A DRAFT DEFINITION OF THE ICT SECTOR

A discussion document prepared by the Statistical Panel

under aegis of the OECD ICCP Committee

August 1997

Abstract: This paper proposes an industry-based draft definition for the information and communication techologies (ICT) sector based on the policy needs identified by OECD's Committee on Information, Computer and Communications Policy (ICCP). It is presented at the September 1997 Voorburg Group meeting with the intent of illiciting comments which will be part of a broader discussion of the proposed definition by the OECD's ICCP Statistical Panel.

A DRAFT DEFINITION OF THE ICT SECTOR

Introduction

1.   Science and technology policy makers have expressed a need for internationally comparable statistics about information and communication technologies (ICT). These technologies are considered to be one of the more significant driving forces behind economic development in most of the world's developed economies and will provide significant employment opportunities for people in those economies. However, there is no accepted statistical framework which Statistical Agencies can use to develop internationally comparable data. Individual countries have developed their own models for data collection and presentation, with resulting inconsistencies between the data for different countries. This discussion paper aims to facilitate the development of a common definition of the ICT sector by proposing a framework for identifying and delineating the industries in the sector.

2.   It is apparent from the statistics which are available from a number of countries that there are requirements for data on both the supply of, and demand for, ICT goods and services. The present task, that of developing an ICT definition, has a supply side focus only. It is aimed at measuring the production and distribution of ICT goods and services and not at measuring their usage. At a later date some attention might also be given to the development of internationally comparable demand side statistics.

Statistical Panel

3.   The need for a set of internationally comparable data about information and communication technologies and the complexity of the requirements led the Information, Computer and Communication Policy (ICCP) Division of the OECD to set up a Statistical Panel, which had its first meeting on Indicators for the Information Society in June 1997. At that meeting the Panel decided to start the task by preparing a discussion paper on the definition of the Information and Communication Technology (ICT) sector.

4.   The formation of the Statistical Panel is not the first attempt by the OECD to set up some statistical standards in this field. In the 1980s, a similar group was set up. The basis of the definitional work undertaken by that Group was the work of Ian Miles of the Science Policy Research Unit at Sussex University. Miles' conceptual basis for the development of a set of IT goods and services revolved around his view that integrated circuits were the key to identifying IT goods. While this seems to work well for a range of goods (for example, most people would concede that a computer is an ICT good, but a new motor car is not even though it uses integrated circuitry in many ways), it does not apply to all goods that might be viewed as IT. It doesn't really apply to services which enable firms to use information and communication technologies. The

work of the initial Statistical Panel never reached a final conclusion on the definition; nor did it complete its aims of developing a standard framework for statistics in this field.

5.   Some of the difficulties with establishing a list of ICT goods and services concerns their rapidly changing character and the dated nature of current 'standard' classifications. New products are continually being developed in line with technological advances and at a fast pace. Users generally require data to be comparable over time and to be able to link domestic production data with international trade data. The classifications which are used for these data series, the Central Product Classification and the Harmonised System respectively, are considerably out-of-date in some areas.

6.   For these reasons the current Panel decided that it would be more productive for it to initially concentrate on a definition of the industries that make up the ICT sector. It will subsequently consider a definition of the goods and services to be included in the statistical framework.

7.   Therefore this paper aims to consider a number of broader issues associated with the delineation of the ICT sector, hopefully leading to the compilation of internationally comparable ICT sector statistics. Some issues of detail about precisely which parts of an industry are to be included can only be finally settled when the definition of the goods and services has been completed.

Some Terminology Issues

8.   As international work in this field is likely to be affected by the different usage of terminology, it may be useful to describe the meanings attributed to a number of terms in this paper to minimise confusion.

Activity - this relates to the functions undertaken by business units; is generally used to describe processes relating to the production and distribution of specific goods and services.

Industry - this relates to the grouping of particular businesses into a set which primarily undertake a common set of activities.

ICT Sector - contains those industries which are associated with the production and distribution of information and communication technologies. It is the purpose of this paper to describe these industries in detail.

Information Technology Industry - contains those businesses associated with the production and distribution of information technology goods and services.

Telecommunications Industry - contains those businesses associated with the production and distribution of telecommunications goods and services.

