European Framework for Digital Competence (DigComp): Updates, Resources and Implementation Examples

Presentation to Expert Group on Public Administration and Governance

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Overview

- Key components and evolution of the DigComp framework
- Recent updates
- DigComp resources
- DigComp implementation examples and related work
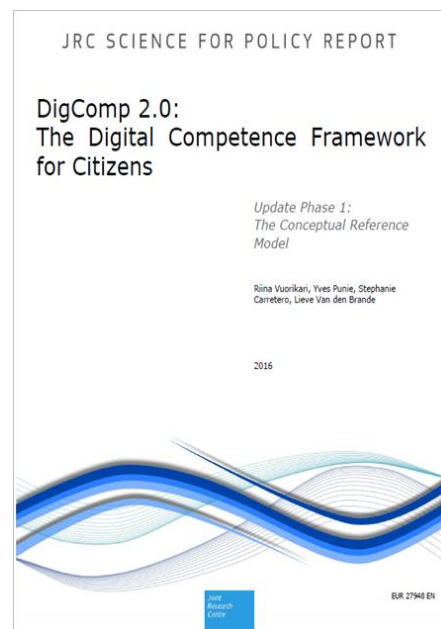- Questions, discussion

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Key Competences for Lifelong Learning

- Council Recommendations (2006, 2018) promoting **competence-oriented education**, training and learning.

- **Reference frameworks** developed through consultative, participatory and consensus-based processes.
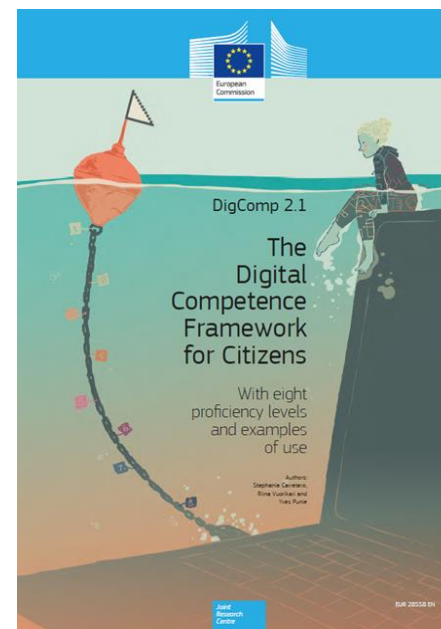
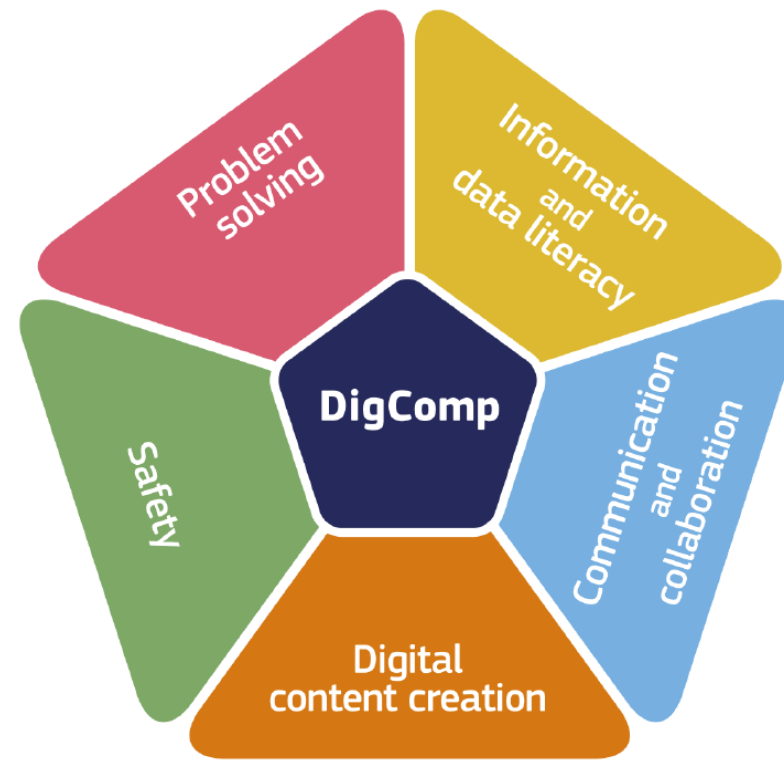# The evolution of the DigComp framework

2013

2016

2018

2022

Also **EntreComp** (2016), **LifeComp** (2020) and **GreenComp** (2021)
Informed by stakeholder consultation and the input of many experts across Member States

DigComp:
the European framework for digital competences for citizens

Digital competence involves the **confident, critical and responsible use** of, and engagement with, digital technologies for **learning**, at **work**, and for **participation in society**.

