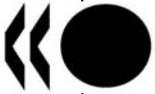


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Working Party on Indicators for the Information Society

ICT ACCESS AND USE BY HOUSEHOLDS AND INDIVIDUALS: REVISED OECD MODEL SURVEY

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FOREWORD

This paper presents a revision of the 2002 OECD model survey on ICT use by households and individuals [“ICT Usage and Electronic Commerce in Households/by Individuals”, internal working document DSTI/ICCP/IIS(2002)1/REV2].

This is the first revision of the model survey and includes changes to the name, scope, classifications and content (including new or revised material on IT security, e-government, digitised products, mobile Internet access and mobile phone use).

The Working Party on Indicators for the Information Society (WPIIS) agreed, at its April 2005 meeting, to recommend that the ICCP Committee declassify the revised model survey through a written procedure. This was completed on 30 September 2005.

The report was prepared by the OECD Secretariat in consultation with delegates from the OECD Working Party on Indicators for the Information Society (WPIIS). It is published under the responsibility of the Secretary-General of the OECD.

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ICT ACCESS AND USE BY HOUSEHOLDS AND INDIVIDUALS: REVISED OECD MODEL SURVEY

Introduction

This paper presents a revised OECD model survey on information and communication technology (ICT) use by households and individuals. The original model survey was agreed at the end of 2002.¹

It was always intended that the model survey² would be dynamic and that “additional components of the questionnaire would be added over time as technologies, usage practices and policy interests change” [internal working document DSTI/ICCP/IIS(2002)1/REV2].

The first review discussion of the questionnaire took place at the 2003 WPIIS meeting, where it was agreed that any future changes should focus on relative priorities and the need to either prioritise questions or distinguish core and non-core elements of the questionnaire.

A Secretariat proposal outlining a number of areas for revision was presented to the 2004 meeting [internal working document DSTI/ICCP/IIS(2004)3]. The proposal suggested a thorough review of the model survey to ensure that it continued to reflect current policy needs and priorities and was aligned, as far as possible, with country survey practices.

A detailed proposal, developed by the Secretariat in consultation with interested member countries, was presented to the 2005 meeting [internal working document DSTI/ICCP/IIS(2005)3] and subsequently revised based on comments made at, and following, the meeting.

The revised model survey

Aim of the revised model

The model survey is intended to provide guidance for the collection of statistics on:

- Household access to ICT, including broadband access to the Internet; and
- Use of ICT by adults (individuals aged 16-74 years) including whether ICTs were used during the previous 12 months, how they were used (for instance, how the Internet was accessed), whether security precautions were employed, where ICTs were used, and what activities they were used for. In particular, new and revised material has been included on IT security, e-government, digitised products, mobile Internet access and mobile phone use.

1. Internal working document DSTI/ICCP/IIS(2002)1/REV2, “Measuring ICT Usage and Electronic Commerce in Households/by Individuals. A Model Questionnaire”.

2. A note on terminology: this paper uses the terms “model survey” and “model questionnaire”. The latter refers specifically to the questionnaire provided as a model to participating countries. The former refers to the questionnaire plus associated information, such as recommendations on methodology, scope and classificatory variables.

Member countries are encouraged to use the model as a core part of their survey development in this area of ICT statistics.

Development of the revised model survey

In order to prioritise material to be included in the revised model survey, content was examined from both an output and an input perspective. Regarding output, reference was made to the OECD list of core e-commerce indicators, agreed at the 2000 WPIIS meeting,³ and data which OECD has been able to collect from member countries. A core list of ICT indicators currently proposed for use by non-OECD member countries (per the WSIS⁴ meetings) was also consulted in order to ensure as many options as possible for future benchmarking across a greater number of countries.

Regarding input, survey material from a number of member countries was examined, including the Eurostat final questionnaire for 2006. Details of other surveys consulted may be found in the 2004 WPIIS paper [internal working document DSTI/ICCP/IIS(2004)3]. Where a majority of country surveys had not incorporated an existing (2002) model survey question, then it was generally removed or revised.

New topics were considered based on known policy needs and experiences of member countries with questions about those topics. An important criterion, applied at each stage, was to try to minimise the number and complexity of the questions. This is in recognition of the high cost of collecting these data in terms of expense and respondent load.

Comment was sought on the 2004 proposal from all WPIIS delegates following the meeting. A number of countries and organisations responded.⁵ In January 2005, a revised questionnaire was sent out to countries and organisations which had responded earlier. Feedback from this round of consultation (see footnote 5) was incorporated and a detailed proposal was presented to the 2005 WPIIS meeting. Comments were received at and/or following the meeting from the following countries and organisations: Australia, Canada, the Czech Republic, Eurostat, Finland, France, Germany, Hungary, Japan, Korea, Mexico, Portugal and Sweden. Their comments have been incorporated into the model as far as possible.

Use of core and non-core questions

The 2002 model did not attempt to differentiate between questions. However, the revised model questionnaire distinguishes core and non-core questions. The difference is not one of priority⁶ but of either:

- How well tested the question is in country surveys. Non-core questions in this category are relatively untested and can therefore be considered to be somewhat experimental; they include new questions on backing up data, mobile Internet access and individual mobile phone use; or

3. DSTI/ICCP/IE/IIS(2000)3/REV1.

4. World Summit on the Information Society meetings. OECD contributed to a list of core ICT indicators which could be used by countries following final agreement. The core indicators were agreed to by a WSIS meeting held in Geneva in February 2005.

5. See internal working document DSTI/ICCP/IIS(2005)3 for details.

6. The 2003 WPIIS meeting referred to a need to prioritise questionnaire content. This has been achieved by removing low priority questions and those which have not been adopted by member countries.

- How challenging the question is statistically. The non-core questions in this category are the two IT security questions, Q15 and Q16, and the value of Internet purchases – Q22; these are questions which many countries regard as important but which can be difficult to collect data for (for instance, because of respondents’ understanding of concepts or recollection of events).

Non-core questions, especially those in the first category, may be revised and lose their *non-core* status as experience is gained by member (and other participating) countries. Countries are encouraged to test these questions and share their experiences.

Structure of the revised model questionnaire

While the revisions to the household/individual model questionnaire have not required major structural change, there have been changes at the broad level, notably the reduction from five modules to two sections (one for households and one for individuals). These changes are illustrated in Table 1 below which presents a broad level comparison of the 2002 and revised questionnaire structure.

