# COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES 2014

### General outline of the survey

Sampling unit:	Enterprise.			
Scope / Target Population:	Economic activity:			
	Enterprises classified in the following categories of NACE Rev. 2: - Section C — "Manufacturing", - Section D,E — "Electricity, gas and steam, water supply, sewerage and waste management", - Section F — "Construction", - Section G — "Wholesale and retail trade; repair of motor vehicles and motorcycles", - Section H — "Transportation and storage", - Section J — "Accommodation and food service activities", - Section L — "Real estate activities", - Division 69 -74 — "Professional, scientific and technical activities", - Section N - "Administrative and support activities"; - Group 95.1 - "Repair of computers";  Enterprises size: Enterprises with 10 or more persons employed;  Optional: enterprises with number of persons employed between 1 and 9.  Geographic scope: Enterprises located in any part of the territory of the Country.			
Reference period:	Year 2013 for the % of sales/orders data and where specified. Where not specified respondents should consider as reference their current situation (survey period in 2014).			
Survey period:	First quarter 2014.			
Questionnaire:	The layout of the national questionnaire should be defined by the country. However, countries should follow the order of the list of variables enclosed, if possible. The background information (Module X) should be placed at the end of the questionnaire. This information can be obtained in 3 different ways: from national registers, from Structural Business Statistics or collected directly with the ICT usage survey. Every effort should be made to obtain them from the most recent SBS survey. Countries can include additional questions.			
Target respondent:	A decision maker with major responsibility for ICT-related issues in the enterprise (the ICT manager or a senior professional in the ICT department). In smaller enterprises, the respondent should be someone at the level of managing director or the owner. In any case the respondent should not be someone with responsibilities only in accounting.			
Sample size, stratification:	The sampling design and the resulting sample size should be appropriate for obtaining accurate, reliable and representative results on the variables and items in the model questionnaire.			
	This objective should be achieved for the overall proportions as well as for the proportions for the different breakdowns of the population defined below: NACE and size class. NACE breakdown and enterprise size class breakdown			

are not required to be cross-tabulated.

This requirement aims at ensuring the collection of a complete dataset – without empty, confidential or unreliable cells - for these indicators – with an exception for those broken down by economic activity for the calculation of **European** NACE aggregates.

### **NACE** breakdown:

### (To be applied to: all variables; enterprises with 10 or more persons employed; whole territory of the country.)

Data should be broken down by the following NACE Rev. 2 aggregates for possible calculation of **national** NACE Rev. 2 aggregates:

- 1 10 18 2 19 - 23 3 24 - 25 4 26 - 33 5 35 - 39 6 41 - 43 7 45 - 47
- 8 49 53 9 55
- 10 58 63 11 68
- 12 69 74 13 77 - 82
- 14 26.1-26.4, 26.8, 46.5, 58.2, 61, 62, 63.1, 95.1

<u>Breakdowns for which national data should be provided with the purpose of possible calculation of European NACE aggregates</u> The production and transmission of these aggregates with an accuracy that allows the release at national level is <u>optional</u>. The production and transmission of these aggregates with an accuracy that may not allow the release at national level (use of flag u: unreliable) but are accurate enough to be combined with other countries' aggregates to be released at European level is <u>mandatory</u>.)

```
10-12
1a
1b
      13-15
      16-18
1c
4a
     26
4b
     27-28
4c
      29-30
4d
      31-33
7a
      45
7b
      46
7с
      47
9a 55 - 56
10a
     58-60
10b
     61
     62-63
10c
     77-78 + 80-82
13a
13b
     79
14a
     95.1
```

### Size class breakdown:

(To be applied to: all variables; aggregate of all mandatory NACE aggregates [1 to 14 defined above]; whole territory of the country.) Data should be broken down by the following size classes according to the number of persons employed:

- 1 10 or more
- 2 10 49 (small enterprises)
- 3 50 249 (medium enterprises)
- 4 250 or more (large enterprises)

### **Optional:**

5 1-9

	6 1-4 7 5-9
Weighting of results:	Results should in general be weighted by number of enterprises.  Turnover weighting should be used for sales related questions. Quantitative variables in the e-Commerce module related to sales should be weighted by total turnover.
	Weighting by the number of Persons Employed should be applied for questions A2, C2, C6 and for % using the Internet, % having broadband, % having a website, % sending orders via a website or EDI-type messages, % receiving orders placed over a website or via EDI-type messages.
Treatment of non-response/'Do not know':	<b>Unit non-response:</b> The non-respondent units should be assumed to resemble those who have responded to the survey and be treated as non-selected units. For this, the weighting or the grossing up factors should be adjusted: the design weight $N_h$ / $n_h$ is replaced by $N_h$ / $m_h$ where $N_h$ is the size of stratum $h$ , $n_h$ is the sample size in stratum $h$ and $m_h$ is the number of respondents in stratum $h$ .
	Item non-response: Logical corrections should be made, when information can be deduced from other variables, and priority given to further contacts with enterprises to collect the missing information. For the categorical variables (e.g. the YES/NO questions), respondents with item non response or 'do not know' should not be imputed with values from respondents who answered the question. Numerical variables shouldn't be imputed (see also Methodological Manual).
Tabulation of results:	For the categorical variables, estimates should be made for the total number of enterprises for each response category, tabulated using the breakdowns specified above.
	For the quantitative variables (turnover, sales and number of persons employed), when collected in absolute or percentage terms (and not in percentage classes), estimates should be made for the total values in absolute terms, tabulated using the breakdowns <b>specified above</b> .
Data transmission:	Results are to be sent to Eurostat following the transmission format described in a forthcoming Eurostat document.

