COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES 2019

General outline of the survey

Sampling unit:	Enterprise.		
Scope / Target Population:	Economic activity:		
	Enterprises classified - Section C – - Section D, E –	in the following categories of NACE Rev. 2: "Manufacturing", "Electricity, gas, steam and air conditioning supply" "Water supply, sewerage, waste management and remediation activities";	
	- Section F – - Section G –	"Construction", "Wholesale and retail trade; repair of motor vehicles and motorcycles",	
	- Section H – - Section I – - Section J – - Section L – - Division 69 - 74 – - Section N – - Group 95.1 –	"Transportation and storage", "Accommodation and food service activities", "Information and communication", "Real estate activities", "Professional, scientific and technical activities", "Administrative and support service activities"; "Repair of computers and communication equipment"	
	Optional: enterprises Geographic scope:	or more persons employed. with number of persons employed between 0 and 9. In any part of the territory of the country.	
Reference period:	Year 2018 for the value or % of sales/orders data and where specified. Where not specified respondents should consider as reference their current situation (survey period in 2019).		
Recommended survey period:	First quarter 2019.		
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:	enterprise (the ICT ma In smaller enterprises managing director or	th major responsibility for ICT-related issues in the anager or a senior professional in the ICT department). Is, the respondent should be someone at the level of the owner. In any case the respondent should not be sibilities 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 47
- 9 49 53
- 10 55
- 11 58 63
- 12 68
- 13 69 74
- 14 77 82
- 15 26.1 26.4, 26.8, 46.5, 58.2, 61, 62, 63.1, 95.1

Breakdowns for which national data should be provided with the purpose of possible calculation of **European** NACE aggregates.

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>.)

- 1a 10 12
- 1b 13 15
- 1c 16 18
- 4a 26
- 4b 27 28
- 4c 29 30
- 4d 31 33
- 7a 45
- 7b 46
- 10a 55 56
- 11a 58 60
- 11b 61
- 11c 62 63
- 14a 77 78 + 80 82
- 14b 79
- 15a 95.1

Size class breakdown: (To be applied to: all variables; aggregate of all mandatory NACE aggregates [1 to 15 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 10 - 49 (small enterprises) 2 50 - 249 (medium enterprises) 4 250 or more (large enterprises) **Optional:** 5 0 - 96 0 - 17 2 - 9Weighting 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 variables related to questions A2, C2, C7, and for other variables e.g. % using the internet, % sending orders via a website or EDI-type messages, etc., as specified in the transmission format document. Treatment of non-response/'Do Unit non-response: The non-respondent units should be assumed to resemble those who have not know': 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 breakdowns as specified in the transmission format document 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 2019 - Model Questionnaire V 2.0 Docx - Response burden

Module	Description	Mandatory questions	Optional questions
Α	Use of computers	1	1
В	ICT specialists and skills	0	7
С	Access and use of the internet		
	Access and use of the internet	2	1
	Fixed connection for business purposes	2	0
	Mobile connection for business purposes	2	0
	Use of a website	0	8
	Use of social media	10	0
D	Sharing of information electronically within		
	the enterprise	3	0
E	ICT security	21	5
F	E-commerce		
	Web-sales	16	3
	EDI-type sales	5	0
х	Background characteristics	(3)	(0)
	Total number of questions/responses	65(62)	25

In parenthesis the number of questions with Module X: Background characteristics

COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES

Model Questionnaire version 2.0

(Questions related to Monitoring the "Digital Economy & Society 2016-2021" are marked with an asterisk *)

	Module A: Use of computers		
	(Scope: all enterprises)		
A1.* ¹	Does your enterprise use computers? (Filter question)		
	Computers include personal computers, portable computers, tablets, other portable devices such as smartphones.	Yes □	No □ ->go to X1
A2.	How many persons employed use computers for business purposes? - Optional	(Number)	
	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) Optional		
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 2018?	Yes	No
	a) Training for ICT specialists Tick "No" if your enterprise didn't employ ICT specialists during 2018.		
	b) Training for other persons employed		
B3.	Did your enterprise recruit or try to recruit ICT specialists during 2018? (Filter question)	Yes □	No □ ->go to B5
B4.	During 2018, did your enterprise have vacancies for ICT specialists that were difficult to fill?	Yes □	No □

 $^{^{1}}$ It can be decided nationally if included in the survey or derived; data delivery is mandatory. 2 For the indicators on human capital of the monitoring framework 2016-2021 – annual or biennial

