

CEN

CWA 16624-1

WORKSHOP

September 2013

AGREEMENT

ICS

English version

e-Competence Framework for ICT Users - Part 1: Framework Content

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2013 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No.:CWA 16624-1:2013 E

Contents

	Page
Foreword.....	3
Introduction	4
1 The Framework Shell – Understanding the Construct	5
2 e-Competence Framework for ICT Users - Overview.....	6
3 e-Competence Framework for ICT Users - Content.....	8
3.1 Word Processing	8
3.2 Web Browsing and Information Search	14
3.3 Communications	21
3.4 Spreadsheets	29
3.5 Presentations.....	36

Foreword

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties on 2013-05-06, the constitution of which was supported by CEN following the public call for participation made on 2011-10-04.

A list of the individuals and organizations in the ICT field which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organizations are as follows:

- (ISC)2
- AICA
- CEPIS
- CIGREF
- DEKRA Akademie
- ECDL Foundation
- EaSA
- EMF eExcellence
- European Software Institute – Center Eastern Europe
- ESI Central Europe
- EuroCIO
- EXIN
- FZI
- HBO-I
- IWA IT
- KWB eV
- Microsoft
- Pasc@line
- Thames Communication
- UBO

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards or legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its members.

The final review/endorsement round for this CWA was started on 2013-01-23 and was successfully closed on 2013-05-07. The final text of this CWA was submitted to CEN for publication on 2013-08-01.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of The following countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN-CENELEC Management Centre.

Introduction

The aim of the e-Competence Framework for ICT Users project is to develop and validate a framework shell and populate the framework with an initial five e-Competence Areas with the assistance of project-created framework development guidelines.

The following document outlines the details of five e-Competence Areas, developed as a core element of this CEN Workshop Agreement. An associated development guidelines document outlining the process used to create the framework is also available to gain further understanding of the framework and/or to create additional framework content. In addition, a user guidelines document has been created to assist potential framework users in understand and using the framework.

The e-Competence Framework for ICT Users ranges in depth from foundation to advanced proficiency levels, and can range in breadth from common, generic software domains to specialised technology domains, thus having the potential to provide a complete coverage of ICT user proficiency levels and domains.

1 The Framework Shell – Understanding the Construct

The e-Competence Framework for ICT Users is structured using four dimensions, adopting the “dimension” terminology used by the e-Competence Framework for ICT Professionals¹. This intentional reuse of terminology will assist in leading to a more consistent approach to framework development, assist users (e.g. a Human Resource function) of both frameworks in getting to grips with each framework and offer the potential for a consistent approach which could in the future be extended to create a similar framework for e-Business / e-Leadership, the third e-Skills category as defined by the European e-Skills Forum in 2004.

The four dimensions reflect different levels of ICT user e-competence requirements and are specified as follows:

Dimension 1: Five ICT User e-Competence areas have been developed in this particular project. These areas were selected based on survey feedback from the previous framework requirements project and are derived from commonly used ICT office productivity applications:

- Word Processing
- Spreadsheets
- Presentation
- Communications²
- Web Browsing and Information Search³

NOTE It is important to note that this project in itself will not result in an exhaustive framework of all ICT user e-competences. The framework is explicitly designed to be expanded to include further ICT user competence areas in the future.

A generic description of each ICT User e-Competence area is also provided.

Dimension 2: A set of ICT User e-Competences are provided for each area, with a generic description for each competence. These competences provide the European generic reference definitions of the ICT User e-Competence Framework. Where a competence is shared across various e-Competence Areas, the project team have looked to reuse the same competence wording where possible.

Dimension 3: This sets out the proficiency levels from Foundation to Advanced for each ICT User e-Competence. These in turn *relate* to EQF levels 1 to 4 for the majority of end user e-competences in the framework. This mapping is explored in further detail in Section 2.4 of the development guidelines.

Dimension 4: Samples are provided of knowledge and skills that relate to the ICT User e-Competences set out in dimension 2. They are provided to add value and context and are not intended to be exhaustive. The knowledge and skills example are also organised into groups.

The framework adopts a similar approach as the existing e-Competence Framework for IT Professionals in that while competence definitions are explicitly assigned to dimension 2 and 3 and knowledge and skills samples appear in dimension 4 of the framework, attitudes are embedded in all three dimensions. In essence this means that the wording of dimensions 2 – 4 contains references (sometimes explicit or sometimes subtle) of attitudes (See Development Guidelines: Section 2.6 and Appendix 3).

¹ See <http://www.ecompetences.eu/> for further details.

² Initially named “e-Mail” but renamed following CEN Plenary input to allow for a broader coverage of communication methods (such as SMS, MMS, IM etc).

³ Expanded to include “...and Information Search” to give sufficient weight to the search.

2 e-Competence Framework for ICT Users - Overview

The following is an overview of the framework showing Dimensions 1 to 3. Full details of the framework for the five ICT User e-Competence Areas developed for the project (including Dimension 4) are contained in the following sections.

Dimension 1	Dimension 2	Dimension 3		
ICT User e-Competence Area	ICT User Competence	Proficiency Levels		
		Foundation	Intermediate	Advanced
Word Processing	Document Creation			
	Content Organisation			
	Document Collaboration and Interaction			
	Document Automation			
	Document Output and Storage			
Web Browsing and Information Search	Using the Browser			
	Online Search			
	Security			
	Online Awareness			
	Information Assessment			
	Online Services			
Communications	Information Sharing			
	User Configuration			
	Security			
	Information Exchange via e-Mail			
	Contact Creation and Organisation			
Spreadsheets	Scheduling			
	Online Collaboration and Social Interaction			
	Workbooks and Worksheet Creation			
	Formulas and Functions			
	Use and Apply Charts and Graphs			
	Data Analysis and Organisation			

	Spreadsheet Output and Storage			
Presentation	Presentation Creation			
	Content Organisation			
	Use of Graphic and Multimedia Effects			
	Presentation Delivery and Storage			
Competence Area 6	[Future project]			
Competence Area 7	[Future project]			
Etc.	[Future project]			

3 e-Competence Framework for ICT Users - Content

3.1 Word Processing

Dimension 1 ICT User e-Competence Area	Word Processing Creating structured and formatted content, using referencing, and features for collaboration, mail merge and security, as well as being able to store and create outputs.		
Dimension 2 ICT User e-Competence	Document Creation Create documents for work or social (home/recreational) use. Navigate the interface confidently and select and use common tools appropriately. Create, format and edit document content to create suitable documents for your chosen purpose. Create and edit illustrations to enhance documents and communicate visually.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Uses input tools to create simple documents accurately and perform simple formatting and editing with some guidance.	Plan the content of a document. Use input tools to create and manipulate text accurately and utilise appropriate formatting and editing features to deliver quality outputs.	Plan the content of a complex document. Create and manipulate text accurately and efficiently. Confidently use advanced formatting and editing features to communicate information effectively.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Use the Interface and Common Tools K1 Understand the main components of the graphical user interface (toolbars, menus, ribbons) and available common application tools (help, zoom, find). K2 Understand that keyboard shortcuts and key combinations can be used to carry out actions. Create and Format Content K1 Understand methods to input data in a word processor (keyboard, speech recognition, mouse). K2 Understand how to plan a structured document. K3 Understand the importance of appropriate presentation to visually enhance the content in a document. Edit Content K1 Understand the main editing functions available in the word processor. K2 Understand that content can be edited and/or modified. K3 Understand that content can be selected for different purposes.	Typically, individuals will display skills including: Use the Interface and Common Tools S1 Navigate around the graphical user interface and use common tools (help, zoom, find). S2 Use available window features (new window, split, hide/unhide). Create and Format Content S1 Enter text, symbols, special characters in a word processing document using preferred methods to input data. S2 Format text using bold, italic, underline, colours, highlighting and styles. Edit Content S1 Edit and delete text in a word processing document. S2 Use copy, paste, and paste special feature to move content within and between documents. S3 Use the find and replace feature.		