<u>Disclaimer:</u> References to third-party brands, products and trademarks are for the sake of clarification and are not intended to promote the use of such products

ICT-Entr 2014 - Model Questionnaire V 1.0.Docx - Response burden

Module	Description	Mandatory questions	Optional questions
Α	Use of computers	1	1
В	ICT specialists and skills	5	0
С	Access and use of the Internet	10	15
D	Use of cloud computing services	17	8
Е	Sharing of information electronically within the enterprise	3	0
F	Use of EDI-type messages suitable for automated processing	2	0
G	Sharing Supply Chain Management Information electronically	3	0
Н	Use of Radio Frequency Identification (RFID) technologies	3	0
- 1	Electronic invoicing	6	0
J	e-Commerce	10	2
Х	Background characteristics	(3)	(0)
Total		63 (60)	26

In parenthesis the number of questions without Module X: Background characteristics

# COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES 2014

### **Model Questionnaire version 1.0**

(Questions relating to the Benchmarking Framework 2011-2015 are marked with an asterisk \*)

	Module A: Use of computers		
	(Scope: all enterprises)		
A1.	Does your enterprise use computers? (Filter question)	V	No □
	Computers include Personal Computers, portable computers, tablets, other portable devices like Smartphones.	Yes □	-> go to X1
A2.	How many persons employed use computers for business purposes?		
	- Optional		iber)
	If you can't provide this value,		
	Please indicate an estimate of the percentage of the total number of persons employed who use computers for business purposes.		%
	- Optional		

	Module B: ICT specialists and skills		
	(Scope: enterprises with computers)		
B1.	Does your enterprise employ ICT specialists?  ICT specialists are employees for whom ICT is the main job. For example, to develop, operate or maintain ICT systems or applications.	Yes □	No □
B2.	Did your enterprise provide any type of training to develop ICT related skills of the persons employed, during 2013?	Yes	No
	a) Training for ICT specialists  Tick No if your enterprise didn't employ ICT specialists during 2013		
	b) Training for other persons employed		
В3.	Did your enterprise recruit or try to recruit ICT specialists, during 2013? (Filter question)	Yes □	No □ ->go to C1
B4.	During 2013, did your enterprise have vacancies for ICT specialists that were difficult to fill?	Yes □	No □

	Module C: Access and use of the Internet		
	(Scope: enterprises with Computers)		
C1.	Does your enterprise have access to the Internet? (Filter question)	Yes □	No □ -> go to <b>E1</b> <sup>1</sup>
C2. *2	How many persons employed use computers with access to the Internet for business purposes?	(Numb	er)
	If you can't provide this value,		
	Please indicate an estimate of the percentage of the total number of persons employed who use computers with access to the Internet for business purposes.		%
	Computers include Personal Computers, portable computers, tablets, other portable devices like Smartphones.		
	Use of a fixed broadband connection to the Internet for bu	siness pu	rposes
C3.	Does your enterprise use DSL or any other type of fixed broadband connection to the Internet? (e.g. ADSL, SDSL, VDSL, fiber optics technology (FTTH), cable technology, etc.)  (add national examples for public Wi-Fi, WiMax, etc)  (Filter question)	Yes	No □ -> go to C5
C4. What is the maximum contracted download speed of the fastest fixed			
	Internet connection of your enterprise?		
	(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		
	Use of a mobile connection to the Internet for business pu	ırposes	
	A mobile connection to the Internet means the usage of portable devices of through mobile telephone networks for business purposes. Enterprises proving pay for all or at least up to a limit, the subscription and the use costs.	connecting to	
C5.	Does your enterprise use any of the following types of mobile connection (via mobile telephone networks) to the Internet?		
	commodicin (via modile telephone networke) to the internet.	Yes	No
*	a) (5) <b>Mobile broadband</b> connection via a portable device using mobile telephone networks (so called 3G or 4G)     e.g. via portable computers or other portable devices like Smartphones		
	<ul> <li>a1) via portable computer using mobile telephone networks (so called 3G or 4G)</li> <li>e.g. notebook, netbook, laptop, tablet, etc.</li> <li>- Optional</li> </ul>		
	<ul> <li>a2) via other portable devices like Smartphones, using mobile telephone networks (so called 3G or 4G)</li> <li>Optional</li> </ul>		
	b) Other <b>mobile</b> connection using e.g. GSM, GPRS, EDGE		

Routing to E1. Module D is only for enterprises with C1=Yes i.e. enterprises with access to the Internet For indicator B10 of the benchmarking framework – annual For indicator B11 of the benchmarking framework - annual For indicator B11 of the benchmarking framework - annual Optional questions C5 a1), C5 a2) should start with "Mobile connection via ..." when used without C5 a)

