

**Draft classifications for service statistics
Proposals from Sweden concerning:**

- COMPUTER AND RELATED ACTIVITIES (ref ISIC)
- SOFTWARE AND OTHER COMPUTER SERVICES (ref CPC)

1 General remarks

Our suggestions regarding coverage, subdivisions, definitions and the drawing of boundaries are still quite preliminary. We have subdivided the ISIC division 85 into four classes, one less than in the UN proposal of 30 June 1986. The boundaries of some of the classes have been changed. We also propose that wholesale trade of computer equipment in ISIC group 626 should be separately identified. As far as possible all important activity elements relating to the manufacture and selling of computer equipment, as well as the consultancy and technical assistance in installation and use of such equipment, should be identified somewhere in the classification and be used as building blocks for special statistical tabulations covering all stages of computer related activities.

We suggest that the class 8504 Data bank activities, as proposed by the UN, should be included in ISIC division 96, which should be renamed: Information supply, cultural and recreational activities. (The present title in the UN draft of the revised ISIC is: Recreational, cultural and sporting activities). We think that the information content of this activity - i.e. storing, distributing or giving access to information - is more important as a clue to where it should be included in the classification than the use of data processing technologies. The close relationship to libraries and central archives, which still function mostly as non-electronic data-bases, gives a better idea of the substance of the activities performed.

As we see it, the substance of the activities within ISIC division 85 is consultancy and technical assistance in the use of computer equipment to different categories of customers spread all over the ISIC. Producers classified to division 85 do not themselves produce any information content products.

The content of ISIC classes 8501 and 8502 has been somewhat changed. The definitions have been redrafted to fit the new contents.

The content of each activity class is also given in terms of the characteristic products as meant to be separated in the CPC. These are shown as subclasses of the product class equivalent to each activity class and assigned a preliminary alphabetic code. The present code construction of the drafted CPC is rather instable in its relationship to the ISIC. In most cases the suggested product categories are also structured differently as compared with the CPC draft. (See class and subclasses within CPC group 891 in the UN proposal of 30 June 1986.) The definitions of the product categories should be further developed and discussed.

2 List of suggested subdivisions

The activity categories in the list are identified by their corresponding ISIC code numbers. The product categories are identified by letters. Suggestions as to titles at group or class level in the product classification have not been inserted. An outline of some interpretation rules which arise from the suggestions is included at the end of the list. How the UN drafts treat the issue of complementary interpretation rules (as to the most important kinds of applications intended) as distinct from the general definitions and descriptions in the classification is still not clear to us.

Code	Title and description
626X	Wholesale of computers, computer equipment and software products (incl commission trade)
a	Wholesale of computers, computer equipment and electronic components
b	Wholesale of software

Remarks: Should electronic products (i.e. computers etc, electronic components and related services; see also CPC 252 and 271 in the part of transportable goods) generally be separated in the classifications according to their primary field of application: (i) Administrative data processing; (ii) Data processing in engineering and manufacturing and other technical processing (e g such as in automatic traffic systems) ?

Code	Title and description
8501	<p>Computer and software consultancy</p> <p><u>Description:</u> This class includes consultancy on type and configuration of hardware and associated software application. The consultancy typically involves analysing the user's needs and problems and presenting the most economic solution.</p> <p><u>Exclusions:</u> Similar services carried out by computer producing or selling units as an integrated part of the equipment delivery contract.</p>
a	<p>Computer and software consultancy services (incl computers, cables, networks, software products, consulting and training)</p>
8502	<p>Software supply (might be called: Software creation ?)</p> <p><u>Description:</u> This class includes activities in connection with the analysis, design and programming of data systems ready to use. Also included is the simple writing of programs following the directives of the user.</p> <p><u>Exclusions:</u> Similar services carried out as an integrated part of the reselling of software.</p>
a	<p>Generalized software tools</p>
b	<p>Expert systems</p>
c	<p>Software application services</p>
8503	<p>Computer service activities (Data processing service bureaus)</p> <p><u>Description:</u> This class includes the processing or tabulation of all types of data as a separate technical facility service. This may consist of the complete processing and preparation of reports from data supplied by the customer. It may also be specialized, i.e. key-punching or other input preparation, conversion such as card to tape etc, optical character recognition and others.</p>

Code	Title and description
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The services may be supplied either over-the-counter or via remote access terminals and may employ either the customer's or the producer's program.