Create and Edit Illustrations

- K1 Understand the options available for including/creating illustrations/images and adding them to the text.
- K2 Understand the legal implications for using certain illustrations/images.
- K3 Understand ways to modify illustrations/images.

NOTE: *This is a non-exhaustive list of examples.*

Create and Edit Illustrations

- S1 Use images, graphics, illustrations into a document.
- S2 Modify the properties of an image, graphic, illustration (size, text wrapping, proportions).
- S3 Create and use diagrams and shapes in a document.

NOTE: *This is a non-exhaustive list of examples.*

Dimension 1 ICT User e-Competence Area	Word Processing Creating structured and formatted content, using referencing, and features for collaboration, mail merge and security, as well as being able to store and create outputs.		
Dimension 2 ICT User e-Competence	Content Organisation Organise document content to ensure a logical structure. Use templates, tables, headers and footers to logically structure a document. Use appropriate referencing to cite sources and assist readers in understanding content. Link to and embed content from other sources to enhance a document.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Organise a simple document positively, with some guidance.	Actively plan and organise the content of a document with an awareness of its purpose. Use referencing to cite sources accurately and utilise links appropriately to refer to other content.	Confidently plan and organise the content of a complex document to meet the needs of the target audience. Use cross referencing and create reference pages. Utilise embedding to improve efficiency and reuse data from other sources.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Structure and Layout Content K1 Understand and recognise the structural elements of a document (headings, indexes, tables). K2 Understand how to select a suitable structure and layout for a document recipient. Use Referencing K1 Understand the importance of referencing and benefits of using referencing features in documents. K2 Recognise different referencing options (footnote, endnote, citation, table, figure). Link and Embed Content K1 Understand what type of information can be used from other sources. K2 Understand the differences between links and embedded information and the benefits of their use. NOTE: <i>This is a non-exhaustive list of examples.</i>		Typically, individuals will display skills including: Structure and Layout Content S1 Create and use page breaks and sections to structure a document. S2 Create and use headers, footers and tables to structure content. S3 Use themes, templates to structure a document. S4 Use a master and sub documents for structuring complex documents. Use Referencing S1 Create and use footnotes, endnotes and captions in a document. S2 Create a table of contents, figures, index and a reference page/bibliography. S3 Use cross referencing in complex documents. Link and Embed Content S1 Create and use hyperlinks within a document or to link to other sources. S2 Embed content to integrate data from other sources in a document (spreadsheet, presentation, image). S3 Edit embedded data and update linked data. NOTE: <i>This is a non-exhaustive list of examples.</i>	
See Also: Spreadsheets (Data Analysis and Organisation), Presentations (Content Organisation), Communications (Contact Creation and Organisation)			

Dimension 1 ICT User e-Competence Area	Word Processing Creating structured and formatted content, using referencing, and features for collaboration, mail merge and security, as well as being able to store and create outputs.		
Dimension 2 ICT User e-Competence	Document Collaboration and Interaction Collaborate effectively with documents by using features like comments, change tracking and document comparisons. Set and edit a shared document to allow for multi-user online collaboration. Create a structured form using appropriate fields to gather feedback.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Carry out proof reading positively and fix simple format and content errors. Complete a simple form.	Actively contribute to collaborating on and reviewing a document. Complete a detailed form accurately.	Use experience to confidently lead a document collaboration and review, managing document changes. Plan and create a form to gather required information.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Collaborate and Review Content K1 Recognise the importance of proof reading a document, and understand the process to carry out a quality check. K2 Understand the available features to assist collaboration on documents (track changes, comments, collaboration features). Create and Use Forms K1 Understand the benefit of planning the structure and layout of a form. K2 Understand the main types of form fields available and their uses. K3 Understand what kind of content optimises the use of a form. NOTE: <i>This is a non-exhaustive list of examples.</i>		Typically, individuals will display skills including: Collaborate and Review Content S1 Proof read a document, use spelling/grammar checks and automatic correction features to correct errors. S2 Use track changes and comments in a document. S3 Use features to compare documents. S4 Setup and collaborate on a shared document. Create and Use Forms S1 Use a form to enter information. S2 Create a form using available options. NOTE: <i>This is a non-exhaustive list of examples.</i>	

Dimension 1 ICT User e-Competence Area	Word Processing Creating structured and formatted content, using referencing, and features for collaboration, mail merge and security, as well as being able to store and create outputs.		
Dimension 2 ICT User e-Competence	Document Automation Use mail merge to automate the creation of multiple items like letters, labels and envelopes. Create and edit recipient lists effectively to ensure accurate outputs are created. Use automation features like fields in documents to populate content automatically. Record and use macros to improve efficiency by automating recurring processes.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	N/A	Accurately recognise opportunities to use automation features. Prepare and execute a mail merge based on existing information. Use common automated fields.	Creatively maximise the use of automation features. Prepare and execute complex mail merges. Exploit opportunities to create and use macros to improve efficiency.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Use Mail Merge K1 Understand the concept of a mail merge to create a variety of outputs like letters, labels, envelopes. K2 Understand the types of source files that can be used for a mail merge. Use Automation K1 Understand the benefits of using automatic fields in a word processing application. K2 Understand the benefits of using macros in a word processing application. NOTE: <i>This is a non-exhaustive list of examples.</i>	Typically, individuals will display skills including: Use Mail Merge S1 Prepare a document to use for a mail merge and select the recipient list. S2 Use rules in a mail merge. S3 Execute a mail merge to create items like letters, labels, envelopes. Use Automation S1 Insert and format automatic page numbers. S2 Use fields to populate content like filenames and dates. S3 Record and use macros to automate recurring processes. NOTE: <i>This is a non-exhaustive list of examples.</i>		

Dimension 1 ICT User e-Competence Area	Word Processing Creating structured and formatted content, using referencing, and features for collaboration, mail merge and security, as well as being able to store and create outputs.		
Dimension 2 ICT User e-Competence	Document Output and Storage Maximise content security by using application security features and appreciate the benefits of taking a pro-active approach to securing documents. Create appropriate printed document outputs for an audience. Store documents in suitable location(s) for your needs using appropriate filenames and choosing appropriate save options.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Use pre-set features positively to save or print a simple document.	Appreciate security risks associated with documents. Save and store documents in a variety of locations and in different file types. Print detailed documents.	Confidently use security features to protect and secure documents. Print complex documents to create appropriate outputs for a target audience and support less experienced users with simple print queries.
Dimension 4			
Knowledge Examples	Skills Examples		
<p>Typically, individuals will display knowledge including:</p> <p>Use Document and Content Security K1 Understand the importance of protecting and securing documents. K2 Understand the benefits of digitally signing a document.</p> <p>Generate Outputs and Store Content K1 Understand the importance of having an organised approach to saving files. K2 Understand the advantages and disadvantages of storing files locally and/or remotely. K3 Understand the importance of checking a print preview before printing.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	<p>Typically, individuals will display skills including:</p> <p>Use Document and Content Security S1 Use available password protection, encryption features for documents. S2 Use available digital signature features for documents.</p> <p>Generate Outputs and Store Content S1 Save a document in various formats using an appropriate filename. S2 Print preview a document, adjust print settings and print. S3 Use an online storage location to save and/or backup documents.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>		
See Also: Spreadsheets (Spreadsheet Output and Storage), Presentation (Presentation Delivery and Storage)			

