



QmetaTool

Session: Quality improvement methods in Household Surveys
Wednesday, 1st June

E. Javier Orche Galindo
National Statistical Institute of Spain (INE)
javier.orche.galindo@ine.es



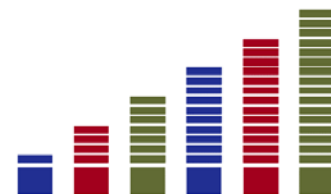
Madrid, May 31 - June 3

QmetaTool

What is it?

Which are the benefits of use it?

How does it work?

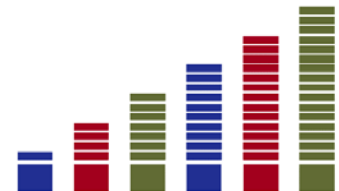
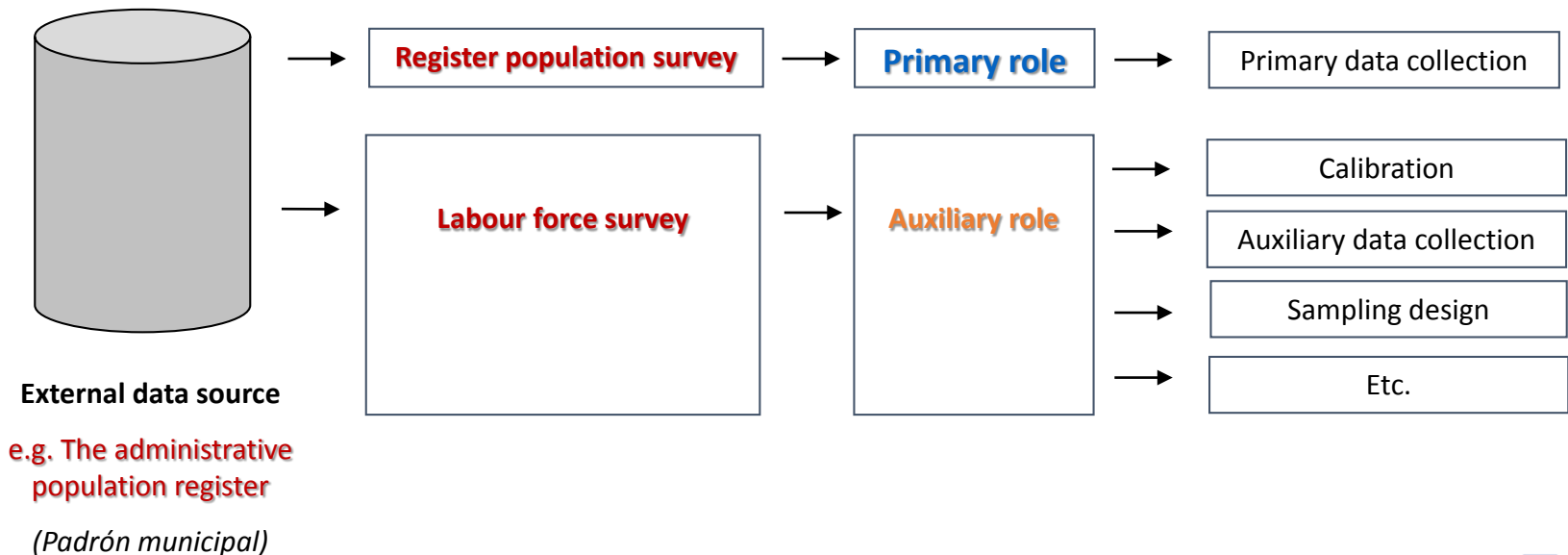


QmetaTool

What is NOT it?

A ~~Standard~~ Tool for **DATA** Quality Assessment of External Sources in the Statistical Production

This one depends on the use of the external source



QmetaTool

What is it?

A Standard Tool for METADATA Quality Assessment of External Sources in the Statistical Production

This one NOT depends on the use of the external source

- Just one assessment for all uses -

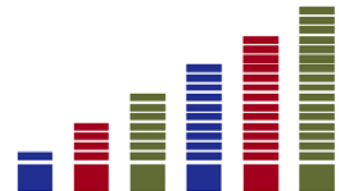
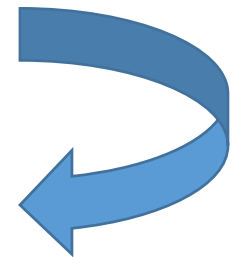
Why is it important?

