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Horizon 2020 & Opportunities in ICT

ICT in the 3 Pillars





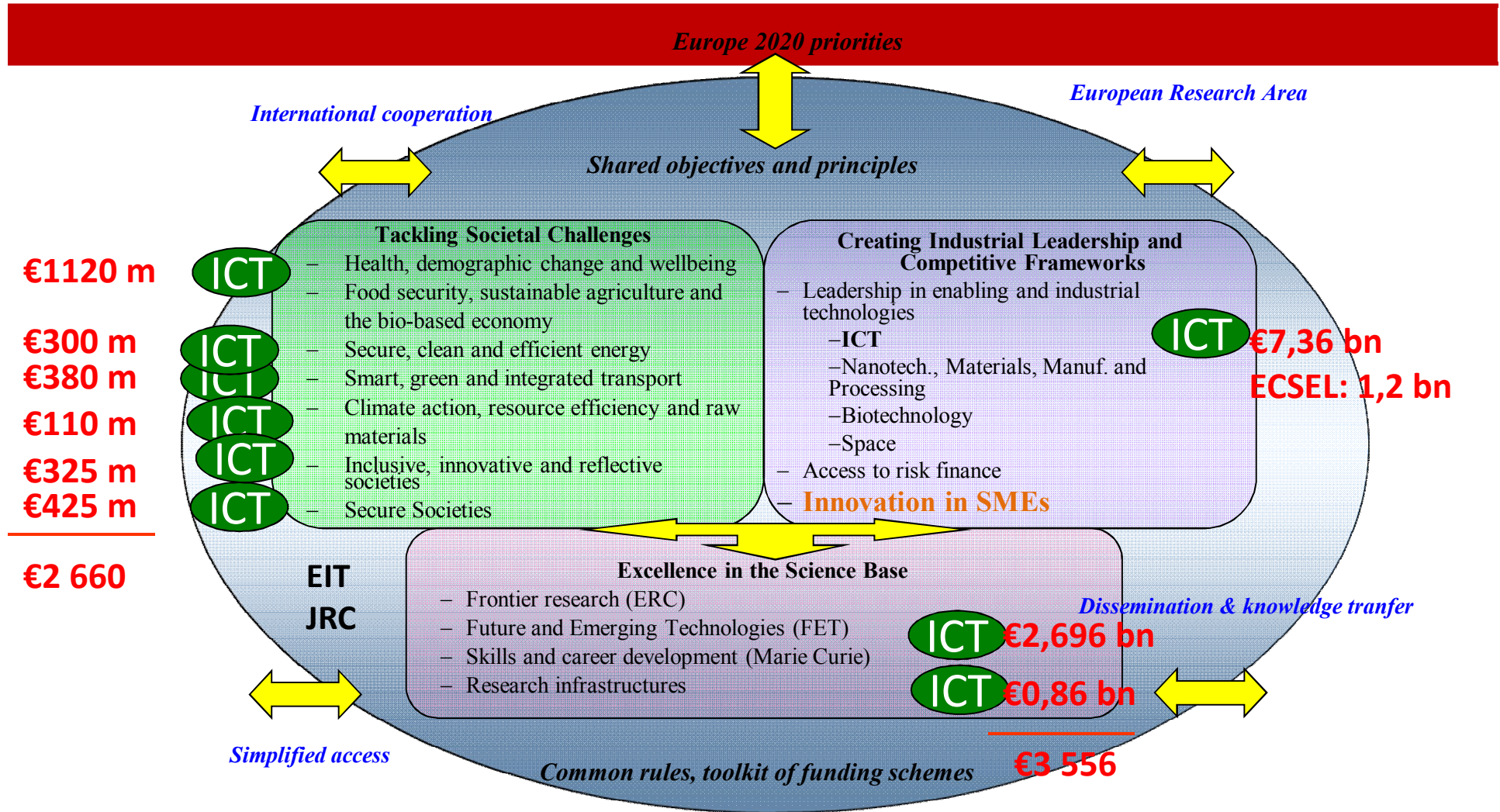
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Simplification?



