



# ISIC and CPC implementation

**United Nations Statistics Division**



# Implementation process



# Implementation of ISIC Rev.4

- **Major tasks and challenges:**
  - Defining a new classification and associated tools
  - Reclassification of all units on the business register according to the revised classification
  - Maintaining two classifications for an interim period
  - Sampling and weighting under the new classification
  - Simultaneous estimation and results assessment under both new and old classification
  - Construction of industry weights for short term statistics
  - Construction of back series in terms of the revised classification
  - Handling of the national accounts move to the revised classification

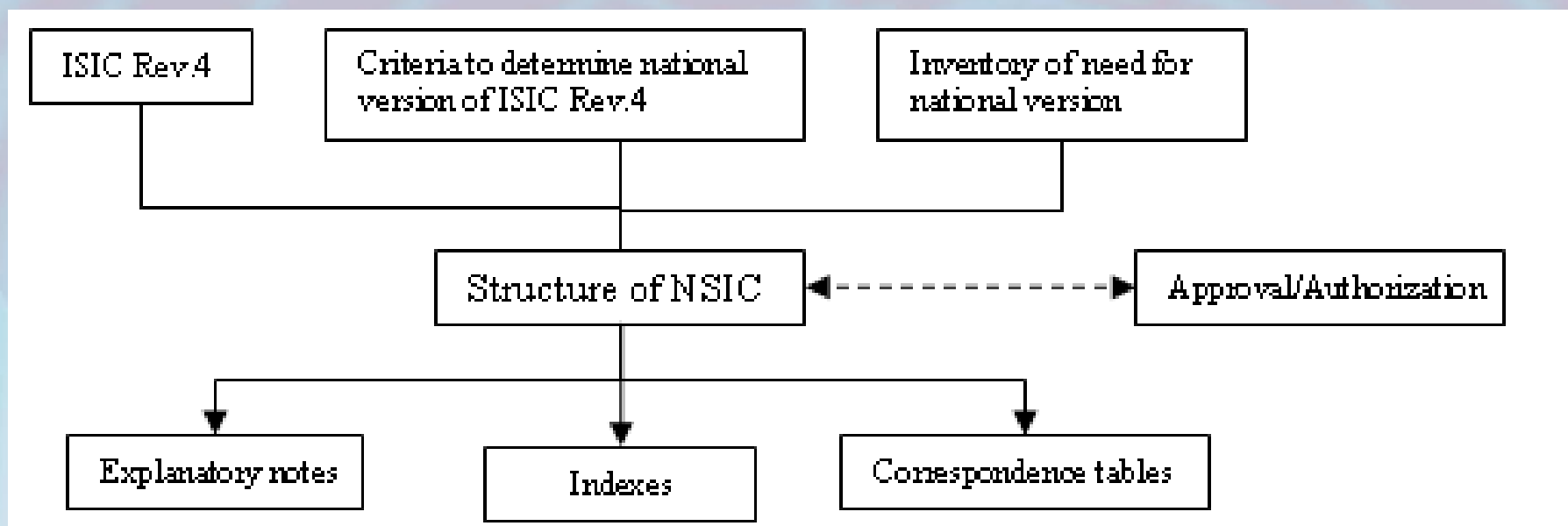


# Overall implementation process

- ***NSIC setup process***
  - creation of a new national version of national classification (NSIC) according to ISIC Rev.4 for national use
- ***Register update process***
  - switchover in the Business Register to new NSIC
- ***Statistics update process***
  - co-ordinate simultaneous switchover in statistics to new NSIC and the control of the quality of time series