Information Content Industries - contains those businesses associated with the provision of information either directly to consumers or through some intermediary who transforms that information into some other medium. The set of industries is therefore made up of the traditional media businesses, such as newspapers and radio and television broadcasters along with elements of the cultural industries which provide the raw material input to the media for delivery. It also includes libraries.

Information Industries - this is taken to be the summation of the Information Technology, Telecommunications and Information Content industries as defined above.

User Needs and Priorities

9.   In order to determine which industries should be included in the ICT sector, there is a need for at least a broad understanding of user information needs and priorities for statistical indicators. Most important of these are the needs of policy analysts.

10.   The Statistical Panel is seeking to develop a fulll listing of user needs at its 1998 meeting - member countries will be asked to contribute to this exercise. In the meantime it is possible to develop some broad priority needs based on experience in some member countries. These are discussed below and may need to be modified in the context of a wider consideration of user needs for ICT statistics.

11.   Our assessment of the priorities for ICT statistics is:

Priority 1: Most current interest is related to the spread of personal and other computers and the mechanisms and technologies which interconnect them. The Internet is an integral part of this environment as is computer and communications software and the services which support it. This area of interest is the one which is mainly associated with the information highway. Another area of major current interest is in interactive entertainment and information products which are capable of either stand alone operation or online operation. There is particular interest in interactive multimedia products, video on demand and other interactive online entertainment services.

Priority 2: The second area of interest is in respect of non-interactive communication of information that is disseminated using information and communication technologies. These will mainly be distributed using services provided by cable TV, free to air TV and radio and other 'one-way' broadcasting activities. These services have existed for some time in many countries, although cable TV is new to some.

12.   By focussing on current issues and priorities, some of the goods which have the potential to complicate deliberations and which may have previously been included in surveys of this sector, can be excluded. Some of them can be considered to use ICT technologies rather than to be an ICT good.

The ICT Sector and Industrial Classifications

13.   Industrial classifications such as ISIC and its many country derivatives are used to classify business units into groupings which carry out similar economic activities. Business units are classified according to their main economic activity. Each of these classifications has a structure which classifies activity at a number of levels. At the broadest level the main purpose is to provide a meaningful, broad dissection of the economy; this provides for fundamentally different activities such as farming, mining, manufacturing, wholesaling, retailing, etc. Each of these broad industrial sectors is then further disaggregated into increasingly detailed dissections of the economic activity carried out.

14.   None of these industrial classifications contains a succinct industrial heading which equates to the ICT sector because the goods and services which characterise that sector are produced and distributed by businesses classified to a number of different industrial sectors. (While the recently developed NAICS draws some activities together into an information and cultural industries sector, manufacturing activities associated with ICT goods are still classified to the manufacturing sector. NAICS does include some manufacturing processes in its Information and Cultural Industries sector, but this only relates to publishing activities, particularly software).

15.   This is not a criticism of current industrial classifications. Rather, it suggests that the ICT information model is more complex than for most other industrial statistics where activities can be typically confined to a single industrial sector. For analytical reasons it seems important to maintain these broad level industrial distinctions in the ICT information model. Clearly, manufacturing activity is distinctly different to on-selling activity (ie the sale of goods purchased in, as distinct from goods produced by the same business), or service provision and on this basis it is illogical to expect all activity relating to ICT to be found under one industrial heading (described in ISIC as Tabulation Categories A, B, C, etc).

16.   Some criticism of industrial classifications may be valid at the finer levels, particularly where specialisation in ICT activities is low. Low specialisation would mean that a large proportion of businesses which have no ICT activity would be drawn into a survey frame based on that industry. The redefinition of some industry classes may be desirable to reduce this problem. The NAICS has addressed this issue by defining some classes more in accordance with ICT concepts. An example of this concerns the revised treatment of 'Computer and electronic product manufacturing'. In the ISIC and its derivative national classifications, these industries are placed in machinery industries or with electrical equipment. The NAICS recognises that Computer and electronic product manufacturing industries have fundamentally different manufacturing processes (via the substantial use of transistors and integrated circuits) to the processes of other machinery and electrical equipment with which they have been grouped in the past.