B5. * ²	Who performed your enterprise's ICT functions in 2018 (e.g. maintenance of ICT infrastructure; support for office software; development or support of business management software/systems and/or web solutions; security and data protection)?	Yes	No
	a) own employees (incl. those employed in parent or affiliate enterprises)		
	b) external suppliers		

	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 D1
C2. *3	How many persons employed use computers with access to the internet for business purposes?	(Numbe	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.		
C3.	Optional Does your enterprise use voice or video call applications over the internet (e.g. Skype/ Skype for business, WhatsApp/ WhatsApp Business, Facetime, Viber) for business purposes? - add national examples -	Yes □	No □

	Use of a fixed connection to the internet for business pu	rposes	
C4.	Does your enterprise use any type of fixed 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.)		No □
	(Filter question)	Yes □	->go to C6
C5.	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		

³ For indicators on connectivity of the monitoring framework 2016-2021 – annual or biennial

	Use of a mobile connection to the internet for business p	urpos	ses		
	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.				
C6.	Does your enterprise provide <u>portable devices</u> that allow a <u>mobile</u> connection to the internet using mobile telephone networks, for <u>business purposes?</u> (e.g. via portable computers or other portable devices such as smartphones)	Y€	_	C11,	C8, , or
C7.	How many persons employed use a portable device provided by the enterprise, that allows internet connection via mobile telephone networks, for business purposes? (e.g. portable computers, or other portable devices such as smartphones) (Please enter a value, field cannot be left blank) If you can't provide this value, please indicate an estimate of the percentage of the total number of persons employed who use a portable device provided by the enterprise, that allows internet connection via mobile telephone networks, for business purposes (e.g. portable computers, or other portable devices such as smartphones) (Please enter a value, field cannot be left blank)		optional, or C11, mandatory (Number) %		6

	Use of a website Optional		
C8.	Does your enterprise have a website? (Filter question)	Yes □	No □ ->go to C11
C9.	Does the website have any of the following?	Yes	No
	a) Description of goods or services, price lists		
*5	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 on the website for regular/recurrent visitors		
	f) Links or references to the enterprise's social media profiles		
C10.	Does your enterprise use information about visitors' behaviour on its website (e.g. clicks, items viewed), for example for advertising or improving customer satisfaction?	Yes □	No □

 $^{^4}$ For indicators on connectivity of the monitoring framework 2016-2021 - annual 5 For indicators on e-commerce of the monitoring framework 2016-2021 - annual or biennial

	Use of Social Media			
	Enterprises <u>using</u> social media are considered those that have a user profile, an account or a user licence depending on the requirements and the type of the social media.			
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. Instagram, YouTube, Flickr, SlideShare, etc.)			
	d) Wiki based knowledge sharing tools			

The following question (C12) should only be answered if any of the above social media is used (i.e. C11 has at least one "Yes"), otherwise go to D1.

C12.	Does your enterprise use any of the above mentioned social media to:	Yes	No
	a) Develop the enterprise's image or market products (e.g. advertising or launching products, etc.)		
	b) Obtain or respond to <u>customer</u> opinions, reviews, questions		
	c) Involve <u>customers</u> in development or innovation of goods or services		
	d) Collaborate with <u>business partners</u> (e.g. suppliers, etc.) or <u>other</u> <u>organisations</u> (e.g. public authorities, non-governmental organisations, etc.)		
	e) Recruit employees		
	f) Exchange views, opinions or knowledge within the enterprise		

ICT-Entr 2019 – Model Questionnaire v 2.0

 $^{^{6}}$ For indicators on integration of digital technology of the monitoring framework 2016-2021 – biennial ; included in DESI

	Module D: Sharing of information electronically within the enterprise				
	(Scope: enterprises with computers)				
	An ERP (Enterprise Resource Planning) is a software package used to manage resources by sharing information among different functional areas (e.g. accounting, planning, production, marketing, etc.)				
D1.	Does your enterprise use an ERP software package?	Yes □	No□		
	CRM (Customer Relationship Management) refers to any software application for managing information about customers				
D2.	Does your enterprise use CRM software to manage:	Yes	No		
	a) the collection, storing and making available information on customers to various business functions				
	b) the analysis of information on customers for marketing purposes, (e.g. setting prices, sales promotion, choosing distribution channels, etc.)				

For indicators on integration of digital technology of the monitoring framework 2016-2021 – biennial; included in DESI For indicators on integration of digital technology of the monitoring framework 2016-2021 – biennial;

Module E: ICT Security

(Scope: enterprises with computers)

ICT security means measures, controls and procedures applied on ICT systems in order to ensure integrity, authenticity, availability and confidentiality of data and systems.

