Methodological guidelines

 The Classification of Types of Constructions (CC) has been developed on the basis of the provisional Central Product Classification (CPC) published in 1991 by the United Nations. CPC distinguishes in Division 52 "Constructions" between the two main categories "Buildings" and "Civil engineering works" which in CC are also used as major groups.

CC tries at the same time to be consistent with the UN recommandations applicable in this field :

- the definitions concerning the current housing and construction statistics for the countries of the ECE/UN region (1994)¹, and
- the recommendations for the 1990 censuses of population and housing in the ECE region².
- 2. Compared with the CPC-structure the CC-version of "Buildings" has been subdivided more detailed and includes a considerable number of additional items.
- 3. CC is designed to serve different purposes such as statistics on construction activities, construction reports, building and housing censuses and price statistics on construction work and national accounts. In addition, CC is to be used for the definition of constructions which will be needed for the provision of information on specific variables (e.g. building permits, production) concerning short term indicators. Also, CC is designed to be used for the whole life of a construction : changes in use, transactions, renovations, demolition. Finally, CC could be used as classification standard for the procurement and tenders on public works contracts initiated by the Commission.
- 4. The classification uses the decimal system and includes :

2	Sections	(1-digit)
6	Divisions	(2-digit)
20	Groups	(3-digit)
46	Classes	(4-digit)

5. This publication consists of three parts :

Part I	Introduction
Part II	Structure

Part III Explanatory notes

Classification principles

- 6. In this classification, constructions are subdivided into "Buildings" and "Civil engineering works". Within these sections CC differentiates primarily according to the technical design which results from the special use of the structure (e.g. commercial buildings, road structures, waterworks, pipelines) and, in particular for buildings, according to the main use (e.g. residential, non-residential). The site of a construction, its ownership and the institution to which it belongs are normally irrelevant criteria for this classification and have not been taken into account, except in a few cases.
- 7. Civil engineering works are classified mainly according to the engineering design which is determined by the purpose of the structure.

Definitions

¹ Statistical Standards and Studies, No 43, United Nations, New York, 1994.

² Statistical Standards and Studies, No 40, United Nations, New York, 1987.

- 8. Constructions are structures connected with the ground which are made of construction materials and components and/or for which construction work is carried out. In this respect, the preparation of soil, planting or sowing etc. for agricultural purposes are not regarded as constructions.
- 9. *Buildings* are roofed constructions which can be used separately, have been built for permanent purposes, can be entered by persons and are suitable or intended for protecting persons, animals or objects.

Buildings do not necessarily need walls. It is sufficient for them to have a roof, but there must be a demarcation which constitutes the individual character of the building to be used separately.

A separate building is any free-standing building; also, in the case of interconnected structures (e.g. semi-detached or terraced houses), any unit separated from other units by a fire wall extending from roof to cellar is considered an individual building. If there is no fire wall the interconnected building units are regarded as individual buildings if they have their own access (own entrance) as well as their own utility system and are separately usable.

For technical reasons, buildings also include separately usable underground constructions which can be entered by persons and are suitable or intended for protecting persons, animals or objects (e.g. underground shelters, underground hospitals, underground shopping centers and workshops, underground garages).

Buildings are subdivided into residential and non-residential buildings.

- 10. *Residential buildings* are constructions at least half of which is used for residential purposes. If less than half of the overall useful floor area is used for residential purposes, the building is classified under non-residential buildings in accordance with its purpose-oriented design.
- 11.Non-residential buildings are constructions which are mainly used or intended for non-residential purposes. If at least half of the overall useful floor area is used for residential purposes, the building is classified as a residential building.
- 12. The overall useful floor area does not include :
 - construction areas (e.g. areas of demarcation components, supports, columns, pillars, shafts, chimneys)
 - functional areas for ancillary use (e.g. areas occupied by heating and air-conditioning installations, or by power generators)
 - thoroughfares (e.g. areas of stairwells, lifts, escalators)

The part of the overall useful area of a building used for residential purposes includes the area used for kitchens, living rooms, bedrooms and ancillary rooms, cellars and common rooms used by the owners of the residential units.

13. *Civil engineering works* are all constructions not classified under buildings : railways, roads, bridges, highways, airport runways, dams etc.

Guidelines for classifying constructions

- 14. The unit to be used for classification is generally the individual construction (building, road, pipeline etc.). In certain cases it is only possible to apply it to a property as a whole.
- 15.For complex constructions consisting, for example, of several buildings, each building is to be classified as a separate unit. If, for example, a school consists of a school building and a hostel, the school building is to be assigned to 1263, whereas the hostel belongs to 1130. However, as mentioned above, if no detailed data are available, the complex is classified to 1263.
- 16.As mentioned before, constructions are classified according to their specific use. Constructions used or designed for several purposes (e.g. a combined residential, hotel and office building) are to

be assigned to one classification item, according to the main use. The main use is to be determined as follows :

- The different purposes of the construction with their particular percentage of the overall useful area have to be calculated, with the purposes/uses allocated to the classification items.
- Then the construction is classified according to the "top-down" method : The construction is first assigned to the 1-digit section (buildings or civil engineering works) which covers the largest share of the overall area; then, it is assigned to the 2-digit division (Residential building, non-residential building, transport infrastructure etc.) with the largest share within the section. At the next stage it is assigned to the 3-digit group with the largest share within the division. Finally to the 4-digit class with the largest share of the overall area within the group.

17. This rule can be illustrated on the basis of the following theoretical example :

The overall useful area of a building is broken down into :

Type of use	Percentage of overall useful area	CC Class
4 flats	30 %	1122
Office of a credit institute	10 %	1220
Pharmacy and shops	20 %	1230
Library	30 %	1262
Doctor's practice	10 %	1264

In this case the building is to be classified as follows :

- in the 2-digit division 12 "Non-residential buildings" because this covers the major percentage (70%)
- in the 3-digit group 126 "Buildings for public entertainment, education or hospital and institutional care" because this covers the major percentage (40%) within division 12
- finally in the 4-digit class 1262 "Museums and libraries" because this class covers the major percentage (30 %) within unit group 126.