

Community Survey on ICT Usage and e-Commerce in Enterprises for 2012 Metadata

1. Cover information

1.1	Country Please insert here the name of the Country to which the survey refers to.
	Luxembourg
1.2	Organisation(s) Here you should put the names of the organisations responsible for the survey under Eurostat (e.g. Statistical Office) and / or any other organisations involved in the conduction of the survey.
	Responsible for the survey and statistical results (co-ordinator) Institut national de la statistique et des études économiques (STATEC) Other organisations involved in carrying out the survey (co-partner) Centre d'Etudes de Populations, de Pauvreté et de Politiques Socio-Economiques / International Networks for Studies in Technology, Environment, Alternatives, Development (CEPS/Instead)
1.3	Contact Person Please indicate the name, unit and the contact information of the person that should be contacted in case there is any question concerning the survey and this report.
	Contact persons at STATEC Georges ZANGERLE – georges.zangerle@statec.etat.lu (Project Manager) Tel. +352 247-84242 Bob JUNG – bob.jung@statec.etat.lu Tel. +352 247-84336 Contact persons at CEPS/INSTEAD Nicolas POUSSING – nicolas.pousing@ceps.lu Tel. +352 585855-503 Ludivine MARTIN – ludivine.martin@ceps.lu Tel. +352 585855-631
1.4	Name of the statistical operation or collection Here you should put the national name of the survey in its original language and in English if there is any national reference (i.e. in the web-site of the statistical office) to the survey in English.
	Enquête relative à l'usage des technologies de l'information et de la communication dans les entreprises - 2012
1.5	Date of this report Please indicate the date of the last update of this report, for the case we have several versions (i.e. use different dates for the <u>metadata</u> report and the <u>quality</u> report).
	16/10/2012

2. General methodological information

2.1	Reference period In this section please indicate if the reference periods defined in the model questionnaire for the several variables were followed in the national survey and highlight the differences.												
	The reference periods defined in the model questionnaire were followed in the national survey.												
2.2	Survey period Please indicate the dates between which the data collection took place, i.e., when the questionnaires were sent out (or the web-questionnaire made available) and when the last filled in questionnaire treated and used for the results was received. Please indicate also the collection dates for the financial sector and the micro-enterprises (if conducted), even if they are the same as the general survey.												
	<table border="1"> <thead> <tr> <th>Survey / Collection</th><th>Date of sending out of questionnaires</th><th>Date of reception of the last questionnaire treated</th></tr> </thead> <tbody> <tr> <td>General survey</td><td>10/03/2012 – 12/03/2012</td><td>02/07/2012</td></tr> <tr> <td>Financial sector</td><td>not applicable</td><td>not applicable</td></tr> <tr> <td>Micro-enterprises</td><td>not applicable</td><td>not applicable</td></tr> </tbody> </table>	Survey / Collection	Date of sending out of questionnaires	Date of reception of the last questionnaire treated	General survey	10/03/2012 – 12/03/2012	02/07/2012	Financial sector	not applicable	not applicable	Micro-enterprises	not applicable	not applicable
Survey / Collection	Date of sending out of questionnaires	Date of reception of the last questionnaire treated											
General survey	10/03/2012 – 12/03/2012	02/07/2012											
Financial sector	not applicable	not applicable											
Micro-enterprises	not applicable	not applicable											
2.3	Survey vehicle Stand-alone or embedded in another survey. Please introduce an "x" in the column next to the type of survey vehicle used for the general survey (enterprises with 10 or more persons employed). In addition, please indicate if the data collection for micro-enterprises was integrated with the general survey, i.e. the same questionnaire was used and the sending out of questionnaires was simultaneous.												
	<table border="1"> <tr> <td>General survey: Stand-alone survey</td><td>X</td><td>General survey: Embedded in another survey</td><td></td></tr> </table>	General survey: Stand-alone survey	X	General survey: Embedded in another survey									
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	<table border="1"> <tr> <td>Was collection of <u>micro-enterprises</u> integrated with the general survey?</td><td>Yes</td><td>No</td><td>X</td></tr> </table>	Was collection of <u>micro-enterprises</u> integrated with the general survey?	Yes	No	X								
Was collection of <u>micro-enterprises</u> integrated with the general survey?	Yes	No	X										
2.4	Survey type Please give a short description of the survey type (e.g. web survey, face-to-face interviews, self-administered mail survey, telephone interview, combination of techniques, other).												
	Self-administered mail survey or web survey.												
2.5	Survey participation Please indicate if the survey was mandatory or voluntary, by introducing an "x" in the column next to the type of survey participation.												
	<table border="1"> <tr> <td>Mandatory</td><td>x</td><td>Voluntary</td><td></td></tr> </table>	Mandatory	x	Voluntary									
Mandatory	x	Voluntary											
2.6	Main methodological differences compared to previous survey(s) Please indicate any changes in the survey from the previous year that may have an impact on the comparability over time of the results delivered to Eurostat (and not particularly those relating to results released only nationally).												
	In order to reduce the burden on enterprises, we changed our sampling scheme and introduced an alternative survey vehicle. <ul style="list-style-type: none"> - In previous years we carried out a census of the frame population. For the 2012 survey, we introduced a sample for enterprises employing between 10 and 50 persons, while enterprises with 50 persons or more, as well as several small-sized strata are still censused. This reduces the number of enterprises surveyed by about 700 enterprises. - The 2012 survey also marks the introduction of an online version of the questionnaire, which facilitates replying to the survey. The online questionnaire includes several consistency checks and validations. 												

3. Statistical Unit and Target Population

3.1	Statistical Unit Please indicate the statistical unit used. If it wasn't the "enterprise", as defined in the model survey, please mention the reasons.															
	The statistical unit used was the Enterprise as defined in the model survey, based on the Enterprise unit in Luxembourg's Business Register.															
3.2	Target Population															
3.2.1	Enterprise size As required by Annex I of the Commission Regulation (EC) No 937/2011 of 21 September 2011, enterprises with 10 or more persons employed are intended to be covered by the survey. Indicate below what is the scope for the coverage of micro-enterprises in terms of size and if the breakdown in the size classes is provided or not. For each one of the two items below introduce an "x" in the column next to the appropriate response. If the variable used to define enterprise size was not the number of persons employed, indicate which one was used (number of employees, number of FTE's ...), the reason and the possible impact on results. <table border="1"> <tr> <td>Scope in terms of persons employed</td><td>1 to 9 persons employed</td><td></td><td>5 to 9 persons employed</td><td></td></tr> <tr> <td>Breakdown between size classes [1 to 4] and [5 to 9] persons employed provided?</td><td>Yes</td><td></td><td>No</td><td></td></tr> <tr> <td>If different size delimitation or different variable was used, please indicate it.</td><td colspan="4"></td></tr> </table>	Scope in terms of persons employed	1 to 9 persons employed		5 to 9 persons employed		Breakdown between size classes [1 to 4] and [5 to 9] persons employed provided?	Yes		No		If different size delimitation or different variable was used, please indicate it.				
Scope in terms of persons employed	1 to 9 persons employed		5 to 9 persons employed													
Breakdown between size classes [1 to 4] and [5 to 9] persons employed provided?	Yes		No													
If different size delimitation or different variable was used, please indicate it.																
3.2.2	Economic Activity All economic activities in the scope of Annex I of the Commission Regulation (EC) No 937/2011 of 21 September 2011 are intended to be included in the general survey, covering enterprises with 10 or more persons employed. These activities are: NACE Rev. 2 sections C, D, E, F, G, H, I, J, L and N, divisions 69-74, groups 65.1, 65.2 and 95.1 and classes 64.19, 64.92, 66.12 and 66.19. In this section, please indicate for the <u>micro-enterprises</u> if all the NACE categories were covered – by introducing an "x" in the column next to the appropriate response; if not which ones were included. <table border="1"> <tr> <th>Economic Activity</th><th colspan="4">Micro-enterprises</th></tr> <tr> <td>All NACE Rev. 2 categories covered?</td><td>Yes</td><td></td><td>No</td><td></td></tr> <tr> <td>If not, which ones were covered?</td><td colspan="4"></td></tr> </table>	Economic Activity	Micro-enterprises				All NACE Rev. 2 categories covered?	Yes		No		If not, which ones were covered?				
Economic Activity	Micro-enterprises															
All NACE Rev. 2 categories covered?	Yes		No													
If not, which ones were covered?																
3.2.3	Geographic scope Please indicate here if all the territory of the country was considered or if any part of the country was not included. All territory of the country should be covered. In case parts of the country were not included indicate which, the reasons why, and an estimate of the percentage of the target population not covered. Not applicable.															

