



**United
Nations**

DESA
Statistics Division

Session 3: Quality assurance of administrative and other (new) data sources

3.4 Discussion of implementation cases and review of available implementation guidance and options

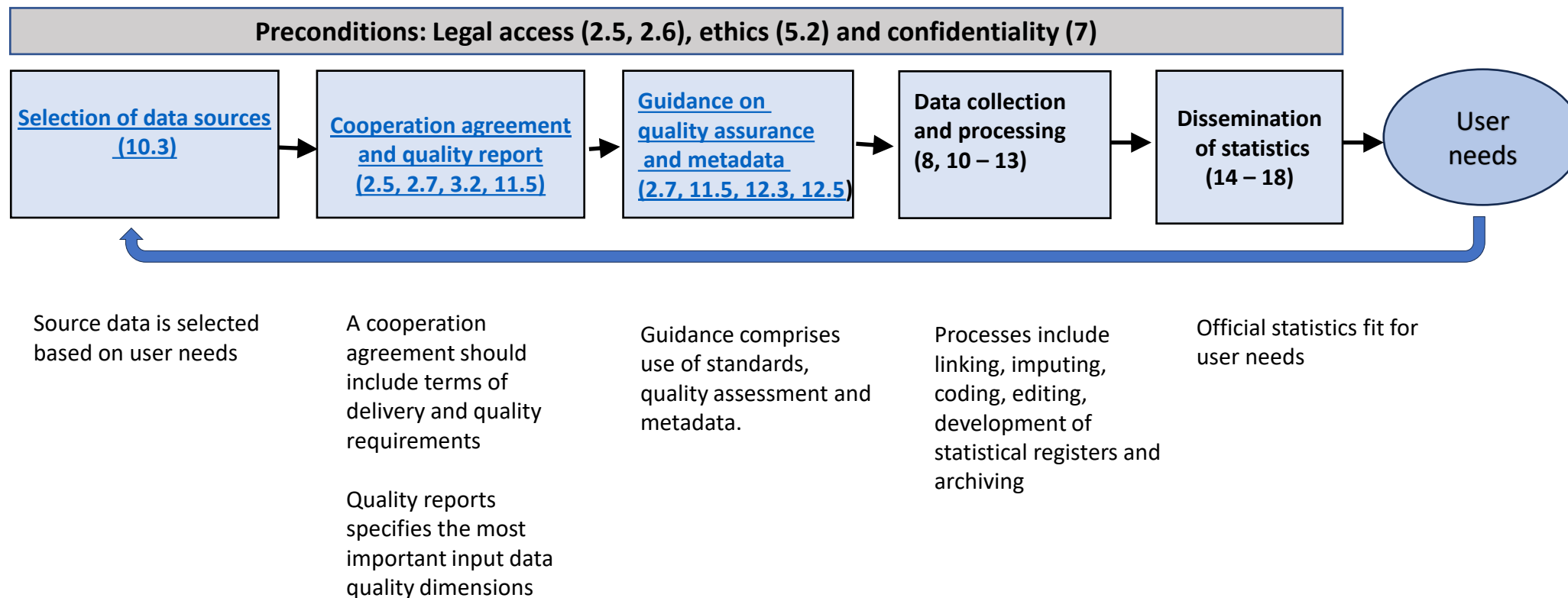
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United Nations Department of Economic and Social Affairs

Workshop on the Implementation of a National Quality Assurance Framework for Official
Statistics in Countries of the Latin American and Caribbean Region