It is defined as a combination of **knowledge, skills and attitudes**.

(Council Recommendation on Key Competences for Life-long Learning, 22 May 2018).

Applications of the DigComp framework

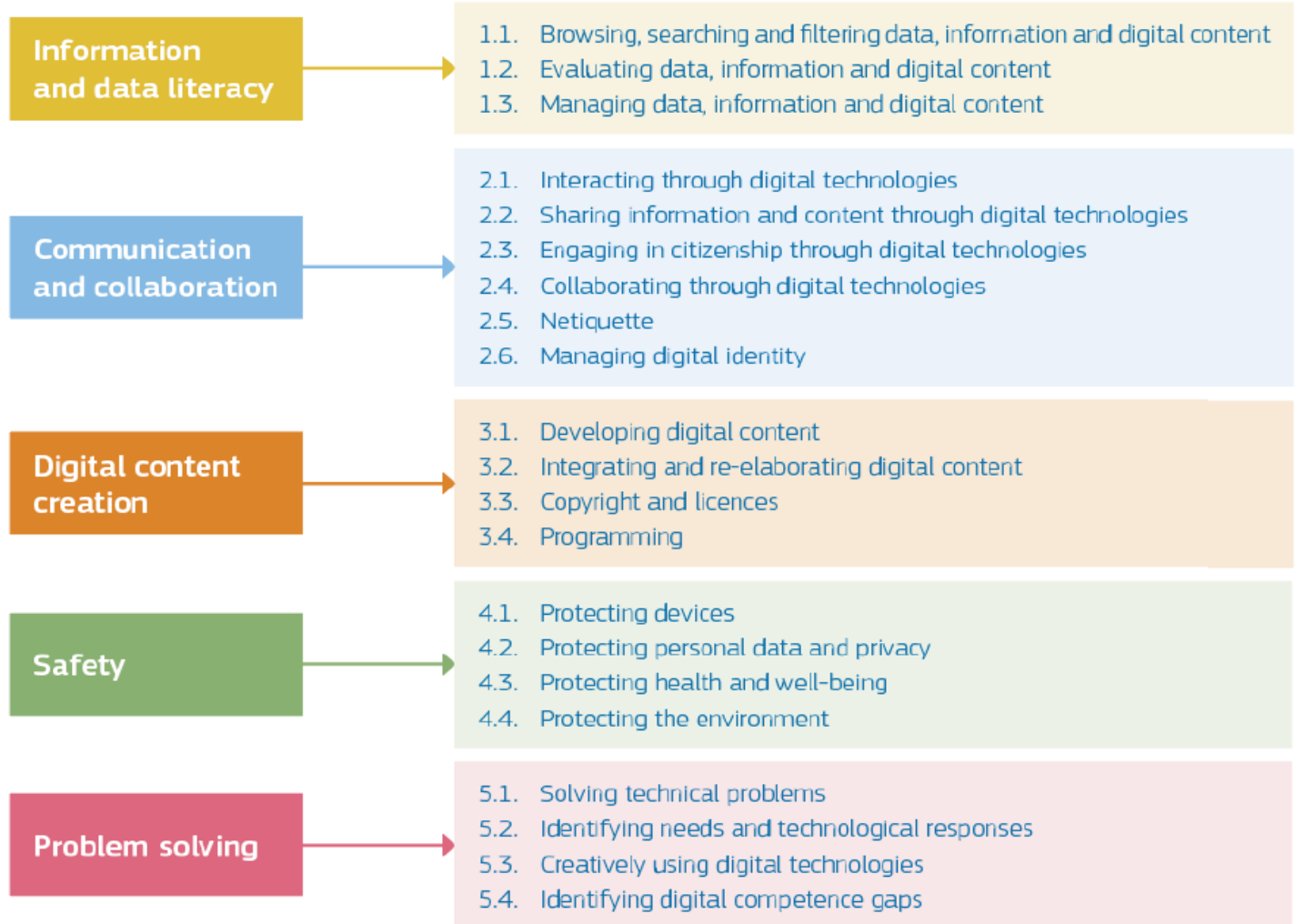The **philosophy** of DigComp: A broad framework to describe the digital competence of citizens