4. Questionnaire

4.1	<p>Implementation in the national questionnaire of the mandatory variables and adoption of questions for micro-enterprises (Model Questionnaire, version 1.1)</p> <p>All mandatory variables included in Annex I of the Commission Regulation (EC) No 937/2011 of 21 September 2011 are intended to be included in the general survey, covering enterprises with 10 or more persons employed.</p> <p>In the following table please indicate any deviation of the question from the recommendation as defined in the model questionnaire, for the general survey.</p> <p>For each question or item, an "x" in the column named <i>Question included</i> means that it was included in the national questionnaire directed to micro-enterprises. The national questionnaire(s) (and an English version, if available,) should be present as annex.</p>
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Question / Item		General Survey	Micro-enterprises
		Any deviation from question / item in model questionnaire	Question included
Module A: Use of computers and computer networks			
A1.	Did your enterprise use computers, in January 2012? (Filter question) Computers include Personal Computers, nettops, portable computers (e.g. laptops, notebooks, netbooks), other portable devices like Smartphones, Personal Digital Assistants (PDA)	No deviation	Not applicable
A4.	Did your enterprise employ ICT/IT specialists, in January 2012? Definition ICT/IT specialists : ICT specialists or IT specialists have the capability to specify, design, develop, install, operate, support, maintain, manage, evaluate and research ICT and ICT systems. ICT is the main job.	No deviation	Not applicable
A5	Did your enterprise recruit or try to recruit personnel for jobs requiring ICT/IT specialist skills, during 2011? (Filter question)	No deviation	Not applicable
A6	Did your enterprise have hard-to-fill vacancies for jobs requiring ICT/IT specialist skills, during 2011?	No deviation	Not applicable
A7	Did your enterprise provide training to develop or upgrade ICT related skills of your personnel, during 2011?		
	a) Training for ICT/IT specialists Tick No if your enterprise didn't employ ICT/IT specialists during 2011	No deviation	Not applicable
	b) Training for other persons employed	No deviation	Not applicable
Module B: Access and use of the Internet			
B1.	Did your enterprise have access to the Internet, in January 2012? (Filter question)	No deviation	Not applicable
B2.	Did your enterprise have the following types of external connection to the Internet, in January 2012?		
	a) DSL connection e.g. xDSL, ADSL, SDSL etc.	No deviation	Not applicable
	b) Other fixed broadband Internet connection, e.g. cable, leased line (e.g. E1 or E3 at level 1 and ATM at level 2), Frame Relay, Metro-Ethernet, PLC - Powerline communication, etc, fixed wireless connections	No deviation	Not applicable
	c) Dial-up access over normal telephone line or ISDN connection	No deviation	Not applicable
	d) Mobile broadband connection (via at least 3G modem or 3G handset) using e.g. UMTS, CDMA2000 1xEVDO, HSDPA	Some changes in the description: via laptops, digital tablets or Smartphones connected via 3G (UMTS, HSDPA, etc.)	Not applicable
	e) Other mobile connection using e.g. analogue mobile phone, GSM, GPRS, EDGE	GSM not introduced to avoid confusion with french-speaking terminology	Not applicable

Question / Item		General Survey	Micro-enterprises
		Any deviation from question / item in model questionnaire	Question included
B3.	What was the maximum contracted download speed of the fastest Internet connection of your enterprise, in January 2012? (tick only one) a) less than 2 Mbit/s b) at least 2 but less than 10 Mbit/s c) at least 10 but less than 30 Mbit/s d) at least 30 but less than 100 Mbit/s e) at least 100 Mbit/s	No deviation	Not applicable
B4.	How many persons employed used computers with access to the World Wide Web at least once a week, in January 2012? or Please indicate an estimate of the percentage of the total number of persons employed who used computers with access to the World Wide Web at least once a week, during January 2012. Computers include Personal Computers, nettops, portable computers (e.g. laptops, notebooks, netbooks), other portable devices like Smartphones, Personal Digital Assistants (PDA).	Some changes to simplify the formulation: <i>Please indicate the percentage of persons employed who used computers with access to the Internet at least once a week during January 2012</i>	Not applicable
B5.	Did your enterprise have a Website or Home Page, in January 2012? (<i>Filter question</i>)	No deviation	Not applicable
B6.	Did the Website or Home Page have any of the following facilities, in January 2012? a) Online ordering or reservation or booking, e.g. shopping cart	No deviation	Not applicable
Use of the Internet in contact with public authorities (<i>Scope: enterprises with access to the Internet</i>)			
B7.	During 2011, did your enterprise use the Internet for interaction with public authorities to: (excluding any interaction via e-mails)		
	a) obtain information from public authorities' websites or home pages?	No deviation	Not applicable
	b) obtain forms from public authorities' websites or home pages? e.g. tax declaration	No deviation	Not applicable
	c) return filled in forms electronically, e.g. forms for customs or VAT declaration	No deviation	Not applicable
	d) treat the following administrative procedures completely electronically without the need for paper work ? (including electronic payment, if required)		
	d1) declaration of VAT	No deviation	Not applicable
	d2) declaration of social contributions	No deviation	Not applicable
Public electronic Procurement – e-Tendering			
B8.	During 2011, did your enterprise use the Internet for accessing tender documents and specifications in electronic procurement systems of public authorities?	No deviation	Not applicable
B9.	During 2011, did your enterprise use the Internet for offering goods or services in public authorities' electronic procurement systems (eTendering)?		
	a) in your own country	No deviation	Not applicable
	b) in other EU countries	No deviation	Not applicable
Mobile connection to the Internet for business use (<i>Scope: enterprises with access to the Internet</i>)			
B10	In January 2012, did your enterprise provide to the persons employed portable devices that allowed a mobile connection to the Internet for business use? Tick 'No' if the devices allowed Internet connection only via wireless networks and not via mobile telephone networks (<i>Filter question</i>) (e.g. portable computers or other portable devices like Smartphone, PDA phone)	No deviation	Not applicable
B11	Did your enterprise provide to the persons employed any of the following portable devices that allowed a mobile connection to the Internet for business use?		
	a) Portable computers? (e.g. Notebook, netbook, laptop, Ultra Mobile PC-UMPC, tablet PC etc)	No deviation	Not applicable
	b) Other portable devices like Smartphone, PDA phone?	No deviation	Not applicable