17.   Even if it were possible to redefine some classes so that their ICT specialisation ratios become higher, it is always likely that there will be a number of industry classes which will include some units which are ICT related and some which are not. Furthermore, the pace of change is perhaps too great for industrial classifications to be ever able to react in time. Thus it would seem to be appropriate to develop a strategy which allowed for whole industry classes to be surveyed, with a view to identifying those businesses which specialise in ICT - the ICT sector. The way of deciding whether or not a unit in a specified class is a specialist ICT unit should be on the basis of predominant ICT activity ie turnover of 50% or more in ICT goods and services.

18.   Given that there is a requirement to combine both the manufacture of information and communication goods with information and communication services in an ICT sector, that sector can therefore best be described as a set of related industries (ie industries which are characterised by their association with the production and diffusion of ICT). These related industries will in general include whole industry classes as specified in standard industrial classifications but in some cases only parts of industry classes belong to the ICT sector.

ICT Related Industries - Country Practices

19.   Before deciding upon a definition of which parts of ISIC might be included in an international definition of the ICT sector, it may be useful to review and summarise the practices currently in place in various member countries of the OECD. The practices in countries for which some information is known are spelt out in the Attachment.   In summary it can be seen that there is:

a)   a fairly broad degree of commonality in the areas of Manufacturing which are included, although there are some industrial classes which are not included by all member countries. The manufacture of computing and communication equipment is
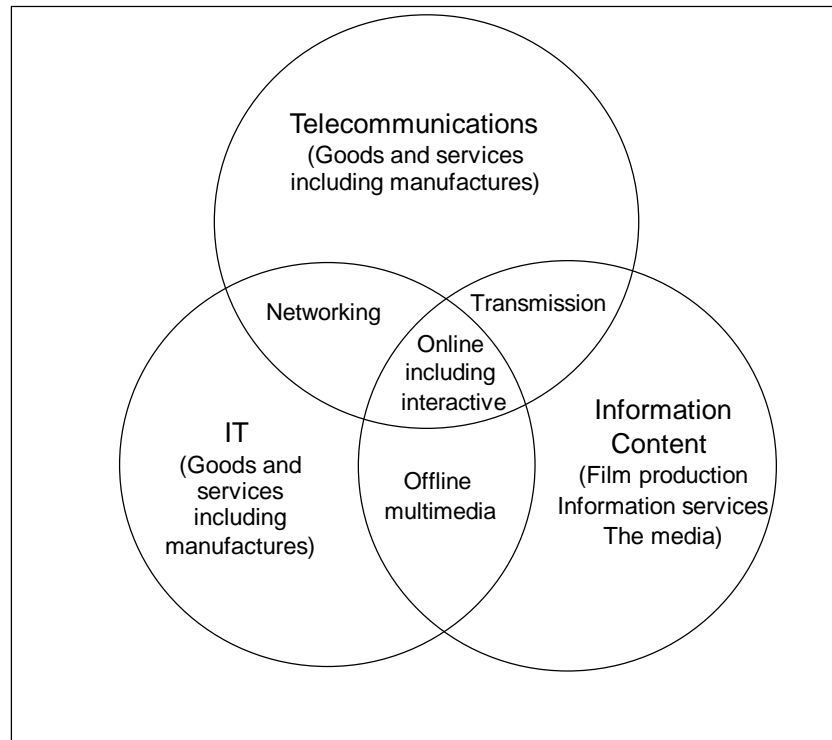
always included; electrical and electronic equipment, medical, navigating and optical equipment and the like are often, but not always, included. (The rationale for the inclusion of some of these pieces of equipment is not entirely clear.)

b)   general agreement that computer and telecommunication services classes should be included.

c)   wholesaling and retailing of ICT goods and services are generally included, although this is not universal.

d)   broadcasting and television services are generally included, although this is not universal.

e)   on some occasions there are other of the so-called "content" industries also included.

The Impact of Convergence on ICT Statistics

20.   The activities of information technology and telecommunications businesses have been converging for quite some time, leading to a need to survey both industries in order to measure all information technology or all telecommunications activities. However, recently this convergence has been complicated by the involvement of information content providers, leading to a set of new products becoming available and signalling the possible emergence of new industries. The industrial classification of the businesses involved in the provision of these new services varies more considerably. These businesses may be part of the standard media industries, Radio and television, and Newsagency but may also cover other more cultural activities such as the arts and music.