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ICT in H2020 (€ 13 576)





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A guide to ICT-related activities in WP2014-15

http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=3511

Guide to the presence of ICT in H2020

Find out more:

<http://ec.europa.eu/programmes/horizon2020/>

A guide to ICT-related activities in WP2014-15:

http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=3511

H2020 launched first calls:

<http://ec.europa.eu/programmes/horizon2020/en/news/horizon-2020-launched-%E2%82%AC15-billion-over-first-two-years>


H2020 Calls published, see here:

https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/master_calls.html#h2020-fof-2014-2015

The Participant Portal:

<https://ec.europa.eu/research/participants/portal/desktop/en/home.html>

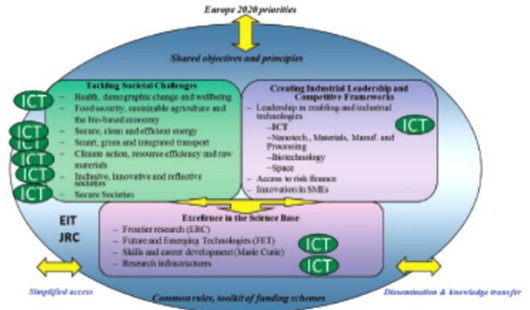
http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=3511



A guide to ICT-related activities in WP2014-15

ICT in H2020 – an Overview

As a generic technology, ICT is present in many of the H2020 areas. This guide is designed to help potential proposers find ICT-related topics across the different parts of H2020.



The diagram illustrates the integration of ICT across H2020 priorities and funding schemes. It is structured as follows:

- Europe 2020 priorities** (top):
 - Tackling Societal Challenges** (left):
 - Health, demographic change and wellbeing
 - Food security, sustainable agriculture and the bio-based economy
 - Secure, clean and efficient energy
 - Smart, green and integrated transport
 - Cleaner action, resource efficiency and circular economy
 - Inclusive, innovative and reflective societies
 - Secure Societies
 - Creating Industrial Leadership and Competitive Frameworks** (right):
 - Leadership in enabling and industrial technologies
 - ICT
 - Nanotech, Materials, Manufacturing and Processing
 - Bioeconomy
 - Space
 - Access to risk finance
 - Innovation in SMEs
 - Excellence in the Science Base** (bottom):
 - Frontier research (ERC)
 - Future and Emerging Technologies (FET)
 - Skills and career development (Marie Curie)
 - Research infrastructures
- Shared objectives and principles** (center):
 - EIT JRC** (left): Simplified access
 - Common rules, quality of funding schemes** (bottom)
 - Dissemination & knowledge transfer** (right)

In work programme 2014-15, ICT-related topics are covered as follows:

- Advanced research to uncover radically new technological possibilities and ICT contributions to research and innovation are addressed in the 'Excellent science' part of the work programme, respectively under 'Future and Emerging Technologies' and 'European research infrastructures' ('infrastructures').
- Research and innovation activities on generic technologies either driven by industrial roadmaps or through a bottom-up approach are addressed in the 'Leadership in enabling and industrial technologies' (LEIT) part of the work programme, under 'Information and communication technologies'.
- Multi-disciplinary application-driven research and innovation leveraging ICT to tackle societal challenges are addressed in the different 'Societal challenges'.

The figures above and below provide synthetic overviews of the presence of ICT in Horizon 2020.