Table 1. Summary of changes to the model questionnaire

2002 model questionnaire	Revised model questionnaire (2005)
Module A – Household access to computers and the Internet. This module focuses on computer and Internet access in households, the type of device used for connecting to the Internet and the speed of the connection (distinguishing between higher and lower speed Internet services).	Section A – Household access to information and communication technology, consisting of questions on access to ICTs, how the household accesses the Internet (access devices and Internet access services used) and barriers to Internet access.
Module B – Household barriers to adoption of the Internet. Indicators on household barriers can help monitor issues of the “digital divide” and potential bottlenecks related to information technology such as cost or security concerns.	
Module C – Location and frequency of use of the Internet by individuals (at home, at work and in other locations).	Section B – Individual (adult) use of information and communication technology. This section includes a number of basic questions on use of computers and the Internet per the existing (2002) model questionnaire. It also contains new questions including: whether/which mobile access services were used for Internet access; IT security problems experienced; whether the home Internet access device was protected by anti-virus or anti-spyware software, or a firewall; whether the individual backs up files s/he creates and keeps on the computer; and personal use of a mobile phone. Existing questions on Internet activities and Internet purchasing have been expanded to focus more on new areas such as use and purchase of new types of products (for instance, digitally delivered music and films) and dealing with government.
Module D – The type of activities carried out by individuals while using the Internet.	
Module E – Internet commerce and barriers to Internet purchases. These questions relate to the location and frequency of individual purchases for personal use, the types and value of goods purchased and whether individuals have paid on line for any of those purchases. This module also addresses factors preventing individuals from purchasing over the Internet.	

This paper covers: name of the model survey; survey methodology; survey scope and coverage; particular statistical issues associated with household and individual ICT access and use measurement; classificatory variables; comparison with Eurostat’s model survey⁷; and a model questionnaire (including definitions of terms and metadata notes). The remainder of this paper describes those elements and presents the model questionnaire as the Annex.

7. “Model for a Community Survey on ICT Usage in Households and by Individuals”, 2006.

Name of the model survey

The name of the 2002 model survey, with its emphasis on e-commerce as well as ICT use, is now less relevant as the content has expanded in terms of activity and new technologies. Accordingly, the name has been changed to the simpler: **OECD Model Survey of ICT Access and Use by Households and Individuals**.

Survey methodology

Introduction

Neither this paper, nor the 2002 model, offer detailed advice on how to conduct or process household surveys. The aim is to convey those methodological points and conceptual issues which are most relevant to the collection of household and individual ICT access and use information.⁸

For most countries, there will be established procedures in place for household surveys which collect ICT access and use data and therefore no recommendations are made on the following aspects of collection methodology:

- For use of a particular type of sample frame, sampling methodology or sample size; these will vary according to country practices and the availability of information (for instance, administrative information on individuals).
- Whether collections should be mandatory or voluntary – both types of collections are used among OECD member countries; however, where collections are voluntary, non-response will tend to be higher and therefore the recommendations below regarding survey bias will be more relevant.
- How to process collected information, including editing, imputation and benchmarking of data.
- A particular type of survey vehicle. There is a variety of survey vehicles used by member countries to collect data on household and individual ICT access and use. Most countries use existing household surveys (such as labour force surveys or general purpose household surveys). At least two OECD countries use separate collections for household ICT access and individual ICT use data.

Minimising sampling and non-sampling error

In general, countries should note that differences in survey methodologies can lead to inconsistencies in output. All countries should therefore aim to reduce sampling and non-sampling error (“bias”) as much as possible by:

- Using well designed samples which are of sufficient size to produce reliable data (that is having low standard errors for the aggregates suggested in this paper).
- Careful design and testing of questions and question sequences.
- Intensive training and checking of interviewers, where they are used.

8. For more detailed information on methodology, readers might like to consult Eurostat’s *Methodological Manual for Statistics on the Information Society*, Luxembourg, 2005.

- Reducing the non-response rate as far as possible.
- Minimising data entry, editing and other processing errors.

Collection techniques

Most member countries use personal interview techniques for collecting data on household and individual access and use of ICT. Personal interview can be by face-to-face or by telephone and, for either method, interviewers may be assisted by computers (using, for instance, CAPI or CATI applications respectively). Face-to-face interviewing may be better for some situations in that it potentially allows the interviewer to check the type of Internet connection or other technical details.

Telephone interviews should generally be avoided where it is not possible to include mobile phone only or unlisted subscribers.

It is also suggested that postal surveys generally not be used because they offer less opportunity for interaction with the respondent (for instance, to clarify technical issues) and because response rates are likely to be lower, thus leading to higher sampling error and possible non-response bias. However, it is acknowledged that postal surveys offer advantages such as cost and a simpler method of presenting list-based questions (of which there are several in the model questionnaire). They are likely to be most reliable when used in conjunction with other questionnaire-based approaches such as a drop-off/call-back (or post back) approach which may enable some interaction and improve the response rate.

Statistical units, selection and weighting

Both households and individuals are recommended as statistical units. Information should ideally be sought from a randomly selected adult⁹ who responds in respect of the household (Section A of the model questionnaire) and in respect of him/herself (Section B). Alternatively, more than one household member could provide individual information in Section B. Households, and individuals within households, should be selected in an unbiased manner.

Because the sample of households and individuals selected is unlikely to be perfectly representative of the whole population, it is important to weight responses according to an independent estimated distribution of the population.

Frequency and reference period/date

It is probably unrealistic to expect participating countries to conduct surveys more frequently than annually. For some participating countries, an annual collection will not be feasible, in which case it is important that those countries align their collection years as far as possible.

As some of the information collected is point-in-time data, it would be preferable to also have alignment of reference dates across participating countries. However, the dependence of many countries on existing survey vehicles probably makes this an unrealistic expectation.

9. Some-one aged between 16 and 74 years.

Survey scope and coverage

Individuals

The scope of individuals would normally be limited by age. The 2002 OECD model recommended that all individuals aged 16 years or over be included in the scope of the survey. However, many European countries have an age range of 16-74 and therefore exclude individuals aged outside this range. In the 2005 revision, the lower age of 16 years has been retained but an upper age limit of 74 years has been introduced, giving a **common individual age scope of 16-74 years**.¹⁰ This is consistent with Eurostat's recommendations and OECD data collection practices. Of course, individual countries can choose to collect data from individuals aged outside the 16-74 years range and are encouraged to do so (of particular policy interest for many countries is the use of ICT by those aged 75 and over).

Other scope or coverage limitations on individuals are likely to be relatively minor and could include, *inter alia*, limiting the survey to those living in private dwellings (therefore excluding individuals in institutions such as prisons and nursing homes and special dwellings such as hotels); excluding full-time members of the armed forces; and excluding non-residents and some foreign residents. Such limitations are likely to have a fairly small impact on estimates so no recommendations are made here.

Households

It is recommended that household scope be consistent with that for individuals, **therefore households where all members are outside the age scope, will themselves be out of scope**. This is a change from the 2002 model where all households were in scope. However, many countries are constrained by use of existing survey vehicles and are not able to follow that guidance. A number of European countries, for instance, exclude households consisting only of members over 74 (or, less likely, under 16).

Many countries will also restrict household survey scope or coverage to those in private dwellings. For some countries, there could be other reasons for a more limited scope (or coverage) of the national survey. They include exclusion or undercoverage of particular households, for example those in remote or inaccessible areas.

For both households and individuals, it is important that countries advise of significant impact on survey estimates resulting from deviations from scope, or areas of poor coverage.