3.2 Web Browsing and Information Search

Dimension 1 ICT User e-Competence Area	Web Browsing and Information Search Using the Internet for information sourcing, information sharing or using online services in the World Wide Web.		
Dimension 2 ICT User e-Competence	Using the Browser <p>Browse web pages, choosing and selecting appropriate links to related pages. Set browser preferences and connectivity settings. Configure the browser according to own preferences and security needs. Effectively use the browser user interface. Use common tools and shortcuts to maximise efficiency. Utilise bookmarks and toolbars to organise and manage regularly used webpages.</p> <p>Be familiar with a variety of information content types. Store files in a local or remote location. Use web sourced information appropriately in other applications. Confidently use web-based forms to submit information.</p>		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Use web browser positively to perform basic navigation actions to browse the content from information sources.	Accurately uses browser user interface and common tools to aid web browser navigation. Organise web browser workspace to perform web navigation efficiently.	Confidently uses web browser to perform complex navigation actions. Use browser user interface and common tools to resolve unpredictable cases. Configure web browser settings, plug-ins and toolbars.
Dimension 4			
Knowledge Examples	Skills Examples		
<p>Typically, individuals will display knowledge including:</p> <p>Web Navigation K1 Understand the concepts of a URL and a web link. K2 Understand that navigation is a flow of visited web pages which are linked together. K3 Describe common errors messages that occur while browsing: "not found", "forbidden", "unauthorised".</p> <p>Browser Settings and Preferences K1 Understand the purpose of browser settings. K2 Describe what pop-up windows and cookies are. K3 Understand that browsers can use third party software which may impact on performance.</p> <p>Browser User Interface and Common Tools K1 Recognise the main components of the graphical user interface (toolbars, menus, ribbons). K2 Understand that common tools are available in applications (help, zoom, find).</p>	<p>Typically, individuals will display skills including:</p> <p>Web Navigation S1 Activate a hyperlink. S2 Navigate backwards and forwards between visited web pages and refresh a web page. S3 Display previously visited URLs using the browser history.</p> <p>Browser Settings and Preferences S1 Set a default browser. S2 Configure web browser settings. S3 Manage browser history, plug-ins.</p> <p>Browser User Interface and Common Tools S1 Navigate around the graphical user interface and select options. S2 Use common tools (help, zoom, find). S3 Use common keyboard shortcuts and key combinations to carry out actions (print, copy, paste).</p>		

<p>Workspace</p> <p>K1 Understand how customisation can comply with your needs in browsing (shortcuts, bookmarks).</p> <p>K2 Understand the role and uses of toolbars.</p> <p>K3 Understand how some webpages allow customisation.</p>	<p>Workspace</p> <p>S1 Add, remove, create, delete a bookmark, bookmark folder.</p> <p>S2 Display, hide built-in toolbars.</p> <p>S3 Organise and configure webpages according to own preferences, if option is available.</p>
<p>Web Interaction and Outputs</p> <p>K1 Understand the main principles of downloading and saving a file.</p> <p>K2 Understand that information content can be accessed directly in browser or by a particular application.</p> <p>K3 Recognise opportunities to post or publish material to a web page.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	<p>Web Interaction and Outputs</p> <p>S1 Download, print files from a web page. Upload content to a remote location (cloud/offsite storage).</p> <p>S2 Open and edit content using a browser.</p> <p>S3 Complete and submit a web-based form (using text boxes, drop-down menus, radio buttons).</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>

Dimension 1 ICT User e-Competence Area	Web Browsing and Information Search Using the Internet for information sourcing, information sharing or using online services in the World Wide Web.		
Dimension 2 ICT User e-Competence	Online Search Understand and identify search concepts and be aware of online media available to search. Carry out searches using appropriate keywords. Identify logical relationships between keywords and refine searches when required. Understand the search options available and utilise an appropriate search engine taking into account search engine scope, efficiency and outputs.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Accurately understand the principle of an online search. Formulate and enter simple search queries to obtain a search result.	Pro-actively evaluate results and refine searches iteratively to obtain more precise information. Use a variety of search engines for a search task.	Confidently formulate and enter complex search queries to maximise search result quality. Identify logical relationships between keywords in the context of the search action. Select an appropriate search engine for a task to maximize search quality and assist others in applying appropriate search tools and techniques.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Search Technique K1 Understand what a search is and know search options (exact match, language, ranges). K2 Understand the importance of proper search concept identification (mapping of desired search to the keyword). K3 Understand what forms of media can be searched online (news, video, audio, publications). Search Engine K1 Describe what a search engine is. K2 Understand the characteristics and scope of different search engines. K3 Understand syntax and operators of the query language (phrase search, search within specific website, terms to be excluded). NOTE: <i>This is a non-exhaustive list of examples.</i>	Typically, individuals will display skills including: Search Technique S1 Formulate and enter a search query on a web page. S2 Use search features to refine a search (by exact phrase, by excluding words, by date, by file format). S3 Refine a search iteratively based on the output of previous search queries. Search Engine S1 Select a specific search tool (search engine, encyclopaedia, dictionary) and search. S2 Use file format/type to refine search results. S3 Use search engine syntax and operators to refine the search results. NOTE: <i>This is a non-exhaustive list of examples.</i>		

Dimension 1 ICT User e-Competence Area	Web Browsing and Information Search Using the Internet for information sourcing, information sharing or using online services in the World Wide Web.		
Dimension 2 ICT User e-Competence	Security Act pro-actively to ensure the security of personal data and devices. Take preventive actions to reduce security risks. Configure browser settings to achieve optimal security level.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Browse web content carefully, being aware of security risks to personal data and own device.	Accurately browse web content, setting appropriate filtering and application security settings to protect personal data and devices.	Act pro-actively to ensure the security of personal data and devices. Verify digital certificates of website when entering confidential data.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Security K1 Understand the risks of using personal and sensitive data. K2 Recognise web security threats (malware, viruses, worms, spyware). K3 Describe what a digital certificate and a secure website is. NOTE: <i>This is a non-exhaustive list of examples.</i>		Typically, individuals will display skills including: Security S1 Configure browser security and enable anti-virus programs when browsing websites. S2 Check digital certificates when entering confidential data. S3 Log out from online services when using a shared computer or device ensuring that previously stored personal information is deleted. NOTE: <i>This is a non-exhaustive list of examples.</i>	
See Also: Communications (Security)			