	ICT security measures		
E1.	Does your enterprise use any of the following ICT security measures?	Yes	No
	a) Strong password authentication, i.e. minimum length of 8 mixed characters, periodical change		
	b) Keeping the software (including operating systems) up-to-date		
	c) User identification and authentication via biometric methods implemented by the enterprise (e.g. based on fingerprints, voice, faces)		
	d) Encryption techniques for data, documents or e-mails		
	e) Data backup to a separate location (including backup to the cloud)		
	f) Network access control (management of access by devices and users to the enterprise's network)		
	g) VPN (Virtual Private Network extends a private network across a public network to enable secure exchange of data over public network)		
	h) Maintaining log files for analysis after security incidents		
	i) ICT risk assessment, i.e. periodically assessment of probability and consequences of ICT security incidents		
	 j) ICT security tests (e.g. performing penetration tests, testing security alert system, review of security measures, testing of backup systems) 		
E2.	Does your enterprise make persons employed aware of their obligations in ICT security related issues in the following ways?	Yes	No
	a) Voluntary training or internally available information (e.g. information on the intranet)		
	b) Compulsory training courses or viewing compulsory material		
	c) By contract (e.g. contract of employment)		
	Miles and a lot of the lot of the desired		
E3.	Who carries out the ICT security related activities (e.g. security testing, ICT training on security, resolving ICT security incidents) in		
	your enterprise? Exclude upgrades of pre-packaged software	Yes	No
	a) own employees (incl. those employed in parent or affiliate enterprises)		
	b) external suppliers		
		ı	
E4.	Does your enterprise have document(s) on measures, practices or procedures on ICT security? (Filter question) Documents on ICT security and confidentiality of data cover employee training in ICT use, ICT security measures, the evaluation of ICT security measures, plans for updating ICT security documents, etc.	Yes□	No□ ->go to E7

E5.	Does your document(s) on measures, practices or procedures on ICT security in your enterprise address the following? -Optional	Yes	No □
	a) Management of access rights for the usage of ICT (e.g. computers, networks)		
	b) Storage, protection, access or processing of data		
	c) Procedures or rules to prevent or respond to security incidents (e.g. pharming, phishing attacks, ransomware, etc.)		
	d) Responsibility, rights and duties of persons employed in the field of ICT (e.g. use of e-mails, mobile devices, social media, etc.)		
	e) Training of persons employed in the safe usage of ICT		
E6. *9	When were your enterprise's document(s) on measures, practices or procedures on ICT security, defined or most recently reviewed? (e.g. risk assessment, evaluation of ICT security incidents, etc.) (Tick only one)		
	* ¹⁰ a) within the last 12 months]
	b) more than 12 months and up to 24 months ago]
	c) more than 24 months ago]
E7. * ¹¹	During 2018, did your enterprise experience at least once any of the following problems due to ICT related security incidents?	Yes	No
	a) Unavailability of ICT services (e.g. Denial of Service attacks, ransomware attacks, hardware or software failures - excluding mechanical failure, theft)		
	b) Destruction or corruption of data (e.g. due to infection of malicious software or unauthorised intrusion, hardware or software failures)		
	c) Disclosure of confidential data (e.g. due to intrusion, pharming, phishing attack, actions by own employees (intentionally or unintentionally))		
			1
E8.	Does your enterprise have insurance against ICT security incidents?	Yes□	No□

For indicators on trust, security and privacy of the monitoring framework 2016-2021 –triennial;

10 Formulation in the national questionnaires should correspond to: a) <= 12 months; b) > 12 months and <= 24 months; and c) more than 24 months

11 For indicators on trust, security and privacy of the monitoring framework 2016-2021 –triennial;

	Module F: E-commerce (Scope: enterprises with computers)			
	E-commerce 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	ducte	d online.	
	E-commerce transactions exclude orders made by manually typed e-mail me	essag	es.	
	E-commerce sales In the following questions please report separately for web sales and EDI-type	oe sale	es.	
	Web sales Web sales are sales made via an online store (web shop, e-commerce mar on a website or extranet, or via apps.	ketpla	ce), via w	eb forms
F1 * ¹²	During 2018, did your enterprise <u>receive</u> orders for goods or services placed via a website or apps?	Yes		No □
	(excluding manually typed e-mails)			go to F9
	(Filter question)			
F2 * ¹³	Please state the value of the turnover resulting from orders <u>received</u> that were placed via a website or apps (in monetary terms, excluding VAT), in 2018.	1)	National cu	irrency)
	If you can't provide this value,			
	please indicate an estimate of the percentage of the total turnover resulting from orders <u>received</u> that were placed via a website or apps, in 2018.	-		%
F3. * ¹⁴	What was the percentage breakdown of the turnover from orders received that were placed via a website or apps in 2018 by type of customer?			
	(estimates in percentage of the monetary values, excluding VAT)			
	a) B2C (Sales to private consumers)	ЦЦЦ%		
	b) B2B (Sales to other enterprises) and B2G (Sales to public authorities)	⊔ ⊔ ⊔ %		
	TOTAL	1 0 0%		
F4. * ¹⁵	During 2018, via which websites or apps did your enterprise <u>receive</u> orders for goods or services:		Yes	No
	a) via your enterprise's website or apps?			
	(including those of parent or affiliate enterprises, extranets)			
	b) via an e-commerce marketplace website or apps used by several enterprises for trading products? (e.g. Booking, eBay, Amazon, Amazon Business, Alibaba, Rakuten, etc.) (Please add national examples of e-commerce marketplaces incl. government marketplaces)	n		