Classificatory variables

The 2002 OECD model survey recommended inclusion of minimal information on a number of household and individual characteristics. A similar set of classificatory variables is included in the revised model survey, though many countries will decide to use extra variables and/or additional categories. Data for these variables will usually be collected as part of the survey (though note that questions have not been included in the model questionnaire). Of possible interest to those countries where a rural/urban divide exists is a geographical classification. However, such a variable is problematic from an international comparability viewpoint and has not been included in the model.

10. Of practical note, there are few OECD countries which would be **unable** to comply with a scope of 16-74 but few which would be able to provide data for those aged outside this range.

Household characteristics

The 2002 OECD model had a *household size* (number of members) variable and a small *household composition* classification which identified several different household types (e.g. couple, one parent family, lone person). The *composition* variable in the 2002 model survey does not have an equivalent in the current Eurostat model. Eurostat's current approach is to collect information on the total number of household members as well as the number of children under 16 in the household. The Eurostat approach enables tabulation of households by size and type (those with and without children under 16). For simplicity and improved comparability, **it has been adopted** in the revised model, leading to household variables as follows:

- *Household type* (two-way classification: *households with/without children under 16*).
- *Household size* (number of members including those outside the age scope).

The variable, *household income*, is differently defined in the 2002 OECD and Eurostat model questionnaires. The 2002 OECD model specified annual gross household income from all sources, while Eurostat defines the variable as average net monthly household income. Note that household income is not collected on all countries' household ICT access and use surveys and for this reason is an optional variable on the Eurostat model. Nevertheless, it is regarded as an important classificatory variable because of the strong correlation between household income and access to ICT. Regarding the conceptual basis of the *household income* variable, a quartile approach has been adopted by Eurostat from 2006. This approach entails either collecting income in ranges corresponding to quartiles (based on other survey data) or collecting income data in other ways and converting it to quartiles for output purposes.

Given that countries which collect household income as a classificatory variable use a variety of bases (monthly, annual, gross, net *etc.*), the quartile approach allows better comparability. The revised OECD model therefore **does not make any recommendation on the conceptual basis of household income** but asks countries which collect it to either collect or output household income on a quartile basis for the purposes of classifying household ICT data.

Individual characteristics

Age is a strong determinant of ICT use so a common age cut-off is important. Consistent with the age scope, **it is recommended that the age range be 16-74**. It is also recommended that the following sub-ranges be used as output categories of the age variable: *16 to 24; 25 to 34; 35 to 44; 45 to 54; 55 to 64 and 65 to 74*. These are the ranges used by OECD and Eurostat for their model surveys but they **differ from the 2002 OECD model which had coarser categories**.

The 2002 model included a variable, *highest education level received*, with four categories: primary, secondary, post-secondary (not tertiary) and tertiary. For consistency with Eurostat, **the classification has been reduced**, giving a three-way classification as follows: *No formal education, primary or lower secondary* (ISCED 0,1,2); *Upper secondary and post-secondary non-tertiary* (ISCED 3,4) and *Tertiary* (ISCED 5,6).¹¹

11. For more information on ISCED (1997), see:
http://www.uis.unesco.org/ev.php?ID=3813_201&ID2=DO_TOPIC.

In respect of employment status, for consistency with Eurostat the first two categories in the 2002 model (full-time employee and part-time employee) have been combined giving the following four-way classification: *paid employee; self-employed;*¹² *unemployed* and *not in the labour force*.^{13,14}

The other two individual characteristics in the 2002 model are *Gender* and *Occupation*. They are retained in the revised model. In respect of *Occupation*, countries are asked to use ISCO88 major groups where possible (as in the 2002 model).¹⁵

In terms of output, many countries may wish to cross-classify some of these variables. This can produce information which is very useful for analytical purposes. However, it should be noted that cross-classified output is often more detailed and therefore often requires higher sample sizes to support reliable estimates.

Particular statistical issues associated with household and individual ICT access and use measurement

Households versus individuals as statistical units

A key issue concerns the appropriate statistical unit for measurement. In general, the household unit is used to elicit information about facilities in place in the household (for example, whether there is a computer or Internet access). The individual unit is used to provide information on use of these facilities (both in and away from the home) and, most importantly, the intensity of that use (for instance, frequency and range of activities undertaken). Debate continues among OECD countries on the preferable unit, though at this stage most use both.

Recall period

Amongst OECD countries, this has been a much-debated issue, though mainly in the context of the value of Internet purchases by individuals.

The 2002 OECD model questionnaire used a 12 month recall period for all questions except for the value of Internet purchases. The current (2006) Eurostat model questionnaire asks some questions in respect of both 12 months and 3 months (for instance, individual use of a computer and the Internet, and whether the individual has purchased products over the Internet) but asks others (*e.g.* location and frequency of use, and activities undertaken) in respect of the last 3 months. The revised OECD model retains a 12 months recall period for individual use questions but includes new filter questions probing the time period when activities occurred (use of a computer, the Internet and purchasing). This allows tabulation of those aggregates for both 3 and 12 months time periods. An additional point regarding the recall period is that for EU and probably most other OECD countries, in respect of main aggregates, it makes little practical difference whether a 3 or 12 month period is used (as very few individuals are

12. Self employed includes: employers; own account workers; contributing family workers; and members of producers' co-operatives.

13. Note that Eurostat splits students from others not in the Labour Force. As students may be included in the Labour Force (in some countries at least), this split has not been incorporated in the OECD model.

14. Categories are based on ILO definitions. For more information, see: <http://www.ilo.org/public/english/bureau/stat/class/icse.htm>.

15. For more information on ISCO, see: <http://www.ilo.org/public/english/bureau/stat/class/isco.htm>. Note that ISCO is due to be revised by 2008-09.

infrequent users). The most obvious exception to this is the value of Internet purchases (see discussion below).

The advantages of a 12 month recall period include avoidance of seasonal effects and better capture of less frequent activities such as selling on line, dealing with government organisations or searching for health information.

In respect of the value of Internet purchases, there is no change to the recommendation in the 2002 model, viz that countries should select a recall period for Internet purchases which would enable calculation of 12 months value. For instance, countries which collect monthly information should collect information in respect of the last month; countries collecting quarterly data, in respect of the last quarter *etc.* Whichever method is chosen, it should be able to deliver a reasonably unbiased estimate of the value of Internet purchases in respect of the 12 month reference period.

Trust in the online environment

Several questions (and parts of questions) in the model questionnaire deal with the topic of trust in the online environment. The questions concern the issue of IT security (new questions 8, 15 and 16) and privacy, security or trust as barriers (questions 5 and 23).

WPIIS comments were sought on the feasibility of the new questions 15 and 16, and on including several other trust topics as follows:

- Whether households/individuals which use anti-virus software download virus definitions and, if so, whether this is done automatically, daily, weekly *etc.*
- Whether households/individuals which use the Internet apply patches or software updates which are critical to the security of their computer, and if so, whether this is done automatically, daily, weekly *etc.*
- Whether individuals regularly back up their important files, *e.g.* documents, spreadsheets, e-mails, digital photos.
- Which sources individuals use to find information about IT security issues (*e.g.* newspapers, TV, vendor Web sites, government Web sites, etc).

