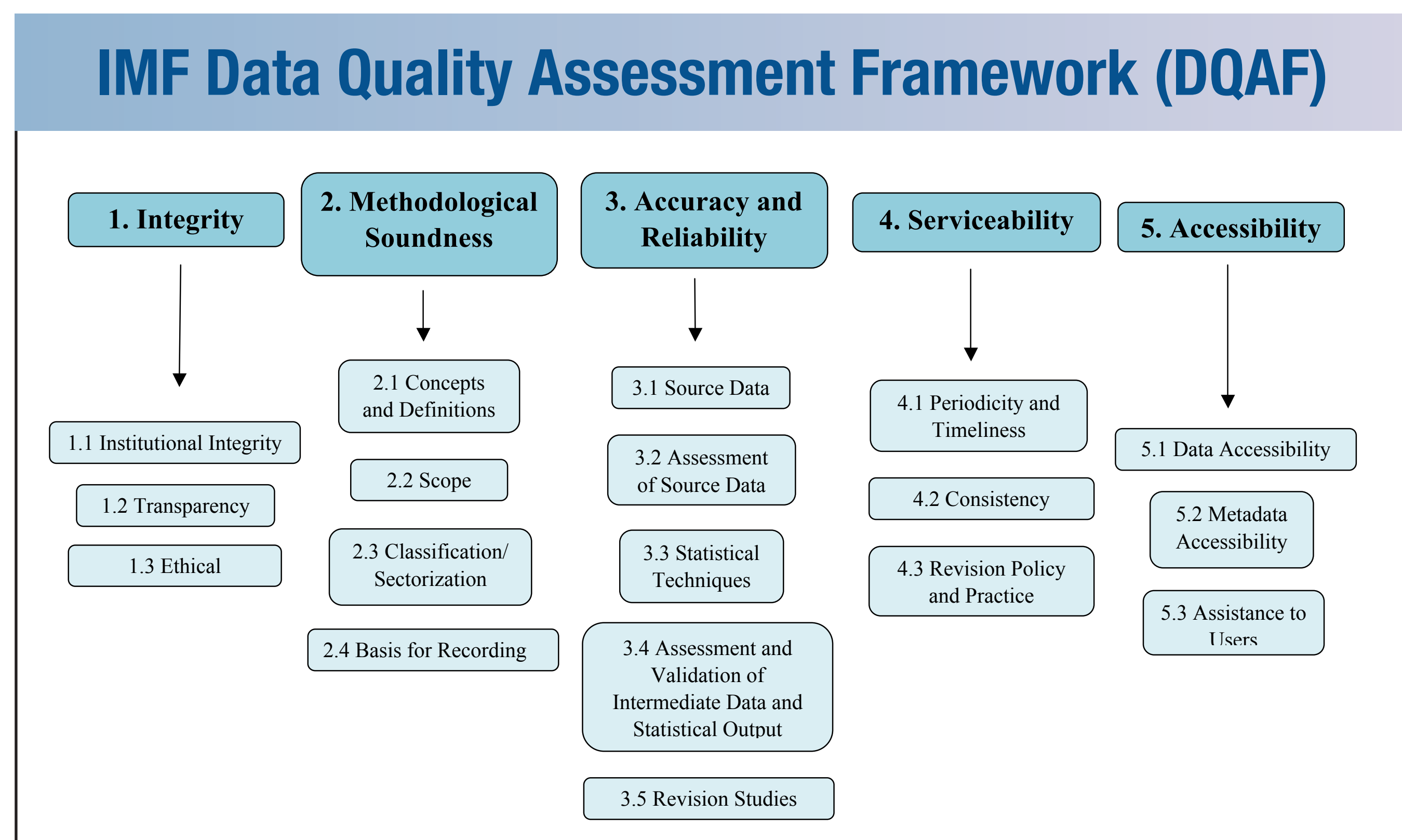
## Using Metadata to Monitor Data Quality

- › Guiding member countries to provide quality information about their economy by the use of data standards.
- › Countries following these standards use the IMF Data Quality Assessment Framework (DQAF).
- › Countries are required to submit text (metadata) describing their data and dissemination practices to the IMF for posting on an electronic bulletin board.
- › Country is responsible for the accuracy and timeliness of its metadata. IMF Staff review metadata for comprehensiveness and internationally comparability.

## Benefits

- › Countries are made accountable for providing metadata about their data.
- › Users get consistent presentation of information that facilitates cross-country comparisons and better understanding of the quality of a country's statistics.

The generic DQAF<sup>2</sup> framework serves as an umbrella for several dataset-specific frameworks.

