# COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES 2016

## **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)				
	Computers include Personal Computers, portable compother portable devices such as Smartphones.	uters, tablets,	Yes □	No □ ->go to X1	
A2.	How many persons employed use computers for burpurposes?  - Optional	siness	(Nun	aber)	
	If you can't provide this value,				
	Please indicate an estimate of the percentage of the of persons employed who use computers for busine - 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. Feedevelop, operate or maintain ICT systems or applications.	are employees for whom <b>ICT</b> is the main job. For example, to			
B2.	2. Did your enterprise provide any type of training to develop ICT related skills of the persons employed, during 2015?		Yes	No	
	a) Training for ICT specialists				
	Tick "No" if your enterprise didn't employ ICT specialists	during 2015.			
	b) Training for other persons employed				
В3.	Did your enterprise recruit or try to recruit ICT speci 2015? (Filter question)	alists, during	Yes □	No □ ->go to B5	
B4.	During 2015, did your enterprise have vacancies for that were difficult to fill?	ICT specialists	Yes □	No □	
B5.	Please indicate who mainly performed the following ICT functions of your enterprise in 2015:	Mainly own employees incl. those employed in parent or affiliate enterprises		Not applicable	
	a) Maintenance of ICT infrastructure (servers, computers, printers, networks)				
	b) Support for office software (e.g. word processors, spreadsheets, etc.)				
	c) Development of business management software/systems  (e.g. <b>ERP</b> - Enterprise Resource planning used to				
	(e.g. ENF - Enterprise Resource planning used to			1	

manage resources by sharing information among different functional areas such as accounting, planning, production, marketing; <b>CRM</b> software application for managing information about customers; <b>H</b> uman <b>R</b> esources information management, databases)		
d) Support for business management software/systems (e.g. ERP, CRM, HR, databases)		
e) Development of web solutions (e.g. websites, ecommerce solutions)		
f) Support for web solutions (e.g. websites, e-commerce solutions)		
g) Security and data protection (e.g. security testing, security software)		

	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.	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 such as Smartphones.		
	Use of a fixed broadband connection to the internet for bu	ısiness pu	ırposes
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 (FTTP), cable technology, etc.)		_
	(add national examples for public Wi-Fi, WiMax, etc.)	Yes	No □
	(Filter question)		->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		

<sup>1</sup> Routing to E1. Module D: Use of cloud computing services is only for enterprises with C1=Yes i.e. enterprises with access to the internet. Module D is mandatory.

2 For indicator B10 of the benchmarking framework – annual

3 For indicator B11 of the benchmarking framework - annual

	Use of a mobile connection to the internet for business purposes			
	A mobile connection to the internet means the usage of portable devices connecting to the internet through mobile telephone networks for business purposes. Enterprises provide portable devices and pay for all or at least up to a limit, the subscription and the use costs.			
C5.	Does your enterprise use a <u>mobile broadband</u> connection to the internet <u>via a portable device</u> using mobile telephone networks (3G or 4G)?  e.g. via portable computers or other portable devices such as Smartphones	Yes □	No □	
<b>C6.</b>	Does your enterprise use a <u>mobile broadband</u> connection to the internet via the following <u>portable devices</u> ?  - Optional	Yes	No	
	<ul> <li>a) via portable computer using mobile telephone networks (3G or 4G)</li> <li>e.g. notebook, netbook, laptop, tablet, etc.</li> <li>- Optional</li> </ul>			
	<ul> <li>b) via other portable devices such as Smartphones, using mobile telephone networks (3G or 4G)</li> <li>Optional</li> </ul>			
C7. *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?  (Filter question) (e.g. portable computers, tablets or other portable devices such as Smartphones) (Please enter a value, field cannot be left blank)	(Number) %		
	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?  (Filter question)  (e.g. portable computers, tablets or other portable devices such as Smartphones)  (Please enter a value, field cannot be left blank)			
C8.	Does your enterprise provide the persons employed with <u>portable</u> <u>devices</u> that allow mobile connection to the internet for business use to:	Yes	No	
	a) access the enterprise's e-mail system?			
	b) access and modify enterprise's documents?			
	c) use dedicated business software applications? (e.g. for orders or sales management, ERP (Enterprise Resource Planning) related applications, etc.)			
	Use of a Website			
C9.	Does your enterprise have a Website? (Filter question)	Yes □	No □ ->go to C11	