General feedback from Eurostat and others is that it is problematic asking individuals about IT security in terms of the incidents they have encountered, what action they take to protect themselves and whether the computer they use at home is protected. Feedback on the inclusion of the new topics outlined above was couched in similar terms, that is, respondents are unlikely to be able to respond to such technical questions. The only exception appears to be whether individuals regularly back up important files. This is a question successfully asked by Finland and a new non-core question (Q8) on this topic has consequently been added to the model questionnaire. While the general feedback on IT security questions was sceptical, they are of such policy importance that they have been retained as **non-core** questions. One change made as a result of feedback is to limit questions 8 (on data backup) and 15 (on incidents experienced) to **home use** only as this is the environment about which users are likely to know most and over which they have most control (for instance, they may have no role in backing up material at work, nor knowledge about attacks on the computer they use at school).

Internet access using mobile services

WPIIS feedback on this question (Q11) was on the technical nature of the categories. Specific comments included asking whether respondents would be able to tell the difference between UMTS and earlier generation networks, and suggesting the need to distinguish home-based wireless network from WiFi type access away from the home. A major change to this question since the WPIIS meeting is to remove devices and focus on mobile services. This has simplified the question slightly and is thought to be better aligned with policy interests in this area. Other changes are to specify “3G” in the UMTS category and to restrict the wireless connection category to away from home use (to avoid confusion with wireless network at home). Note that the question remains **non-core** because it is both untested and technically complex.

Digitised products

The Internet activities and purchasing items questions (19 and 21 respectively) contain several new categories designed to probe individuals’ interest in new types of products which the Internet has made possible. These so-called “digitised products” are those which are able to be digitally delivered via the Internet. They are challenging statistically as they are difficult to describe in a way which is technically correct yet understandable to respondents.

The value of Internet purchases

The existing question on the value of Internet purchases has been included in the revised questionnaire with few changes (Q22). However, it is a conceptually complex question and has been made **non-core** because of the difficulty respondents have answering it accurately. Importantly, Eurostat has dropped this question from its model questionnaire (from 2005).

Mobile phones

In OECD countries, information on mobile phones has conventionally been collected in respect of the household (therefore whether the household, through one or more of its members, has access to a mobile phone). However, there is increasing recognition that it is more important to examine individual use of mobile phones, especially since they are typically owned and/or used by an individual rather than a group of people. The revised model questionnaire includes two questions (24 and 25) on individual mobile phone use. It should be noted that the questions are relatively untested in OECD countries and therefore might change as experience increases. They have been denoted **non-core** for this reason.

Comparison with Eurostat’s model survey

European Union countries now comprise nearly two-thirds of OECD countries. Additionally, some OECD countries which are not EU members use the Eurostat model. It is therefore important to try to align the two model questionnaires (and associated standards) as far as possible, while taking into account the interests of the eight OECD countries which do not carry out Eurostat’s model survey. The revised model questionnaire is reasonably consistent with Eurostat’s 2006 Household questionnaire – where they overlap. However, Eurostat asks questions about a number of topics which are not on the OECD model questionnaire and (to a lesser extent) *vice versa*. Other differences include instances where the questionnaires differ because response categories are split in one questionnaire and not in the other. Such differences may be able to be dealt with at the output stage.

For differences in the recall periods used, see page 10.

In respect of scope and classificatory variables, there were a number of differences between the 2002 OECD and Eurostat models most of which have now been removed, leaving the revised OECD and current Eurostat models very similar.

Model questionnaire

The revised model questionnaire, including definitions of terms and associated metadata notes, is shown in the Annex below.

The size of the new model questionnaire

Despite the inclusion of a number of new topics in the revised model questionnaire, the total number of questions is the same as in the 2002 questionnaire (25). In addition, there are nine non-core questions in the revised questionnaire (and none in the 2002 questionnaire). This economy has been achieved by removing questions which are no longer topical or are not asked by most member countries.

Core and non-core questions

Questions denoted “non-core” are considered to be **either** relatively untested and therefore somewhat experimental, **or** difficult to collect. The term “non-core” is **not** used to indicate a lower priority. In the model questionnaire, a *non-core* question is indicated by **NC** under the question number.

Definitions of terms

The 2004 WPIIS paper proposed an expansion of survey material to include a glossary of terms. This has been included in the form of definitions of terms associated with each question in the revised model questionnaire.

Format of the model questionnaire

The OECD model questionnaire is not an operational questionnaire which can be used directly in countries’ household surveys. This is because countries conduct household ICT access and use surveys in different ways, each requiring their own types of survey instruments. For instance, a questionnaire which is self-enumerated will look quite different from one designed for a telephone survey, which in turn will differ from a questionnaire which is used for face-to-face interviewing. Because the model questionnaire is not an operational questionnaire, it does not show:

- Questions which establish the values of classificatory variables (household and individual characteristics).
- Filter questions which have no ICT data content (*e.g.* whether the respondent is an employee).
- Interview instructions (though it does indicate question populations and logic).
- How questions are asked (this will vary depending on the collection methodology used, for instance, personal interviewers might use prompt cards for a number of the “list” questions whereas telephone interviewers might use a running prompt *i.e.* ask each response item as a yes/no question).

Adaptation of the model questionnaire

It is not expected that the structure, question wording or definitions which comprise the model questionnaire would be used unchanged (or literally translated) in national surveys. However, it is important for comparability purposes that:

- Where questions are used, their meanings are preserved.
- The logic is preserved to the extent that the same (or very similar) populations of households or individuals are asked each question.

ANNEX. OECD MODEL QUESTIONNAIRE FOR ICT ACCESS AND USE BY HOUSEHOLDS AND INDIVIDUALS (2005)

Section A: Household access to information and communication technology	Logic ¹	Definitions and notes
1 Does any member of this household/do you² have access to a computer at home regardless of whether it is used?³	<input type="checkbox"/> No	A computer includes: a desktop, portable or handheld computer (e.g. a personal digital assistant). A computer does not include other equipment with some embedded computing functions, such as cell phones, VCRs or TV sets.
<i>Population: all in-scope households</i>	<input type="checkbox"/> Yes	
2 Does any member of this household/do you² have access to the Internet at home regardless of whether it is used?⁴	<input type="checkbox"/> No Go to 5	The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files. Internet access may be via a computer, Internet-enabled mobile phone or TV, games machine etc.
<i>Population: all in-scope households</i>	<input type="checkbox"/> Yes	
3 On which devices do members of this household access the Internet at home?⁵		The Internet is as defined in Question 2.
<i>Population: in-scope households with access to the Internet at home</i>		
Multiple responses allowed		
Through a computer ⁶ <input type="checkbox"/>		A desktop, portable or handheld computer.
Through an Internet-enabled mobile phone <input type="checkbox"/>		For instance WAP (Wireless Application Protocol), GPRS (General Packet Radio Service), i-mode or UMTS (Universal Mobile Telecommunications System).
Through a games machine with Internet connection <input type="checkbox"/>		Also known as a games console.
Through an Internet-enabled television set <input type="checkbox"/>		For instance, digital TV or TV with a set-top box.
Using any other means (please specify)..... <input type="checkbox"/>		
Do not know <input type="checkbox"/>		