Dimension 1 ICT User e-Competence Area	Web Browsing and Information Search Using the Internet for information sourcing, information sharing or using online services in the World Wide Web.		
Dimension 2 ICT User e-Competence	Information Assessment Critically assess and appropriately use web-based resources. Perform resource evaluations based on identified criteria for sourcing valuable information. Evaluate content of web-based resource against other references, your own acquired knowledge and the views of others.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	N/A	Accurately assesses the content of web-based resources against other references.	Confidently identifies criteria for assessing web-based resources. Critically assess the content of web-based resources against multiple reference points and previous acquired knowledge.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Information Assessment K1 Recognise that the web consists of both reliable and unreliable information/sources. K2 Describe how web based resources can be created (audio, video, web editing applications). K3 Understand the consequences of using unreliable information/sources. NOTE: <i>This is a non-exhaustive list of examples.</i>		Typically, individuals will display skills including: Information Assessment S1 Assess web-based resources using identified criteria. S2 Assess the track of records of an information publisher and compare sourced information with other available sources. S3 Extract relevant information provided by information source. NOTE: <i>This is a non-exhaustive list of examples.</i>	

Dimension 1 ICT User e-Competence Area	Web Browsing and Information Search Using the Internet for information sourcing, information sharing or using online services in the World Wide Web.		
Dimension 2 ICT User e-Competence	Online Services Uses appropriate online services effectively in personal, social and work life to achieve a goal and reduce human effort.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Intuitively use online services occasionally to browse content.	Accurately register for and use online services frequently to browse content and interact for personal, social or work life.	Use online services confidently to browse content and interact with other to reduce effort in personal, social and work life.
Dimension 4			
Knowledge Examples	Skills Examples		
<p>Typically, individuals will display knowledge including:</p> <p>Online Services</p> <p>K1 Recognise service providers for various online services.</p> <p>K2 Understand the benefits and limitations of storing data remotely.</p> <p><i>NOTE: This is a non-exhaustive list of examples.</i></p>	<p>Typically, individuals will display skills including:</p> <p>Online Services</p> <p>S1 Choose, browse and register for suitable online services (news, government, consumer, travel, education/training, employment, health, business).</p> <p>S2 Request information from an online service (using query form, email, IM).</p> <p>S3 Use various devices to access application deployed remotely by thin clients (web browser, mobile application).</p> <p><i>NOTE: This is a non-exhaustive list of examples.</i></p>		

Dimension 1 ICT User e-Competence Area	Web Browsing and Information Search Using the Internet for information sourcing, information sharing or using online services in the World Wide Web.		
Dimension 2 ICT User e-Competence	Information Sharing Actively share information with others and engage others to contribute to these information sources.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Share information with others taking limited responsibility for consequences. Act lawfully browsing the web being aware of copyright and licences and behave according to the ethical standards.	Actively shares information with others taking full responsibility and consequences.	Pro-actively shares information with others and engage others to contribute to the sources. Utilise software and infrastructure to maximise accessibility regardless of location or device.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Information Sharing K1 Describe how to share/upload information sources with others. K2 Recognise common sharing tools (discussion forums, community groups, interest groups, wikis). K3 Understand the consequences of information sharing. NOTE: <i>This is a non-exhaustive list of examples.</i>	Typically, individuals will display skills including: Information Sharing S1 Use browser tools to share information sources. Organise workspace to make valuable content accessible easily for the user and for others. S2 Contribute to discussion forums, community groups, voluntary organisations, special interest groups, message boards. S3 Access shared content using different devices. NOTE: <i>This is a non-exhaustive list of examples.</i>		
See Also: Communications (Online Collaboration and Social Interaction)			

3.3 Communications

Dimension 1 ICT User e-Competence Area	Communications Use and management of e-mail/messaging, use of calendars, using social networks, blogs and instant messaging tools and devices.		
Dimension 2 ICT User e-Competence	User Configuration Be familiar with different communications options available on the Internet. Actively set up accounts to use suitable communication services, and customise the different tools effectively to meet user needs.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Understand the principles of web communication. Set up a standard account to access communication services. Find contacts to communicate with, and use default communications service skins and templates.	Accurately sets up accounts to access communication services and change settings to adapt them to own needs. Use existing skins and templates to customise communication services.	Confidently evaluate and choose suitable communication services for personal or company needs. Set up environments for the different services, by creating specific skins and templates. Set up specific tools for comment management in a communication service.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Account Setup K1 Understand that communication can be carried out towards single, specific targets (e-Mail, IM or chat, SMS, VoIP communications) and towards multiple targets (blog, microblogging, social networks, streaming). Understand that an account is necessary to access the different services. K2 Recognise that communication can be interactive (chat, e-mail, VoIP) or non-interactive (audio and video streaming). K3 Recognise that communication can occur in real-time or non-real-time depending on service type, network quality. NOTE: <i>This is a non-exhaustive list of examples.</i>	Typically, individuals will display skills including: Account Setup S1 Set up an account to access communication services (e-Mail, IM or chat, VoIP, microblogging, blogs, social networks...) using local applications or online services, checking and accepting relevant agreements/terms. S2 Set up a communication service: add contacts, linking accounts of different services. S3 Customise the communication service: define templates for blogs and social networks, set up comments, notifications mechanism. NOTE: <i>This is a non-exhaustive list of examples.</i>		

Dimension 1 ICT User e-Competence Area	Communications Use and management of e-mail/messaging, use of calendars, using social networks, blogs and instant messaging tools and devices.		
Dimension 2 ICT User e-Competence	Security Act pro-actively to ensure the security of personal data and devices. Take preventive actions to reduce security risks. Configure applications settings to achieve optimal security level.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Use communication services carefully, being aware of security risks to personal data and device.	Accurately use communication services, setting appropriate filtering and application security settings to protect personal data and devices.	Act pro-actively to ensure the security of personal data and devices. Verify digital signatures of e-mail messages and recognise security risks before carrying out any action on received messages.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Risks Using Communication Tools K1 Recognise the security risks associated to e-mails, instant messaging: viruses, phishing. K2 Describe how personal security and identification can be attained: encryption, digital signature. K3 Recognise possible risks associated with information posted to a blog, a social network: personal information disclosure, personal security issues, political ideas and faith disclosure. NOTE: <i>This is a non-exhaustive list of examples.</i>		Typically, individuals will display skills including: Risks Using Communication Tools S1 Set up a spam filter tool for e-mail. S2 Generate and use a digital signature to digitally sign an e-mail message. S3 Generate and use an encryption key to encrypt files, drives, secure connections. S4 Set up security and privacy settings for instant messenger, blog, social network environments. NOTE: <i>This is a non-exhaustive list of examples.</i>	
See Also: Web Browsing and Information Search (Security)			