For indicator B11 of the benchmarking framework - annual For indicator B11 of the benchmarking framework - annual For indicator B12 of the benchmarking framework - annual For indicator B13 of the benchmarking framework - annual

C10.	Does the Website have any of the following?	Yes	No
	a) Description of goods or services, price lists		
	*8 b) Online ordering or reservation or booking, e.g. shopping cart		
	c) Possibility for visitors to customise or design online goods or services		
	d) Tracking or status of orders placed		
	e) Personalised content in the website for regular/recurrent visitors		
	f) Links or references to the enterprise's social media profiles		
	g) Advertisement of open job positions or online job application  - Optional		

	Use of Social Media		
	Enterprises <u>using</u> social media are considered those that have a user profile, licence depending on the requirements and the type of the social media.	an accoun	t or a user
C11.	Does your enterprise use any of the following social media? (not solely used for paid adverts)  (add national examples; replace existing examples if necessary)	Yes	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		
	Other use of the internet		
C12.	Do any persons employed have remote access to the enterprise's e-mail system, documents or applications?	Yes	No 🗆
C13.	Does your enterprise pay to advertise on the internet? (e.g. adverts on search engines, on social media, on other websites, etc.) (Filter question)	Yes	No □ go to D1
C14.	Does your enterprise pay to advertise on the internet using any of the following targeted advertising methods?	Yes	No
	a) Based on webpages' content or keywords searched by users		
	b) Based on the tracking of internet users' past activities or profile		
	c) Based on the geolocation of internet users		
	d) Any other method of targeted advertising on the internet not specified above		

<sup>&</sup>lt;sup>8</sup> For indicator D7 of the benchmarking framework - annual

## 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 access software, computing power, storage capacity etc.;

#### where the services have all of the following characteristics:

- are delivered from servers of service providers
- can be easily **scaled** up or down (e.g. number of users or change of storage capacity)
- can be used **on-demand by the user**, at least after the initial set up (without human interaction with the service provider)
- are **paid** for, either per user, by capacity used, or they are pre-paid Cloud computing may include connections via Virtual Private Networks (VPN).

D1.	Does your enterprise buy any cloud computing services used over the internet?	Yes □	No □ ->go to <b>E1</b>
	(Please refer to the definition of cloud computing above, exclude free of charge services.) (Filter question)		->g0 t0 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		
	b) servers of service providers exclusively reserved for your enterprise		

# Module E: Big data analysis

(Scope: enterprises with computers)

- Optional

<u>Big data</u> are generated from activities that are carried out electronically and from machine-tomachine communications (e.g. data produced from social media activities, from production processes, etc.)

Big data typically have characteristics such as:

- Significant volume referring to vast amounts of data generated over time.
- **Variety** referring to the different format of complex data, either structured or unstructured (e.g. text, video, images, voice, docs, sensor data, activity logs, click streams, coordinates, etc.).
- **Velocity** referring to the high speed at which data is generated, becomes available and changes over time.

<u>Big data analysis</u> refers to the use of techniques, technologies and software tools for analysing **big** data extracted from your own enterprise's data sources or other data sources.