- a Data processing services
- b Remote data processing facility services
- c Computer facilities management services
- d Backup facilities services (?)

(8504 Activity class moved to ISIC division 96, see general remarks above)

8505 Maintenance and repair of computer systems

Description: This class includes all kinds of maintenance and repair of computer and computer-related equipment not intimately connected to manufacture or wholesale contracts.

- a Computer maintenance and repair services

3 Interpretation/application rules

The services may be rendered either on a fee or contract basis between different enterprise-type units or between divisions of the same enterprise-(or concern-) type unit.

A minimum goal in most statistics applications is to measure the services performed on a fee or contract basis. Internal services for own use by the legal organisation would then be treated as auxiliary and not separately visible in the applied classification.

In order to increase the analytical significance and comparability of activity and product statistics it is recommended to measure also the internal services ("products for own use") when performed by larger divisions of the legal family unit. A guideline for the size of such divisions could be .. employees or more. The same kinds of services performed in a division of smaller size are, as far as general statistics is concerned, treated as auxiliary without any measurement and classification separate from the activities or products served.

In specific statistics, e g such as R&D, the goal of measurement may, however, be still higher so that all the services/activities according to the general definition are covered, irrespectively of whether performed as auxiliary or not. The industry classification concept should not be effected thereby. Establishment- or enterprise-type units should be classified by the main kind of activity according to the same interpretation rules as applied in general statistics. Thus the difference between general and specific statistics in this case concerns the range of separate coverage and way of recording activities and services performed as auxiliary, i.e. not the delimitation and classification of establishments to industries.

Draft classifications for service statistics

Proposal from Sweden concerning

POST AND TELECOMMUNICATION (Ref ISIC)

POSTAL AND OTHER MULTI-MODAL TRANSPORT SERVICES (Ref CPC)

TELECOMMUNICATION SERVICES (Ref CPC)

1 General remarks

Post- and telecommunication services defined institutionally are in Sweden The Post Office Administration and The Swedish Telecom. To a great extent we are dependent on these institutions and their organizational structure when drawing the boundaries for the activities. However, we should diverge from what is the institutionally defined boundary by excluding services like selling and/or reselling of apparatus and other services which are not "pure" post and telecommunication services. The fact that the two companies perform such services makes it somewhat difficult to separate economics about the "pure" services except for simple turnover figures.

We suggest that the activities within the Post Office Administration should be split into Post terminal and courier activity and Post counter activity. The reason for this is that the terminal services more and more are being exposed to competitions from private companies, for instance in the case of newspaper distributions and courier car services.

Also we suggest that telecommunication services should constitute two subdivisions, network activities and radio communication activities. In this case our suggestions are more shaky. As far as radio communication is concerned we lump together activities (services) quite different in kind, with different suppliers, markets and anticipated growth rates. Still, it is the only subdivisions we have found to be of some value. Technically there is no problem to separate cable-TV but the market for cable-TV is said to be rather small even after considering a future expansion. This is the reason why we have not given it a class of its own.

We are aware of that it is even more complicated to group these services than keeping side-activities outside the boundaries. Anyway we suggest it for what it is worth.

2 List of suggested subdivisions

Activity categories in the list are identified by corresponding ISIC code numbers. Product categories are identified by letters.

Code Symbol	Title and description
751	Post and courier activities
751X	Postterminal and courier activities. This class includes picking-up, mail sorting, transport and delivery of mail and parcels a) Letter b) Publication c) Parcel d) Valuable paper e) Courier activity
751Y	Post office counter activities This class includes all activities at a post- office except sorting and financial intermediation activities a) Post office counter services
752	Telecommunication
752X	Operation and maintenance of primary distribution, network for telephone, data and images (Even in- cluding cable TV network) a) Telephone services b) Telegraph services c) Data transmission services d) Distribution network services for TV-programmes (Cable-TV services)

Subdivisions of

a) telefon services:

1. Telephone services for regular subscribers

1.1 Local calls

1.2 Interurban calls

1.3 International calls

2. Telephone services for telephone exchange PBX subscribers

2.1 Local calls

2.2 Interurban calls

2.3 International calls

3. Paytelephone services

4. Directories and personal services such as wake up, etc.

752Y Radio communication activities

This class includes: Broadcasting of radio and TV, Mobil radio (incl. mobil telephoning, paying systems, radio data systems), fixed base radio (incl. mirowave links and satellite communications)

- a) Broadcasting of radio and TV
- b) Mobile radio service