Horizon 2020

ICT in Excellent science

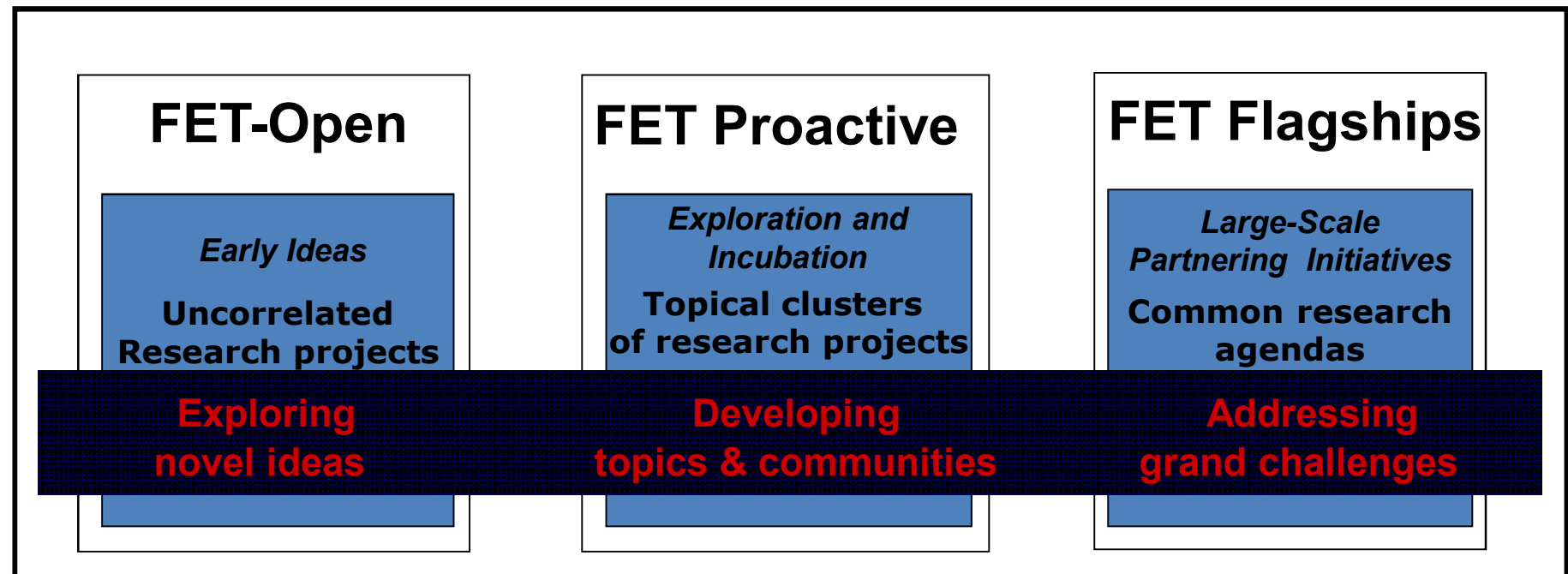




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FET – 3 complementary funding schemes