Knowledge and documentation is VITAL to help us to use them:

- ✓ *How and why are data collected ?*
- ✓ *How are they processed ?*
- ✓ *What are concepts and definitions used? ...*

- *Strengths -*
- *Weaknesses -*

- *What could be improved -*



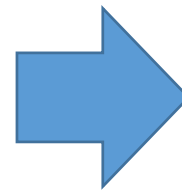
How does it work?

The tool assesses the **STATE OF CLARITY** in the metadata of an external source in seven items or dimensions:

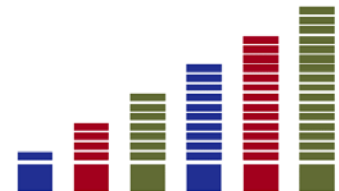
1. Population units
2. Time dimensión
3. Geographical scope
4. Statistical variables

5. Communication of changes

6. Data checks
7. Data modifications



- Just one by source
- Not long time
- Graphical output
- Outcomes suggestions



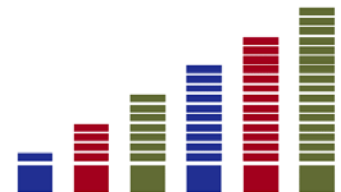
Input items:

1. Population units

Are the population units defined clearly by the data supplier? :

----->

- a: Description clear → **100%**
- b: Description unclear → **50%**
- c: Description missing → **0%**

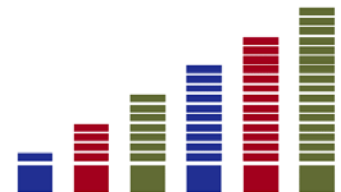


Input items:

2. Time dimension

Is the period or point in time to which the data refer clearly described by the data source supplier? : ----->

- a: Description clear → **100%**
- b: Description unclear → **50%**
- c: Description missing → **0%**

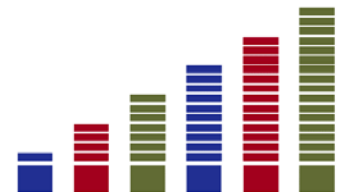


Input items:

3. Geographical scope

Is the geographical scope to which the data refer clearly described by the data source supplier? : ----->

- a: Description clear → **100%**
- b: Description unclear → **50%**
- c: Description missing → **0%**

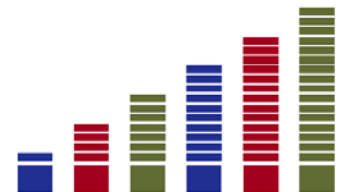


Input items:

4. Statistical variables

Are the statistical variables clearly described by the data source supplier (classifications, codifications used, etc...)? : ----->

- a: Description clear → **100%**
- b: Description unclear → **50%**
- c: Description missing → **0%**

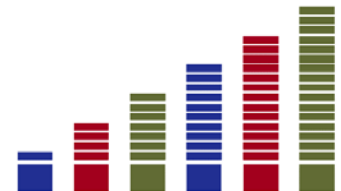


Input items:

5. Communication of changes

When the data source supplier has adjusted a definition, is this change communicated clearly? : ----->

- a: No changes occurred → **100%**
- b: Communication clear → **100%**
- c: Communication unclear → **50%**
- d: Communication missing → **0%**

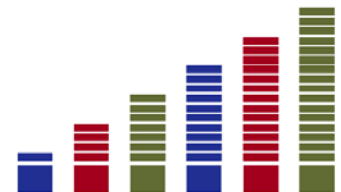


Input items:

6. Data checks by the supplier

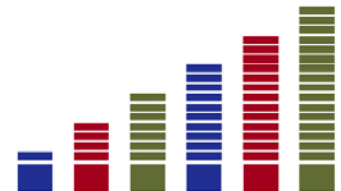
Are the supplier's data checks clearly described (uniqueness of the
 units, plausibility of variables and combinations of variables,
 extreme values, etc...)? : ----->

- a: Description clear → **100%**
- b: Description unclear → **50%**
- c: Description missing → **0%**

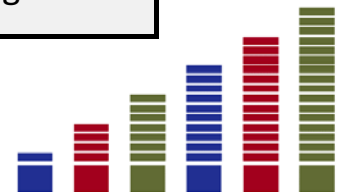


Input items:

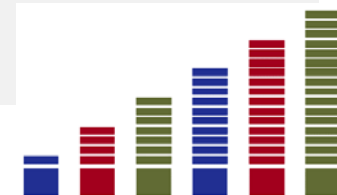
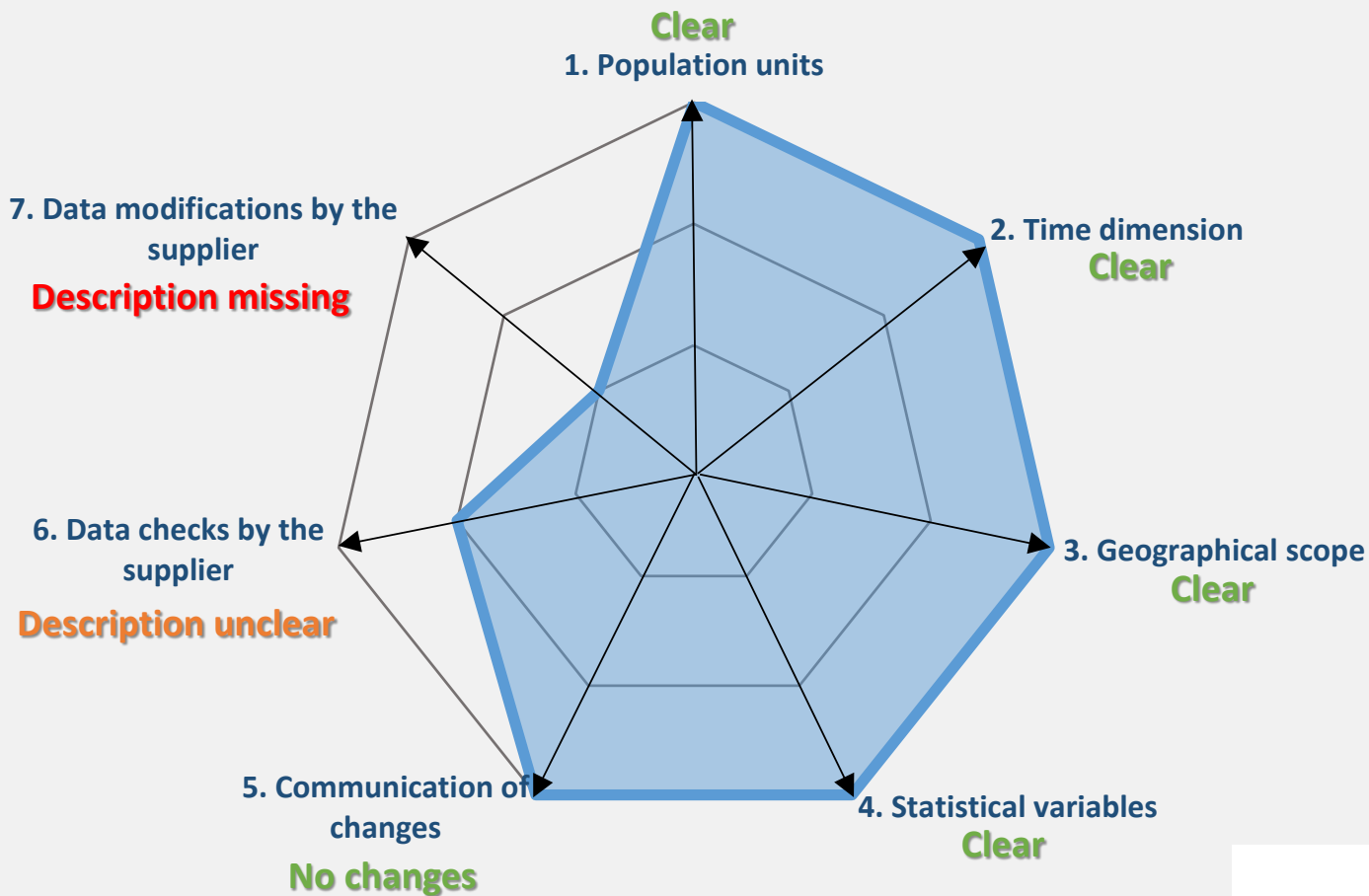
7. Data modifications by the supplier	
Are the supplier's data modifications clearly described (editing and imputation data rules, default values for missing data, etc.)? : -- ----->	<ul style="list-style-type: none"> <input checked="" type="radio"/> a: No modifications on data 100% <input type="radio"/> b: Description clear → 100% <input type="radio"/> c: Description unclear → 50% <input type="radio"/> d: Description missing → 0%



Results of the evaluation in the clarity of metadata:	Example
1. Population units description :	Clear
2. Time dimension description :	Clear
3. Geographical scope description :	Clear
4. Statistical variables description :	Clear
5. Communication of changes :	No changes
6. Data checks by the supplier :	Description unclear
7. Data modifications by the supplier :	Description missing



Metadata clarity of the external source



QmetaTool

Thank you for you attention!

javier.orche.galindo@ine.es

National Statistical Institute of Spain (INE)