The **design** of DigComp: Not rigid or prescriptive, designed to be flexible with respect to purpose, implementation and future developments

- Promotes common language, terminology and understanding
- Guides policy and strategy development, implementation and monitoring
- Guides curriculum development and related professional development of teachers and educators
- Aids with the development of digital competence (self-) assessment and certification tools
- Supports alignment in competence measurement (Eurostat, ITU)

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Dimensions of DigComp

- Dimension 1: **Competence Areas (5)**

- Dimension 2: **Competences (21)**

- Dimension 3: **Proficiency Levels (8)**

- Dimension 4: **Knowledge, Skills and attitudes** relative to each competence (new to DigComp 2.2)

- Dimension 5: Examples of use, in **contexts of education and employment**
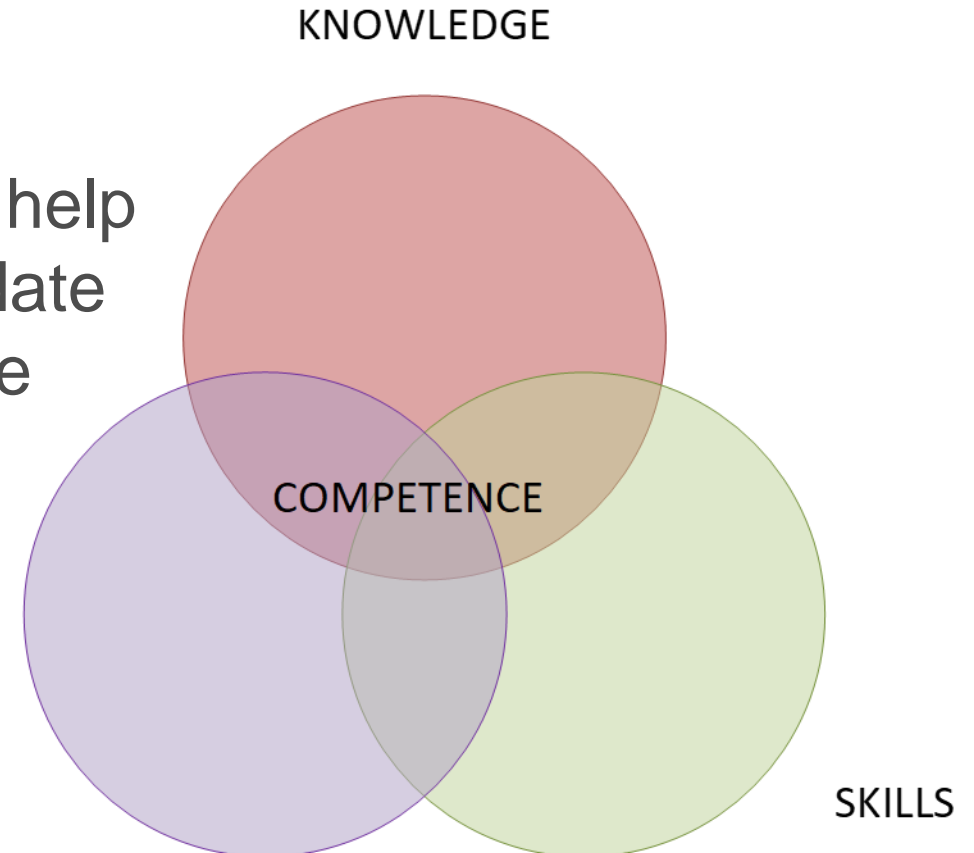
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DigComp:
Dimensions 1 and 2