Question / Item		General Survey	Micro-enterprises
		Any deviation from question / item in model questionnaire	Question included
B12	How many persons employed were provided with a portable device that allowed a mobile connection to the Internet for business use, in January 2012? (e.g. portable computers or other portable devices like Smartphone, PDA phone) or Please indicate an estimate of the percentage of the total number of persons employed who were provided with a portable device that allowed a mobile connection to the Internet for business use, in January 2012? (e.g. portable computers or other portable devices like Smartphone, PDA phone)	Some changes to the formulation: <i>Please indicate the percentage of persons employed that were provided with a portable device that allowed a mobile connection to the Internet for business use (situation in January 2012)</i> - or - <i>Please indicate the number of persons employed who were provided with such a portable device (situation in January 2012)</i>	Not applicable
B13	In January 2012, did your enterprise provide the persons employed with portable devices that allowed a mobile connection to the Internet for business use to:		
	a) access publicly available information on the Internet?	No deviation	Not applicable
	b) access the enterprise's e-mail system?	No deviation	Not applicable
	c) access and modify documents of the enterprise?	No deviation	Not applicable
	d) use dedicated business software applications? e.g. for orders or sales management, ERP (enterprise resource planning) related applications etc	No deviation	Not applicable
B14	In January 2012, did the following obstacles limit or prevent your enterprise from using a mobile connection to the Internet?		
	a) Connectivity problems to mobile telephone networks for accessing the Internet	No deviation	Not applicable
	b) High costs for the subscription or use of the Internet	No deviation	Not applicable
	c) Security related risks (disclosure, destruction or corruption of data)	No deviation	Not applicable
	d) Technical obstacles or high costs for integrating mobile connection to the Internet in the enterprise's business software applications (e.g. incompatibility problems)	No deviation	Not applicable
	e) Other obstacles (e.g. adaptability of employees to new working practices, lack of skills or knowledge, contractual or legal barriers)	No deviation	Not applicable
	f) Limited or no need for a mobile connection to the Internet for business use	No deviation	Not applicable
Module C: Sending/receiving of messages suitable for automatic processing to/from systems outside the enterprise (EDI) (Scope: enterprises with Computers)			
C1.	In January 2012, did your enterprise send or receive electronically such information in a format that allowed its automatic processing? (<i>Filter question</i>)	Some changes to the formulation: <i>In January 2012, did your enterprise send or receive such information electronically to or from other enterprises in a format that allowed its automatic processing?</i>	Not applicable
C2.	Did your enterprise send or receive electronically such information for the following purposes?		
	a) Sending payment instructions to financial institutions	No deviation	Not applicable
	b) Sending or receiving product information (e.g. catalogues, price lists)	No deviation	Not applicable
	c) Sending or receiving transport documents (e.g. consignment notes)	No deviation	Not applicable
	d) Sending or receiving data to/from public authorities (e.g. tax returns, statistical data, import or export declarations [national examples])	No deviation	Not applicable
Module D: Sharing electronically information on Supply Chain Management (Scope: enterprises outside the financial sector with Computers)			
D1.	In January 2012, did your enterprise share information electronically on supply chain management with its suppliers or customers? (<i>Filter question</i>)	No deviation	Not applicable

Question / Item		General Survey	Micro-enterprises
		Any deviation from question / item in model questionnaire	Question included
D2.	Did your enterprise share the information electronically with its suppliers, in January 2012? On Inventory levels, production plans, demand forecasts or progress of deliveries (i.e. distribution of raw materials or finished products)	No deviation	Not applicable
D3	Did your enterprise share the information electronically with its customers, in January 2012? On Inventory levels, production plans, demand forecasts or progress of deliveries (i.e. distribution of raw materials or finished products)	No deviation	Not applicable
Module E: Automatic share of information within the enterprise (<i>Scope: enterprises with Computers</i>)			
E1.	In January 2012, when your enterprise received a sales order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?		
	a) Your management of inventory levels	Some changes in the formulation of question E1 (options a-d were left unchanged): <i>In January 2012, was the information about incoming sales orders shared electronically and automatically with the software used for the following functions?</i>	Not applicable
	b) Your accounting	see above	Not applicable
	c) Your production or services management	see above	Not applicable
	d) Your distribution management	see above	Not applicable
E2.	In January 2012, when your enterprise sent a purchase order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?		
	a) Your management of inventory levels	Some changes in the formulation of question E1 (options a-b were left unchanged): <i>In January 2012, was the information about outgoing purchase orders shared electronically and automatically with the software used for the following functions?</i>	Not applicable
	b) Your accounting	see above	Not applicable
E3.	In January 2012, did your enterprise have in use an ERP (enterprise resource planning) software package to share information between different functional areas (e.g. accounting, planning, production, marketing)?	No deviation	Not applicable
E4	In January 2012, did your enterprise have in use any software application for managing information about clients (so called-Customer Relationship Management – CRM software) that allows it to:		
	a) Capture, store and make available to other business functions the information about its clients?	Capture, store and make the information about clients available to other business functions?	Not applicable
	b) Analyse the information about clients for marketing purposes (setting prices, making sales promotion, choosing distribution channels, etc.)?	No deviation	Not applicable
Module F: e-Commerce (<i>Scope: enterprises outside the financial sector with Computers</i>)			
E-commerce Sales			
Web sales			
F1.	During 2011, did your enterprise receive orders for products or services placed via a website? (excluding manually typed e-mails) (<i>Filter question</i>)	No deviation	Not applicable

Question / Item		General Survey	Micro-enterprises
		Any deviation from question / item in model questionnaire	Question included
F2.	<p>Please state the value of the turnover resulting from orders received that were placed via a website (in monetary terms, excluding VAT), in 2011.</p> <p>or</p> <p>Please indicate an estimate of the percentage of the total turnover resulting from orders received that were placed via a website, in 2011.</p>	<p>Some changes to the formulation: <i>Please indicate the percentage of the total turnover (excluding VAT) that resulted from orders received via a website, in 2011</i> - or - <i>Please state the value of the turnover that resulted from orders received via a website, in 2011 (in Euros, excluding VAT)</i></p>	Not applicable
EDI-type sales			
F4.	During 2011, did your enterprise receive orders for products or services placed via EDI-type messages? (<i>Filter question</i>)	No deviation	Not applicable
F5.	<p>Please state the value of the turnover resulting from orders received that were placed via EDI-type messages (in monetary terms, excluding VAT), in 2011.</p> <p>or</p> <p>Please indicate an estimate of the percentage of the total turnover resulting from orders received that were placed via EDI-type messages, in 2011.</p>	<p>Some changes to the formulation: <i>Please indicate the percentage of the total turnover that resulted from orders received via EDI-type messages, in 2011 (excluding VAT)</i> - or - <i>Please state the value of the turnover that resulted from orders received via EDI-type messages, in 2011 (in Euros, excluding VAT)</i></p>	Not applicable
E-commerce Purchases			
F6.	During 2011, did your enterprise send orders for products or services via a website or EDI-type messages? (Excluding manually typed e-mails)	Some changes to the formulation: <i>Did your enterprise send orders for products or services via computer networks, during 2011 (via a website or EDI-type)? excluding manually typed e-mails</i>	Not applicable
Module X: Background information (X1-X4) available in some countries from SBS, the business register or administrative data and thus not to be included; latest available information should be provided			
X1.	Main economic activity of the enterprise, during 2011?	Obtained from Business Register	Not applicable
X2.	Average number of persons employed, during 2011.	Estimated using preliminary SBS data for 2011	Not applicable
X4.	Total turnover (in value terms, excluding VAT), for 2011	Estimated using preliminary SBS data for 2011	Not applicable