<b>C6.</b> *6*7	How many persons employed use a <u>portable device</u> provided by the enterprise, that allows Internet connection via mobile telephone networks, for business purposes?  (e.g. portable computers, tablets or other portable devices like Smartphones)	(Numbe		mber)	
	If you can't provide this value,				
	Please indicate an estimate of the percentage of the total number of persons employed who use a <u>portable device</u> provided by the enterprise, that allows Internet connection via mobile telephone networks, for business purposes?	<u> </u>		9	6
	(e.g. portable computers, tablets or other portable devices like Smartphones)				
	Use of a Website				
C7.	Does your enterprise have a Website? (Filter question)	Yes	□  -	No □ > go to (8)	
C8.	Does the Website have any of the following?	Yes	3	No	
	a) Description of goods or services, price lists     Optional				
	*9 b) Online ordering or reservation or booking, e.g. shopping cart				
	c) Possibility for visitors to customise or design online goods or services  - Optional				
	d) Tracking or status of orders placed  - Optional				
	e) Personalised content in the website for regular/repeated visitors  - Optional				
	f) Links or references to the enterprise's social media profiles  - Optional				
	g) A privacy policy statement, a privacy seal or a website safety certificate  - Optional				
	h) Advertisement of open job positions or online job application  - Optional				
	i) Electronic submission of complaints (i.e. via e-mail, web form, etc.)				
	Use of Social Media				
	Enterprises <u>using</u> social media are considered those that have a user profile license depending on the requirements and the type of the social media.	e, an acc	ount	or a use	er .
C9.	Does your enterprise use any of the following social media? (not solely used for paid adverts) (add national examples; replace existing examples if necessary) - Optional a)b)c)d)	Yes	3	No	
	a) Social networks (e.g. Facebook, LinkedIn, Xing, Viadeo, Yammer, etc.)				
	b) Enterprise's blog or microblogs (e.g. Twitter, Present.ly, etc.)				
	c) Multimedia content sharing websites (e.g. YouTube, Flickr, Picasa, SlideShare, etc.)				
	d) Wiki based knowledge sharing tools				

For indicator B12 of the benchmarking framework - annual For indicator B13 of the benchmarking framework - annual Routing may need to change; C9, C10 and C11 are optional For indicator D7 of the benchmarking framework - annual

	Other use of the Internet		
C10.	Do any persons employed have remote access to the enterprise's e-mail system, documents or applications?  - Optional	Yes	No 🗆
C11.	Does your enterprise pay to advertise on the Internet? (e.g. adverts on search engines, on social media, on other websites, etc.) - Optional	Yes	No
	Module D: Use of cloud computing services		
	(Scope: enterprises with access to the Internet)		
	Cloud computing refers to ICT services that are used over the Internet to accomputing power, storage capacity etc.; where the services have all of the following characteristics:	ess softwa	re,
	- are delivered from <b>servers</b> of service providers		
	- can be easily <b>scaled</b> up or down (e.g. number of users or change of storage ca	pacity)	
	- can be used <b>on-demand by the user</b> , at least after the initial set up (without huservice provider)	ıman intera	ction with the
	- are <b>paid</b> for, either per user, by capacity used, or they are pre-paid		

	are para for, carrel per deer, by capacity deed, or are pre-para		
	Cloud computing may include connections via Virtual Private Networks (VPN)		
D1.	Does your enterprise buy any cloud computing services used over the Internet?  (Please refer to the definition of cloud computing above, exclude free of charge services)  (Filter question)	Yes □	No □ ->go to D6 or E1
D2.	Does your enterprise buy any of the following cloud computing services used over the Internet?	Yes	No
	(Please refer to the definition of cloud computing above, exclude free of charge services)		
	a) E-mail (as a cloud computing service)		
	b) Office software (e.g. word processors, spreadsheets, etc.) (as a cloud computing service)		
	c) Hosting the enterprise's database(s) (as a cloud computing service)		
	d) Storage of files (as a cloud computing service)		
	e) Finance or accounting software applications (as a cloud computing service)		
•	f) Customer Relationship Management (CRM, software application for managing information about customers) (as a cloud computing service)		
	g) Computing power to run the enterprise's own software (as a cloud computing service)		
D3.	Does your enterprise buy any cloud computing services delivered from:		
	(Please refer to the definition of cloud computing above, exclude free of charge services)	Yes	No
	a) shared servers of service providers		
	h) servers of service providers exclusively reserved for your enterprise		П

D4.	Do any of the following factors limit your enterprise from using cloud computing services?					No	
	(Please refer to the definition of cloud computing above, exclude free of charge services)						
	a) Risk of a security breach						
	b) Problems accessing data or software						
	c) Difficulties in unsubscribing or changing service provider (include with data portability)						
	d) Uncertainty about the location of the data						
	e) Uncertainty about applicable law, jurisdiction, dispute resolution	mechanis	m				
	f) High cost of buying cloud computing services						
	g) Insufficient knowledge of cloud computing						
D5.						T .	
D3.	To what degree were any of the following benefits realised from using cloud computing services?  (Please refer to the definition of cloud computing above, exclude free of charge services)	To a high degree		some egree	To a limited degree	Not at all	
	- Optional a) b) c)						
	a) Reduction of ICT related costs						
	b) Flexibility due to scaling cloud computing services up or down						
	c) Easy and quick deployment of solutions based on cloud computing						
	-> Go to E1						
	(To be encurated only if D4 - "Ale")						
D6.	(To be answered only if D1 = "No")  Do any of the following factors prevent your enterprise from using cloud computing services?  (Please refer to the definition of cloud computing above, exclude free of charge services)  - Optional a) b) c) d) e)					No	
	a) Risk of a security breach						
	b) Uncertainty about the location of the data c) Uncertainty about applicable law, jurisdiction, dispute resolution mechanism						
	d) High cost of buying cloud computing services						
	e) Insufficient knowledge of cloud computing						