Open, light and agile ← → Roadmap based research



ICT in Societal challenges



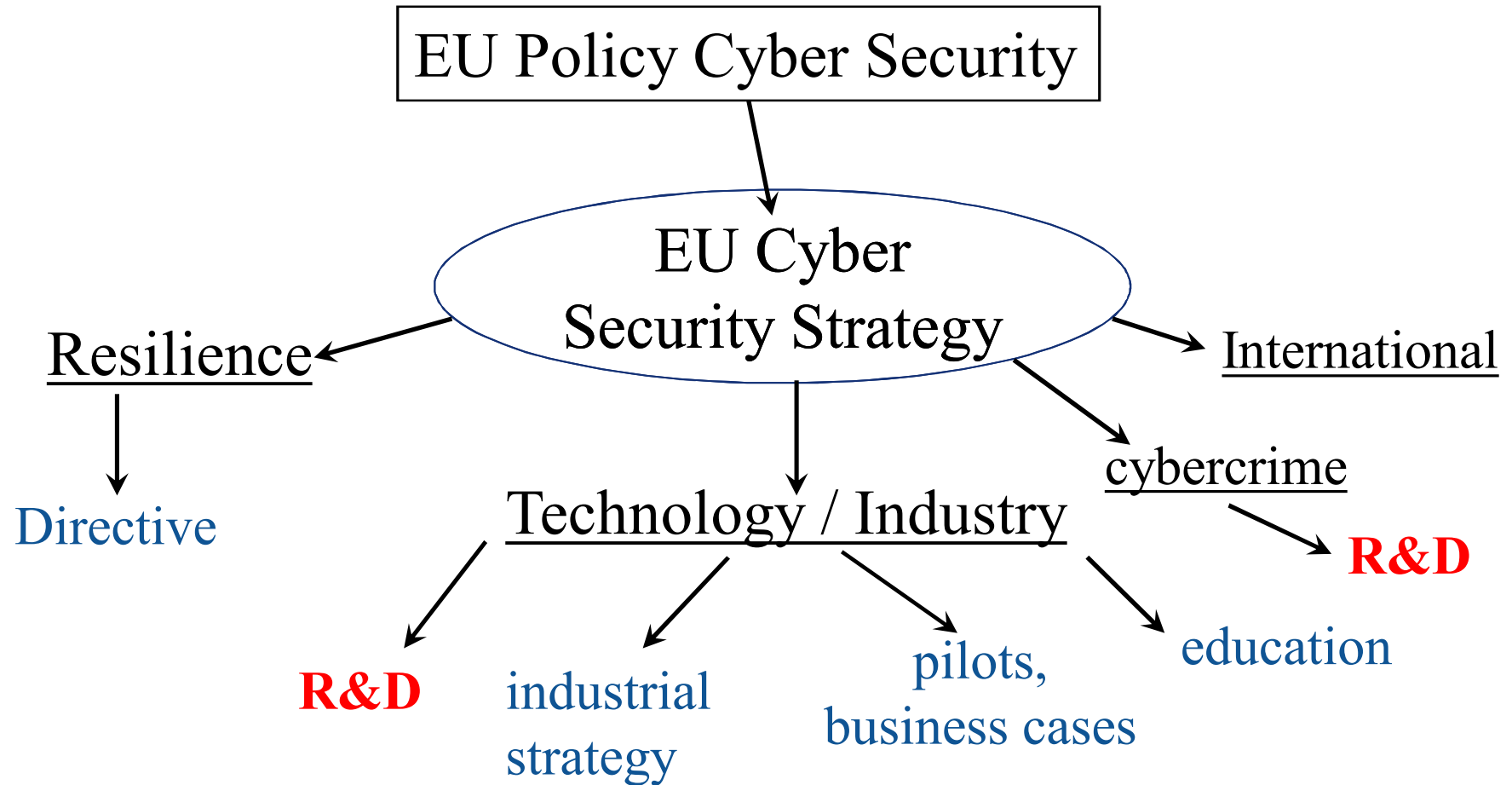


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Cybersecurity R&D&I in H2020

&

**Workprogram
2014 -2015**





Where to find cybersecurity R&D&I in H2020?

Everywhere!