E1.	During 2015, did your enterprise analyse <u>big data</u> from any of the following data sources? (Please refer to the definition of big data above; include big data analysis conducted by external service providers) - Optional	Yes	No
	<ul> <li>a) Enterprise's own data from smart devices or sensors (e.g. Machine to Machine -M2M- communications, digital sensors, Radio frequency identification tags RFID<sup>9</sup>, etc.) (in the context of big data)</li> </ul>		
	<ul> <li>b) Geolocation data from the use of portable devices (e.g. portable devices using mobile telephone networks, wireless connections or GPS)</li> <li>(in the context of big data)</li> </ul>		
	c) Data generated from social media (e.g. social networks, blogs, multimedia content sharing websites, etc.) (in the context of big data)		
	d) Other big data sources not specified above		

If E1 has at least one positive answer then continue to E2, else go to F1.

E2.	During 2015, who performed big data analysis for your enterprise?  - Optional	Yes	No
	a) Enterprise's own employees (incl. those employed in parent or affiliate enterprises)		
	b) External service provider		

<sup>&</sup>lt;sup>9</sup> A **Radio Frequency identification-RFID** tag is a device that can be applied to or incorporated into a product or an object and transmits data via radio waves.

## **Module F: 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.

(EDI (e.g. EDIFACT), XML (e.g. UBL), [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.

F1.	During 2015, did your enterprise issue/send any type of invoices, whether in electronic or in paper form, to: (Filter question)	Yes	No
	a) other enterprises		
	b) public authorities		
	c) private consumers		

### If F1 has a) or b) answered with "Yes" then continue, else go to F3.

F2 <sup>10</sup> .*	Of all invoices your enterprise issued/sent to other enterprises or public authorities during 2015, what percentage was issued/sent as:		(%	)	
	a) Invoices in electronic form, in a standard structure <u>suitable</u> for automated processing (elnvoices)?  (EDI (e.g. EDIFACT), XML (e.g. UBL), [please add national examples])	П		П	%
	b) <b>Invoices in electronic form</b> , <u>not suitable</u> for automated processing? (e.g. e-mails, e-mail attachment as pdf, images in TIF, JPEG or other format)	П	П	П	%
	c) Invoices only in paper form?	П	⊔	П	%
	TOTAL	1	0	0	%
F3.*	Of all invoices your enterprise <u>received</u> during 2015, what percentage was <u>received</u> as:	(%)			
	a) Invoices in electronic form, in a standard structure <u>suitable</u> for automated processing (elnvoices)?  (EDI (e.g. EDIFACT), XML (e.g. UBL), [please add national examples])	П	П	П	%
	b) Invoices in paper form or in electronic form <u>not suitable</u> for automated processing? (e.g. e-mails, e-mail attachment as pdf, images in TIF, JPEG or other format)	П	П	П	%
	TOTAL	1	0	0	%

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 $<sup>^{\</sup>rm 10}$  For indicator D5 of the benchmarking framework – annual (based on F2(a), F3(a))

	Module G: 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-	ducted on	line	
	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	e sales.		
	Web sales Web sales are sales made via an online store (web shop), via web forms or via "apps".	a website	e or	extranet, or
G1. * <sup>11</sup>	During 2015, did your enterprise <i>receive</i> orders for goods or services placed via a website or "apps"?	Yes □		No □ go to G5 or
	(excluding manually typed e-mails) (Filter question)			G6 <sup>12</sup>
G2. * <sup>13</sup>	Please state the value of the turnover resulting from orders <i>received</i> that were placed via a website or "apps" (in monetary terms, excluding VAT), in 2015.	(Natio	onal	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 or "apps", in 2015.			%
G3.	Please provide a percentage breakdown of the turnover from orders <i>received</i> that were placed via a website or "apps" in 2015 by type of customer. (estimates in percentage of the monetary values, excluding VAT)			
	a) <b>B2C</b> (Sales to private consumers)	Ц	Ц	⊔ %
	b) <b>B2B</b> (Sales to other enterprises) and <b>B2G</b> (Sales to public authorities)	П	Ц	⊔ %
	c) TOTAL	1 0 0 %		
		T		
G4.	Which of the following means of payment are accepted for sales via a website or "apps"?  -Optional	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)			
	Please provide a percentage breakdown of the turnover from orders received that were placed via a website or "apps" in 2015 by type of customer. (estimates in percentage of the monetary values, excluding VAT)  a) B2C (Sales to private consumers)  b) B2B (Sales to other enterprises) and B2G (Sales to public authorities)  c) TOTAL  Which of the following means of payment are accepted for sales via a website or "apps"?  -Optional  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	⊔ 1 Yes	Ц	□ % □ % No