4.2	<p>Coverage of the optional variables of the Model Questionnaire (MQ version 1.1)</p> <p>Indicate below <u>which</u> optional variables and questions were included in the national questionnaire.</p> <p>For each question or item, an "x" in the column named <i>Question included</i> means that it was included in the national questionnaire. The column "10+" refers to enterprises with 10 or more persons employed and column "Micr" refers to micro-enterprises.</p>
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Optional Question / Item	Question included	Any deviations from question / item in model questionnaire
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		10+	Micr	
Module A: Use of computers and computer networks (optional questions/items)				
A2.	How many persons employed used computers at least once a week, in January 2012? or Please indicate an estimate of the percentage of the total number of persons employed who used computers at least once a week, in January 2012.			Not introduced
A3.	In January 2012, did your enterprise provide to the persons employed remote access to the enterprise's e-mail system, documents or applications (via fixed, mobile or wireless connection to the Internet)?	X		Modified (see 4.4)
Module B: Access and use of the Internet (optional questions/items)				
B2.	Did your enterprise have the following types of external connection to the Internet, in January 2012?			
	d1) via portable computer with at least 3G modem e.g. notebook, netbook, laptop, Ultra Mobile PC-UMPC, tablet PC using e.g. UMTS, CDMA2000 1xEVDO, HSDPA			Not introduced
	d2) via handset with at least 3G technology e.g. Smartphone, PDA phones using e.g. UMTS, CDMA2000 1xEVDO, HSDPA			Not introduced
B6.	Did the Website or Home Page have any of the following facilities, in January 2012?			
	b) A privacy policy statement, a privacy seal or certification related to website safety	X		
	c) Product catalogues or price lists	X		
	d) Order tracking available on line	X		
	e) Possibility for visitors to customise or design the products	X		
	f) Personalised content in the website for regular/repeated visitors	X		
	g) Advertisement of open job positions or online job application	X		
Module D: Sharing electronically information on Supply Chain Management (optional questions/items) (Scope: enterprises outside the financial sector with Computers)				
D4.	Were the following methods used for the electronic exchange of this information, in January 2012?			
	a) Websites (yours, those of your business partners or web portals)	X		
	b) Electronic transmission allowing automatic processing methods (e.g. EDI-type systems, XML, EDIFACT, etc.)	X		
Module F: e-Commerce (optional questions/items) (Scope: enterprises outside the financial sector with Computers)				
F3.	Please provide a percentage breakdown of the turnover from orders received that were placed via a website in 2011 by type of customer (estimates in percentage of the monetary values, excluding VAT)			
	a) B2C (Sales to private consumers)	X		
	b) B2B (Sales to other enterprises) and B2G (Sales to public authorities)	X		
F7.	During 2011, did your enterprise <i>place</i> orders for products or services via a website?			Not introduced
F8.	During 2011, did your enterprise <i>place</i> orders for products or services via EDI-type messages?			Not introduced

Optional Question / Item		Question included		Any deviations from question / item in model questionnaire
		10+	Micr	
F9.	<p>Please indicate for 2011 the value of orders that were sent electronically in relation to the total purchases' value (in monetary terms, excluding VAT)</p> <p>Less than 1% 1% or more and less than 5% 5% or more and less than 10% 10% or more and less than 25% 25% or more and less than 50% 50% or more and less than 75% 75% or more</p> <p>or Please state the value of the purchases resulted from orders placed electronically (in monetary terms, excluding VAT), in 2011.</p> <p>or Please provide an estimate of the percentage of the total purchases that resulted from orders placed electronically, in 2011.</p>	X		<p>Some changes to the formulation: <i>Please provide the percentage of the total purchases that resulted from orders placed electronically, in 2011 (excluding VAT)</i> - or - <i>Please state the value of the purchases that resulted from orders placed electronically (in Euros, excluding VAT), in 2011</i></p>
<p>Module X: Background information (<i>optional questions/items</i>) (X1-X4) available in some countries from SBS, the business register or administrative data and thus not to be included; latest available information should be provided</p>				
X3.	Total purchases of goods and services (in value terms, excluding VAT), for 2011	X		Estimated using preliminary SBS data for 2011

4.3	General remarks on the national questionnaire																		
	This section can be filled in with general information about the variables collected. For example if any of the variables was collected outside the scope of the survey (administrative sources, other survey, etc.).																		
	n/a																		
4.4	Additional questions introduced in national questionnaire(s)																		
	In this section you can introduce general information on the adoption of additional national questions. In the following table you can provide the designation of these questions and any other additional information on that question you wish to provide.																		
	<table border="1"> <thead> <tr> <th>Variable</th> <th>Additional information</th> </tr> </thead> <tbody> <tr> <td>Does your firm belong to a group?</td> <td>-</td> </tr> <tr> <td>Where is the head of your group located?</td> <td>-</td> </tr> <tr> <td>How would you consider the position of your firm on its market?</td> <td>Options: Leader, Challenger, Follower</td> </tr> <tr> <td>How would you consider the competition of your firm on its market?</td> <td>Options: Very intense, intense, limited, very limited</td> </tr> <tr> <td>The reputation (goodwill) of your firm (your brand(s)) is:</td> <td>Options: National, "Grande Région", International</td> </tr> <tr> <td>Did your firm use the following Information and Communication Technologies in January 2011?</td> <td>Options: Intranet, Extranet, Video conference, Electronic forums, Electronic working group calendar, Group project scheduler</td> </tr> <tr> <td>Did your enterprise provide to the persons employed (via a fixed, mobile or wireless connection to the Internet) the possibility to remotely access the enterprise's e-mail system?</td> <td>Used for computation of question A3</td> </tr> <tr> <td>Did your enterprise provide to the persons employed (via a fixed, mobile or wireless connection to the Internet) the possibility to remotely access and modify documents of the enterprise?</td> <td>Used for computation of question A3</td> </tr> </tbody> </table>	Variable	Additional information	Does your firm belong to a group?	-	Where is the head of your group located?	-	How would you consider the position of your firm on its market?	Options: Leader, Challenger, Follower	How would you consider the competition of your firm on its market?	Options: Very intense, intense, limited, very limited	The reputation (goodwill) of your firm (your brand(s)) is:	Options: National, "Grande Région", International	Did your firm use the following Information and Communication Technologies in January 2011?	Options: Intranet, Extranet, Video conference, Electronic forums, Electronic working group calendar, Group project scheduler	Did your enterprise provide to the persons employed (via a fixed, mobile or wireless connection to the Internet) the possibility to remotely access the enterprise's e-mail system?	Used for computation of question A3	Did your enterprise provide to the persons employed (via a fixed, mobile or wireless connection to the Internet) the possibility to remotely access and modify documents of the enterprise?	Used for computation of question A3
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Did your enterprise provide to the persons employed (via a fixed, mobile or wireless connection to the Internet) the possibility to remotely access and modify documents of the enterprise?	Used for computation of question A3																		

Did your enterprise provide to the persons employed (via a fixed, mobile or wireless connection to the Internet) the possibility to remotely use dedicated business software applications? e.g. for orders or sales management, ERP (enterprise resource planning) related applications, etc.	Used for computation of question A3
Please provide a percentage breakdown of the turnover from orders received that were placed via a website in 2011, by geographic areas:	<ul style="list-style-type: none"> - Luxembourg - Other EU countries - Rest of the world
What was the main incentive in the decision of your firm to send orders for products or services via computer networks?	<ul style="list-style-type: none"> - Reduce transaction costs e.g. contracting costs, costs of processing orders, communication costs, etc. - Obtain products or services at more favourable prices - The only way to acquire some products or services - Access a wider variety of products or services - Other incentive (Please specify)
In the box below, please write any additional comments that you would like to make	-
How long has it taken you to complete this questionnaire?	-

5. Frame population

5.1	<p>Description of frame population</p> <p>This section includes a description of the frame population. Please indicate if the frame population is the same as, or is in some way coordinated with, the one used for the Structural Business Statistics. If there was any deviation from the recommendation of the model survey, please refer to it explicitly. Please describe if different frames are used during different stages of the statistical process (e.g. frame used for sampling vs. frame used for grossing up).</p> <p>The frame population is drawn from the business register in January. Since data for the last months of the reference year (2011) are not yet available at this date, we take into account the average number of persons employed over the available periods for the definition of size-classes. For the production of the results, the frame population was updated to reflect the situation of SBS preliminary results for 2011 (therefore some quantitative data will be under embargo until official transmission of preliminary SBS results to Eurostat).</p> <p>All mandatory activities laid out in the model survey are covered. In order to be in line with the SBS frame population (more precisely the subset covering enterprises with 10 employees or more), we also take into account concepts such as market activity and economic territory when defining the frame population.</p>
5.2	<p>Known shortcomings of the frame population, if any</p> <p>Indicate shortcomings in terms of timeliness (e.g. time lag between last update of the sampling frame and the moment of the actual sampling), geographical coverage, coverage of different subpopulations, data available etc., and any measures taken to correct it, for this survey.</p> <p>Since a lot of the requested breakdowns comprise a low number of enterprises, some NACE Rev. 2 aggregates for calculation at the European level have to be flagged because of disclosure risks (too few firms in the population of several strata, e.g. S95.1).</p>