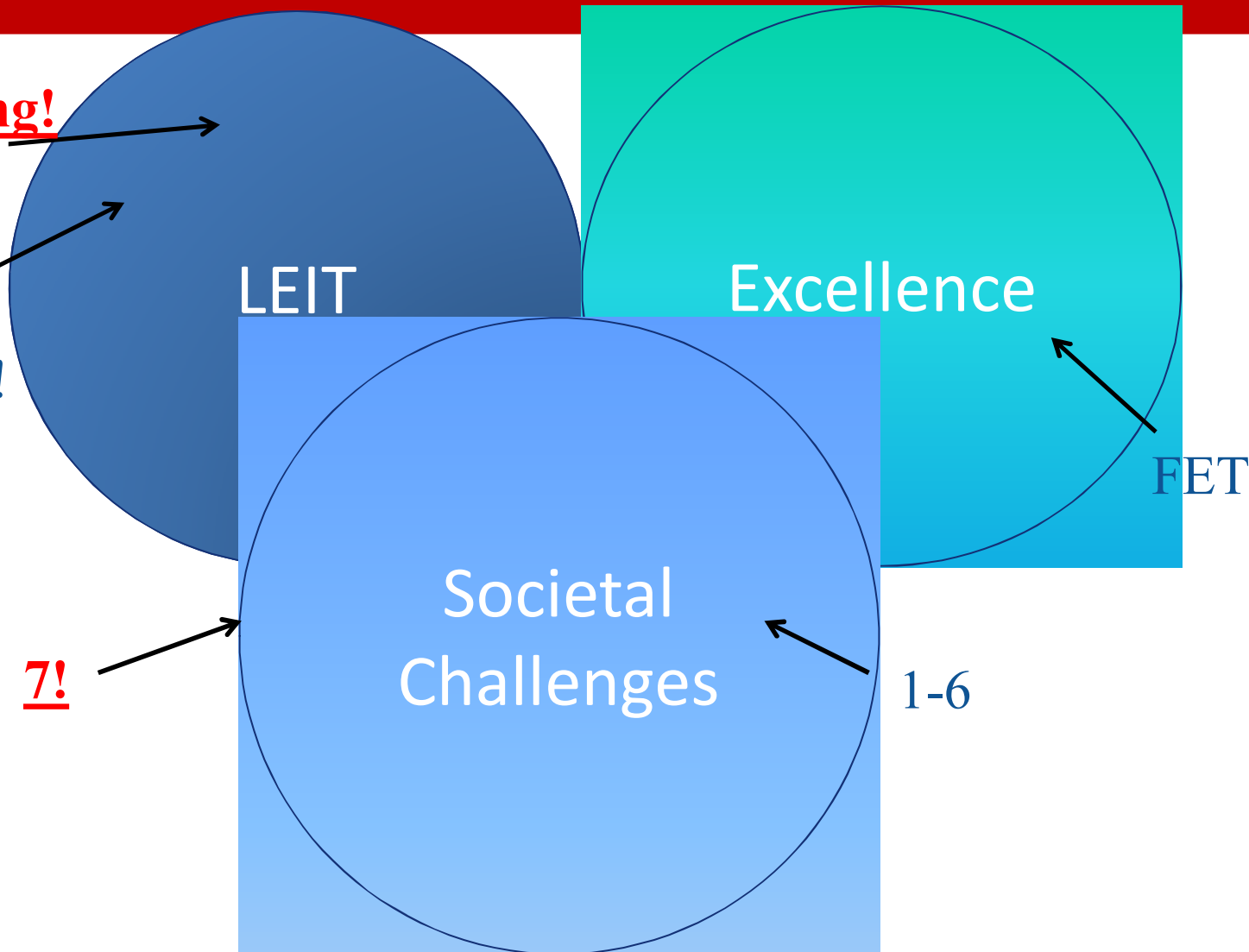
change of mindset



Cross-cutting!

Embedded!

7!





Example: smart grids

- quantum teleportation => FET
- cryptography? => LEIT
- SCADA? => SC7
- smart meter? => SC3
- smart city? => SC3

=> determine your focus!



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H2020 Societal Challenge 7 - Secure societies "Protecting freedom and security of Europe and its citizens"

Digital Security: Cybersecurity, Privacy & Trust
H2020-DS-2015-1

Four key concepts



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- Secure societies – Protecting freedom and security of Europe and its citizens.
- Address the economic and societal dimension of security and privacy in the digital ecosystem.
- Secure and increase trust in the digital society.
- Demonstrate the viability and maturity of state-of-the-art solutions.



Four Topics

- DS-03-2015: The role of ICT in Critical Infrastructure Protection (IA)
- DS-04-2015: Information driven Cyber Security Management (IA)
- DS-05-2015: Trust eServices (IA)
- DS-07-2015: Value-sensitive technological innovation in Cybersecurity (CSA)



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The role of ICT in Critical Infrastructure Protection

DS3

- Addressing security in the use of ICT in Critical Infrastructure (networks, systems, IACS, SCADA).
- The investigated concepts have to be tested in a field trial. SMEs are particularly encouraged to provide specific and very focused security solutions adapting current ICT security technology to IACS environments.
- **Impact**: Resilience, increased preparedness, reduced response time and coordinated response in case of a cyber-incident. Reduced possibilities to misuse ICT as a vehicle to commit cybercrime or cyber-terrorism.



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Information driven Cyber Security Management

DS4

- Incidents, vulnerabilities, weaknesses and potential impact, threats, adversary's behaviour, capability, and intent.
- Need to efficiently process the flow of information from both internal and external sources, through improved information processing, analysis and, where necessary, exchange.
- **Impact**: Effective vulnerability remediation, enhanced prevention and detection capabilities and faster response to incidents.



- Electronic signatures, e-seals, timestamps or certified electronic delivery. Regulation (EU) No 910/2014.
- Comparison and interoperability of electronic trust services covering aspects such as security assurance levels, operational security audits, state supervision systems, data protection regimes or liability of trust service providers.
- **Impact**: Empower and protect users in their digital experiences like e-contracting, e-bidding, e-invoicing, accessing social networks, or accessing the services of local or national administrations.



- Ensure a flourishing information society which offers safety and security and at the same time respects Europe's fundamental values and rights.
- Fundamental values and rights taken into account in the development process and applied when used in innovative services and products
- Coordination & Support Action.



- Call identifier: H2020-DS-2015-1
- Indicative budget: 50,21 million EURO
 - DS-03-2015 17.50
 - DS-05-2015 14.31
 - DS-05-2014 17.40
 - DS-07-2015 1.00
- Published: 11 Dec 2013, Amended in 2014
- Opening date: 25/03/2015
- Deadline: 27 August 2015, 17.00.00 CET



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Only instrument: Innovation Actions

- Activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services.
- Prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.