Section A: Household access to information and communication technology	Logic	Definitions and notes
<p>4 What types of Internet access services are used for Internet access at home?⁷</p> <p><i>Population: in-scope households with access to the Internet at home</i></p> <p style="text-align: center;">Multiple responses allowed</p> <p>Analog modem (dial-up via standard phone line) <input type="checkbox"/></p> <p>ISDN (Integrated Services Digital Network) <input type="checkbox"/></p> <p>DSL (ADSL, SDSL, VDSL etc.)⁸ <input type="checkbox"/></p> <p>Cable modem⁸ <input type="checkbox"/></p> <p>Other narrowband⁹ <input type="checkbox"/></p> <p>Other broadband^{8,9} <input type="checkbox"/></p> <p>Do not know <input type="checkbox"/></p>	<p>Go to 6</p>	<p>An analog modem converts a digital signal into analog for transmission by traditional (copper) telephone lines. It also converts analog transmissions back to digital.</p> <p>ISDN is a telecommunication service that turns a traditional (copper) telephone line into a higher speed digital link. It should be regarded as narrowband.</p> <p>Digital subscriber line; it is a high-bandwidth, local loop technology carrying data at high speeds over traditional (copper) telephone lines.</p> <p>A modem which uses cable TV lines for connecting to the Internet.</p> <p>Including most mobile phone access (e.g. WAP, GPRS, i-mode) and other forms of access with an advertised download speed of less than 256 kbps (kilobits per second).</p> <p>Including optic fibre cable, some mobile phone access (e.g. UMTS, EDGE), powerline, satellite, fixed wireless, with an advertised download speed of greater than or equal to 256 kbps.</p>

Section A: Household access to information and communication technology	Logic	Definitions and notes
<p>5 What are ALL the reasons for members of this household not having access to the Internet at home?¹⁰</p> <p><i>Population: in-scope households without access to the Internet at home (whether or not they have a computer)</i></p> <p style="text-align: center;">Multiple responses allowed</p> <p style="text-align: center;">Not interested <input type="checkbox"/></p> <p style="text-align: center;">Costs are too high <input type="checkbox"/></p> <p style="text-align: center;">Lack of confidence, knowledge or skills <input type="checkbox"/></p> <p style="text-align: center;">Concern that content is harmful <input type="checkbox"/></p> <p style="text-align: center;">Have access to Internet elsewhere <input type="checkbox"/></p> <p style="text-align: center;">Security concerns, for example, concerns about viruses <input type="checkbox"/></p> <p style="text-align: center;">Privacy concerns, for example, concerns about abuse of personal information <input type="checkbox"/></p> <p style="text-align: center;">Other (please specify)..... <input type="checkbox"/></p>		<p>Note that not having a computer is not a valid response.</p> <p>Includes equipment and access costs.</p> <p>For instance, concern that children will access inappropriate sites.</p> <p>For example, household members are able to use the Internet at work.</p>

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
<p>6 When did you most recently use a computer?¹¹ <i>Population: all in-scope individuals</i></p> <p style="text-align: right;">Within the last three months <input type="checkbox"/></p> <p style="text-align: right;">Between three months and a year ago¹² <input type="checkbox"/></p> <p style="text-align: right;">More than a year ago <input type="checkbox"/> Go to 9</p> <p style="text-align: right;">Never used a computer <input type="checkbox"/> Go to 9</p>		<p>From any location. A computer is defined in Question 1.</p>
<p>7 In the last 12 months, did you use a computer at home? <i>Population: all in-scope individuals who used a computer in the last 12 months</i>¹³</p> <p>NC¹⁴ <input type="checkbox"/> No Go to 9</p> <p><input type="checkbox"/> Yes</p>		
<p>8 When using a computer at home in the last 12 months, how frequently did you back up files (such as documents, spreadsheets or digital photographs) which you created and kept on the computer?¹⁵ <i>Population: all in-scope individuals who used a computer at home in the last 12 months</i></p> <p style="text-align: right;">Always or almost always <input type="checkbox"/></p> <p style="text-align: right;">Sometimes <input type="checkbox"/></p> <p style="text-align: right;">Never or hardly ever <input type="checkbox"/></p> <p style="text-align: right;">Not applicable – I have not created files which I kept on a computer used at home <input type="checkbox"/></p>		<p>For example, by putting them onto a CD, memory stick or external hard drive, or storing them on Web sites (such as those offering online storage for photographs or other files). Includes files created elsewhere (for instance, on a handheld computer or digital camera) and transferred to a computer used at home.</p> <p>That is, all or most files created by the individual are backed up – either individually or via a periodic backup of new (or all) files.</p>

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
<p>9 When did you most recently use the Internet?¹¹ <i>Population: all in-scope individuals</i></p> <p>Within the last three months <input type="checkbox"/></p> <p>Between three months and a year ago¹² <input type="checkbox"/></p> <p>More than a year ago <input type="checkbox"/></p> <p>Never used the Internet <input type="checkbox"/></p>	<p>Go to 11</p> <p>Go to 24</p> <p>Go to 24</p>	<p>From any location and access device. The Internet is defined in Question 2.</p>
<p>10 How often did you typically use the Internet during the last 12 months?¹⁶ <i>Population: all in-scope individuals who used the Internet within the last 3 months</i></p> <p>At least once a day <input type="checkbox"/></p> <p>At least once a week but not every day <input type="checkbox"/></p> <p>At least once a month but not every week <input type="checkbox"/></p> <p>Less than once a month <input type="checkbox"/></p>		<p>From any location.</p> <p>If using the Internet from work, this category refers to at least once each working day.</p>

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
<p>11 In the last 12 months, did you connect to the Internet using any of the following methods of mobile access?¹⁷</p>		
<p>NC <i>Population: all in-scope individuals who used the Internet in the last 12 months</i></p>		
<p style="text-align: right;">Multiple responses allowed</p>		
<p style="text-align: right;">Via a WAP, GPRS or i-mode mobile cellular network <input type="checkbox"/></p>		<p>Connection is typically via an Internet enabled mobile phone or another device such as a laptop computer or handheld device. WAP is Wireless Application Protocol, GPRS is General Packet Radio Service.</p>
<p style="text-align: right;">Via a UMTS (3G) mobile cellular network <input type="checkbox"/></p>		<p>Connection is via an Internet enabled mobile phone or another device such as a laptop computer or handheld device. UMTS is a 3G mobile technology that will deliver information at speeds up to 2Mbits/sec.</p>
<p style="text-align: right;">Via a wireless connection, such as a “hotspot”, WiFi or Wimax, away from home <input type="checkbox"/></p>		<p>Characterised by its local nature. Coverage would generally not be continuous across a very wide area such as a country. Connection is typically by a laptop computer or handheld device such as a PDA or smartphone. Excludes use of a wireless network at home.</p>
<p>12 In the last 12 months, did you use the Internet at home?</p>	<p><input type="checkbox"/> No Go to 17</p>	<p>Via fixed or mobile access. Fixed access is defined in Question 17 and mobile access in Question 11.</p>
<p><i>Population: all in-scope individuals who used the Internet in the last 12 months¹³</i></p>	<p><input type="checkbox"/> Yes</p>	
<p>13 How often did you typically use the Internet at home during the last 12 months?¹⁶</p>		
<p><i>Population: all in-scope individuals who used the Internet at home in the last 12 months</i></p>		
<p style="text-align: right;">At least once a day <input type="checkbox"/></p>		
<p style="text-align: right;">At least once a week but not every day <input type="checkbox"/></p>		
<p style="text-align: right;">At least once a month but not every week <input type="checkbox"/></p>		
<p style="text-align: right;">Less than once a month <input type="checkbox"/></p>		