Dimension 1 ICT User e-Competence Area	Communications Use and management of e-mail/messaging, use of calendars, using social networks, blogs and instant messaging tools and devices.		
Dimension 2 ICT User e-Competence	Information Exchange via e-Mail Be familiar with basic e-mail concepts and customisation of e-mail applications. Know how to use efficiently the user interface and common tools of an e-mail application. Create and send e-mail messages to different recipients, and manage sent and received messages in an efficient way.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively use e-mail applications to perform simple message creation and incoming messages management.	Use available e-mail application tools efficiently to compose messages, set up a signature, set up a spam filter for incoming messages, create a simple search on messages.	Confidently use specific tools available in e-mail applications to efficiently automate incoming messages filtering, set up automatic responses, perform complex search on archived messages.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: e-mail Settings and Preferences K1 Describe the benefits and risks of having an e-mail account. K2 Recognise the make-up and structure of an e-mail address. K3 Describe how the mechanism of mail delivery works. K4 Recognise different options available to access e-mail accounts. e-mail User Interface and Common Tools K1 Recognise the main components of the graphical user interface (toolbars, menus, ribbons). K2 Understand that common tools are available in applications (help, zoom, find). Message Creation and Delivery K1 Understand the concept of network etiquette applied to the preparation of an e-mail message. K2 Understand when to use the Cc and Bcc options. K3 Understand the need to use of spell checking tools before sending messages. Messages Management K1 Describe the benefits of using archive features for		Typically, individuals will display skills including: e-mail Settings and Preferences S1 Set up e-mail signatures, out of office features. S2 Customise e-mail application user interface to make it suitable to own needs. S3 Use webmail, mobile devices to access e-mails remotely. e-mail User Interface and Common Tools S1 Navigate around the graphical user interface and select options. S2 Use common tools (help, zoom, find). S3 Use common keyboard shortcuts and key combinations to carry out actions (print, copy, paste). Message Creation and Delivery S1 Compose a message and send it directly or using Cc, Bcc. S2 Reply to/forward a message. S3 Attach a file to an e-mail message. S4 Select recipients from contacts' address book. Messages Management S1 Read, manage, organise and store e-mail messages	

<p>messages, attachments.</p> <p>K2 Recognise the characteristics of a spam, phishing message.</p> <p>K3 Recognise that e-mail software has a spam filter that can be activated to automatically recognise spam messages.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	<p>effectively, in order to avoid losing information.</p> <p>S2 Use e-mail tools and techniques to automate responses.</p> <p>S3 Delete e-mail messages.</p> <p>S4 Set up a filter to automatically organise incoming messages in e-mail software.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>
--	---

Dimension 1 ICT User e-Competence Area	Communications Use and management of e-mail/messaging, use of calendars, using social networks, blogs and instant messaging tools and devices.		
Dimension 2 ICT User e-Competence	Contact Creation and Organisation Active understanding of how to manage the different contacts and their personal data. Organise and update contacts data on different devices.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively add new contacts, prepare simple lists and edit contacts' data. Understand that contacts data should be managed responsibly.	Organise contacts' lists accurately, synchronise contacts on different devices. Understand the responsibilities involved in sharing contacts with others.	Import/export contacts' lists confidently from/to other applications; understand that different applications may need contacts' lists in different formats.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Creation and Organisation K1 Understand that contacts personal data should be managed responsibly. K2 Recognise that contacts can be organised in different lists or groups by some common characteristics, and that some contacts can belong to more than one group. Update and Synchronise K1 Understand the importance of keeping contacts organised and up to date. K2 Understand that it is possible to keep contacts synchronised between different devices (computer, tablet, smartphone). NOTE: <i>This is a non-exhaustive list of examples.</i>	Typically, individuals will display skills including: Creation and Organisation S1 Create, update and delete contacts information. S2 Create and modify contacts groups, mailing lists. Update and Synchronise S1 Import and export contacts to be used in different applications (e-mail, phone, SMS...). S2 Synchronise contacts on different devices. S3 Share contacts with others. NOTE: <i>This is a non-exhaustive list of examples.</i>		
See Also: Word Processing (Content Organisation), Presentations (Content Organisation), Communications (Contact Creation and Organisation)			

Dimension 1 ICT User e-Competence Area	Communications Use and management of e-mail/messaging, use of calendars, using social networks, blogs and instant messaging tools and devices.		
Dimension 2 ICT User e-Competence	Scheduling Understand why using a calendar is both useful and convenient for managing personal time. Use a calendar confidently and keep it updated over different devices, or share it with other persons.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Manage simple calendar events. Be able to answer to an event invitation and add the event to own calendar.	Synchronise calendars accurately between different devices. Share calendars with other persons. Create tasks in a calendar.	Manage calendar tasks confidently. Import, export calendar events, tasks.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Using Calendars K1 Understand that a calendar can be local to the computer or available online. K2 Understand that calendars can be shared to facilitate collaboration, to enhance visibility. Calendar and Task Management K1 Understand how prioritising activities can help in setting targets for completion. NOTE: <i>This is a non-exhaustive list of examples.</i>		Typically, individuals will display skills including: Using Calendars S1 Create, edit, and delete calendar entries; arrange recurring appointments. S2 Answer an event invitation. S3 Synchronise a calendar between different devices (computer, tablet, smartphone). S4 Import, export calendar data. Calendar and Task Management S1 Create, edit, and delete tasks. S2 Organise tasks in task lists and set targets for completion. S3 Use websites services to add events and tasks to calendar. NOTE: <i>This is a non-exhaustive list of examples.</i>	

Dimension 1 ICT User e-Competence Area	Communications Use and management of e-mail/messaging, use of calendars, using social networks, blogs and instant messaging tools and devices.		
Dimension 2 ICT User e-Competence	Online Collaboration and Social Interaction Be familiar with the idea that it is possible to interact on the web with known and unknown persons. Be able to actively use social and collaborative tools and devices aimed at a better interaction with other people (IM, online meetings, blogs, social networks).		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Know different ways to communicate appropriately using internet services. Create and send simple messages via different services. Compose simple comments to answer posts on a blog, or messages on a social network.	Connect to an online meeting service positively. Compose messages for a social network or posts for a blog with complex content. Understand the copyright associated to multimedia material shared on the web.	Set up an online meeting confidently; share material and computer desktop with the other online meeting participants. Set up confidently preferences for managing comments received for a blog post.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Instant Message Services and Applications K1 Describe the characteristics of Instant Messaging, MMS, VoIP, and how they work. K2 Recognise that many services are available also via SMS (weather warnings, latest news). Online Meetings K1 Recognise when the use of an online meeting service is appropriate. K2 Understand how to choose suitable online meeting services to the participants needs (maximum number of concurrent participants, possibility to use the webcam). Blogging K1 Describe what a blog is, and the type of content it may present (personal online diary, corporate information, political commentaries, training material). K2 Recognise possible legal and social consequences associated to blogging. Social networking K1 Describe the etiquette required to correctly behave in a social network.	Typically, individuals will display skills including: Instant Message Services and Applications S1 Send and receive instant messages (IM, MMS, VoIP). S2 Compose SMS messages using available tools. S3 Send additional material (pictures, documents) as MMS or during instant messages exchange. Online Meetings S1 Setup and start an online meeting. S2 Activate the webcam during a conference. S3 Show the computer desktop during a conference. Blogging S1 Write and format a new blog post. S2 Add images and links to a post. S3 Comment on a post in a blog using different devices. S4 Accept, decline comments received to a blog post. Social networking S1 Prepare and post a message on a social network. S2 Manage own connections (friends, colleagues,		

CWA 16624-1:2013 (E)

<p>K2 Understand social network utility and rules. K3 Recognise when the use of geolocation tools to share own location on the social network is appropriate.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	<p>groups). S3 Share comments, pictures, files on a social network.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>
<p>See Also: Web Browsing and Information Search (Information Sharing)</p>	