The following question (F5) should only be answered if both F4 a) and F4b) = "Yes" otherwise go to F6

For indicators on e-commerce of the monitoring framework 2016-2021 – annual; included in DESI For indicators on e-commerce of the monitoring framework 2016-2021 – annual; included in DESI For indicators on e-commerce of the monitoring framework 2016-2021 – annual; For indicators on e-commerce of the monitoring framework 2016-2021 – annual or biennial;

	What was the percentage breakdown of the turnover from orders received via a website or apps in 2018 for the following:			
F5.	(estimates in percentage of the monetary values, excluding VAT)			
	If you cannot provide the exact percentages an approximation will suffice.			
	a) via your enterprise's website or apps? (including those of parent or affiliate enterprises, extranets)	Ц	⊔ ⊔ %	
	b) via an e-commerce marketplace website or apps used by several enterprises for trading products? (e.g. Booking, eBay, Amazon, Amazon Business, Alibaba, Rakuten, etc.) (Please add national examples of e-commerce marketplaces incl. government marketplaces)		⊔⊔⊔%	
	TOTAL	1	0 0 %	
		1		
F6 *16	During 2018, did your enterprise <u>receive</u> orders placed via a website or apps by customers located in the following geographic areas? Yes N			
			No	
	a) Own country			
	b) Other EU countries			
	c) Rest of the world			
	The following question (F7) should only be answered if at least two responses in question F6 a), b) or c) are answered with "Yes", othe instruction before question F8	of the aboverwise check	e possible next filter	
	,			
F7.	What was the percentage breakdown of the turnover from orders received that were placed via a website or apps in 2018 by customers located in the following geographic areas?			
୮/. ∗16	(estimates in percentage of the monetary values, excluding VAT)			

 $^{^{16}}$ For indicators on e-commerce of the monitoring framework 2016-2021 – biennial; included in DESI;

The following question (F8) should only be answered if F6 b) = "Yes" otherwise go to F9

Yes

No

During 2018, did your enterprise experience any of the following difficulties when selling to other EU countries via a website or apps?

a) High costs of delivering or returning products when selling to other EU

	b) Difficulties related to resolving complaints and disputes when selling to other EU countries				
	c) Adapting product labelling for sales to other EU countries				
	d) Lack of knowledge of foreign languages for communicating with customers in other EU countries				
	e) Restrictions from your business partners to sell to certain EU countries				
	EDI-type sales				
	EDI-type sales are sales made via EDI-type messages (EDI: Electronic Data	a inter	change)	meaning	:
	 in an agreed or standard format suitable for automated processing (e.g. (E.g. UBL), [please add national examples]) 	EDI (e	g. EDIF	ACT), XI	ΛL
	- without the individual messages being typed manually				
F9. * ¹⁸	During 2018, did your enterprise <u>receive</u> orders for goods or services placed via EDI-type messages? (Filter question)	١	′es □	No □ -> go to	
F10.	Please state the value of the turnover resulting from orders received that were placed via EDI-type messages (in monetary terms, excluding VAT), in 2018.	(National currency)			
	If you can't provide this value,				
	Please indicate an estimate of the percentage of the total turnover resulting from orders <u>received</u> that were placed via EDI-type messages, in 2018.	_		%	
F11.	resulting from orders received that were placed via EDI-type			%	

a) Own country

b) Other EU countries

c) Rest of the world

F8

countries

For indicators on e-commerce of the monitoring framework 2016-2021 – annual or biennial;

For indicators on e-commerce of the monitoring framework 2016-2021 – annual; included in DESI;

For indicators on e-commerce of the monitoring framework 2016-2021 – annual; included in DESI;

For indicators on e-commerce of the monitoring framework 2016-2021 – annual; included in DESI;

For indicators on e-commerce of the monitoring framework 2016-2021 – biennial; included in DESI;

	Module X: Background information* ²¹ (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 2018		
X2.	Average number of persons employed, during 2018		
Х3.	Total turnover (in monetary terms, excluding VAT), for 2018		

-

²¹ For indicators on background characteristics of the monitoring framework 2016-2021

COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES Glossary

App(s)

A mobile app, short for mobile application or just app, is application software designed for a specific purpose (e.g. entertainment, shopping, etc.), downloaded and used on computers depending on their operating system. (e.g. portable devices such as tablets, Smartphones, etc.)