	Module E: Sharing of information electronically within the enterprise				
	(Scope: enterprises with Computers)				
	An ERP (Enterprise Resource Planning) is a software package used to mana information among different functional areas (e.g. accounting, planning, produ				
E1. *10	Does your enterprise use an ERP software package?  Yes □  No □				
	CRM (Customer Relationship Management) refers to any software an information about customers	oplication for	managing		
E2. * <sup>11</sup>	Does your enterprise use CRM software to manage:	Yes	No		
	a) the collection, storing and making available information about customers to various business functions				
	(*) b) the analysis of information about customers for marketing purposes. (e.g. setting prices, sales promotion, choosing distribution channels, etc.)				
	Module F: Use of EDI-type messages suitable for autom	nated prod	essing		
	(Scope: enterprises with Computers)				
	Electronic transmission of data suitable for automated processing - often called <b>Interchange</b> (EDI) - means:	Electronic D	ata		
	- sending and/or receiving of messages (e.g. payment transactions, tax de	clarations, ord	lers, etc.)		
	<ul> <li>in an agreed or standard format suitable for automated processing,</li> <li>e.g. EDI, EDIFACT, XML, xCBL, cXML, ebXML, ODETTE, TRADACOMS,</li> </ul>				
	<ul> <li>without the individual message being typed manually</li> </ul>				
	[please add national examples]				
F1 * 12, 13	Does your enterprise send or receive EDI-type messages suitable for automated processing for?	Yes	No		
	a) Payment instructions to financial institutions				
	b) Data to/from public authorities  (e.g. tax returns, statistical data, import or export declarations [please add national examples])				

<sup>10</sup> For indicator D1 of the benchmarking framework
11 For indicator D8 of the benchmarking framework (biennial 2014)
12 For indicator D3 of the benchmarking framework
13 For indicator D3, D4 of the benchmarking framework

	Module G: Sharing Supply Chain Management Infor	mati	on	
	electronically (Scope: enterprises with Computers)			
	Sharing information electronically on Supply Chain Management means exchanging all types of information with suppliers and/or customers about the availability, production, development and distribution of goods or services.  This information may be exchanged via websites, networks or other means of electronic data transfer,			
G1.* <sup>14</sup>	but it excludes manually typed e-mail messages.			
GI.	Does your enterprise share supply chain management information electronically with its suppliers or customers?			No □
	(e.g. information on inventory levels, production plans, planning or progress in the provision of services, demand forecasts or progress of deliveries, etc.). (Filter question)	Y	es 🗆	-> go to H1
G2.	How does your enterprise share supply chain management			
	information electronically?	•	Yes	No
	a) via websites (yours, those of your business partners) or web portals			
	b) via electronic transmission suitable for automated processing (e.g. EDI-type systems, XML, EDIFACT, etc.)			
	Module H: Use of Radio Frequency Identification (RFID) technologies			ogias
	(Scope: enterprises with Computers)	10)	t COIIION	)gics
	<ul> <li>Radio Frequency identification technologies (RFID) means:</li> <li>- an automated identification method to store and remotely retrieve data us transponders,</li> </ul>	sing RI	FID tags or	
	An RFID tag is a device that can be applied to or incorporated into a produtransmits data via radiowaves.	ct or a	ın object an	d
	[please add national examples]			
H1.* <sup>15</sup>	Does your enterprise make use of Radio Frequency Identification instruments for the following purposes?			
			Yes	No
	a) Person identification or access control			
	b) As part of the production and service delivery process			
	(e.g. monitoring and control of industrial production, supply chain and invertracking; service, maintenance or asset management, etc.)	ntory		
	c) For product identification after the production process (e.g. theft control, counterfeiting, allergen information, etc.)			

For indicator D4 benchmarking framework (annual)

15 For indicator D6 of the benchmarking framework (biennial - 2014)

### **Module I: Electronic invoicing**

(Scope: enterprises with Computers)

There are invoices in paper form and electronic form. Invoices in electronic form are of two types:

- elnvoices in a standard structure suitable for automated processing.

(e.g. EDI, UBL, XML, [please add national examples]). They are exchanged either directly or via service operators or via an electronic banking system.

- Invoices in electronic form not suitable for automated processing.

(e.g. e-mails, e-mail attachment as pdf, images in TIF, JPEG or other format)

If you cannot provide the exact percentages an approximation will suffice.

11.	Did your enterprise send invoices to other enterprises or public authorities during 2013? (Filter question)	Yes		No □ >-go	to I3
12.	Of all invoices the enterprise <u>sent to other enterprises or public</u> <u>authorities</u> during 2013, what percentage was <u>sent</u> as:		(%)		
	a) elnvoices in a standard structure suitable for automated processing? (e.g. EDI, UBL, XML, please add national examples)	П	П	П	%
	b) Invoices in electronic form not suitable for automated processing?  (e.g. emails, e-mail attachment as pdf, images in TIF, JPEG or other format)	П	П	П	%
	c) Invoices only in paper form?	Ш	Ш	П	%
	TOTAL	1	0	0	%
13.	Of all invoices the enterprise <u>received</u> during 2013, what percentage was <u>received</u> as:	(%)			
	a) elnvoices in a standard structure suitable for automated processing? (e.g. EDI, UBL, XML, please add national examples)	П	П	П	%
	<ul> <li>b) Invoices in paper form or in electronic form not suitable for automated processing?</li> <li>(e.g. emails, e-mail attachment as pdf, images in TIF, JPEG or other format)</li> </ul>	П	П	П	%
	TOTAL	1	0	0	%