3.4 Spreadsheets

Dimension 1 ICT User e-Competence Area	Spreadsheets Creating and modifying workbooks, setting up and making use of formulas/macros, presenting data visually, organising and analysing data.		
Dimension 2 ICT User e-Competence	Workbooks and Worksheets Creation Interact with the spreadsheet interface by selecting and using appropriately common tools or setting up personal preferences. Create a workbook including a number of worksheets and entering different types of data in cells. Use different tools to format contents for a specific purpose. Link confidently contents from different cells and worksheets.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Interact actively with the spreadsheet interface and use simple tools to create and format simple workbooks.	Plan the content of a spreadsheet accurately and use different formats of data in a worksheet to create a cohesive workbook.	Create and manage complex workbooks confidently, including several worksheets, by linking their different data and making use of complex formatting tools to deliver a high quality document.
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Spreadsheet interface and users preferences K1 Understand the elements of the spreadsheet interface (workbook, worksheet, cell, row, columns...) and be aware of the possibility to set up preferences. K2 Recognise that there are differences in the way the user interacts with a spreadsheet and another interface (copy/paste, delete..., may work in a different way than they do in a word processing). K3 Understand that the user can decide to modify the default setting to create the preferred number of spreadsheets within a workbook. Create a workbook / worksheet K1 Understand that a workbook can include one or more worksheets. K2 Understand good practice using cells (enter one only sort of date per cell, avoid blank rows/columns...) Format content K1 Understand the importance of planning content structure. K2 Understand the possible formats that a cell could have (numbers, texts, dates, currencies...). K3 Understand the importance of attractive presentation to enhance the content.		Typically, individuals will display skills including: Spreadsheet interface and users preferences S1 Navigate through the user's interface and use the different available tools. S2 Freeze/unfreeze and hide/unhide a row or a column within a worksheet (to use as reference all the time). S3 Create a workbook making use of the existing templates if they suite user's needs. Create a workbook / worksheet S1 Apply the appropriate commands to create a new workbook or an open an existing workbook. S2 Insert a new worksheet within a workbook. S3 Define and Set up the data type in a cell. Format content S1 Enter the type of data selected in a cell. S2 Apply the required format to a cell by using the suitable command in the menu. S3 Format data using bold, italic, underline, colours, highlighting and styles.	

Link and embed content

- K1 Understand the benefits of linking different worksheets.
- K2 Know the rules and the tools to link different worksheets.
- K3 Understand that linking can be performed for worksheets within one workbook or between different ones.

NOTE: *This is a non-exhaustive list of examples.*

Link and embed content

- S1 Identify and select the source and the destination worksheets before performing link.
- S2 Pre-format accordingly the destination cell in the destination worksheet (currency data, set the decimal places...).

NOTE: *This is a non-exhaustive list of examples.*

Dimension 1 ICT User e-Competence Area	Spreadsheets Creating and modifying workbooks, setting up and making use of formulas/macros, presenting data visually, organising and analysing data.		
Dimension 2 ICT User e-Competence	Formulas and Functions Use the appropriate syntax to create and easily use formulas that a specific task or project requires. Access those functions that are already set by default and use them confidently.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Use simple syntax actively to create a simple workbook including simple arithmetic formulas.	Plan the content of a workbook pro-actively using a range of formulas and some functions, where suitable.	Plan and create complex workbooks confidently by using and creating complex formulas and taking advantage of complex functions to enhance productivity.
Dimension 4			
Knowledge Examples		Skills Examples	
<p>Typically, individuals will display knowledge including:</p> <p>Formulas</p> <p>K1 Understand the importance of the concept of "cell reference" (cell address) for the formulas set up.</p> <p>K2 Understand the syntax of creating different kind of formulas (use of the specific discriminator allowed by each spreadsheet).</p> <p>K3 Understand the common error messages produced by the spreadsheet in order to sort them out.</p> <p>Functions</p> <p>K1 Understand the different kind of functions already set by default by the spreadsheet and the ones that can be created.</p> <p>K2 Understand the specific importance of using the conditional function in some cases (using spreadsheets as a data base).</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>		<p>Typically, individuals will display skills including:</p> <p>Formulas</p> <p>S1 Create formulas using cell references and other available operators (Addition, subtraction, multiplication and division...).</p> <p>S2 Use mixed references to create specifically needed formulas.</p> <p>S3 Copy and paste formulas from a cell to another and from a worksheet to another.</p> <p>Functions</p> <p>S1 Use arithmetic functions.</p> <p>S2 Use statistical functions (countif, countblank, rank).</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	

Dimension 1 ICT User e-Competence Area	Spreadsheets Creating and modifying workbooks, setting up and making use of formulas/macros, presenting data visually, organising and analysing data.		
Dimension 2 ICT User e-Competence	Use and Apply Charts and Graphs Generate the appropriate charts/graphs related to an existing data series. Apply a new charts/graphs to the same data series. Manage and modify specific charts/graphs. Confidently create and store "Built-In-Custom" charts for future use. Export charts/graphs to different locations and in different forms (image file). Format charts/graphs for specific purpose (presentations, working document...).		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively generate some types of charts/graphs from a simple data series and store them.	Create several types of charts/graphs accurately, from elaborated data and modify/format them.	For complex data series, confidently evaluate all charts/graphs types available and generate the most adequate ones. If not available, generate "Built-In-Custom" ones. Confidently interpret and export charts/graphs to different locations.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Use Charts and graphs K1 Describe the different "Built-In Custom" types of charts already available in a spreadsheet and their benefits. K2 Understand how to interpret the produced chart. K3 Understand the different types of sparklines that can be created. Format charts and graphs K1 Recognise the different tools and methods available to format a chart. K2 Understand that hyperlinks embedded to a chart can be useful and add value. K3 Understand that an embedded chart can be copied from a position to another within the same worksheet or to a different one. Export charts and graphs K1 Understand that a chart can be exported to another workbook/worksheet and to another file (image file, presentation file...). K2 Recognise that, in some spreadsheets, a chart	Typically, individuals will display skills including: Use Charts and graphs S1 Select the data series to which the chart or graph have to be applied and create a personalised chart by combining the "Built-In Custom" chart Types. S2 Apply the type of chart that responds to a specific need and audience. S3 Create a sparkline in single cell, to show a trend for a specific data. Format charts and graphs S1 Position, size and align embedded charts. S2 Chose and apply a style for the chart or graph. S3 Apply data labels to each wedge in a specific chart or graph and add/remove legends. Export charts and graphs S1 Use tools and macros, when necessary, to export an embedded chart to another file (image file, presentation file...). S2 Produce a chart using data exported from a text document.		

can be exported to another kind of files.