<sup>11</sup> For indicators D10, D11 of the benchmarking framework
12 Routing to Question **G5** that is **optional** or **G6** if **G5** is not asked
13 For indicator D9 of the benchmarking framework

G5.	Did any of the following obstacles limit or prevent your enterprise from selling via a website or "apps"?				
	-Optional	Yes, I agree	No, I disagree		
	a) The enterprise's goods or services were not suitable for web sales				
	b) Problems in web sales related to logistics (shipping of goods or delivery of services)				
	c) Problems in web sales related to payments				
	d) Problems in web sales related to ICT security or data protection				
	e) Problems in web sales related to the legal framework				
	f) The cost of introducing web sales was, or would have been, too high compared to the benefits				
	EDI-type sales				
	EDI-type sales are sales made via EDI-type messages (EDI: Electronic Data	• ,	•		
	<ul> <li>in an agreed or standard format suitable for automated processing (e.g. (EDI (e.g. EDIFACT), (e.g. UBL), [please add national examples])</li> </ul>				
	<ul> <li>without the individual messages being typed manually</li> </ul>				
<b>G6.</b> * <sup>15</sup>	During 2015, did your enterprise <i>receive</i> orders for goods or services placed via EDI-type messages? (Filter question)	Yes □	No □ -> go to G8		
<b>G7</b> . *16	Please state the value of the turnover resulting from orders received that were placed via EDI-type messages (in monetary terms, excluding VAT), in 2015.	(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 2015.		%		
	e-Commerce purchases -Optional				
	e-Commerce purchases are purchases made via any of the following ways				
	<ul> <li>via an online store (web shop) or via web forms on a website or an extranet of another enterprise, via "apps",</li> <li>or</li> <li>via EDI-type messages (EDI: Electronic Data Interchange) which means messages in an agreed or standard format suitable for automated processing (e.g. (EDI (e.g. EDIFACT), XML (e.g. UBL) [please add national examples]) ,</li> </ul>				
	<ul> <li>without the individual messages being typed manually.</li> </ul>				
	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, <u>excluding</u> capital goods the consumption of which is registered as consumption of fixed capital.]				
<b>G8.</b> *17	During 2015, did your enterprise place orders for goods or services via a website, "apps", or EDI-type messages? (Excluding manually typed e-mails) -Optional	Yes □	No □ -> go to X1		

<sup>14</sup> If **G5** is included in the national questionnaire then it should be asked to all respondents i.e. **G1** either "Yes" or "No" For indicator D10, D11, D3 of the benchmarking framework 16 For indicator D9 of the benchmarking framework 17 For indicator D11 of the benchmarking framework

G9.	During 2015, did your enterprise <i>place</i> orders for goods or services via a website or "apps"?  -Optional	Yes □	No □
<b>G10.</b> * <sup>18</sup>	During 2015, did your enterprise <i>place</i> orders for goods or services via EDI-type messages?  -Optional	Yes □	No □
G11 * <sup>19</sup>	During 2015, was the value of the orders that your enterprise placed electronically equal or more than 1% of the total purchases' value? (in monetary terms, excluding VAT)  -Optional	Yes □	No □

	Module X: Background information*20			
	(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 2015			
X2.	Average number of persons employed, during 2015			
Х3.	Total turnover (in monetary terms, excluding VAT), for 2015			

<sup>18</sup> For indicators D3 and D4 of the benchmarking framework 19 For indicator D11 of the benchmarking framework 20 For background information of the benchmarking framework