5.3	Frame population distribution In the following table, please provide the number of statistical units (e.g. enterprises) <u>in the frame population</u> , by size and by economic activity. Grey cells correspond to optional size classes, and are to be filled in only when these were covered by the survey. Include in the totals all filled in cells listed above the Total.					
Frame Population	1 to 4 persons employed	5 to 9 persons employed	10 to 49 persons employed	50 to 249 persons employed	250 or more persons employed	Total
10-12			39	19	5	63
13-15			3	2	2	7
16-18			21	6	2	29
19-23			9	21	7	37
24-25			72	18	5	95
26			4	.	2	6
27-28			10	11	4	25
29-30			5	3	.	8
31-33			29	4	.	33
35-39			22	9	2	33
41-43			732	140	18	890
45			118	22	3	143
46			248	49	3	300
47			329	45	10	384
49-53			193	68	10	271
55			80	12	.	92
56			237	10	5	252
58-60			27	8	2	37
61			16	7	2	25
62-63			129	32	1	162
68			30	1	.	31
69-74			345	46	10	401
77-78+80-82			118	55	24	197
79			6	4	.	10
95.1			1	.	.	1
Total			2823	592	117	3532
Of which ICT sector (in: 26.1-26.4+ 26.8+46.5+ 58.2+61+ 62+63.1+95.1)			174	47	4	225
64.19+64.92						
65.1+65.2						
66.12+66.19						
Total financial sector						

6. Sampling design

6.1	<p>Sampling method</p> <p>This section includes a description of the sampling method used (e.g. stratified random sample, quota sampling, cluster sampling; one-stage or two-stage sampling). If stratification was used, please indicate which variables were used to stratify, the categories of those variables, in particular for the NACE categories related to the "possible calculation of European aggregates", and the final number of strata. Include also in this section the method used for the determination of the sample size and the method used for sample selection. In particular, mention if any procedures for the coordination or non- overlapping with samples of other surveys was used.</p> <p>The frame population was stratified using the following criteria:</p> <ul style="list-style-type: none"> - 3 size classes (i.e. 10-49, 50-249, 250+ employees) - 15 NACE categories. These categories are mainly based on the aggregates listed in the model questionnaire for possible calculation of national NACE Rev. 2 aggregates, the only difference being that division 55 and group 95.1 are included as separate categories: <ul style="list-style-type: none"> o C10_18 o C19_23 o C24_25 o D26_36 o D35_39 o F41_43 o G45_47 o H49_53 o I55 o I56 o J58_63 o L68 o M69_74 o N77_82 o S951 <p>The method used for sampling was a stratified random sample, with varying sampling rates depending on size class:</p> <ul style="list-style-type: none"> - For the two size classes 50-249 and 250+, the sampling rate was 100% (i.e. a census); - For the size class 10-49, the sampling rate was generally fixed 66%. If a stratum contained less than 20 units, the sampling rate was fixed at 100%. <p>The sampling rate of 66% was chosen after simulating the effect of various sampling rates on the coefficients of variation of the 2011 data, taking into account historical response rates. Simulations were performed on the coefficients of variation for the following indicators: cuse, iacc, web, ade, awsell, aebuy.</p>
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6.2	Gross sample distribution In the following table, please provide the number of statistical units (e.g. enterprises) <u>selected for sampling without any posterior correction for misclassification</u> , by size and by economic activity. Grey cells correspond to optional size classes or economic activities, and are to be filled in only when these were covered by the survey. Include in the totals all filled in cells listed above the Total.					
Gross sample	1 to 4 persons employed	5 to 9 persons employed	10 to 49 persons employed	50 to 249 persons employed	250 or more persons employed	Total
10-12			27	17	6	50
13-15			2	2	2	6
16-18			11	6	2	19
19-23			10	21	7	38
24-25			49	17	3	69
26			1	0	2	3
27-28			7	11	4	22
29-30			3	3	0	6
31-33			20	4	0	24
35-39			14	8	2	24
41-43			479	133	16	628
45			77	22	2	101
46			159	46	2	207
47			198	44	8	250
49-53			128	65	11	204
55			50	11	0	61
56			152	8	5	165
58-60			15	10	1	26
61			10	7	2	19
62-63			90	29	1	120
68			19	1	0	20
69-74			217	45	10	272
77-78+80-82			78	51	24	153
79			3	4	0	7
95.1			1	0	0	1
Total			1820	565	110	2495
Of which ICT sector (in: 26.1-26.4+ 26.8+46.5+ 58.2+61+ 62+63.1+95.1)			119	43	4	166
64.19+64.92						
65.1+65.2						
66.12+66.19						
Total financial sector						

7. Response and non-response

(Quality Report)

7.1	Unit Response The following table should be filled in with the number of units (e.g. enterprises), by type of response to the survey and by the percentage of these values in relation to the gross sample size.				
Type of response		1-9 persons employed		10 or more persons employed	
		Number	%	Number	%
Gross sample size (as in section 6.2)		/	/	2495	100%
1. Response (questionnaires returned by the enterprise)		/	/	2086	83.6%
1.1 Used for tabulation and grossing up (Net sample or Final Sample; as in section 7.2)		/	/	2065	82.8%
1.2 Not used for tabulation		/	/	21	0.8%
1.2.1 Out of scope (deaths, misclassified originally in the target population, etc.)		/	/	21	0.8%
1.2.2 Other reasons (e.g. unusable questionnaire, etc.)				%
2. Non-response (e.g. non returned mail, returned mail by post office, etc.)		/	/	409	16.4%

7.2	Net sample distribution In the following table, please provide the number of enterprises <u>used for grossing up and tabulation</u> , by size and by economic activity. Grey cells correspond to optional size classes or economic activities, and are to be filled in only when these were covered by the survey. Include in the totals all filled in cells listed above the Total.					
Net sample	1 to 4 persons employed	5 to 9 persons employed	10 to 49 persons employed	50 to 249 persons employed	250 or more persons employed	Total
10-12			21	18	5	44
13-15			2	2	2	6
16-18			9	6	2	17
19-23			9	18	6	33
24-25			41	15	4	60
26			1	.	2	3
27-28			7	9	4	20
29-30			3	3	.	6
31-33			17	3	.	20
35-39			11	9	2	22
41-43			382	121	13	516
45			62	20	3	85
46			132	40	3	175
47			154	41	9	204
49-53			95	53	10	158
55			41	10	.	51
56			113	7	5	125
58-60			14	7	2	23
61			7	7	1	15
62-63			73	25	1	99
68			14	1	.	15
69-74			183	42	7	232
77-78+80-82			61	49	21	131
79			2	2	.	4
95.1			1	.	.	1
Total			1455	508	102	2065
Of which ICT sector (in: 26.1-26.4+ 26.8+46.5+ 58.2+61+ 62+63.1+95.1)			94	39	3	136
64.19+64.92						
65.1+65.2						
66.12+66.19						
Total financial sector						
7.3	Comments on unit response, if any The response rate of 83.6% is the highest response rate yet for the ICT Enterprise survey in Luxembourg. This increase can partly be explained by the reduced sample size, but also by the increased efforts to minimise non-response (see 7.4). The reduced burden and increase in response can be summed up as follows: although 1000 units less than in 2011 were surveyed in 2012 (3563 vs. 2495), only about 500 questionnaires less than in 2011 are ultimately available for grossing-up (2531 vs. 2065).					