Further information: http://en.wikipedia.org/wiki/Mobile-app; http://www.techopedia.com/definition/2953/mobile-application-mobile-app

Authentication methods

Authentication is a way to ascertain that a user is who they claim to be. This is usually performed by presenting one or more challenges to the user. There are three broad categories of challenges:

- 1) Something the user knows. The user is asked for a secret, known only to her. Typical examples are passwords and PINs, but can also take the form of security questions.
- 2) Something the user has. The user is in possession of a unique token, like a key. In the case of computer tokens, this can take the form of an NFC tag, or a device.
- 3) Something the user is. Aka biometrics. The user is asked to present a part of her body that forms unique and repeatable patterns, like fingerprints, voice, or face recognition.

Source: https://www.enisa.europa.eu/topics/csirts-in-europe/glossary/authentication-methods

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: http://www.its.bldrdoc.gov/projects/devglossary/ data.html

Denial of service attack

A denial-of-service attack (DoS attack) or distributed denial-of-service attack (DDoS attack) is an attempt to make a computer resource unavailable to its intended users. Although the means to carry out, motives for, and targets of a DoS attack may vary, it generally consists of the concerted efforts of a person or persons to prevent an internet site or service from functioning efficiently or at all, temporarily or indefinitely. Perpetrators of DoS attacks typically target sites or services hosted on high-profile web servers such as banks, credit card payment gateways, and even root name servers.

One common method of attack involves saturating the target (victim) machine with external communications requests, such that it cannot respond to legitimate traffic, or responds so slowly as to be rendered effectively unavailable. In general terms, DoS attacks are implemented by either forcing the targeted computer(s) to reset, or consuming its resources so that it can no longer provide its intended service or obstructing the communication media between the intended users and the victim so that they can no longer communicate adequately.

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

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-type messages. 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

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 or apps, 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:

- 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.

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.

Intrusion

An intrusion is an attempt to bypass security controls on a information system. Means of intrusion can be eavesdropping, viruses, worms, trojan horses, logic or time bombs, brute force attacks, etc.

Intrusion detection is a process with the purpose of detecting intrusions or attempts of intrusions into a computer or network to compromise the confidentiality, integrity or availability by observation of system, application and user activity as well as network traffic. Intrusion detection systems take preventive actions against intrusions without direct human intervention.

Malicious software

Malicious software, also known as "malware" is any piece of software that performs undesirable operations such as data theft or some other type of computer compromise.

Source:https://www.enisa.europa.eu/topics/csirts-in-europe/glossary/malware

Marketplace(s)

(e-commerce marketplaces)

The term "e-commerce marketplaces" refers to websites or apps used by several enterprises for trading products e.g. Booking, eBay, Amazon, Amazon Business, Alibaba, Rakuten, etc.). E-commerce marketplaces are different from e-commerce platforms. The latter provide scalable, self-made online solutions for business that would like to set up their own e-commerce website.

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

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.

Pharming

The term "pharming" connotes an attack to redirect the traffic of a website to another, bogus website in order to acquire sensitive information.

Phishing

Phishing is a criminally fraudulent attempt to acquire sensitive information such as usernames, passwords and credit card details by masquerading as a trustworthy entity in an electronic communication.

Ransomware

Ransomware is a type of malware (like Viruses, Trojans, etc.) that infect the computer systems of users and manipulates the infected system in a way, that the victim can not (partially or fully) use it and the data stored on it. The victim usually shortly after receives a blackmail note by pop-up, pressing the victim to pay a ransom (hence the name) to regain full access to system and files.

Source: https://www.enisa.europa.eu/topics/csirts-in-europe/glossary/ransomware

Sales via website (web sales)

Web sales are sales made via an online store (web shop), via web forms on a website or extranet, or apps. 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-type 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.

UBL

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: http://en.wikipedia.org/wiki/Universal Business Language

Web e-Commerce

Web (e-commerce) sales are sales made via an online store (web shop), via web forms on a website or extranet, or apps 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

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.

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.

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: http://www.xml.com/