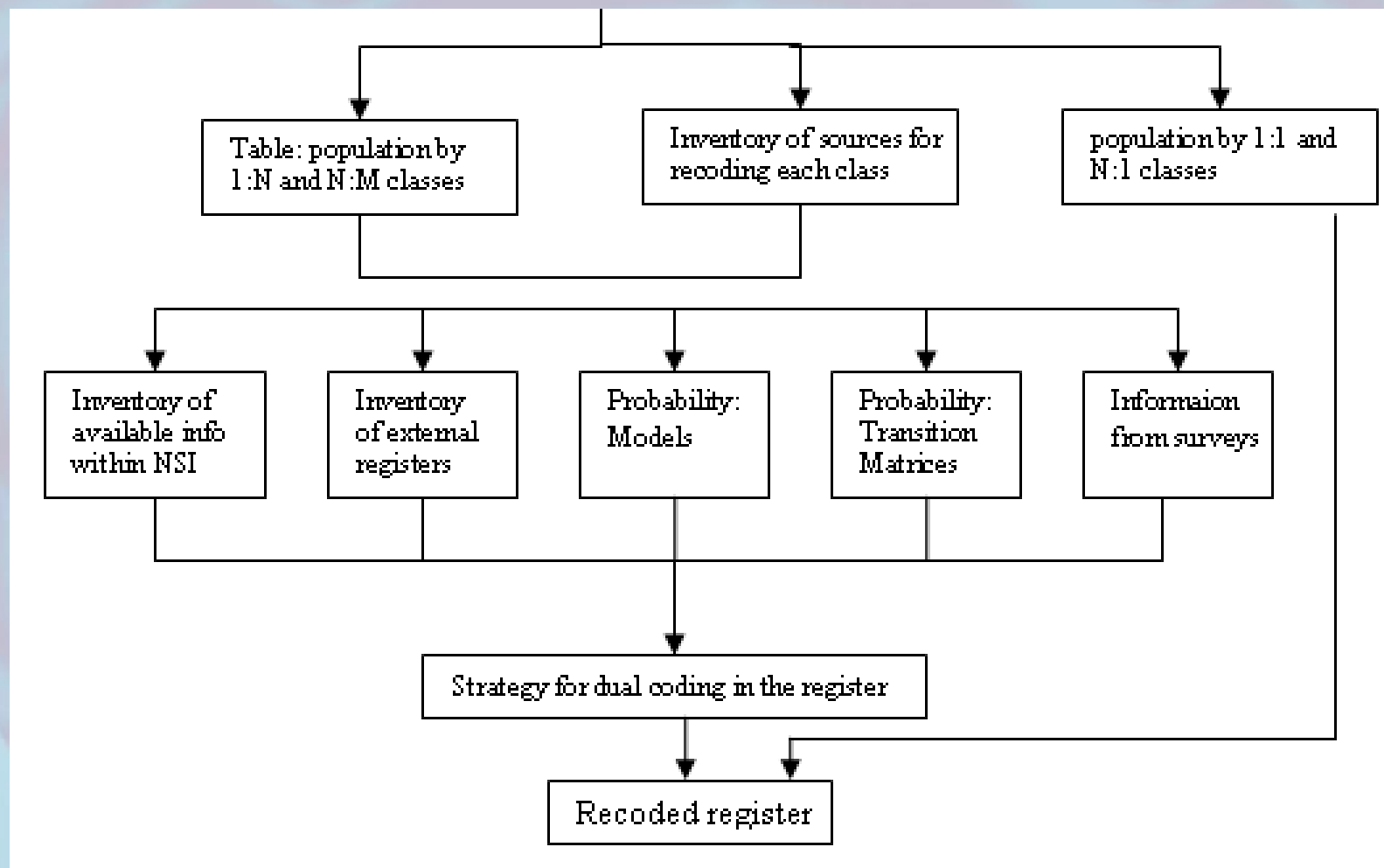
# NSIC setup process





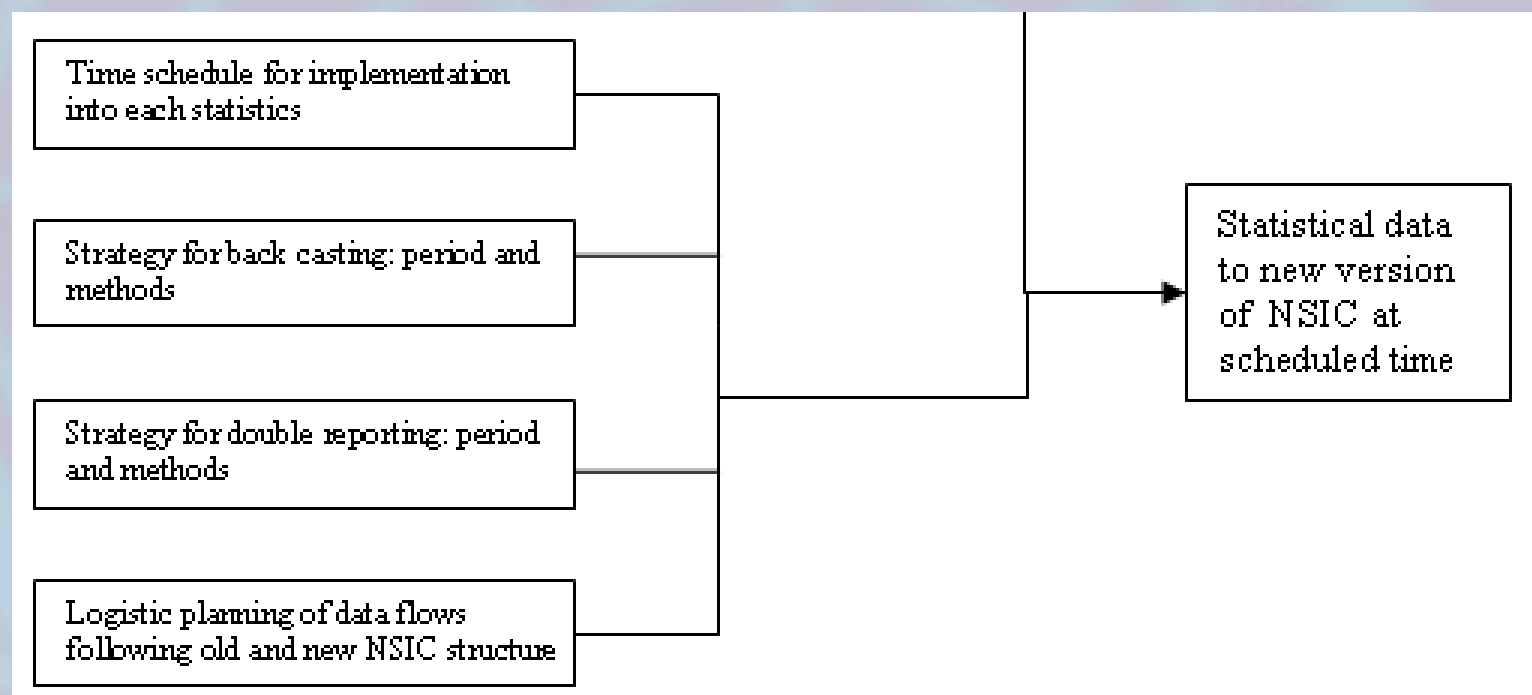


# Register update process





# Statistics update process





# Coordination of work

- Groups involved in the three processes need to be coordinated
  - Need for a programme manager
- Communication with users of the classification (potential data providers)
  - Need to get other users involved in setup and keep them updated on work and impact according to a fixed schedule





# Criteria for developing NSIC

- Discussed in previous presentation
- Should involve other stakeholders / users/ data providers
- If sufficient, ISIC Rev.4 can be used as is
  - In this case, tools (correspondence tables etc.) are ready



# Recoding the business register

- Based on known correspondence table, can use different methods:
  - Direct (straight) recoding
  - Use of additional info from NSO or external registers
  - Surveys
  - Profiling
  - Probabilistic models



# Recoding the business register

- Dual coding should be kept for several years
  - Problem: some units may cease operation
    - Use of reference dates may help
  - Can be implemented by using a transition code
    - Reflect correspondence table
- Can computer-assisted coding help?





# Future statistical work

- Sampling procedures have to be updated for the new classification
  - Scope of categories may have changed
  - Should (at least for the transition period) produce estimates for old and new classification
- Overall sample size may increase
  - To increase reliability of dual-coded results
  - To compensate for startup problems of the new classification (misclassification of units)
  - To allow for increase of detail required in new classification
  - To better evaluate coherence between old and new classification



# Sample timetable for transition (1)

Jan 2009	BR recoded to old and new classification
2009	Continue sampling according to old NSIC but use Register information to tabulate the existing sample against the new strata in new NSIC. Use this scheme as the first attempt at the sample on the new basis. For strata that are weak, in terms of their sample size, estimate the numbers required for acceptable results on the new NSIC and seek approval to carry out this top-up of the sample





## Sample timetable for transition (2)

Jan 2010	Draw the sample on new NSIC (initially: old sample tabulated against the new industries and new strata, with weakest strata under the new NSIC boosted by a top-up of the sample)
2010	Calculate variance of the elements in the sample in each of the strata based on returned data. Use sample variances as approximations of the population variances and use Neyman allocation to calculate new samples.
Jan 2011	Re-allocate the sample based on reported data (in a more efficient way now). The top-up sample can cease. Survey can be conducted according to new NSIC.



# Additional guidance

- **More detailed guidance for developing new national classification, recoding of business register, sampling design and weight estimation, backcasting is being prepared in the implementation materials**