Innovation Actions (1/2)

A 'demonstration or pilot' :

- aims to validate the technical and economic viability of a new or improved technology, product, process, service or solution... (ie, validate **innovation**)
- in an operational (or near to operational) environment, whether industrial or otherwise...
- involving where appropriate a larger scale prototype or demonstrator.



Innovation Actions (2/2)

- Projects may include **limited** research and development activities.
- Funding rate: 70% (except for non-profit legal entities, where the rate is 100%)



Useful links - Cybersecurity

Policy

- [The EU cybersecurity strategy – An Open, Safe and Secure Cyberspace – 2013](#)
- [European Programme for Critical Infrastructure Protection \(EPCIP\)](#)
- [Digital Agenda – targets relevant to cyber security](#)

H2020 Cybersecurity – Workprogrammes

- [SC7 - Security](#)
- [LEIT ICT](#)

Trust & Security

- <http://ec.europa.eu/digital-agenda/en/telecoms-and-internet/trust-security>
- <http://ec.europa.eu/digital-agenda/en/cybersecurity>



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CNECT-TRUST-SECURITY@ec.europa.eu

@EU_TrustSec



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Horizont2020 - ICT információs napok

2015
calls

H2020 Secure Societies Information Day

http://ec.europa.eu/rea/about_us/events/h2020_secure_societies_information_day_en.htm

Cybersecurity & Privacy Innovation Forum, 28-29 April 2015

<https://www.cspforum.eu/2015/programme>

2nd High-level Cybersecurity Conference, 28th May 2015

<http://ec.europa.eu/digital-agenda/en/news/save-date-2nd-high-level-cybersecurity-conference-28th-may-2015>



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Horizont2020 - ICT információs napok

2015
calls

ICT Proposers Day – OCT 2014

Előadások az ICT Proposers Day-ről (digital security videót érdemes nézni, rövid előadás az elvárásokról, valamint több profil/projektötlet prezentáció)

<http://www.youtube.com/user/ICTHungary>

A Digital Security szekció oldala a rendezvényen

<http://ec.europa.eu/digital-agenda/en/news/ict-proposers-day-2014-digital-security>

Kapcsolatépítő rendezvény, profilok, projektötletek (Social challenge 7-re, vagy “security” és egyéb kulcsszavakra szűrhető)

<https://www.b2match.eu/proposersday2014/participants?utf8=%E2%9C%93&q=&bfs%5B%5D=16236>



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Horizont2020 - ICT információs napok

2015
calls

H2020 Information day - Digital Security: Cybersecurity, Privacy, and Trustworthy ICT – JAN 2014

<https://ec.europa.eu/digital-agenda/en/news/h2020-information-day-digital-security-cybersecurity-privacy-and-trustworthy-ict>

Plenary presentations (felhívások elvárásai)

<http://ec.europa.eu/digital-agenda/events/cf/h2020-digital-security/stream-items.cfm?id=249>

Proposers' presentations (projektötletek, résztvevői profilok)

<http://ec.europa.eu/digital-agenda/events/cf/h2020-digital-security/stream-items.cfm?id=240>