7.4	<p>Methods used for minimizing unit non-response</p> <p>Where applicable, give a description of measures taken to reduce the unit non-response: advance notification in the form of a letter or phone call; showing respondents how the data they are providing are being used; system of reminders; etc.</p> <p>For the 2012 we tried to compensate the reduced sample size by working on increasing unit response rates:</p> <ul style="list-style-type: none"> For the first time we offered the possibility to complete the survey via online questionnaire. 34% of the respondents used this method. Since fewer units were contacted compared to previous years' censuses, this allowed to increase the number of reminders to 3. Additionally, enterprises in strata with low response-rates (<80%) after the 3 reminders were specifically contacted.
7.5	<p>Methods used for unit non-response treatment</p> <p>Indicate the method used to correct for unit non-response (Please tick the appropriate box)</p> <p>1. No treatment for unit non-response <input type="checkbox"/></p> <p>2. Treatment by re-weighting <input checked="" type="checkbox"/></p> <p>2.1 Re-weighting by the sampling design strata considering that non-response is ignorable inside each stratum (the naïve model) <input type="checkbox"/></p> <p>2.2 Re-weighting by identified response homogeneity groups (created using sample-level information) <input type="checkbox"/></p> <p>2.3 Re-weighting through calibration/post-stratification (performed using population information) by the groups used for calibration/post-stratification <input checked="" type="checkbox"/></p> <p>3. Treatment by imputation (done distinctly for each variable/item) <input type="checkbox"/></p> <p>4. Please briefly describe below the method(s) and the model(s) corresponding to the above or other method(s) used for the treatment of unit non-response. (e.g. Re-weighting using Horvitz-Thompson estimator, ratio estimator or regression estimator, auxiliary variables, etc.)</p> <p>Re-weighting was done in two steps.</p> <ul style="list-style-type: none"> First, the original sampling weights for each stratum were adjusted to compensate for unit non-response (original weight divided by response rate for the survey stratum). The adjusted sampling weights were then calibrated to increase coherence with SBS preliminary data. Auxiliary variables were turnover and number of persons employed, the strata used were the same as those used for sampling when possible (Eurostat strata used for possible calculation of national NACE Rev. 2 aggregates). Please refer to section 8 for further details on the weighting process.
7.6	<p>Other comments relating to the unit non-response</p> <p>If any, please use this box to inform on additional issues on the non-response calculation (e.g. method used in national publications, etc.).</p>

	<p>Unit non-response of enterprises with important turnover/employment is especially problematic when trying to calibre the sampling weights. In future surveys, more efforts have to be made so that enterprises of this type respond to the survey.</p>
7.7	<p>Questions or items with item response rates below 90% If any, identify the items with low response rates (the cut-off value to be used is 0.90) and indicate their respective response rates. The item non-response rate should of course be calculated taking into account the routing and filtering in the questionnaire.</p> <p>There are no questions with response rates lower than 90%. The lowest-scoring variable is the "maximum contracted download speed (ISPD)" with a response rate slightly above 93%. All other variables have response rates around or above 98%.</p>
7.8	<p>Methods used for item non-response treatment Indicate whether imputations are made for item non-response and give a short description of the methods used. Please see also guidance on this subject in the model questionnaire and the Methodological Manual.</p> <p>1. No treatment for item non-response X</p> <p>2. Deductive imputation <input type="checkbox"/> <i>An exact value can be derived as a known function of other characteristics.</i></p> <p>3. Deterministic imputation (e.g. mean/median, mean/median by class, ratio-based, regression-based, single donor nearest-neighbour, etc) <input type="checkbox"/> <i>Deterministic imputation leads to estimators with no random component, that is, if the imputation were to be re-conducted, the outcome would be the same</i></p> <p>4. Random imputation (e.g., hot-deck, cold-deck etc) <input type="checkbox"/> <i>Random imputation leads to estimators with a random component, that is, if the imputation were re-conducted, it would have led to a different result</i></p> <p>5. Re-weighting <input type="checkbox"/></p> <p>6. Multiple imputation <input type="checkbox"/> <i>In multiple imputation each missing value is replaced (instead of a single value) with a set of plausible values that represent the uncertainty of the right value to impute. Multiple imputation methods offer the possibility of deriving variance estimators by taking imputation into account. The incorporation of imputation into the variance can be easily derived based on variability of estimates among the multiply imputed data sets.</i></p> <p>7. Please briefly describe below the method(s) and the model(s) corresponding to the above or other method(s) used for the treatment of item non-response.</p> <p>n/a</p>

7.9	Other comments relating to the item non-response If any, please use this box to inform on additional issues on the non-response calculation (e.g. method used in national publications, etc.).

8. Grossing-up

(Quality Report)

8.1

Grossing-up procedures

Please give a description of the extrapolation or weighting procedures used to gross up the number of enterprises, number of persons employed, turnover and purchases in the net sample to the (target) population. Please present the different steps taken or factors applied to the design weighting to take into account the (post)stratification, balancing for unit non-response, etc. Please describe the different categories of questions – if any – that have been grossed up differently (see also the model questionnaire and the Methodological Manual).

To treat non-response, the initial sampling weight is first adjusted using the response rate for each stratum. Strata are defined by crossing the following size classes and NACE groupings.

In order to obtain reliable results for quantitative variables (that are in line with SBS totals) the corrected weights are calibrated using to the number of units, the total turnover and the total employment per stratum as auxiliary information. Calibration is carried out in R, using the *calib* method of the sampling package with a “logit” distance function.

Please note that due to the small number of observations leading to co-linearity problems, some strata (i.e. C19-23, C24_25, D35_39, F41, I55, I56, J58_63) cannot be calibrated over all size classes. For these strata, several size classes were combined. Additionally, C19-23 and C24-25 were combined to insure that the weighted turnover is in line with SBS.

The strata used for calibration consist of the following sampling strata (combinations in parenthesis when applicable):

Size classes:

S - 10-49 employees

M - 50-249 employees

L - 250 employees

NACE groupings:

C10_18

C19_23 + C24_25 (S+M+L combined)

C26_33

D35_39 (S+M+L combined)

F41_43 (M+L combined)

G45_47

H49_53

I55 (M+L combined)

I56 (M+L combined)

J58_63 (M+L combined)

L68

M69_74

N77_82

S951

9. Standard error

(Quality Report)

9.1	<p>Standard error (for a selection of indicators)</p> <p>Precision measures related to variability due to sampling, unit non-response (the size of the subset of respondents is smaller as compared to the size of the original sample) and other (imputation for item non-response, calibration etc.) are not (yet) required from the Member-State for all indicators. Eurostat will make basic assumptions to compute these measures for all indicators produced (e.g. stratified random sampling assuming as strata the crossing of the variables "Number of Persons Employed" and "Economic Activity" as it was defined in the tables of sections 5.3, 6.2 and 7.2).</p> <p>In order to evaluate the reasonability of the assumptions made by Eurostat, we need to compare the estimated standard error computed under these assumptions and those computed by the country, <u>taking into account the real sampling design used and other sources of variability</u>, for at least some of the indicators. We also need to compare these measures not only for the overall population, but also for the several breakdowns, in which case the standard error is commonly higher. Please, describe also the method used for the estimation of the standard error in §9.2 below.</p> <p>We kindly ask you to provide in the following table the estimated standard error in percentage points for each of the listed indicators. Both aggregates for "possible calculation of national aggregates" and for "possible calculation of European aggregates" are included in the table.</p> <p>Grey cells correspond to optional size classes, and are to be filled in only when these were covered by the survey.</p> <p>In the third column of the table, a technical reference is made to the question and scope in the same terms as used in the Transmission Format.</p>					
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Indicator			Question associated	Estimated proportion % ¹	Standard error Percentage points ²	Flag C: Confidential U: unreliable
Question	Scope	Technical reference ³				
B7c	10+ No K	e_igov2rt, 10_C10_S95 1_XK, in % ent	During 2011, did your enterprise use the Internet for returning filled in forms electronically, e.g. forms for customs or VAT declaration	62.15	0.71044	
B10	10+ No K	e_pmd, 10_C10_S95 1_XK, in % ent	In January 2012, did your enterprise provide to the persons employed portable devices that allowed a mobile connection to the Internet for business use?	52.84	0.69071	
C1	10+ No K	e_ade, 10_C10_S95 1_XK, in % ent	In January 2012, did your enterprise send or receive electronically such information in a format that allowed its automatic processing?	54.49	0.73892	
E3	10+ No K	e_erp1, 10_C10_S95 1_XK, in % ent	In January 2012, did your enterprise have in use an ERP software package to share information between different functional areas?	22.79	0.54656	
E4b	10+ No K	e_crman, 10_C10_S95 1_XK, in % ent	In January 2012, did your enterprise have in use any software application for managing information about clients (CRM) to analyse the information about clients for marketing purposes?	17.53	0.50165	
F1	10+ No K	e_awsell, 10_C10_S95 1_XK, in % ent	During 2011, did your enterprise receive orders for products or services placed via a website? (excluding manually typed e-mails)	13.61	0.47167	
F4	10+ No K	e_axsell, 10_C10_S95 1_XK, in % ent	During 2011, did your enterprise receive orders for products or services placed via EDI-type messages?	5.61	0.29808	
F6	10+ No K	e_aebuy, 10_C10_S95 1_XK, in % ent	During 2011, did your enterprise send orders for products or services via a website or EDI-type messages(excluding manually typed e-mails)	40.52	0.70219	