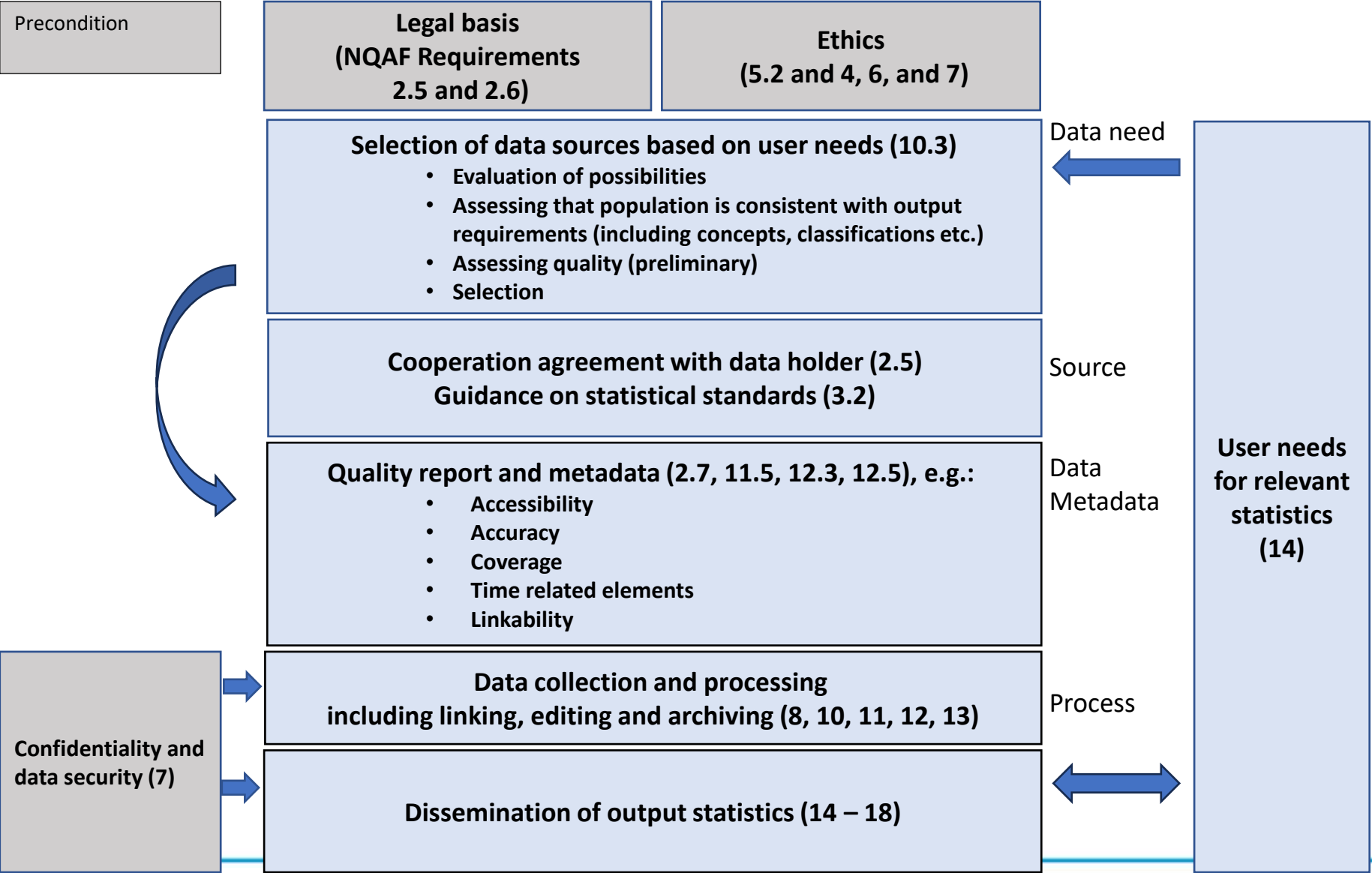
Bogota, Colombia, 22-24 November 2023



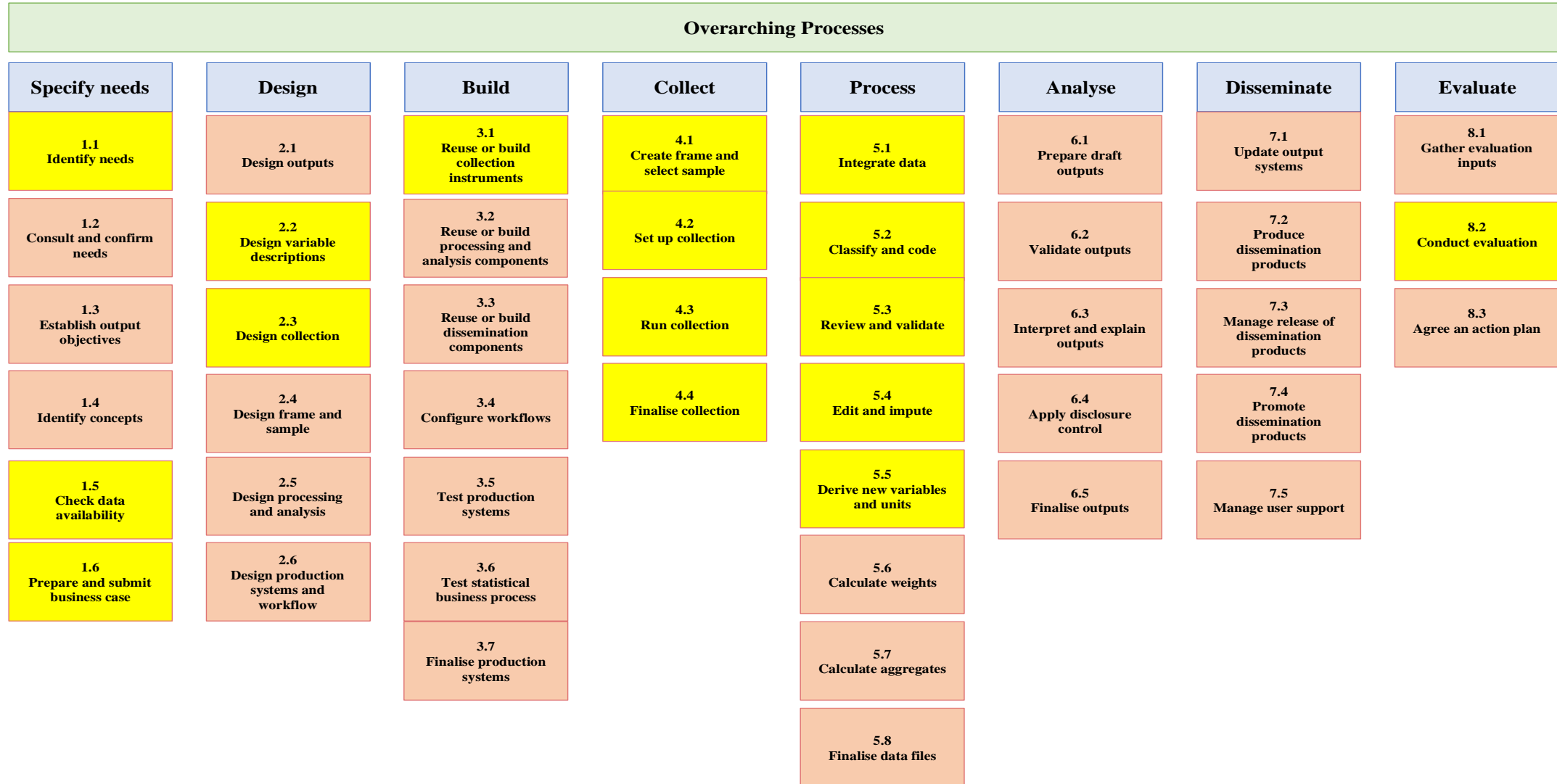
Important steps when using administrative and other data for official statistics – and their link to UN NQAF



A conceptual approach to using administrative and other data sources



Question: How is the use of admin and other data sources reflected in GSBPM



What NQAF covers or does not cover

- NQAF includes most of the factors affecting quality of statistics based on administrative and other data sources, though not always at the same level of detail. The main principles/requirements/elements covered are largely summed up in the figures.
- Possible main requirements and elements from the examples that are not covered comprise:
 - **Review of the data holder organization (and its reputation to ensure that it is ethically and legally acceptable to acquire the data)**
 - **Quality assurance of the data holder (beyond assessment of its data)**
 - **Details about the content of Cooperation agreements/MoUs**
 - **Details about the content of quality reports (a checklist on **quality dimensions of input data**, see next slide)**
 - **Details about data processing beyond linkage, editing and archiving (such as imputing, coding and development of statistical registers)**
- Terminology may vary in the examples, there is a need for some harmonization

Example 1: Quality criteria for administrative data

Statistics Netherlands 2009

- Quality criteria linked to **Source**: Supplier, Relevance, Privacy and security, Delivery, Procedures
- Quality criteria linked to **Metadata**: Clarity, Comparability, Unique keys, Data treatment (by supplier)
- Quality criteria linked to **Data**: Technical checks, Coverage, Linkability, Non-response, Measurement, Processing, Sensitivity