NOTE: *This is a non-exhaustive list of examples.*

NOTE: *This is a non-exhaustive list of examples.*

Dimension 1 ICT User e-Competence Area	Spreadsheets Creating and modifying workbooks, setting up and making use of formulas/macros, presenting data visually, organising and analysing data.		
Dimension 2 ICT User e-Competence	Data Analysis and Organisation Create and use pivot tables and charts in order to address specific data analysis needs. Modify pivot tables and charts views depending on needs. Filter and sort data.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	N/A	Generate simple pivot tables/charts accurately and sort out errors that may occur during the process.	Plan and generate complex pivot tables/charts confidently and modify them to change views with ease, to obtain high quality analysis of data.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Using pivot tables and pivot charts K1 Understand that information can be extracted from a large table of data without the use of formulas. K2 Understand that it is possible to view the same data in a table or a chart, under different ways and depending on needs. Filtering and sorting data K1 Understand that once pivot tables have been produced, filtering tools can only be used. K2 Recognise the tools used to filter and sort data. K3 Understand that in a pivot table, filtering data requires the use of specific criteria to limit the data to be displayed. NOTE: <i>This is a non-exhaustive list of examples.</i>	Typically, individuals will display skills including: Using pivot tables and pivot charts S1 Create pivot tables and enter pivot table data. S2 Add and modify data in pivot table. S3 Use "drag and drop" to look at the same data in a number of different ways. Filtering and sorting data S1 Filter and sort data by columns. S2 Create a list and perform either a manual or an automatic filter. S3 Apply advanced filter options to a list. NOTE: <i>This is a non-exhaustive list of examples.</i>		
See Also: Word Processing (Content Organisation), Presentations (Content Organisation), Communications (Contact Creation and Organisation)			

Dimension 1 ICT User e-Competence Area	Spreadsheets Creating and modifying workbooks, setting up and making use of formulas/macros, presenting data visually, organising and analysing data.		
Dimension 2 ICT User e-Competence	Spreadsheet Output and Storage Use appropriate ways (passwords, digital signature) to save and store spreadsheets content. Store spreadsheet files in different formats, as needed. Select the appropriate storage location (backup, external, internal). Set printing preferences and print spreadsheet contents.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively save and/or print a simple worksheet or a full workbook.	Appreciate security risks associated with documents. Save and store documents accurately, in a variety of locations and in different file types. Print detailed documents.	Use security features confidently to protect and secure documents. Print complex documents to create appropriate outputs for a target audience and support less experienced users with simple print queries.
Dimension 4			
Knowledge Examples		Skills Examples	
<p>Typically, individuals will display knowledge including:</p> <p>Use Spreadsheet and Content Security K1 Understand the importance of protecting and securing spreadsheets. K2 Understand the benefits of digitally signing a spreadsheet.</p> <p>Generate Outputs and Store Content K1 Understand the importance of having an organised approach to saving files. K2 Understand the advantages and disadvantages of storing files locally and/or remotely. K3 Understand the importance of checking a print preview before printing.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>		<p>Typically, individuals will display skills including:</p> <p>Use Spreadsheet and Content Security S1 Use available password protection, encryption features for spreadsheets. S2 Use available digital signature features for spreadsheets.</p> <p>Generate Outputs and Store Content S1 Save a spreadsheet in various formats using an appropriate filename. S2 Print preview a spreadsheet, adjust print settings and print. S3 Use an online storage location to save and/or backup spreadsheets.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	
See Also: Word Processing (Document Output and Storage), Presentation (Presentation Delivery and Storage)			

3.5 Presentations

Dimension 1 ICT User e-Competence Area	Presentations Planning presentation information, adapting to the audience needs, structuring information, inclusion of content and interaction for engagement.		
Dimension 2 ICT User e-Competence	Presentation Creation Create a presentation for professional or social use. Identify and confidently manage all the main features and functionalities of the user interface. Evaluate the audience expectation from a presentation and understand how to aggregate suitable content to be used to communicate correctly.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively use the interface and tools to create simple presentation slides, with simple formatting.	Evaluate how presentations impact to the audience. Effectively plan presentation format, duration, content and use text editing in the presentation. Ensure quality of the output is aligned with professional presentations.	Confidently manage a complex presentation with timing and appropriate content. Use sources and advanced editing features appropriately to communicate to the audience.
Dimension 4			
Knowledge Examples	Skills Examples		
Typically, individuals will display knowledge including: Presentation planning K1 Understand that different audience groups need different messages. K2 Understand that information can have different degrees of complexity. K3 Understand that venues (layout, light, available equipment) can have an impact on the presentation. Manage presentation K1 Understand that a presentation can be retrieved from a local and/or remote storage location. K2 Understand that an existing presentation can be re-used and modified accordingly to the target group. K3 Understand that multiple presentations can be opened and used at the same time and their content mutually exchanged for drafting a new presentation. Use of interface and common tools K1 Understand the main components of the graphical user interface (toolbars, menus, ribbons) and available common application tools (help, zoom, find). K2 Understand that a customised toolbar can really help presentation creation activities.	Typically, individuals will display skills including: Presentation planning S1 Define the target audience (age, education, occupation, cultural background). S2 Select an appropriate and reliable set of information sources for each target group. S3 Quantify the use of resources and the number of slides / length of the presentation. Manage presentation S1 Open presentation files locally and/or remotely from an online storage location. S2 add and remove slides and content from existing presentations, modify the order of slides in existing presentations. S3 work on different open presentation files, and switch among them, copy and move content from one slide of a file to another slide of the same presentation or of another presentation. Use of interface and common tools S1 Navigate around the graphical user interface and use common tools (help, zoom, find). S2 configure the toolbar to improve efficiency of completing typical procedures in users' own work. S3 Use of complex/combined commands and settings,		

<p>K3 Understand menu levels for settings in a presentation programme, evaluate the possibility to optimise the work by sharing settings among presentations.</p> <p>Create and format content</p> <p>K1 Understand that text is often the basic means of communication in a slide.</p> <p>K2 Understand that text can be modified and differentiated to highlight words and concepts.</p> <p>K3 Understand that contents can be organised into list and sub-lists in a slide according to the relevance and pertinence of each concept.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	<p>use of commands not present in the default ribbon, confidently assign settings to opened presentations.</p> <p>Create and format content</p> <p>S1 Insert plain text in text-box captions. Enter text in a slide.</p> <p>S2 Format text using bold, italic, underline, colours, highlighting and styles to highlight a message.</p> <p>S3 Use numbered, bulleted lists, use different colours to communicate different degrees of importance of the messages.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>
--	--

Dimension 1 ICT User e-Competence Area	Presentations Planning presentation information, adapting to the audience needs, structuring information, inclusion of content and interaction for engagement.		
Dimension 2 ICT User e-Competence	Content Organisation Organise the structure of a presentation. Ensure the message is correctly structured to be communicated effectively to the target audience. Adapt other sources' information and documents for screen and display presentation.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively create and draft a simple presentation, with existing templates.	Accurately create a presentation, using customisation of existing templates, differentiate slides accordingly to the message.	Confidently organise a complex presentation cross-referencing different sources and differentiating the message through advanced editing. Create customised templates for presentations
Dimension 4			
Knowledge Examples		Skills Examples	
Typically, individuals will display knowledge including: Presentation Templates K1 Recognise that built-in, ad-hoc templates can help and support presentation creation. K2 Understand that templates can be modified accordingly to suit the target audience. K3 Understand that external content can be automatically included into a template. Structure content K1 Recognise that tables and charts help to simply convey complex concepts in a slide. K2 Understand that content structure can be modified according to content type, quality. K3 Understand that automatic update can be used to create dynamic structured content. Slide layout K1 Recognise that a slide/page dimension can be adjusted to suit presentation, display requirements. K2 Understand that a presentation can include different layouts for different groups of slides, or a specific layout identifying an organisation. K3 Understand that design scheme and colour contrast are fundamental for visualisation in the room. Arrange content K1 Understand that objects in a slide can be grouped and merged to create complex objects. K2 Understand that objects can be aligned in a slide,		Typically, individuals will display skills including: Presentation Templates S1 Select and use different slide templates, create a presentation based on a built-in or ad-hoc template. S2 Modify and customise an existing template, build an ad-hoc template for slides. S3 Embed text, images and data from external files into a template. Structure content S1 Create charts and tables, create and use headers, footers and tables to structure content. S2 Use charts to represent data visually. S3 Use of embed data to create and automatically modify charts in the presentation. Slide layout S1 Modify slide size and orientation settings S2 Use of slide master for groups of selected slides. S3 Use layout and background personalisation to comply with presentation constraints and guidelines. Customise a slide master with text, multimedia and graphics. Arrange content S1 Group, ungroup text cells and objects. S2 Use available grid and arrangement features to align text and objects horizontally, vertically.	

ensuring a smooth readability among slides.