¹ The estimated proportion is to be expressed as a percentage; please use decimal points only and as many decimals as needed. **Values should correspond to the latest transmitted data.**

² The standard error is to be expressed in percentage points (absolute precision measure); please use decimal points only and as many decimals as needed. **Values should correspond to the latest transmitted data.**

³ The first item consists of the variable code as included in the Transmission format, the second is the breakdown (by activity and/or size class), whereas the third indicates to what the proportion (and standard error) should be related, i.e. % ent: as a percentage of the total number of enterprises within the scope; % turn: as a percentage of the total turnover of enterprises within the scope; % emp: as a percentage of the number of persons employed in the enterprises within the scope.

Indicator			Question associated	Estimated proportion % ¹	Standard error Percentage points ²	Flag C: Confidential U: unreliable
Question	Scope	Technical reference ³				
B5	10+ No K	e_web, 10_C10_S95 1_XK, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	76.68	0.61898	
B5	1-4 No K	e_web, MC_C10_S95 1_XK, in % ent	Did your enterprise have a Website or Home Page, in January 2012?			
B5	5-9 No K	e_web, MI_C10_S95 1_XK, in % ent	Did your enterprise have a Website or Home Page, in January 2012?			
B5	10-49 No K	e_web, S_C10_S951 _XK, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	75.48	0.77919	
B5	50-249 No K	e_web, M_C10_S951 _XK, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	86.61	0.57178	
B5	250+ No K	e_web, L_C10_S951 _XK, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	95.96	0.90499	
B5	10+ 10-12	e_web, 10_C10_12, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	66.45	4.95419	u
B5	10+ 13-15	e_web, 10_C13_15, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	86.84	0.00000	U
B5	10+ 16-18	e_web, 10_C16_18, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	92.31	5.25804	U
B5	10+ 10-18	e_web, 10_C10_18, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	75.62	3.71111	
B5	10+ 19-23	e_web, 10_C19_23, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	80.98	1.07048	U
B5	10+ 24-25	e_web, 10_C24_25, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	81.94	3.29059	U
B5	10+ 26	e_web, 10_C26, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	100.00	0.00000	U
B5	10+ 27-28	e_web, 10_C27_28, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	88.97	4.18308	U
B5	10+ 29-30	e_web, 10_C29_30, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	100.00	0.00000	U
B5	10+ 31-33	e_web, 10_C31_33, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	89.72	3.99638	U
B5	10+ 26-33	e_web, 10_C26_33, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	91.32	2.71709	
B5	10+ 35-39	e_web, 10_D35_E39, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	84.57	4.12939	
B5	10+ 41-43	e_web, 10_F41_43, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	73.75	1.34100	
B5	10+ 45	e_web, 10_G45, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	86.12	2.59642	U
B5	10+ 46	e_web, 10_G46, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	82.45	2.06992	U
B5	10+ 47	e_web, 10_G47, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	62.68	2.44975	U
B5	10+ 45-47	e_web, 10_G45_47, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	74.58	1.47172	
B5	10+ 49-53	e_web, 10_H49_53, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	62.39	2.66955	

Indicator			Question associated	Estimated proportion % ¹	Standard error Percentage points ²	Flag C: Confidential U: unreliable
Question	Scope	Technical reference ³				
B5	10+ 55	e_web, 10_I55, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	95.92	2.01836	
B5	10+ 55-56	e_web, 10_I55_56, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	84.76	1.95908	
B5	10+ 58-60	e_web, 10_J58_60, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	95.22	3.50084	u
B5	10+ 61	e_web, 10_J61, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	100.00	0.00000	u
B5	10+ 62-63	e_web, 10_J62_63, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	98.34	0.79237	u
B5	10+ 58-63	e_web, 10_J58_63, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	98.06	0.86313	
B5	10+ 68	e_web, 10_L68, in % ent	Did your enterprise have a Website or Home Page, in January 2012?		6.46728	c
B5	10+ 69-74	e_web, 10_M69_74, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	82.21	1.72058	
B5	10+ 77-78+80-82	e_web, 10_N77_82_X79, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	81.26	2.34854	u
B5	10+ 79	e_web, 10_N79, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	100.00	0.00000	u
B5	10+ 77-82	e_web, 10_N77_82, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	81.80	2.26936	
B5	10+ 64.19+64.92	e_web, 10_K64, in % ent	Did your enterprise have a Website or Home Page, in January 2012?			
B5	10+ 65.1+65.2	e_web, 10_K65, in % ent	Did your enterprise have a Website or Home Page, in January 2012?			
B5	10+ 66.12+66.19	e_web, 10_K66, in % ent	Did your enterprise have a Website or Home Page, in January 2012?			
B5	10+ 64.19+64.92+65.1+65.2+66.12+66.19	e_web, 10_K6FINS, in % ent	Did your enterprise have a Website or Home Page, in January 2012?			
B5	10+ 95.1	e_web, 10_S951, in % ent	Did your enterprise have a Website or Home Page, in January 2012?	98.80	0.00000 0.61798	c
B5	10+ 26.1-26.4+26.8+46.5+58.2+61+62+63.1+95.1	e_web, 10_ICT_T, in % ent	Did your enterprise have a Website or Home Page, in January 2012?			
B12	10+ No K	p_empmd, 10_C10_S951_XK, in % emp	Please indicate an estimate of the percentage of the total number of persons employed who were provided with a portable device that allowed a mobile connection to the Internet for business use, in January 2012	15.08	0.31940	
F2	10+ No K	e_awsval, 10_C10_S951_XK, in % turn	Please indicate an estimate of the percentage of the total turnover resulting from orders received that were placed via a website, in 2011.			
F5	10+ No K	e_axsval, 10_C10_S951_XK, in % turn	Please indicate an estimate of the percentage of the total turnover resulting from orders received that were placed via EDI-type messages, in 2011.			

9.2

Calculation of the standard error

Various methods can be used for the calculation of the standard error for an estimated proportion. The aim is to incorporate into the standard error the sampling variability but also variability due to unit non-response, item non-response (imputation), calibration etc. In case of census / take-all strata, the aim is to calculate the standard errors comprising the variability due to unit non-response and item non-response.

Please, describe below the approach which you have followed. This information will help Eurostat to evaluate the comparability of the standard errors supplied in the previous section by the different statistical institutes participating in the survey.

a) Name and brief description of the applied estimation approach

Estimations of the variables of interest were performed with the calibrated weights (please refer to section 8.1 for more information on weights).