Information and data literacy
- 1.1. Browsing, searching and filtering data, information and digital content
- 1.2. Evaluating data, information and digital content
- 1.3. Managing data, information and digital content

Communication and collaboration
- 2.1. Interacting through digital technologies
- 2.2. Sharing information and content through digital technologies
- 2.3. Engaging in citizenship through digital technologies
- 2.4. Collaborating through digital technologies
- 2.5. Netiquette
- 2.6. Managing digital identity

Digital content creation
- 3.1. Developing digital content
- 3.2. Integrating and re-elaborating digital content
- 3.3. Copyright and licences
- 3.4. Programming

Safety
- 4.1. Protecting devices
- 4.2. Protecting personal data and privacy
- 4.3. Protecting health and well-being
- 4.4. Protecting the environment

Problem solving
- 5.1. Solving technical problems
- 5.2. Identifying needs and technological responses
- 5.3. Creatively using digital technologies
- 5.4. Identifying digital competence gaps

DigComp: Dimension 3

4 OVERALL LEVELS	Foundation		Intermediate		Advanced		Highly specialised	
8 GRANULAR LEVELS	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
COMPLEXITY OF TASKS	Simple task	Simple task	Well-defined and routine tasks, and straightforward problems	Tasks, and well-defined and non-routine problems	Different tasks and problems	Most appropriate tasks	Resolve complex problems with limited solutions	Resolve complex problems with many interacting factors
AUTONOMY	With guidance	Autonomy and with guidance when needed	On my own	Independent and according to my needs	Guiding others	Able to adapt to others in a complex context	Integrate to contribute to the professional practice and to guide others	Propose new ideas and processes to the field
COGNITIVE DOMAIN	Remembering	Remembering	Understanding	Understanding	Applying	Evaluating	Creating	Creating

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DigComp 2.2 update in a nutshell

- More than 250 new examples of **knowledge, skills and attitudes** to help education and training providers update their DigComp curriculum and course material to face today's challenges (Dimension 4)

- **DigComp areas and competences remain the same**

KNOWLEDGE

COMPETENCE

ATTITUDES

SKILLS

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Key elements of DigComp 2.2 update

- Fact-checking online content and its sources

- Remote or hybrid work context

- Digital accessibility

- Green and sustainability aspects of interacting with digital technologies

- Well-being and safety

- Citizens interacting with AI systems and data literacy

  - Note IT Professionalism Europe's **e-Competence Framework (e-CF) for ICT specialists**: https://itprofessionalism.org/about-it-professionalism/competences/the-e-competence-framework/

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Implementation examples

- **DigComp into action** (2018) describes 38 inspiring practices of DigComp implementation. These are illustrated by 50 content items consisting of Case studies and Tools

- **DigComp at work** (2020) describes contexts of employability and employment through the analysis and sharing of 9 inspiring practices and related resources of DigComp implementations

- **DigComp at work implementation guide** (2020) describes specific guidelines, examples, tips and useful resources for the use of DigComp in employment contexts (accompanies the above report)

  - Case study of civil servants' digital skills initiative is included in the first two publications

EDSC Feasibility Study

- In support of the implementation of Action 9 of the Digital Education Action Plan, the JRC is carrying out a **Feasibility Analysis** of a **European Digital Skills Certificate** (EDSC) to help people have their digital skills quickly and easily recognised by employers, training providers and more.

- The EDSC will be based on the European Digital Competence Framework (DigComp).

- The EDSC feasibility study will explore scenarios for the European Digital Skills Certificate. It will map existing digital skills certification schemes in Europe and carry out a gap analysis to understand the role and value of an EDSC and how it could support recognition of digital skills in Europe.