Checklist for the Quality
evaluation of Administrative
Data Sources



[45-Checklist-quality-evaluation-administrative-data-sources-2009.pdf](#)

Example 2: Quality criteria for administrative data

- Technical checks (usability)
- Accuracy (erroneous objects or variables)
- Completeness (under-coverage, over-coverage, redundancy)
- Time (timeliness and punctuality)
- Integrability (linking-ability including comparability with variables from different data sources)

Metadata must be available

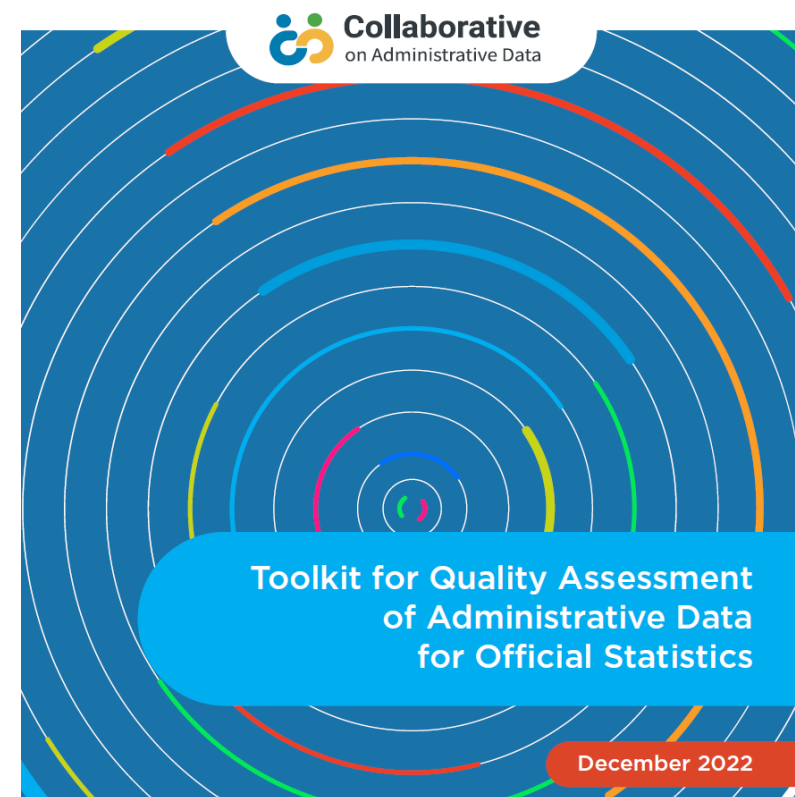


Source: [BLUE-ETS Project](#)

Example 3: UN Collaborative on Administrative Data

1. The Statistical System, Institutional Framework and Agreements
2. Input data quality (Source)
3. Quality and data processing:
 - Accuracy and completeness (including over and under coverage, selectivity, and redundancy)
 - Validity
 - Clarity (metadata)
 - Coherence and Consistency.
 - Technical checks
4. Ensuring quality of statistical outputs

Source: [Other 04.a Toolkit for Quality Assessment of Admin Data for Official Statistics.pdf](#)



Example 4: Quality criteria for other and new data: Big data

1. Quality criteria linked to **Source**:

- Institutional environment (sustainability of data provider, transparency and interpretability)

2. Quality criteria linked to **Metadata**:

- Complexity, completeness, usability (of metadata) etc.
- Time

3. **Data quality**:

- Accuracy and selectivity, including coverage (over and under-coverage and imperfections)
- Linkability etc.