21.   The impact of the convergence is depicted in the following diagram, which is an adaptation of one included in "On The Road to the Finnish Information Society". It shows the overlap between the information technology, telecommunications and information content activities of firms and where this leads to the new products of online services and multimedia products.

Telecommunications
(Goods and services
including manufactures)

Networking

Transmission

Online
including
interactive

IT
(Goods and
services
including
manufactures)

Offline
multimedia

Information
Content
(Film production
Information services
The media)

22.   In a very short time new and different pieces of information will be applied to the computing and telecommunication technologies leading to a much more significant overlap between the three sets of activities with more online products becoming available. Expressed another way, the range of the content activities in the diagram, particularly in the intersections, will change over time.

23.   The intersecting areas are of increasing interest to industry and policy organisations as they are seen as areas of major potential growth, both in terms of the number of products available and on the impact they will have on the economy and society generally.   This raises a serious problem for statistical indicators as these intersections are not separately identified as industries within ISIC, or its national derivatives, and will not be separately identified in current standard industrial statistics.

24.   Allied to this, the degree to which businesses involved in these new activities also specialise in them is of importance in determining whether or not it is appropriate to separately identify such activities within industrial classifications. If these activities are carried out by firms which predominantly carry out other activities, the firms would, of course, never be classified to a separate industry, even if one existed within the classification.

25.   A further difficulty is associated with the actual recording of firms which undertake such activities in national Statistical Agency Business Registers. Experience to date suggests that while some of the firms which undertake such activities can be classified to one of the range of industry classes that could be considered as being in the more traditional ICT sector, others will be classified elsewhere. This will make it more difficult for the Statistical Agency to define the scope of its collection activity if it wishes to obtain full coverage of such activities.

26.   Conceptually then the ICT Sector can be viewed as the activities which fall into the union of the Information Technology and Telecommunications activities in the diagram above.   It includes therefore the intersections between them and the Information Content activities. However it excludes those Information Content activities which falls outside those intersections; that is, those which have no direct ICT association.

27.   To obtain a total measure of those activities implies a need to also include within the industry scope of the collection those information content industries to which firms may be classified or in which these activities may be carried out as a secondary activity.

ICT Sector - Recommendations For ISIC Industries To Be Included

28.   On the basis of the above discussions, recommendations have been developed for industries to be included in a definition of the ICT sector. The list below presents some discussion on the possible inclusions and comes to a recommendation for consideration by member countries. In line with the earlier discussion, a distinction will be drawn between the ICT sector and associated industries which might be construed as suitable for inclusion in either an Information Content or an Information Industry concept.

29.   These classes (marked with an *) should be considered for inclusion in surveying work if the required output relates to the wider Information Industries concept. For surveying work in respect of the ICT sector, they need not be included, unless there are doubts about the treatment and coverage of new generation activities like multimedia. Also, as previously stated, some ISIC classes are only partly relevant and these are marked with a "p". It may be worth noting here that most national SICs already subdivide ISIC categories to varying degrees.

2211*   Publishing of books, brochures, musical books and other publications
2212*   Publishing of newspapers, journals and periodicals
2213p*   Publishing of recorded media
2219*   Other publishing

30.   Publishing of conventional hard copy publications and the like is seen as being more related to either the wider information industries concept or the information content industry than to ICT. The publishing of recorded media is relevant to the ICT sector to the extent that the class would cover businesses which publish computer related recorded media such as CDROM or other disc or tape based computer products. Not all businesses included in this class would be involved in the publishing of computer related products.

2230p   Reproduction of recorded media

31.   This class would be partly relevant to ICT. The reproduction of recorded media which is not for computer application, would be included in that part of the Information Content industry which is not included in the ICT   sector.