- **Stakeholders' contribution** to the study is critically important and members of this Expert Group are invited to consider registering: https://edsc-consultation.eu/
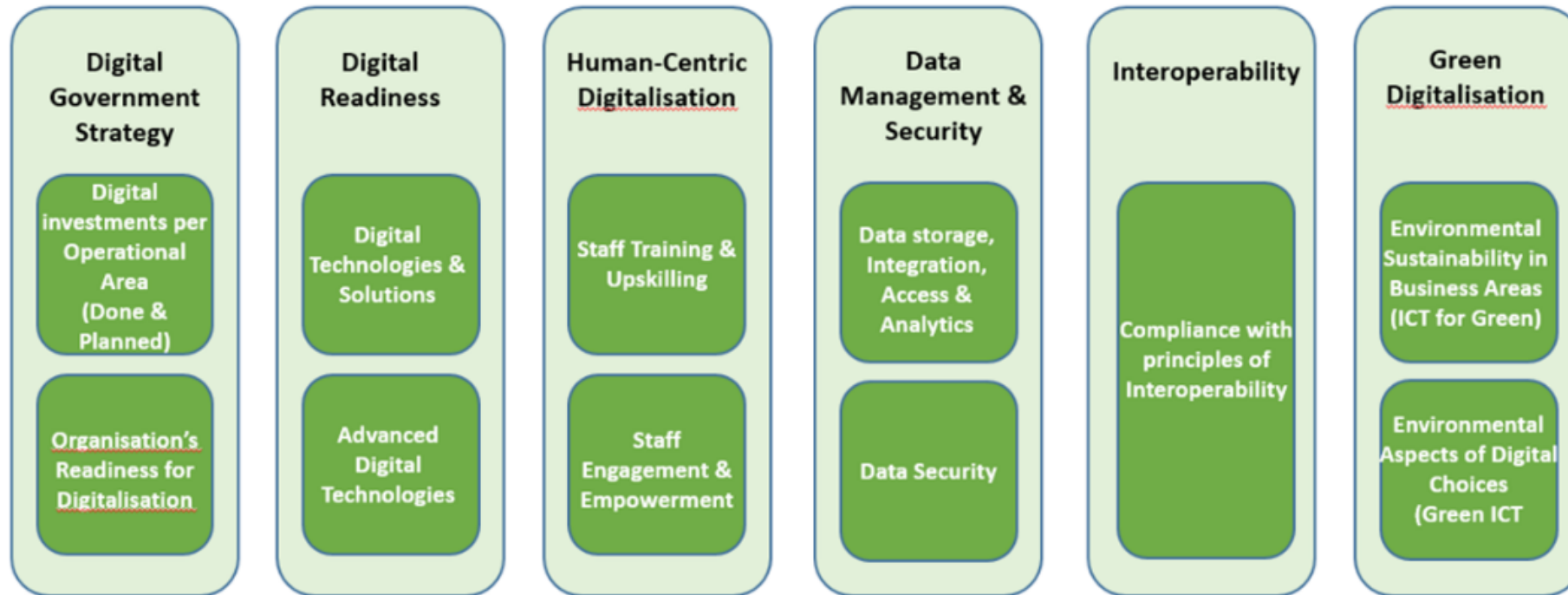
Digital Maturity Assessment (DMA)

- An initiative within the **Digital Innovation Hubs (DIH) Network**

- To support the uptake of advanced digital technologies by businesses and the public sector

- **JRC T1** has developed a **Digital Maturity Assessment (DMA) framework and assessment tool** for both public service organisations (PSOs) and SMEs

- It assesses overall digital maturity level of an organisation along six dimensions

- More information at https://digital-strategy.ec.europa.eu/en/events/webinar-digital-maturity-assessment-tool

- Tool prototype at https://www.edihnetwork.eu/dma-tool/dma-prototype

Digital Maturity Assessment (DMA)

Digital Maturity Assessment Framework for Public Sector Organisations (PSOs)

DigComp resources

- JRC's dedicated webspace for DigComp: https://joint-research-centre.ec.europa.eu/digcomp_en

  - Framework overview and all framework publications: https://joint-research-centre.ec.europa.eu/digcomp/digcomp-framework_en

  - Implementation guides and examples: https://joint-research-centre.ec.europa.eu/digcomp/digcomp-implementation-guides_en

  - Self-assessment and monitoring tools: https://joint-research-centre.ec.europa.eu/digcomp/digcomp-self-reflection-self-assessment-and-measurement-tools_en

- DigComp Community of Practice hosted by ALL DIGITAL at https://all-digital.org/invitation-to-digcomp-cop/

Questions, discussion
Thank you

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