	Module J: e-Commerce				
	(Scope: enterprises with Computers)				
	<b>e-Commerce</b> is the sale or purchase of goods or services conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders.				
	The payment and the delivery of the goods or services do not have to be con-	The payment and the delivery of the goods or services do not have to be conducted online.			
	e-Commerce transactions <b>exclude</b> orders made by manually typed e-mail me	essages.			
	e-Commerce Sales In the following questions please report separately for web sales and EDI-type sales				
	Web sales Web sales are sales made via an online store (web shop) or via web forms on a website or extranet.				
J1. * <sup>16</sup>	During 2013, did your enterprise <i>receive</i> orders for goods or services placed via a website?	Yes □		No □	
	(excluding manually typed e-mails)		-> go to J5		
.12	(Filter question)				
<b>J2.</b> * <sup>17</sup>	Please state the value of the turnover resulting from orders <i>received</i> that were placed via a website (in monetary terms, excluding VAT), in 2013.	(National currency)			
	If you can't provide this value,				
	Please indicate an estimate of the percentage of the total turnover resulting from orders <i>received</i> that were placed via a website, in 2013.			%	
J3.	Please provide a percentage breakdown of the turnover from orders <i>received</i> that were placed via a website in 2013 by type of customer. (estimates in percentage of the monetary values, excluding VAT)				
	a) <b>B2C</b> (Sales to private consumers)	⊔ ⊔ ⊔ % ⊔ ⊔ ⊔ % 1 0 0 %		⊔ %	
	b) <b>B2B</b> (Sales to other enterprises) and <b>B2G</b> (Sales to public authorities)				
	c) TOTAL				
J4.	Which of the following means of payment are accepted for sales via a website?	Yes		No	
	a) Online payment, i.e. payment integrated in the ordering transaction (e.g. credit, debit card, direct debit authorisation, via 3rd party accounts)				
	b) Offline payment, i.e. payment process is not included in the ordering transaction (e.g. cash on delivery, bank transfer, cheque payment, other not online payment)				

For indicators D10, D11 of the benchmarking framework For indicator D9 of the benchmarking framework

	EDI-type sales  EDI-type sales are sales made via EDI-type messages (EDI: Electronic Data  in an agreed or standard format suitable for automated processing (e.g. EDI  without the individual messages being typed manually	<b>3</b> /		
J5. * <sup>18</sup>	During 2013, did your enterprise <i>receive</i> orders for goods or services placed via EDI-type messages? (Filter question)	Yes □	No □ -> go to J7	
J6. * <sup>19</sup>	Please state the value of the turnover resulting from orders received that were placed via EDI-type messages (in monetary terms, excluding VAT), in 2013.	(National currency)		
	If you can't provide this value,			
	Please indicate an estimate of the percentage of the total turnover resulting from orders <i>received</i> that were placed via EDI-type messages, in 2013.		%	

e-Commerce purchases are purchases made via any of the following ways:  - via an online store (web shop) or via web forms on a website or an extranet of another enterprise, or - via EDI-type messages (EDI: Electronic Data Interchange) which means messages in an agreed or standard format suitable for automated processing (e.g. EDIFACT, UBL, XML etc.) without the individual messages being typed manually.  [ Purchases of goods or services include the value of all goods and services purchased during the accounting period for resale or consumption in the production process, excluding capital goods the consumption of which is registered as consumption of fixed capital. ]  J7.  *20  **During 2013, did your enterprise place orders for goods or services via a website or EDI-type messages? (Excluding manually typed e-mails)  **During 2013, did your enterprise place orders for goods or services via a website? -Optional  **Optional		e-Commerce purchases			
or - via EDI-type messages (EDI: Electronic Data Interchange) which means messages in an agreed or standard format suitable for automated processing (e.g. EDIFACT, UBL, XML etc.) without the individual messages being typed manually.  [ Purchases of goods or services include the value of all goods and services purchased during the accounting period for resale or consumption in the production process, excluding capital goods the consumption of which is registered as consumption of fixed capital. ]  J7.  During 2013, did your enterprise place orders for goods or services via a website or EDI-type messages?  (Excluding manually typed e-mails)  No □  -> go to  X1  Suring 2013, did your enterprise place orders for goods or services via a website?		e-Commerce purchases are purchases made via any of the following ways:			
standard format suitable for automated processing (e.g. EDIFACT, UBL, XML etc.) without the individual messages being typed manually.  [ Purchases of goods or services include the value of all goods and services purchased during the accounting period for resale or consumption in the production process, excluding capital goods the consumption of which is registered as consumption of fixed capital. ]  J7.  During 2013, did your enterprise place orders for goods or services via a website or EDI-type messages?  (Excluding manually typed e-mails)  No □  Yes □  No □  Yes □  No □  No □  No □					
accounting period for resale or consumption in the production process, excluding capital goods the consumption of which is registered as consumption of fixed capital. ]  J7.  *20  **During 2013, did your enterprise place orders for goods or services via a website or EDI-type messages? (Excluding manually typed e-mails)  **During 2013, did your enterprise place orders for goods or services via a website?  **Yes : No ::  **No ::  **N					
website or EDI-type messages? (Excluding manually typed e-mails)  Yes □ -> go to X1  Solution X1  Yes □ -> go to X1  Yes □ -> go to X1  Yes □ No □		accounting period for resale or consumption in the production process, excluding capital goods the			
a website? Yes □ No □	<b>J7.</b> ∗ <sup>20</sup>	website or EDI-type messages?	Yes □	-> go to	
	J8.	a website?	Yes □	No □	
J9. During 2013, did your enterprise <i>place</i> orders for goods or services via EDI-type messages? -Optional Yes □ No □	<b>J9.</b> * <sup>21</sup>	EDI-type messages?	Yes □	No □	
J10 During 2013, was the value of the orders that your enterprise placed  *22 electronically equal or more than 1% of the total purchases' value?  (in monetary terms, excluding VAT)  Yes □  No □	J10 * <sup>22</sup>	electronically equal or more than 1% of the total purchases' value?	Yes □	No □	