Section B: Individual (adult) use of information and communication technology		Logic	Definitions and notes
14	Did you use a computer to access the Internet at home in the last 12 months? ¹⁸	<input type="checkbox"/> No Go to 17	<p>Excluding attacks which were successfully prevented by security measures in place. A <i>virus</i> is a self-replicating, malicious program which attaches itself to a host program. A <i>Trojan horse</i> is a program that performs like a real program a user may wish to run, but also performs unauthorised actions. A <i>worm</i> is a malicious program that self-replicates across networks.</p>
NC	<i>Population: all in-scope individuals who used the Internet at home and who used a computer at home in the last 12 months</i>	<input type="checkbox"/> Yes	
15	When using a computer to access the Internet at home in the last 12 months, have you experienced an attack by a virus or similar (for example, a Trojan horse or worm) which has resulted in loss of data or time, or damage to software? ¹⁹	No Yes Don't know	
NC	<i>Population: all in-scope individuals who used a computer to access the Internet at home in the last 12 months</i>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
16	Was the computer you (mainly) used to access the Internet at home protected by: ²⁰	No Yes Don't know	
NC	<i>Population: all in-scope individuals who used a computer to access the Internet at home in the last 12 months</i>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	Virus checking or protection software?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	A firewall?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	Anti-spyware software?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
17	Did you use the Internet at places other than home in the last 12 months using a fixed access device? ²¹	<input type="checkbox"/> No Go to 19	
	<i>Population: all in-scope individuals who used the Internet in the last 12 months</i>	<input type="checkbox"/> Yes	A fixed access device is associated with the place where the Internet was used, for instance, a computer at work or at school. It includes a portable computer which is usually located in a particular place (for instance, work). It excludes devices such as portable computers or mobile phones used in conjunction with mobile access services as defined in Question 11.

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
<p>18 At which of these other places did you use the Internet in the last 12 months?²² <i>Population: all in-scope individuals who used the Internet at places other than home, using a fixed access device, in the last 12 months</i></p> <p style="text-align: right;">Multiple responses allowed</p> <p style="padding-left: 100px;">Work (other than home) <input type="checkbox"/></p> <p style="padding-left: 100px;">Place of education <input type="checkbox"/></p> <p style="padding-left: 100px;">At another person's home <input type="checkbox"/></p> <p style="padding-left: 100px;">Community Internet access facility²³ <input type="checkbox"/></p> <p style="padding-left: 100px;">Commercial Internet access facility²³ <input type="checkbox"/></p> <p style="padding-left: 100px;">Other places (please specify)..... <input type="checkbox"/></p>		<p>For instance, home of a friend, neighbour or relative.</p> <p>Includes access at community facilities such as public libraries, publicly provided Internet kiosks or government agencies; access is typically free or low cost.</p> <p>Includes access at Internet or cyber cafés, hotels or airports; even though the venue is commercial, the cost is not necessarily at full market price.</p>
<p>19 For which of the following activities did you use the Internet for private purposes in the last 12 months?²⁴ <i>Population: all in-scope individuals who used the Internet in the last 12 months</i></p> <p style="text-align: right;">Multiple responses allowed</p> <p style="text-align: center;">Getting information</p> <p style="padding-left: 100px;">About goods or services <input type="checkbox"/></p> <p style="padding-left: 100px;">About job opportunities <input type="checkbox"/></p> <p style="padding-left: 100px;">Related to health or health services <input type="checkbox"/></p>		<p>For private use from any location (private means not as part of one's current job).</p> <p>Covers injury, disease, nutrition and improving health generally.</p>

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
19 For which of the following activities did you use the Internet for private purposes in the last 12 months? (continued)		For private use from any location (private means not as part of one's current job).
Getting information (continued)		
From government organisations (e.g. from Web sites or via e-mail) ²⁵ <input type="checkbox"/>		
Other information or general Web browsing <input type="checkbox"/>		
Communicating		
Sending or receiving e-mails <input type="checkbox"/>		
Telephoning over the Internet <input type="checkbox"/>		
Other communication (e.g. chat rooms/sites, message boards, instant messaging, Web logs) <input type="checkbox"/>		Web logs are also known as "blogs".
Selling goods or services (e.g. through auction sites)²⁶ <input type="checkbox"/>		
Internet banking <input type="checkbox"/>		
Applying for jobs <input type="checkbox"/>		
Formal education or training activities <input type="checkbox"/>		For instance, related to school or university courses, formal online courses.
Dealing with government organisations²⁵		Government organisations are defined by the SNA93 and include government organisations at local, regional and national level.
Downloading or requesting government forms <input type="checkbox"/>		Includes downloading from Web sites or e-mailing requests for forms; includes taxation forms, claims, applications for permits <i>etc.</i>
Completing forms on line or sending completed forms <input type="checkbox"/>		Includes online completion and submission of forms (e.g. Web forms) and sending completed forms, for instance, by e-mail; includes tax forms, claims, applications for permits <i>etc.</i>
Making online payments <input type="checkbox"/>		Includes payment of fees, payments for purchases, taxation remittances <i>etc.</i> Online payments to government organisations may be made via an intermediary, for instance, a bank's Web site.

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
<p>19 For which of the following activities did you use the Internet for private purposes in the last 12 months? (continued)</p>		<p>For private use from any location (private means not as part of one's current job).</p>
<p>Leisure activities</p>		
<p>Downloading or listening to online music <input type="checkbox"/></p>		<p>Includes file sharing and streaming from subscription services. Excludes listening to Web radio.</p>
<p>Playing or downloading computer or video games <input type="checkbox"/></p>		<p>Includes file sharing games and playing games on line.</p>
<p>Downloading or watching movies, short films or images <input type="checkbox"/></p>		<p>Includes file sharing. Excludes watching Web television but includes watching downloaded TV programmes.</p>
<p>Listening to Web radio or watching Web television <input type="checkbox"/></p>		<p>Includes podcasts of radio programmes.</p>
<p>Reading or downloading electronic books, newspapers or magazines <input type="checkbox"/></p>		<p>Includes accessing Web news sites.</p>
<p>Downloading software, patches or upgrades <input type="checkbox"/></p>		<p>Includes downloading computer software, software patches (e.g. for operating systems) and upgrades; excludes software for computer and video games.</p>
<p>20 When did you most recently buy or order goods or services for private use over the Internet?¹¹</p>		<p>From any location; it refers to purchase orders placed via the Internet whether or not payment was made on line. Orders which were cancelled or not completed are excluded.</p>
<p><i>Population: all in-scope individuals who used the Internet in the last 12 months</i></p>		
<p>Within the last three months <input type="checkbox"/></p>		
<p>Between three months and a year ago <input type="checkbox"/></p>		
<p>More than a year ago <input type="checkbox"/></p>	<p>Go to 23</p>	
<p>Never bought or ordered goods or services over the Internet <input type="checkbox"/></p>	<p>Go to 23</p>	