For a sufficiently large sample size, the calibrated estimator is equivalent to the linear regression estimator and its bias tends to be minor. Consequently, the variance of the estimation is based on the residuals resulting from the relationship between the variable of interest and the ancillary variables which have been used for the calibration.

The standard error for a given survey stratum (which is normally also the stratum used for grossing-up) is calculated based on these properties. If necessary, these standard errors are then aggregated to the breakdowns requested by Eurostat.

b) Basic formula

The variance of the estimated proportion for a given stratum is equivalent to the variance of the residuals:

$$\hat{V}(Y) \approx V(U)$$

where $U_k = Y_k - \sum_{\alpha=1}^K \hat{b}_{\alpha} X_k^{\alpha}$ represents the residual of the unit k in the linear regression of Y on the ancillary variables X

More precisely, the estimation of the variance for a given stratum is obtained by applying the following formula

$$\hat{V}(Y) \approx (1-f) \cdot \frac{s_U^2}{n}$$

with :

$f = \frac{n}{N}$ representing the response rate for a given stratum;

s_U^2 = the variance of the residuals for a given stratum.

The standard error is obtained by taking the square root of $\hat{V}(Y)$.

c) Main reference in the literature

"Techniques de sondage" by Pascal Ardilly (ISBN 10: 2-7108-0847-1)

d) How has the stratification been taken into account?

The same strata used for the grossing-up procedure (see section 8.1) were used to calculate the standard error. The standard error was calculated for each stratum individually. These individual strata were then aggregated using the following formula:

$$V(\hat{Y}_W) \approx \sum_{h=1}^H \left(\frac{N_h}{N} \right)^2 (1 - f_h) \cdot \frac{s_h^2}{n_h}$$

with :

$\frac{N_h}{N}$ = the relative importance of a given stratum h in the total population;

$f_h = \frac{n_h}{N_h}$ representing the response rate for a given stratum h;

s_h^2 = the variance of the residuals of a given stratum h;

H = the total number of strata.

The standard error is obtained by taking the square root of $V(\hat{Y}_W)$.

Since the strata used for grossing-up were based on the NACE groupings requested for **calculation of national aggregates**, this method is only valid for standard errors relating to Totals (10+ No K), Totals by size class (10-49 No K, 50-249 No K, 250+ No K) or related to NACE groupings used for the calculation of national aggregates.

In order to provide figures for NACE groupings used for the **possible calculation of European aggregates**, a second set of standard errors were calculated taking into account these "domains". These standard errors are provided for information only, as these breakdowns are flagged as "unreliable".

Due to insufficient observations for several strata, this method cannot be applied to the variables e_awsval and e_axsval.

e) Which strata have been considered?

	<p>The strata used were the ones used for grossing-up. In cases where several strata had to be combined to allow calibration, these regroupings were also taken into account for the calculation of standard errors. Generally, strata were defined by crossing the following size classes and NACE groupings (exceptions in parenthesis):</p> <p><u>Size classes:</u> S - 10-49 employees M - 50-249 employees L - 250 employees</p> <p><u>NACE groupings:</u> C10_18 C19_23 + C24_25 (S+M+L combined) C26_33 D35_39 (S+M+L combined) F41_43 (M+L combined) G45_47 H49_53 I55 (M+L combined) I56 (M+L combined) J58_63 (M+L combined) L68 M69_74 N77_82 S951</p>				
9.3	<p>Comments on reliability and representativeness of results and completeness of dataset</p> <p>These comments should reflect on the standard errors reported for the indicators and subgroups in section 9.1 as well as on the other indicators and breakdowns. The estimated standard error should not exceed 2% for the overall proportions and should not exceed 5% for the proportions relating to the different subgroups of the population (for those NACE aggregates for calculation and dissemination on national aggregates). If problems were found, these could have implications for future surveys (e.g. need to improve sampling design, to increase sample sizes, to increase the response rates etc.).</p>				
	Indicators and breakdowns in section 9.1:				
	<p>The standard errors referring to NACE groupings used for the possible calculation of European aggregates tend to be higher than those for other NACE groupings. This is due to the fact that these groupings are different from the strata used in the calibration process (e.g. C10-18 was used in calibration, but the breakdowns for the calculation of European aggregates are C10-12, C13-15 and C16-18). All breakdowns for the calculation of European aggregates are flagged as unreliable for this reason.</p>				
	Other indicators and breakdowns:				
	<p>Standard errors for each variable were calculated for all NACE groupings used for the possible calculation of European aggregates as well as for totals size class and population totals. This year, combinations of breakdowns/variables with standard errors above 5% were flagged as unreliable (D35-E39 and L68 were most affected by this). No variable showed standard errors above 2% for population totals.</p>				
	For all indicators and breakdowns:				
	If significant standard errors were found, were data cells in the transmitted dataset flagged as unreliable?	Yes	X	No ⁴	

⁴ Please note that if data were not flagged as unreliable they will be released

9.4

Reliability of aggregates for the "possible calculation of European aggregates"

- Please indicate for both the general survey and for micro-enterprises the aggregates for the "possible calculation of **European** aggregates" that have a sufficiently high quality to be released at **national** level by introducing an "X" in the column next to the Y/N responses.
- **Note:** In the case there is a grant agreement that foresees that certain breakdowns will be provided with sufficiently high quality to allow the release at **national** level, the following table should reflect the grant agreement ("X" next to "Yes" for the respective breakdowns).
- In the case data for few variables/breakdowns cannot be released - although the particular breakdowns had been taken into account in the sampling design as foreseen in the grant agreement - it is expected that the breakdowns are marked with "Yes", data are accordingly flagged as unreliable and explanations should be provided in point 9.3.
- In all cases the data will be evaluated for completeness and compliance with the grant, based on the grant agreement's technical annex and the current quality report; clarifications may be requested.

Economic Activity	Micro-enterprises				General Survey			
10-12	Yes		No		Yes		No	X
13-15	Yes		No		Yes		No	X
16-18	Yes		No		Yes		No	X
26	Yes		No		Yes		No	X
27-28	Yes		No		Yes		No	X
29-30	Yes		No		Yes		No	X
31-33	Yes		No		Yes		No	X
45	Yes		No		Yes		No	X
46	Yes		No		Yes		No	X
47	Yes		No		Yes		No	X
55-56	Yes		No		Yes		No	X
58-60	Yes		No		Yes		No	X
61	Yes		No		Yes		No	X
62-63	Yes		No		Yes		No	X
64.19+64.92	Yes		No		Yes		No	
65.1+65.2	Yes		No		Yes		No	
66.12+66.19	Yes		No		Yes		No	
77-78+80-82	Yes		No		Yes		No	X
79	Yes		No		Yes		No	X
95.1	Yes		No		Yes	X	No	

10. National dissemination of results

(Quality Report)

10.1	<p>National dissemination of results Please indicate if there was any dissemination of results or if any dissemination of results is foreseen. If possible, provide links to any results available on-line.</p> <p>Results will be published on http://www.statistiques.public.lu/fr/entreprises/</p> <p>Selected results will also appear in the annual statistical yearbook and in "Luxembourg in figures".</p> <p>It is also planned to have a publication in our "Regards"-series.</p>
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11. Closing remarks

(Quality Report)

11.1	Problems encountered and lessons to be learnt These comments can relate to methodological issues as well as to the questionnaire itself (item construction, clarity of definitions to respondents, routing and filtering, etc.)
	<p>The change in wording for the questions related to mobile broadband/narrowband use seems to have had the desired effect and eliminated confusions between the two methods.</p> <p>On the other hand, variables related to connection speed still seem to be problematic for enterprises. This is also highlighted by the fact that this is the variable with the most item-non response.</p>
11.2	Other comments, if any

12. Annexes

Note: Please also provide the annexes in a computer-readable format and in English

12.1	Questionnaire in national language FR/DE
12.2	Questionnaire in English (if available)