3000p   Manufacture of office, accounting and computing machinery
3130p   Manufacture of insulated wire and cable
3210p   Manufacture of electronic valves and tubes and other electronic
             components
3220   Manufacture of television and radio transmitters and apparatus for line
             telephony and line telegraphy
3230p   Manufacture of television and radio receivers, sound or video recording
             or reproducing apparatus, and associated goods
33   Manufacture of Medical, Precision and Optical Instruments, Watches
             and Clocks

32.   While radio and television equipment are included in the definition of ICT, they are viewed as being of second priority only. Hence their inclusion in survey work would not be mandatory but on a needs basis. Watches, clocks, medical and optical instruments are not considered to be ICT even though they may incorporate electronics and some other features of ICT. Their primary functions are for highly specialised medical, etc purposes unrelated to general computing and communication.

5150p   Wholesale of machinery, equipment and supplies

33.   Part of this class would relate to ICT. The inclusion of wholesaling activities is considered to be important by many countries and have been included in their surveying work to date. Many imported ICT goods are distributed through local subsidiaries of multinationals such as Apple and IBM. These distribution units are likely to be classified to wholesaling as they are simply on-selling goods which were produced in some other country. The activities of such firms in comparison to domestic manufacturers is considered to be important information. Aside from this, many computer wholesalers have close similarities to computer service businesses. Their

industry treatment is a reflection of the commission income received from the supply of expensive computing equipment (eg mainframes and minis in particular). Commissions on this type of equipment can be very large, outweighing income from the provision of services associated with the installation and integration of equipment, activities which are characteristic of computer service companies.

5233p   Retail sale of household appliances, articles and equipment

34.   Part of this class relates to the selling of ICT goods. However, sales of non ICT goods and services is likely to be much more significant than the selling of ICT goods and services especially in situtations where large department stores are involved.

35.   There are some retail firms which do specialise in the sale of ICT goods and services; these should be included in the scope of ICT. For practical reasons, such as the ability to be able to identify such firms on a Business Register separately from other firms classified to this class, it is likely that Statistical Agencies would wish to exclude them from the scope of any collection.

6420   Telecommunications

36.   There is agreement that this class be included in its entirety.

7123p   Renting of office machinery and equipment (incl computers)

37.   This class is partly relevant. However the vast majority of firms coded to this industry would either not specialise in ICT goods and services or would not rent ICT goods at all. Hence, for practical reasons, it is likely that it should be excluded from survey activity.

7210   Hardware consultancy
7220   Software consultancy and supply
7230   Data processing
7240   Database activities
7250   Maintenance and repair of office, accounting and computing machinery
7290   Other computer related activities

38.   There is general agreement on the inclusion of this group of industries in the definition of the ICT sector.

73p Research & Development

39.   This class is considered to be partly in scope. Research and development by firms on ICT goods and services (eg software development) is an ICT activity. However, other research and development will not be. It can be expected that most software development will be carried out by firms already classified to the computer services or telecommunications industries. In view of this, there would be little benefit in including this class in scope of collection activities.

40.   This should not be taken to mean that there is no interest in R&D activities of ICT firms. In fact this is one of the data items that ought to be included in surveys of the sector.

80p Education

41.   The provision of computer and communication training is considered to be a borderline ICT activity. It can be viewed as ICT in much the same way as the retailing of ICT goods and services can be. Yet it is interesting that no country has included it in its statistical collections. Australia has noted that it conceptually was in scope of its IT&T surveys; however, for practical reasons, it has been excluded from collection activities.

42.   A great deal of computer training will be carried out by firms which are providing more general training services eg universities, colleges. Such firms would of course not be included in the ICT Sector. For this reason, it is probably not practical to include firms offering ICT training services in scope of an ICT statistical collection.

9211*   Motion picture and video production and distribution
9213p*   Radio and television activities

43.   Film and video production and distribution activities relate more to information content industry concepts than to ICT concepts. Radio and TV broadcasting activities would be included in the ICT definition as a second priority user need.