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
21 What types of goods or services did you buy or order over the Internet for private use in the last 12 months?²⁷		
<i>Population: all in-scope individuals who bought or ordered goods or services for private use over the Internet in the last 12 months</i>		
Multiple responses allowed		
Books, magazines or newspapers which are <u>digitally delivered</u> <input type="checkbox"/>		Downloaded from the Internet.
Books, magazines or newspapers which are <u>physically delivered</u> <input type="checkbox"/>		Generally delivered by post or delivery service.
Clothing, footwear, sporting goods or accessories <input type="checkbox"/>		
Computer equipment or parts (including peripheral equipment) <input type="checkbox"/>		Computer equipment includes packages where some software (such as an operating system) is included.
Computer or video games which are <u>digitally delivered</u> <input type="checkbox"/>		Downloaded from the Internet or played on line.
Computer or video games which are <u>physically delivered</u> <input type="checkbox"/>		For example, as CDs.
Computer software (including patches and upgrades but excluding computer games) which is <u>digitally delivered</u> <input type="checkbox"/>		Downloaded from the Internet.
Computer software (including patches and upgrades but excluding computer games) which is <u>physically delivered</u> <input type="checkbox"/>		For example, as CDs.
Financial products (including shares and insurance) <input type="checkbox"/>		The interest is in the purchase of the service rather than the investment value of the product. Include only where there is a service cost such as brokerage or commission.
Food, groceries, alcohol or tobacco <input type="checkbox"/>		
Information technology and telecommunications services (excluding software) <input type="checkbox"/>		Includes subscription to, or renewal of, ICT services such as: Internet access, pay TV, phone services; includes purchase of credit for Internet access or mobile phone use.
Movies, short films or images which are <u>digitally delivered</u> <input type="checkbox"/>		Downloaded from the Internet e.g. as AVI, MOV, MPEG files.
Movies, short films or images which are <u>physically delivered</u> <input type="checkbox"/>		For example, as DVDs.

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
21 What types of goods or services did you buy or order over the Internet for private use in the last 12 months? (continued)	<p>Music products which are <u>digitally delivered</u> <input type="checkbox"/></p> <p>Music products which are <u>physically delivered</u> <input type="checkbox"/></p> <p>Photographic, telecommunications or optical equipment <input type="checkbox"/></p> <p>Tickets or bookings for entertainment events (sports, theatre, concerts etc.) <input type="checkbox"/></p> <p>Travel products (tickets, accommodation, vehicle hire etc.) <input type="checkbox"/></p> <p>Other²⁸ (please specify.....) <input type="checkbox"/></p>	<p>Downloaded from the Internet e.g. as MP3, WMA files or streamed from subscription services.</p> <p>For example, as CDs.</p> <p>Includes photographic equipment and accessories; telecommunications equipment such as fixed, cordless, mobile phones or fax machines; optical equipment such as binoculars.</p> <p>Excludes travel products.</p>
22 What was the TOTAL value of goods and services you bought or ordered for private use over the Internet in the last <period>? ²⁹	<input type="text"/>	<p>In national currency units. Includes the value of orders placed via the Internet whether or not payment was made on line. It excludes the value of orders which were cancelled or not completed and the value of capital items such as investment products, shares and loans. It includes financial services charges such as Internet brokers' fees or Internet banking charges.</p>
NC Population: all in-scope individuals who bought or ordered goods or services for private use over the Internet in the last 12 months	Go to 24	

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
<p>23 What were ALL the reasons for not buying or ordering goods or services for private use over the Internet in the last 12 months?³⁰</p> <p><i>Population: all in-scope individuals who used the Internet in the last 12 months, but who did <u>not</u> buy or order goods or services for private use over the Internet during that period</i></p>	<p>Multiple responses allowed</p>	
<p>Not interested <input type="checkbox"/></p>		
<p>Prefer to shop in person or deal personally with a service provider <input type="checkbox"/></p>		
<p>Security concerns, for example, worried about giving debit or credit card details over the Internet <input type="checkbox"/></p>		
<p>Privacy concerns, for example, worried about giving personal details over the Internet <input type="checkbox"/></p>		
<p>Trust concerns, for example, worried about warranties, receiving goods or services, or returning goods <input type="checkbox"/></p>		
<p>Lack of confidence, knowledge or skills <input type="checkbox"/></p>		
<p>Speed of connection is too slow <input type="checkbox"/></p>		
<p>Other (please specify)..... <input type="checkbox"/></p>		
<p>24 Did you have <u>personal use</u> of a mobile phone during some or all of the last 12 months?¹⁵</p>	<p><input type="checkbox"/> No Go to end</p>	
<p>NC <i>Population: all in-scope individuals</i></p>	<p><input type="checkbox"/> Yes</p>	

Section B: Individual (adult) use of information and communication technology	Logic	Definitions and notes
<p>25 For which of the following activities did you use a mobile phone in the last 12 months?¹⁵</p> <p>NC <i>Population: all in-scope individuals with personal use of a mobile phone during some or all of the last 12 months</i></p> <p style="text-align: center;">Multiple responses allowed</p> <p>Accessing the Internet, for example, browse WAP pages or use i-mode services <input type="checkbox"/></p> <p style="padding-left: 100px;">Sending or receiving SMS (short text messages) <input type="checkbox"/></p> <p style="padding-left: 150px;">Sending or receiving photographs <input type="checkbox"/></p> <p style="padding-left: 100px;">Downloading music, ringtones, games or video <input type="checkbox"/></p> <p style="padding-left: 150px;">Paying for goods or services <input type="checkbox"/></p>		<p>Free or charged.</p> <p>Where the payment appears in the phone bill (or is deducted from phone credit).</p>

