



United Nations Statistics Division

Linking ISIC to other classifications

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What links are possible?

- ❑ ISIC is used for statistics grouped by activities and most commonly statistics based on units (e.g. establishments) classified according to their main activity
- ❑ Theoretically, any classification that can establish a connection to these concepts can be linked to ISIC



What links are possible?

- Some classifications may link to the complete range of ISIC activities, while others can establish a meaningful link only to a subset of ISIC categories
- Sometimes, categories in both classifications may look alike, but their context restricts the link
 - Example: ICATUS



How is the link defined?

□ The important question is:

What criteria/concepts are used to link the two classifications?



How is the link defined?

- Very common links
 - Other activity classifications
 - Product classifications

- Criteria are typically clear in these cases
 - options for products still exist

- We will look at the ISIC-CPC link later on



Example: ISCED

- ISCED classifies programmes into levels according to set criteria
- ISIC classifies units providing education services



Example: ISCED

- A link between ISIC and ISCED can be established by linking units providing programmes at educational level n with educational programmes at level n in ISCED
- Problem: the programmes are not defined at unit level (e.g. schools) and a unit can carry out multiple programmes
 - Keep in mind when comparing data



Example: ICNPO

- ❑ ICNPO also classifies activities
- ❑ Categories of ICNPO and ISIC often line up or can be aggregated to matching levels
 - Discussed in Part 4 of the ISIC Rev.4 publication
- ❑ Data conversion issue:
 - While definitions of activity categories are comparable, the ISIC classes cover non-profit and for-profit institutions



Example: ICATUS

- ICATUS covers activities carried out by individuals
 - ISIC covers activities by statistical units, such as establishments
 - One-person establishments are possible (for many activities)

- Covers also non-productive activities
 - Scope is different from ISIC
 - Links for the matching scope part could be established



Example: ICATUS

- Some individual categories seem identical to ISIC
 - E.g. farming of animals, quarrying of stone, processing of meat, cleaning services
- However, ICATUS also considers the context in which the work is carried out
 - The above examples could be performed for corporations (formal work), households or for own use



Example: ICATUS

- All formal work (in main job) is classified in one category in ICATUS - 011110
 - Makes link to ISIC not very useful in this case
- Other activities can be linked according to their type

- Overall link needs context information to be applied correctly



Example: ISCO

- ❑ ISCO classifies jobs, while ISIC classifies activities (units)
- ❑ In many cases a link could be established

- ❑ However, the concept of the link needs to be clarified



Example: ISCO

- In some cases an apparent match between ISIC and ISCO exists
 - E.g. Lawyers are recognized in ISCO
 - They could be linked to legal activities in ISIC (6910)
 - However, lawyers can work in companies engaged in many different activities
- In other cases the links don't work at reasonable levels
 - Machine operators in ISCO could be linked to many classes in ISIC
 - Managers, supervisors



Example: ISCO

- Should an ISIC-ISCO link reflect the industry in which a certain job is actually performed?

or

- Should an ISIC-ISCO link reflect the industry in which a person carrying out a given job would be classified if he/she had been an independent goods or service provider?

- To what kind of data is the link applied?



Example: COFOG

- COFOG classifies expenditures by government units according to purpose
 - Should a link between ISIC and COFOG be based on which units have expenditures for the purposes shown in ISIC?

or

 - Should a link between ISIC and COFOG be based on which units provide the goods and services for the purposes shown in ISIC?



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CPC Ver.2 - ISIC Rev.4



CPC-ISIC link

- CPC classifies products, ISIC classifies activities/units
- What concept is used for the link?
- Most common: Link CPC products to the ISIC activities that produce them
 - Other options: link to activities that use them; link to ISIC industries that produce these products
 - Problem with latter: secondary production



CPC-ISIC link

- In most cases, a product can be attributed to a single activity that produces it
- There are exceptions, which complicate the link:
 - Products assigned to multiple activities
 - Products assigned to many/all activities/industries
 - Products assigned to no activity (not outputs of production)
- Note: although the link is to “activity” the above exceptions may go beyond that for practical reasons
 - E.g. trademarks, leasing of rights to use patents



CPC – ISIC link

- ❑ Products with multiple activity/industry links
 - Examples:
 - ❑ Mushrooms (output of growing or gathering)
 - ❑ Oysters (output of aquaculture or fishing)
 - ❑ Glycerol (output of different chemical processes)
 - ❑ Electrical capacitors (electric vs. electronic)
 - ❑ Sale of advertising space in print media (different media)
 - ❑ Internet access services (different providers)



CPC – ISIC link

- Reasons for multiple links:
 - Insufficient product detail
 - (could be fixed)
 - One product (with unique characteristics) can be produced by different industries
 - Subdividing these would create “artificial products”; goods not compatible with HS

- Forcing a single link may result in loss of data
 - Depends on application of this link for data collection and display



CPC – ISIC link

- Total number of CPC products with multiple ISIC links:
 - 66 (out of 2730) = 2.5%
- For most products, a regrouping by industry is possible

- No ISIC link shown for waste products
 - Could be produced by many industries, regardless of waste type
 - Some are not output of production



Summary

- Links can be established between ISIC and many other classifications
- It is important to agree on the concept that defines the link
 - This will depend on the type of data that is being considered