9220*   News agency activities

44.   This class is considered to relate more to information content industry concepts than to ICT.

9231*   Library and archives activities

45.   This class is considered to relate more to information content industry concepts than to ICT.

46. The following table summarises those ISIC classes of relevance to ICT

ISIC	ICT priority 1	ICT priority 2	Content	Comment
2211			x	Not an ICT industry
2212			x	Not an ICT industry
2213	p		p	Partly relevant to ICT - CDROM titles and the like
2219			x	Not an ICT industry
2230	p		p	Partly relevant to ICT - CDROM titles and the like
3000	p			Partly relevant to ICT
3130	p			Partly relevant to ICT - twisted pair, etc
3210	p			Partly relevant to ICT
3220	x			Relevant to ICT
3230		p		Partly relevant to ICT
33				Not an ICT industry
5150	p			Partly relevant to ICT
5233	p	p		Partly relevant to ICT
6420	x			Relevant to ICT
7123	p			Partly relevant to ICT
7210	x			Relevant to ICT
7220	x			Relevant to ICT
7230	x			Relevant to ICT
7240	x			Relevant to ICT
7250	x			Relevant to ICT
7290	x			Relevant to ICT
73	p			Partly relevant to ICT
80				Not an ICT industry
9211			x	Not an ICT industry
9213		p	p	Partly relevant to ICT
9220			x	Not an ICT industry
9231			p	Not an ICT industry

47. These recommendations can be viewed pictorially. The following diagram is therefore a representation of the ICT sector. The industry classes within the circle are wholly ICT. Industry classes which are dissected by the circumference are partly relevant only.
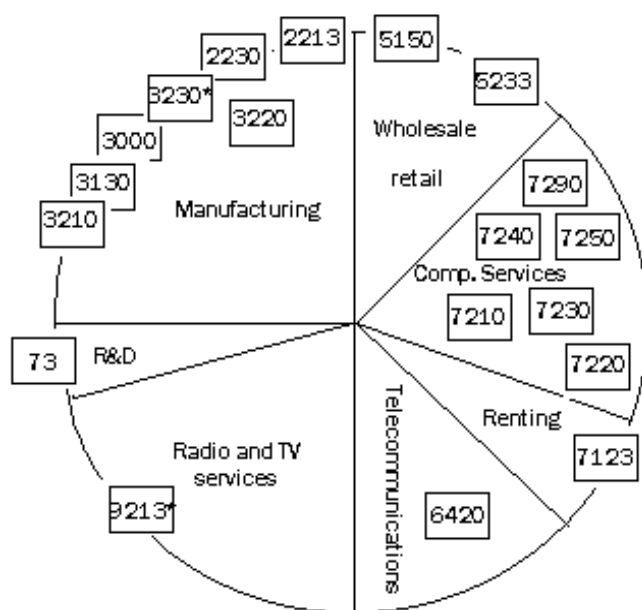
ICCP Statistical Panel

26   August   1997

Attachment A

Country Practices

AUSTRALIA
Australia's focus to date has been on IT&T and it has defined the following industries to be in scope.

Manufacturing
. Recorded Media Manufacturing and Publishing
. Computer and Business Machine Manufacturing
 .Telecommunication, Broadcasting and Transceiving Equipment Manufacturing
 .Electronic Equipment Manufacturing n.e.c.
 .Electric Cable and Wire Manufacturing

Services
.Computer Wholesaling
 .Business Machine Wholesaling n.e.c.
 .Electrical and Electronic Equipment Wholesaling n.e.c.
.Telecommunication Services
 .Plant Hire and Leasing
 .Data Processing Services
 .Information Storage and Retrieval Services
 .Computer Maintenance Services
 .Computer Consultancy Services
 .Education

CANADA

The Canadian definition as circulated in DSTI/ICCP/AH(97)2 covers the following industries:

Manufacturing:

. Consumer electronics
. Communications and Other electronic components:
..   Telecommunications equipment
..   Electronic parts and components
..   Other communication and electronic equipment
. Computer equipment:
..   Electronic computing and peripheral equipment
..   Other office, store and business machines

. Instrumentation:
.. Indicating, recording and controlling instruments
.. Other instruments and related products

Services:

. Computer and related services
. Broadcasting
. Telecommunications carriers

Finland

Finland has indicated its intention to adopt the NAICS. 'On the Road to the Finnish Information Society' (Statistics Finland 1997), indicates that the ICT sector will cover the following:

Production of core goods:

. Manufacture of office machinery and computers
. Manufacture of insulated wire and cable
. Manufacture of radio, television and communication equipment and apparatus
. Manufacture of medical, precision and optical instruments, watches and clocks