K3 Understand that different objects can be displaced in different layers according to their importance in the message, or to create a specific visual effect.

Link and embed content

K1 Understand that the repetition of concepts in different slides can be useful to smooth the complexity of messages and help the audience to better understand the overall presentation.

K2 Understand that external sources (spreadsheets, videos, images) can be added to a presentation even if stored in different location.

K3 Understand that external source content can be automatically updated as the main source changes.

NOTE: This is a non-exhaustive list of examples.

S3 Position content (foreground, background) within layers.

Link and embed content

S1 Create and use hyperlinks in a presentation to link to objects in different slides of the same presentation.

S2 Use hyperlinks to connect to other sources. Edit embedded data and update linked data.

S3 Embed content to integrate data from other sources in a presentation (spreadsheet, video, image).

NOTE: This is a non-exhaustive list of examples.

See Also: Word Processing (Content Organisation), Spreadsheets (Data Analysis and Organisation), Communications (Contact Creation and Organisation)

Dimension 1 ICT User e-Competence Area	Presentations Planning presentation information, adapting to the audience needs, structuring information, inclusion of content and interaction for engagement.		
Dimension 2 ICT User e-Competence	Use of Graphic and Multimedia Effects Enrich the presentation with non-text format messages, expressing concepts through illustrations and multimedia, use of conceptual drawing schemes, inclusion of images and audio-video files, animate the content in a single slide.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively use predefined art formats for text, inclusion of images, connect a multimedia file through hyperlinks.	Add suitable multimedia to a presentation, embed basic animation effects in slide and use built-in creative features accurately.	Modify built-in creative features and images confidently, use interaction among multimedia objects in a slide and among different slides.
Dimension 4			
Knowledge Examples	Skills Examples		
<p>Typically, individuals will display knowledge including:</p> <p>Draw special text and concept, objects K1 Understand that a concept can be expressed through a schematic visualisation. K2 Understand that a drawn object can be saved to reuse for future and different purposes. K3 Recognise the impact of a drawn object in the presentation message and modify it according to the scope.</p> <p>Embed and modify multimedia content K1 Understand that a multimedia content can engage the audience who follow the presentation. K2 Understand there is a limit in the multimedia that balances the need of a message and the actual level of audience understanding.</p> <p>Use of animation K1 Understand that the different elements in a slide can be shown to the audience at different times. K2 Recognise that multimedia and complex drawn objects can be animated and presented to the audience to improve the message of the presentation. K3 Understand that animation can be automated with simple commands for different purposes and to create different presentation paths.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	<p>Typically, individuals will display skills including:</p> <p>Draw special text and concept, objects S1 Enrich text with built-in drawings and diagrams S2 Save a drawn object as a graphic file (jpeg, bmp, png, tiff, etc.). S3 Modify shapes, rescale, apply effects (background, transparency, 3D, etc.) to a drawn object. Use of connectors and links in diagrams and drawn objects.</p> <p>Embed and modify multimedia content S1 Insert multimedia to enhance the presentation, to play automatically or based on a command. S2 Use and modify images, multimedia elements, edit multimedia (audio and video), display in b/w, grey scale or colour as required.</p> <p>Use of animation S1 Assign a time-order to each element in a slide. S2 Animate elements of graphic / multimedia objects. S3 Use action buttons to create complex animations.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>		

Dimension 1 ICT User e-Competence Area	Presentations Planning presentation information, adapting to the audience needs, structuring information, inclusion of content and interaction for engagement.		
Dimension 2 ICT User e-Competence	Presentation Delivery and Storage Finalise and save presentation for future use. Share a presentation with an audience, evaluate timings for a presentation, ensure suitable protection of the presentation.		
Dimension 3 ICT User e-Competence Proficiency Levels	Foundation	Intermediate	Advanced
	Actively use basic save options and automatic transition among slides.	Use interaction tools accurately, save in different formats for other uses, and use online storage for public presentation delivery.	Share and deliver a presentation confidently for public and professional events, evaluate the ethics within the message, use quality checks to ensure the presentation works as planned. Apply protection, copyright and creative commons to the presentation.
Dimension 4			
Knowledge Examples	Skills Examples		
<p>Typically, individuals will display knowledge including:</p> <p>Use of presentation view tools K1 Understand the use of different presentation view options (i.e. full screen, slide show). K2 Understand that using effects can increase the audience understanding of the presentation. K3 Understand that an ad-hoc presentation path can be built to optimise the output.</p> <p>Share a presentation K1 Recognise the various print options available and their uses. K2 Understand that other readers and users can be helped by note, comments. K3 Understand the importance of copyright on own work.</p> <p>Presentation interactivity K1 Recognise that a presentation can have a number of slide and content paths. K2 Recognise that the presentation can also involve audience feedback. K3 Understand that multiple sources and presentations can be used to create a more compelling bilateral discussion with the audience.</p>	<p>Typically, individuals will display skills including:</p> <p>Use of presentation view tools S1 Use tools to structure slide sequences, hide, show slides. S2 Use transition effects to enhance slide sequence, set presentation timing. S3 Customise a slide show for a presentation.</p> <p>Share a presentation S1 Share and print a presentation for use and commenting by colleagues and third parties. S2 Share a presentation with notes and comments for presenters. S3 Deliver and apply copyrights or creative commons to set rules of use of the presentation by third party.</p> <p>Presentation interactivity S1 Use custom buttons and switch among slides to give strength to the presentation. S2 Use of interaction effects to optimise the presentation and audience engagement. S3 Use of tools to cross-reference multiple files and multiple opened presentations.</p>		

<p>Generate outputs and store content</p> <p>K1 Understand that the content can be stored in presentation files in local or online storage locations.</p> <p>K2 Understand that a presentation can be used by different people, through different output devices and for different purposes.</p> <p>K3 Understand that different storage locations may have different file storage policies.</p> <p>Perform a quality check</p> <p>K1 Understand that the presentation should be evaluated against what has been planned for the target audience.</p> <p>K2 Understand that the presentation should be smooth and without technical interruption during the speech.</p> <p>K3 Understand that a released presentation could be viewed by multiple audiences.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>	<p>Generate outputs and store content</p> <p>S1 Save a presentation file in various formats using an appropriate filename.</p> <p>S2 Save a presentation in different formats for different uses (document PDF, series of images, video).</p> <p>S3 Use an online storage location to save and/or backup documents.</p> <p>Perform a quality check</p> <p>S1 Use tools to proof the presentation and ensure that the presentation meets needs as planned.</p> <p>S2 Check that all embedded links, multimedia and animations work correctly.</p> <p>S3 Review the presentation for any ethical considerations.</p> <p>NOTE: <i>This is a non-exhaustive list of examples.</i></p>
<p>See Also: Word Processing (Document Output and Storage), Spreadsheets (Spreadsheet Output and Storage)</p>	