



United Nations Statistics Division

Principles and concepts of classifications

United Nations Statistics Division



Definitions

- ❑ Classifications group and organize information meaningfully and systematically into a standard format that is useful for determining the similarity of ideas, events, objects or persons using an exhaustive and structured set of mutually exclusive and well-described categories
- ❑ Often presented as a hierarchy



Uses

- Classifications may:
 - Support regulatory policies (e.g. customs)
 - Standardize concepts of public services (e.g. job placement, education, welfare)
 - Describe social, economic or natural phenomena



Definition

- A **statistical classification** is a classification having a set of discrete categories, which may be assigned to a specific variable registered in a statistical survey or in an administrative file and used in the production and presentation of statistics



Principles of statistical classifications

- Statistical classifications are developed or revised on the basis of established practices and principles:
 - Objectives and statistical priorities to be served must be clearly stated, including the classification variable
 - A custodian must be clearly identified and responsibilities stated
 - Time table for the work must be publicized and must allow substantive experts (users or producers of statistics) to contribute to the process



Principles (cont.)

- Well-defined classification structure must be prepared
 - Depending on needs, may include a hierarchy
- Descriptive definitions or exhaustive listings of the content of the defined categories must be provided
- Instructions on the use / interpretation of the classification must be provided
- Guidance and training materials should be developed



Other uses of statistical classifications

- Legal importance and policy relevance affect the development and use of statistical classifications
 - Examples for such links:
 - Harmonized System (HS) and customs regulations
 - Int. Classification of Diseases (ICD) and formulation of prevention and treatment programmes; scope of insurance schemes and identification of people who qualify for services or compensation ...
- Other uses can and should be taken into account when developing a statistical classification



Other uses of statistical classifications

- Important restriction:
 - If a legal text or contract refers to a statistical classification or any category therein, the entity that prepared the legal text or contract, not the custodian of the statistical classification, is responsible for practical consequences and for any clarifications of their content



Harmonization

- The objective of harmonization of statistics is to make possible the combination or comparison of data that have been collected for different populations, for different periods, for different statistical units and by different data collection methods
- This may be possible through the use of the same or consistent statistical standards and classifications across data sets
 - Otherwise, an explanation of differences must be part of the analysis



Harmonization

- Harmonization of statistical classifications themselves:
 - Should be attempted by establishing consistent categories for same or closely related variables
 - Requires a reconciliation process of different classifications and standards into a common framework, including:
 - Common concepts and terminology
 - Agreement on common building blocks
 - Establishment of correspondence tables



Harmonization

- If classifications cover the same variable, harmonization requires a clear understanding of the basis for and nature of the differences
 - E.g. could respond to user needs
- Move towards a common reconciled classification may include adjustments to existing classifications, giving priority to some application over others or even use a less tailor-made classification for some purposes



Harmonization

- ❑ A classification should not be amended/changed without taking into account the possible effects on other classifications or on the analytical use of the classification
- ❑ A open development procedure, involving other users, should be used to prepare for the effects and minimize them



Harmonization

- To establish clearer criteria for classifications in a specific area and to describe the relationship among them, classifications are categorized as
 - Reference classifications
 - Derived classifications
 - Related classifications
- In particular, the reference classifications serve as models for developing other classifications (national, regional)



Developing a classification

- Developing a new or adapting an existing international classification should cover an agreed set of steps:
 - Determining user requirements
 - Agreeing on conceptual basis
 - Setting the classification structure
 - Develop supporting materials



Determination of user requirements

- Who are the users?
- How do they use the classification or the statistics produced through it?
- What do users want the classification to do?

- Balance users' requirements



Conceptual basis of the classification

- Define the scope of the classification
 - Consider also the general purpose nature of many classifications, which can then applied to specific more restrictive frameworks
- Select the main variable of the classification
- Identify main statistical units
- Set rules for applying the classification (incl. for application to other statistical units)
- Collect necessary information to define/describe the classification categories



Setting the classification structure

- ❑ Categories at the most detailed level should be built according to agreed similarity criteria
- ❑ Criteria for higher level aggregations may be defined differently
 - Example: ISIC, ISCO



Development of supporting materials

- Explanatory notes
 - (are actually part of the classification itself)
- Classification indexes
- Correspondence tables
 - To which other classifications?
 - At what level?
- Coding tools



Next step:

Implementation !!!