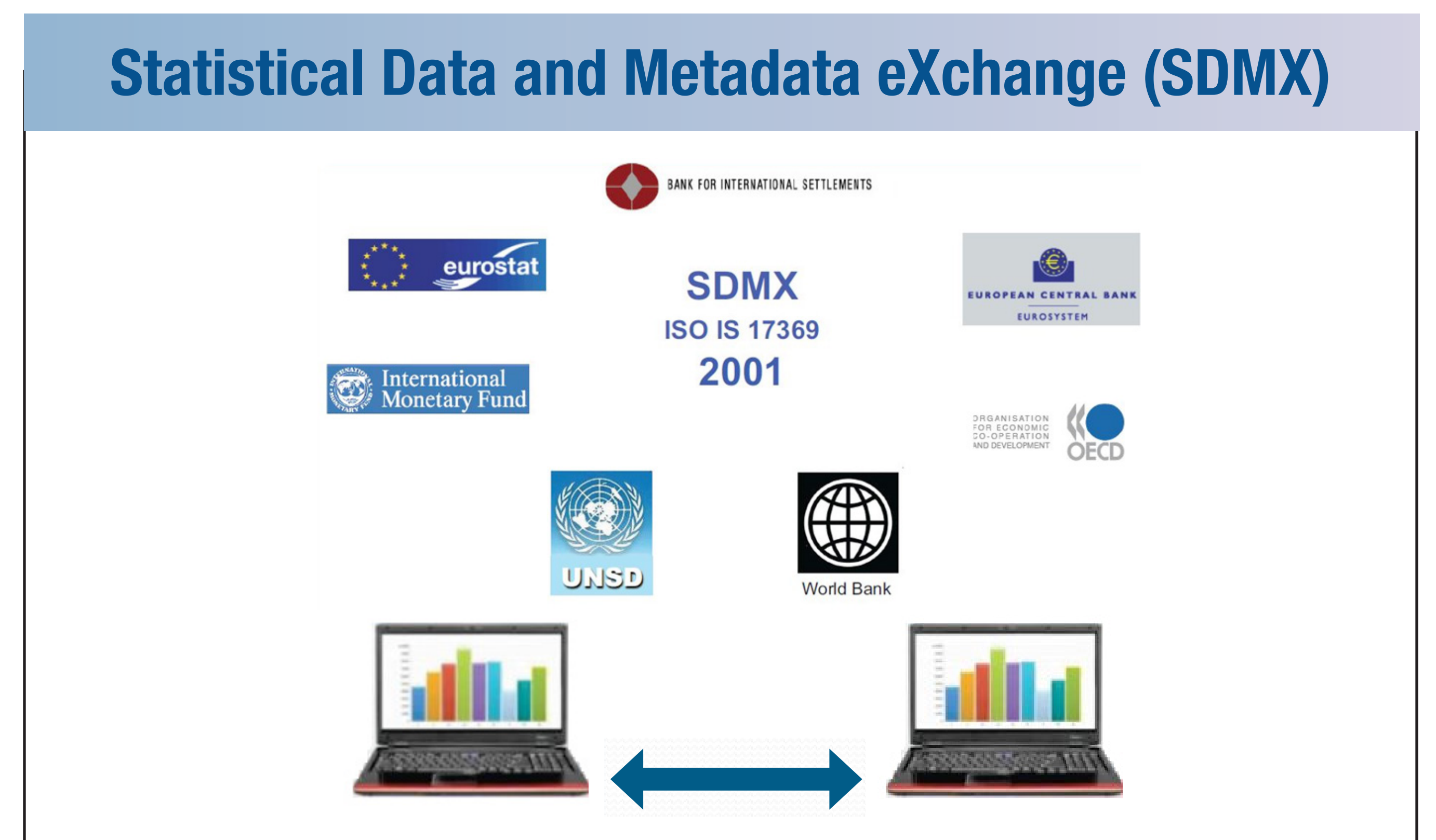


## Using Metadata to Exchange Data

- › IMF uses Statistical Data and Metadata Exchange (SDMX) to reduce the work in mapping metadata structures between agencies.
- › IMF collaborates with other organizations to develop common Data Structure Definitions (DSDs), code lists, and concept schemes.
- › The IMF increasingly collects and disseminates data using SDMX.
- › A recent example is the external sector DSD that will allow a country to provide one SDMX data file or web service to satisfy the data collection needs of multiple agencies.

## Benefits

- › SDMX makes the global exchange of data and metadata faster and cheaper.
- › Reduces the reporting burden of member countries.
- › SDMX enables efficiency and consistency in data and metadata transmissions.



## Using Metadata to Improve Data Consistency

- › Improving data consistency and efficiency by using consistent names and definitions in IMF data production and dissemination systems.
- › The IMF uses master lists for economic concepts and country names to improve data comparisons.
- › The *Catalog of Time Series (CTS)* provides a hierarchical vocabulary of concepts across economic sectors, and contains names and codes for over 50,000 items.