Source: [UNECE Big Data Quality Task Team](#)

A Suggested Framework for the Quality of Big Data

Deliverables of the UNECE Big Data Quality Task Team

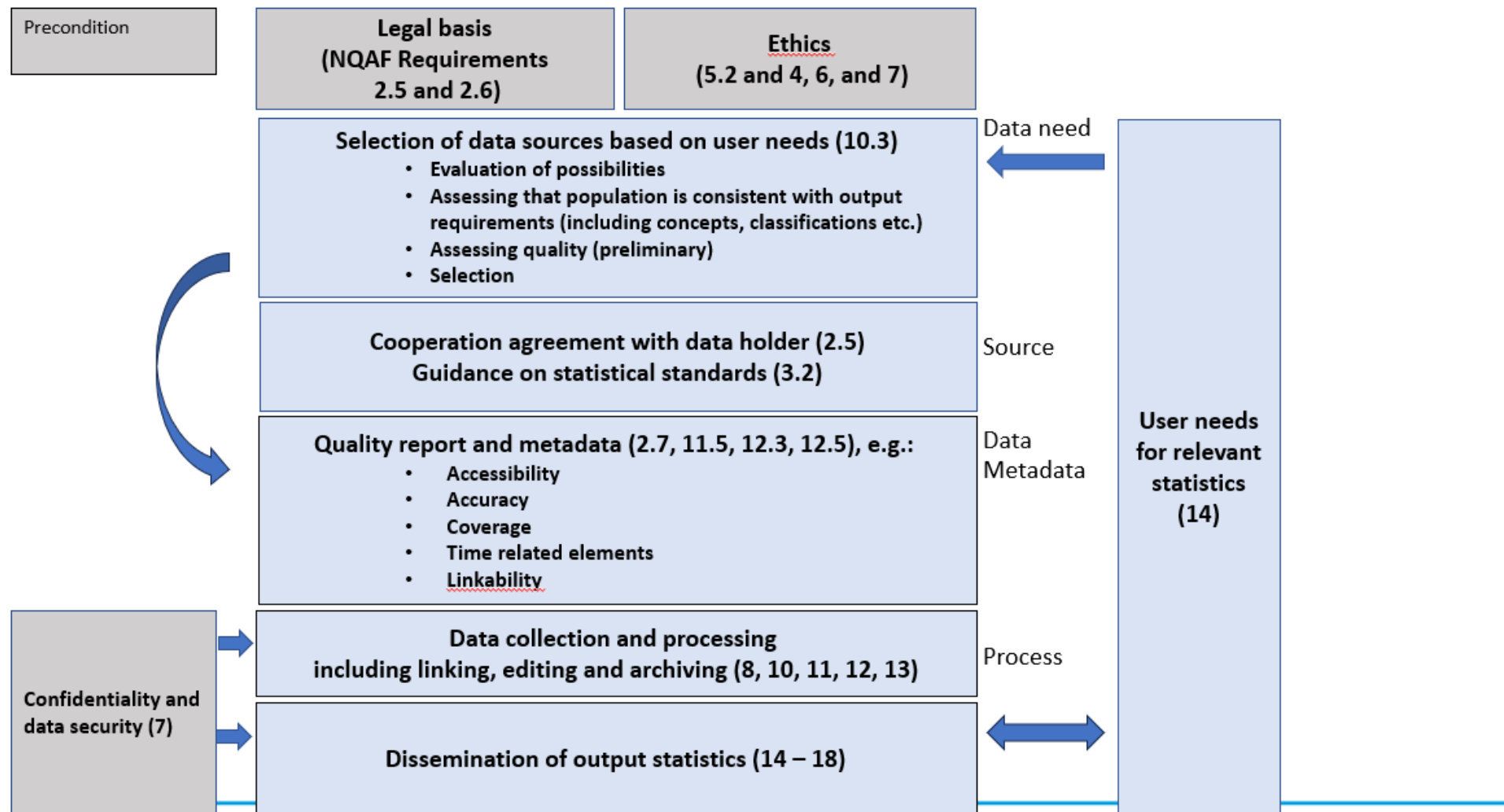
December, 2014

Roundtable 1: Possible tools / guidance – Pros and Cons

1. Amendment / supplement to UN NQAF
 - Countries to integrate the additional requirements into their NQAF
2. Module(s) on admin and other data sources (group exercise)
 - Focuses exclusively on the relevant requirements for admin and other data sources
 - Can be used in conjunction with existing NQAF
 - Complements your NQAF
3. Separate toolkit
 - Includes all other relevant requirements of your NQAF, such as on statistical outputs
 - No need to refer to NQAF (advantage for some users)
 - Overlaps with NQAF and risks confusion
4. All of the above, other suggestions?

Roundtable 2: Do you find the conceptual approach useful?

A conceptual approach to using administrative and other data sources





Thank you.