	Module X: Background information*23		
	(X1-X3) 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 2013		
X2.	Average number of persons employed, during 2013		
Х3.	Total turnover (in value terms, excluding VAT), for 2013		

For indicator D10, D11, D3 of the benchmarking framework ror indicator D9 of the benchmarking framework For indicator D11 of the benchmarking framework For indicators D3 and D4 of the benchmarking framework For indicator D11 of the benchmarking framework For background information of the benchmarking framework

## COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES 2014

### **Glossary**

3G, 3<sup>rd</sup> Generation 4G, 4<sup>th</sup> Generation 3G or 3rd Generation, is a family of standards for mobile telecommunications (W-CDMA, CDMA2000, etc) defined by the International Telecommunication Union (ITU). 3G devices allow simultaneous use of speech and data services and higher data transmission rates. Cellular mobile services were initially offered using analogue radio technologies and these were considered as the first generation systems (1G). 2G technology replaced analogue radio networks with digital ones (2G networks) in the 1990's.

4G is the fourth generation of cellular wireless standards. It is a successor of the 3G and 2G families of standards. The ITU-R organization specified the International Mobile Telecommunications Advanced requirements for 4G standards, setting peak speed requirements for 4G service at 100 Mbit/s for high mobility communication (such as from trains and cars) and 1 Gbit/s for low mobility communication (such as pedestrians and stationary users).

Source: http://en.wikipedia.org/wiki/; http://www.itu.int

## Business process

A business process or business method is a collection of related, structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers. Business processes can be of three types: *Management processes* (e.g. corporate governance, strategic management), *Operational processes* (e.g. purchasing, manufacturing, marketing and sales etc) and *Supporting processes* (e.g. accounting, recruitment, technical support etc).

Source: http://en.wikipedia.org/wiki/Business process

### Counterfeiting

A counterfeit is an imitation, usually one that is made with the intent of fraudulently passing it off as genuine. Counterfeit products are often produced with the intent to take advantage of the established worth of the imitated product. The word counterfeit frequently describes both the forgeries of currency and documents, as well as the imitations of products or goods (e.g. clothing, software, pharmaceuticals, jeans, watches, electronics, etc.).

Source: http://en.wikipedia.org/wiki/Counterfeiting

### CRM

Customer Relationship Management (CRM) is a management methodology which places the customer at the centre of the business activity, based in an intensive use of information technologies to collect, integrate, process and analyse information related to the customers.

One can distinguish between:

- 1. Operational CRM Integration of the front office business processes that are in contact with the customer.
- 2. Analytical CRM Analysis, through data mining, of the information available in the enterprise on its customers. This aims to gather in depth knowledge of the customer and how to answer to its needs.

### **Data**

Representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by humans or by automated means. Any representations such as characters or analogue quantities to which meaning is or might be assigned.

Source: <a href="http://www.its.bldrdoc.gov/projects/devglossary/">http://www.its.bldrdoc.gov/projects/devglossary/</a> data.html

### DSL

Digital Subscriber Line (DSL) is a family of technologies that provides digital data transmission over the wires of a local telephone network. DSL is widely understood to mean Asymmetric Digital Subscriber Line (ADSL), the most commonly installed technical varieties of DSL. DSL service is delivered simultaneously with regular telephone on the same telephone line as it uses a higher frequency band that is separated by filtering.

Source: http://en.wikipedia.org/wiki/DSL

### **EDGE**

Enhanced Data rates for GSM technology represent further enhancements to GSM networks providing up to three times the data capacity of GPRS. EDGE networks rely on Time Division Multiple Access transmission (TDMA) and General Packet Radio Service (GPRS).

Source: <a href="http://gsmworld.com/technology/edge.htm">http://gsmworld.com/technology/edge.htm</a>

### **EDI, EDI-type**

Electronic Data Interchange (EDI) refers to the structured transmission of data or documents between organizations or enterprises by electronic means. It also refers specifically to a family of standards (EDI-type) and EDI-type messages suitable for automated processing.

Source: http://en.wikipedia.org/wiki/Electronic Data Interchange

### EDI e-Commerce

Orders initiated with EDI. EDI (electronic data interchange) is an e-business tool for exchanging different kinds of business messages. EDI is here used as a generic term for sending or receiving business information in an agreed format suitable for automated processing (e.g. EDIFACT, XML, etc.) and without the individual message being manually typed. "EDI e-Commerce" is limited to EDI messages placing an order.

Source: OECD, DSTI/ICCP/IIS(2009)5/FINAL

### e-Invoice

E-invoicing, comprises payment information exchanged between the parties – enterprises, public authorities - involved in commercial transactions, transmitted via the Internet or other electronic means.

A structured e-invoice is an invoice where all data are in digital format and that can be processed automatically. A distinctive feature of a structured e-invoice is automation: a structured e-invoice will be transferred automatically in inter-company invoicing from the invoice issuer's or service provider's system directly into the recipient's financial or other application.

The e-invoice data could be structured according to the XML, EDI or other similar format.

Unstructured invoices in an electronic form are not suitable for automated processing (e.g. emails, e-mail attachment as pdf, images in TIF, JPEG or other format)

# Electronic commerce (e-Commerce)

An e-Commerce transaction is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-Commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations. E-Commerce comprises orders made in Web pages, extranet or EDI and excludes orders made by telephone calls, facsimile, or manually typed e-mail. The type is defined by the method of making the order.