## Benefits:

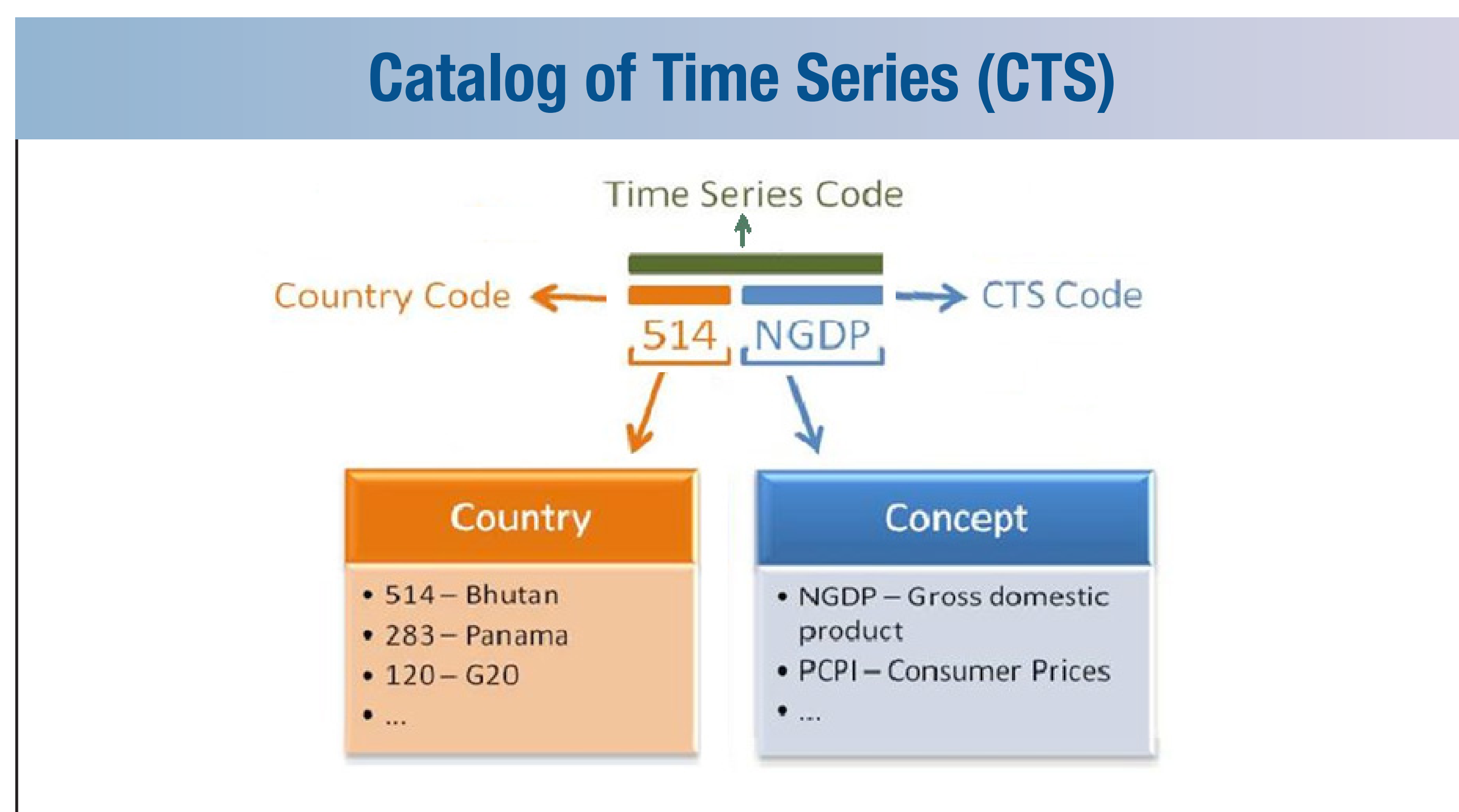
- › Using master lists ensures the consistent use of names and definitions across databases and facilitates cross-country comparisons.
- › Managing these lists centrally allows accuracy and methodology checks to be done once rather than multiple times.
- › Using master lists in SDMX leads to faster and cheaper exchange of data and metadata.

## Using Metadata to Explain Data Characteristics

- › IMF's published outputs contain explanatory notes, which help users understand the data they see.
- › Storing explanatory notes in a standard format using a DQAF-based schema allows us to present these notes in a way most suited to any given output format.

## Benefits:

- › Users are able to view metadata alongside relevant data and understand better the characteristics of data better.
- › Improves users' understanding of data and methodology used in compilation of statistics.
- › Facilitates cross-country comparisons of data and enables structuring of content using a comprehensive framework.



Country	Concept	Data Source	Status	Unit	Scale	2004	2005	2006
India	Consumer Prices, All items	International Financial Statistics (IFS)	Note				000	106.146
India	Consumer Prices, All items	International Financial Statistics (IFS)					246	6.146
India	Consumer Prices, All items	International Financial Statistics (IFS)					542	128.591
India	Consumer Prices, All items	International Financial Statistics (IFS)					000	106.146
India	Consumer Prices, All items	International Financial Statistics (IFS)					246	6.146

## Conclusion

The poster illustrates how metadata standardization in the IMF leads to an improvement in the quality of statistical information and a better understanding of data and metadata by users. It enables a more efficient and faster exchange of information at lower costs, which is a result of collaboration with member countries and other international organizations.

<sup>1</sup>The views expressed herein are those of the authors and should not be attributed to the IMF, its Executive Board, or its management.

<sup>2</sup>For further information, refer to the link: <http://dsbb.imf.org/Pages/DQRS/DQAF.aspx>.