Notes to the questions

- 1 Where there is no “Go to” direction, the respondent is asked the next question.
- 2 The term “do you” is included to cover single person households. It does not refer to individual activities.
- 3 This question refers to access rather than use. The equipment should be in working order or expected to be returned to working order soon.
- 4 This question refers to access rather than use. The connection should be functional (that is, any equipment or software needed should be in working order) or expected to be returned to working order soon. Note that access is not assumed to be only via a computer. It may also be by mobile phone, games machine *etc.* Therefore this question is asked even if there is a “No” response to Question 1.
- 5 Possible country variations are: remove categories where items are not feasible; add or split categories according to technologies available and country data requirements. Care should be taken when adding or splitting categories that statistical bias is not introduced. This could occur if the provision of alternative categories affects response thereby leading to loss of comparability with other countries’ data.
- 6 Three types of computers (desktop, portable and handheld) are combined into one category based on information from EC countries that the incidence of use of portable and handheld computers to access the Internet from home is very low. Where statistically feasible, countries may split the category.
- 7 The main aim of this question is to enable estimation of the proportion of households with broadband access. Possible country variations are: remove categories where items are not feasible, add or split categories according to technologies available and country data requirements (though note comments about bias above). Note also the comments against the categories “Other narrowband” and “Other broadband”.
- 8 Based on Finnish household data for 2004, the broadband categories have not been split by speed (unlike the same question on the revised OECD business model questionnaire). Finland reported a very high “don’t know” response for such questions.
- 9 This “Other” item would not appear on questionnaires – countries should add appropriate category/ies based on services available.
- 10 Changes have been made to categories to improve consistency with Eurostat and items have been ordered based on Eurostat data for 2004. Possible country variations are to add or split categories according to country data requirements though note comments about bias above. It is possible to ask barriers questions in a variety of ways. They include asking for all reasons, asking respondents to rate the importance of each reason or asking for the main plus a secondary reason, or the main reason only. The approach taken here is probably the least burdensome presentation and is suitable for telephone interviewing. Where countries use a different method of collecting these data, for the purposes of international comparability, data should be tabulated to show the main reason most commonly reported or the reason most commonly selected as the most important and so on. Note that responses to barriers questions tend to be fairly stable over time therefore they may be rotated in and out of an annual collection.
- 11 New filter question. This formulation is consistent with Eurostat’s model and would provide somewhat more information than a simple Yes/No filter question. However, countries could use a Yes/No filter question if they preferred (for countries with a low incidence of infrequent (3-12 months) use, the advantages of using the split question are much less).
- 12 Based on Eurostat data, the incidence of this item is likely to be low for most countries (average for EU: 3% of respondents in 2004 for computer use and 2% for Internet use).
- 13 As it is possible that households could have had computer access /Internet access at some time in the previous 12 months, but not at the time of the survey, the population for questions 7 and 12 (respectively) has not been restricted to those who had such access at home.
- 14 NC denotes a non-core question, that is, a question which is either relatively untested and therefore somewhat experimental, or may be difficult to collect.

- 15 New question nominated as non-core because relatively untested.
- 16 Note that countries are able to add additional frequency categories if they wish to obtain finer level information. The question refers to typical or usual use, therefore less frequent use because of absence (e.g. on holiday) is not taken into account.
- 17 The purpose of this question is to explore the use of mobile Internet access. It has been nominated as non-core because it has not been tested in this form and its categories may be technically complex for many respondents (though the sub-population for whom the question is relevant is likely to be relatively advanced, technically).
- 18 New filter question for the following two questions on security of the home computer. Like those questions, it has been nominated as non-core.
- 19 This is a new question and is nominated as non-core because such questions may be quite technical for many respondents.
- 20 This is a new question and is nominated as non-core because of evidence that many respondents are unaware of security precautions in place. Consistent with that hypothesis, Finnish data indicates that countries can expect quite high “don’t know” rates on this question. However, the incidence of “don’t know” responses may be useful information as an indication of awareness.
- 21 This is based on question 13 in the previous (2002) model questionnaire. The purpose of the question is to explore the use of the Internet from particular locations where the access device (typically a computer) is associated with the location.
- 22 Possible country variations are: add or split categories according to country data requirements, though note comments about bias above.
- 23 This category would not appear on country questionnaires. Each country should tailor the response categories for the facilities available in their country.
- 24 There are alternative ways of asking activities questions. For instance, each could be rated according to its frequency of use. The model questionnaire uses a simplified method of presentation which asks respondents to respond in respect of all activities. It is presumed that reasonably comparable output can be compiled by those countries taking a different approach. Possible country variations are: add or split categories according to country data requirements, though note comments about bias above. Note that the categories are not strictly mutually exclusive (e.g. getting information about goods or services may overlap with getting information from government organisations). The response categories of Australia, Canada, Japan, Korea, UK, US and Eurostat were checked for the revision of this question. 2004 data from Eurostat were used to remove some categories with very low responses (e.g. gambling and other financial services such as share purchasing).
- 25 Government organisations/public authorities are defined per the SNA93. They include government organisations at local, regional and national level. According to SNA93 “the principal functions of government are to assume responsibility for the provision of goods and services to the community or to individual households and to finance their provision out of taxation or other incomes; to redistribute income and wealth by means of transfers; and to engage in non-market production.” For more information, see <http://unstats.un.org/unsd/sna1993/glossform.asp?getitem=219>.
- 26 The item “purchasing over the Internet” has been removed following a Eurostat change for 2006. The logic for the removal is that there is a separate question on Internet purchasing and analysis of Eurostat data has shown that the results from the two questions differ.
- 27 An option is to have a separate section for digitally delivered products (following the practices of Eurostat and Japan). Other possible country variations are: remove categories where items are not available (or are illegal); add or split categories according to products available and country data requirements (though note comments about bias above). Classifications of Canada, Japan, Eurostat, Finland, Korea, UK and Australia have been used in revising this question. In addition, the CPC 1.1 mail-order/Internet purchases categories were considered as were those of a major Internet purchasing Web site. Note that categories are arranged in alphabetical order.

- 28** Following feedback that there were too many categories, the following items were removed (in some cases, country data indicate a low level of purchases; in other cases, the items were removed because they are not generally included on equivalent country questions): *Gambling, lotteries or betting services; Gifts n.e.c. (e.g. flowers, gift baskets, gift certificates); Household furniture, appliances or equipment (white goods, audio-visual equipment; excluding computer equipment and parts); Motor vehicles, accessories or parts; Musical instruments or sheet music; Real estate; Toiletry or health items (pharmaceuticals, other medical products, perfume, cosmetics etc.); Toys, hobby items or collectibles (stamps, coins, autographs, figurines, models, craft items, art etc.); Watches or jewellery.* If any of these categories are important, countries may wish to add them back.
- 29** The issue of bias arising from recall error is especially relevant for this question. OECD suggests that countries select a recall period for Internet purchases which allows calculation of 12 months' value (for instance, countries which collect monthly information should collect expenditure in respect of the last month). This information could also be collected in a household expenditure (or budget) survey rather than a use of ICT collection. Whichever method is chosen, it should deliver a reasonably unbiased estimate of total domestic Internet expenditure for the 12 month reference period. Note that this question should be asked in national currency and can be asked as a single value or as a set of ranges. If the latter, then the top category should be open (and ask for an exact value), and preferably apply to a small proportion of respondents. It is suggested that use of ranges may reduce recall bias (and probably also question non-response). Note that Eurostat dropped this question from 2005. Because it can be a difficult question to collect, it has been nominated as non-core.
- 30** It is possible to ask barriers questions in a variety of ways – see footnote 10 for more information. Possible country variations are: add or split categories according to country data requirements. In revising this question, response categories have been compared with those of Eurostat, Australia, Japan and the United Kingdom. Note that responses to barriers questions tend to be fairly stable over time therefore they may be rotated in and out of an annual collection.