Source: OECD, DSTI/ICCP/IIS(2009)5/FINAL

### E-mail

Electronic transmission of messages, including text and attachments, from one computer to another located within or outside of the organisation. This includes electronic mail by Internet or other computer networks.

### **ERP**

Enterprise Resource Planning (ERP) consists of one or of a set of software applications that integrate information and processes across the several business functions of the enterprise. Typically ERP integrates planning, procurement, sales, marketing, customer relationship, finance and human resources.

ERP software can be customised or package software. These latter are single-vendor, enterprise wide, software packages, but they are built in a modular way allowing enterprises to customise the system to their specific activity implementing only some of those modules.

ERP systems typically have the following characteristics:

- 1. are designed for client server environment (traditional or web-based);
- 2. integrate the majority of a business's processes;
- 3. process a large majority of an organization's transactions;

- 4. use enterprise-wide database that stores each piece of data only once;
- 5. allow access to the data in real time.

### **Extranet**

A closed network that uses Internet protocols to securely share enterprise's information with suppliers, vendors, customers or other businesses partners. It can take the form of a secure extension of an Intranet that allows external users to access some parts of the enterprise's Intranet. It can also be a private part of the enterprise's website, where business partners can navigate after being authenticated in a login page.

GSM

Global System for Mobile Communications. GSM is a digital cellular technology used for transmitting mobile voice and data services. It is the most popular standard for mobile telephone systems in the world. GSM differs from its predecessor technologies in that both signalling and speech channels are digital, and thus GSM is considered a second generation (2G) mobile phone system.

Source: <a href="http://en.wikipedia.org/wiki/GSM">http://en.wikipedia.org/wiki/GSM</a>

**GPRS** 

General Packet Radio Service is a very widely deployed wireless data service, available with most GSM networks. GPRS offers throughput rates of up to 40 kbit/s, so that users have a similar access speed to a dial-up modem, but with the convenience of being able to connect from almost anywhere.

Source: <a href="http://www.gsmworld.com/technology/gprs.htm">http://www.gsmworld.com/technology/gprs.htm</a>

Information

- 1) Facts, data, or instructions in any medium or form.
- 2) The meaning that a human assigns to data by means of the known conventions used in their representation.

(Source: http://www.its.bldrdoc.gov/projects/devglossary/ information.html)

# Internal computer network

An internal computer network is a group of at least two computers connected together using a telecommunication system for the purpose of communicating and sharing resources within an enterprise. It typically connects personal computers, workstations, printers, servers, and other devices. It is used usually for internal file exchange between connected users; intra business communications (internal e-mail, internal web based interface etc), shared access to devices (printers etc) and other applications (databases) or for joint business processes.

LAN (Local Area Network) - A network for communication between computers confined to a single building or in closely located group of buildings, permitting users to exchange data, share a common printer or master a common computer, etc.

**Internet** 

The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks of local to global scope that are linked by a broad array of electronic and optical networking technologies. The Internet carries a vast array of information resources and services, most notably the inter-linked hypertext documents of the World Wide Web (WWW) and the infrastructure to support electronic mail.

Source: http://en.wikipedia.org/wiki/Internet

Relates to Internet Protocol based networks: www, Extranet over the Internet, EDI over the Internet, Internet-enabled mobile phones.

Intranet

An internal company communications network using Internet protocol allowing communications within an organisation.

Message

Any thought or idea expressed briefly in a plain or secret language, prepared in a form suitable for transmission by any means of communication.

Source: http://www.its.bldrdoc.gov/projects/devglossary/ message.html

### Mobile broadband

Mobile broadband (Mobile connection to the Internet over telephone networks) is the name used to describe various types of wireless high-speed Internet access through a portable modem, telephone or other device. (viz. 3G)

Source: <a href="http://en.wikipedia.org/wiki/Mobile broadband">http://en.wikipedia.org/wiki/Mobile broadband</a>

### Modem

Device that modulates outgoing digital signals from a computer or other digital device to analogue signals for a conventional copper twisted pair telephone line and demodulates the incoming analogue signal and converts it to a digital signal for the digital device. (MODEM: MOdulator DEModulator)

# Odette (standards, organisation)

Odette International is an organisation, formed by the automotive industry for the automotive industry. It sets the standards for e-business communications, engineering data exchange and logistics management, which link the 4000 plus businesses in the European motor industry and their global trading partners.

Source: <a href="http://www.odette.org/html/home.htm">http://www.odette.org/html/home.htm</a>

# Office (automation) software

Office (automation) software is a generic type of software comprising (grouped together) usually a word processing package, a spreadsheet, presentations' software etc.

### Online payment

An online payment is an integrated ordering-payment transaction

### **RFID**

Radio-frequency identification (RFID) is an automated identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders.

An RFID tag is an object that can be applied to or incorporated into a product for the purpose of identification using radiowaves. Some tags can be read from several meters away and beyond the line of sight of the reader.

### Sales via website (web sales)

A part of the e-Commerce activities, sales via website (web application) are orders made in an online store or filled in and sent by an electronic form on the www or extranet. Web sales are distinguished from EDI sales. In particular, the type of e-Commerce transaction is defined by the method of making the order. This approach should mitigate the interpretation problems where both types, EDI and Web, are used in the process. An example is a situation where an order is made by the customer through a web application but the information is transmitted to the seller as an EDI-message. Here the type of selling application is however web; EDI is only a business application to transmit information about the sale. Web sales can be done by mobile phones using an Internet-browser.