Production of core services:

. Wholesale of radio and television goods
. Wholesale of computer hardware
. Wholesale of telecommunication equipment and electronic components
. Retail sale of computer hardware
. Retail sale of telecommunication equipment and office machinery
. Telecommunications
. Renting of office machinery and equipment including computers
. Computer and related activities
. Mechanical and process engineering design

Core content production:

. Publishing
. Market research and public opinion polling
. Business and management consultancy activities

. Advertising
. Motion picture and video activities
. Radio and television activities
. News agency activities

Adjacent services:

. Retail sale via mail order houses
. Post and courier services

Adjacent content production:

. Printing and service activities related to printing
. Reproduction of recorded media
. Renting of videotapes
. Research and development
. Secretarial and translation activities

SWEDEN

In devising ICT statistics, Sweden covers manufacturing, wholesaling, telecommunications and computer services.

Manufacture:

. Manufacture of office machinery
. manufacture of computers and other information processing equipment
. Manufacture of electronic valves and tubes and other electronic components
. Manufacture of television and radio transmitters and apparatus for line
   telephony and line telegraphy
. Manufacture of television and radio receivers, sound or video recording or
   reproducing apparatus and associated goods
. Manufacture of instruments and appliances for measuring, checking, testing,
   navigating and other purposes, except industrial process control equipment
. Manufacture of industrial process control equipment

Commerce:

. Reproduction of computer media
. Agents involved in the sale of office machinery and computer equipment
. Wholesale of radio and television goods
. Wholesale of office machinery and equipment
. Wholesale of telecommunication equipment and electronic components

. Retail sale of radio and television sets
. Retail sale of computers, office machinery and computer programmes
. Retail sale of telecommunication equipment
. Renting of office machinery and equipment including computers

Telecommunications:

. Network operation
. Radio and television broadcast operation
. Cable television operation

Computer Consultancy and other services:

. Hardware consultancy
. Software consultancy
. Software supply
. Data processing
. Data base activities
. Maintenance and repair of office, accounting and computing machinery
. Other computer related activities

UNITED KINGDOM

DEFINITION OF ICT - A UK PERSPECTIVE

The UK does not have its own general definition of the ICT sector which is in widespread use; the Department of Trade and Industry (DTI) for internal purposes has adopted the term ITEC (Information Technology, Electronics and Communication). This term is designed to encompass those sectors that manufacture equipment inherently based on electronic, optical or magnetic technologies, provide services using such technologies, or distribute content via these technologies. However, official (or other) statistics are not in all cases readily available for these activities, particularly in the services domain.

USA

The USA is developing a definition based on the NAICS. Room document No 8 for the June 1997 OECD meeting describes the Information Sector (rather than the ICT sector) to include the following industries:

. Computer and peripheral equipment manufacturing

. Computer storage device manufacturing
. Computer terminal manufacturing
. Telephone apparatus manufacturing
. Radio and television broadcasting and wireless communications equipment manufacturing
. Other communications equipment manufacturing
. Electron tube manufacturing
. Electronic coil, transformer, and other inductor manufacturing
. Electrical connector manufacturing
. Printed circuit/electronics assembly manufacturing
. Other electronic component manufacturing
. Electromedical and electrotherapeutic apparatus manufacturing
. Instrument and related product manufacturing for measuring, displaying and controlling
    industrial process variables
. Totalising fluid meter and counting device manufacturing
. Irradiation apparatus manufacturing
. Watch, clock and part manufacturing
. Other measuring and controlling device manufacturing
. Software reproducing
. Prerecorded compact disc (except software), tape and record reproducing

. Book publishers
. Database and directory publishers
. All other publishers
. Software publishers
. Motion picture and video distribution
. Motion picture theatres (except drive-ins)
. Drive-in motion picture theatres
. Teleproduction and other post-production services
. Integrated record production/distribution
. Music publishers

. Cable networks
. Cable and other program distribution
. Paging
. Cellular and other wireless telecommunications
. Telecommunications resellers
. News syndicates
. Libraries and archives
. Data processing services

_____

_____

_____

_____

Mail Certify: **No** ¿
Retention: **Indefinite** ¿
Remind me..:   **0 days (None)** ¿