Source: OECD, DSTI/ICCP/IIS(2009)5/FINAL

### Social media

In the context of the ICT usage survey, the central point of the social media is to establish and maintain social relationships within and around the enterprise. From that aspect we refer to the use of social media (as applications based on Internet technology or communication platforms) and the use of Web 2.0 technologies and tools for connecting, conversing and creating content online, with customers, suppliers, or other partners, or within the enterprise. It is not simply the use of Web 2.0 platform (although it is the enabling technology) but the use of social media implies the development of new forms of collaboration and information management within the enterprises as well as helping employees, customers and suppliers to collaborate, to innovate, to share, and to organize knowledge and experiences.

The following are the main social media communication platforms and tools for enterprises:

**Social networks or websites** are applications based on Internet technologies that enable users to connect by creating personal information profiles, share interest and/or activities, share ideas, invite others to have access to their profile and create communities of people with common interests.

Blogs: A blog is a website or a part of a website, that is updated frequently,

either owned by individuals, interest groups of individuals or corporate (in the current context it is the blog of the enterprise and not other blogs to which employees contribute). An update (called an entry or a post) is usually quite short and readers can respond, share, comment or link to the entry online. Blogs can be used either within an enterprise (corporate blog) or for communicating with customers, business partners or other organisations.

**Content communities** offer the possibility of sharing media content between users. Photo and video services / Podcasting: A podcast (or non-streamed webcast) is a series of digital media files (either audio or video in various file format e.g. .aiff, .wav, .midi etc for the former and .mov, .avi etc for the latter) that are released episodically. The mode of delivery differentiates podcasting from other means of accessing media files over the Internet, such as direct download, or streamed webcasting. Presentation sharing websites offer the possibility to share presentations, documents and professional videos over the Internet (share publicly or privately among colleagues, clients, intranets, networks etc). These websites offer the possibility to upload, update and access presentations and/or documents. Very often, presentation sharing websites are linked to blogs and other social networking services or websites.

**Microblogging** refers to the posting of very short updates about oneself. It is in contrast to long-form blogging, where there are usually at least a few hundred words. Microblog posts usually involve a few hundred characters or less. For example, in the context of microblogging services Tweets (Twitter) are text-based posts of up to 140 characters displayed on the user's profile page.

**Wiki:** A wiki is a website that allows the creation and editing of any number of interlinked web pages via a web browser using a simplified markup language or a WYSIWYG text editor. Wikis are typically powered by wiki software and are often used collaboratively by multiple users. Examples include community websites, corporate intranets, and knowledge management systems.

Universal Business Language (UBL) is a library of standard electronic XML business documents such as purchase orders and invoices. UBL was developed by an OASIS Technical Committee with participation from a variety of industry data standards organizations. UBL is designed to plug directly into existing business, legal, auditing, and records management practices. It is designed to eliminate the re-keying of data in existing fax- and paper-based business correspondence and provide an entry point into electronic commerce for small and medium-sized businesses.

Source: <a href="http://en.wikipedia.org/wiki/Universal Business Language">http://en.wikipedia.org/wiki/Universal Business Language</a>

### Web e-Commerce

Orders made at an online store (webshop) or via web forms on the Internet or extranet regardless of how the web is accessed (computer, laptop, mobile phone etc.)

Source: OECD, DSTI/ICCP/IIS(2009)5/FINAL

### Webform

A webform on a web page allows a user to enter data that is sent to a server for processing. Webforms resemble paper forms because Internet users fill out the forms using checkboxes, radio buttons, or text fields. For example, webforms can be used to enter shipping or credit card data to order a product or can be used to retrieve data.

Source: http://en.wikipedia.org/wiki/Webform

### Webserver

A Web server is a computer program that delivers (serves) content, such as Web pages, using the Hypertext Transfer Protocol (HTTP), over the World Wide Web. The term Web server can also refer to the computer or virtual machine running the program.

http://en.wikipedia.org/wiki/Web server

### Website

Location on the World Wide Web identified by a Web address. Collection of Web files on a particular subject that includes a beginning file called a home page. Information is encoded with specific languages (Hypertext mark-up language (HTML), XML, Java) readable with a Web browser, like Netscape's Navigator or Microsoft's Internet Explorer.

**UBL** 

Wireless access The use of wireless technologies such as radio-frequency, infrared,

microwave, or other types of electromagnetic or acoustic waves, for the last internal link between users devices (such as computers, printers, etc) and a LAN backbone line(s) within the enterprise's working premises. It includes

mainly Wi-fi and Bluetooth technologies.

**xCBL** XML Common Business Library (xCBL) is the pre-eminent XML component

library for business-to-business e-Commerce.

Source: <a href="http://www.xcbl.org/">http://www.xcbl.org/</a>

**xDSL** Digital Subscriber Line. DSL technologies are designed to increase bandwidth

available over standard copper telephone wires. Includes IDSL, HDSL, SDSL,

ADSL, RADSL, VDSL, DSL-Lite.

XML The Extensible Markup Language is a markup language for documents

containing structured information. Structured information contains both content (words, pictures, etc.) and some indication of what role that content plays (for example, content in a section heading has a different meaning from content in a footnote, which means something different than content in a figure caption or content in a database table, etc.). Almost all documents have some structure. A markup language is a mechanism to identify structures in a document. The XML specification defines a standard way to add markup to

documents.

Source: <a href="http://www.xml.com/">http://www.xml.com/</a>