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ICT 2016-17



Structure, budget

CH1: Components and Systems

**CH2: Advanced computing and
Cloud Computing**

CH3: Future Internet

CH4: Content technologies

CH5: Robotics

CH6: Micro-Nano and Photonics

2016 – 17:	1526,2
Y1:	736,2
Y2:	790,0

ICT Cross-Cutting Activities

Manufacturing

Internet of Things

Cyber-Security

Open Disruptive Innovation

Fast track to Innovation

RRI/SSH and creative dialogue

Horizontal Innovation

International Activities



ICT Cross-Cutting Activities

Digital Security

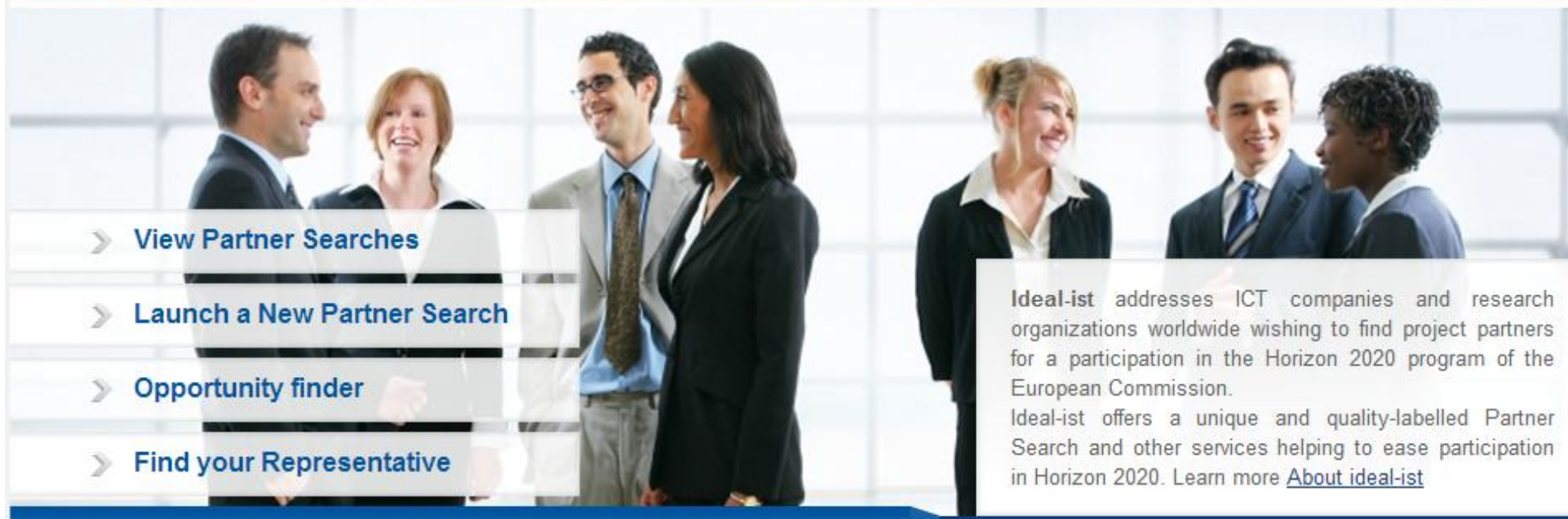
- R&I to securely design and deploy trustworthy ICT products, systems and services.
- LEIT-ICT is complemented by work in SC7 on topics such as Cyber Security for SMEs and Individuals, Security Economics, Privacy and Data Protection as well as "Increasing digital security of health related data on a systemic level" in SC1.

Topics	43M
Assurance and certification	23.5M
Cryptography	17.5M
Prize	2M



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NATIONAL CONTACT POINT PARTNER SEARCH & PROPOSAL DEVELOPMENT



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- [> Launch a New Partner Search](#)
- [> Opportunity finder](#)
- [> Find your Representative](#)

Ideal-ist addresses ICT companies and research organizations worldwide wishing to find project partners for a participation in the Horizon 2020 program of the European Commission. Ideal-ist offers a unique and quality-labelled Partner Search and other services helping to ease participation in Horizon 2020. Learn more [About ideal-ist](#)

Open calls [View All](#)

- [> H2020 – EU-JAPAN – 2014](#)
Close date:
10/04/2014
- [> H2020 – FoF – 2014/2015](#)

Recently Published Partner Searches

- [> PS-AT-89331: K4FoF](#)
- [> PS-SK-89303: \[EuroLangNet 21+3 \] European network](#)

In QA process

- [> PS-NO-89154: Inclusive-MT](#)
- [> PS-NO-89152: Inclusive-MT](#)

[View All](#)

ICT Events

- [View All](#)
- [> European Data Forum 2014](#)
 - [> Future Internet Assembly](#)



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Key events

ICT 2015 - 20-22 Oct 2015

Lisbon, Portugal

Információ – kapcsolatépítés –
konzorciumalakítás - kiállítás

Bővebb

információ: <http://www.ec.europa.eu/digital-agenda/ICT2015>

Kövesse a fejleményeket

twitteren: <https://twitter.com/ICT2015eu>





eDIGIREGION

Realising The Digital Agenda Through
Transnational Cooperation
Between Regions

<http://www.edigiregion.eu/>



1st eDIGIREGION International Conference

19 May 2015 – Budapest, Hungary

The Internet of Things is *not* the future. The Internet of Things is here, today. But are industry, policy makers, and academia ready?

Businesses across the world – high tech and traditional – are racing to identify opportunities in the new digital innovation ecosystem to take-up and deploy high impact technologies, build new business models, revolutionize value chains, and provide innovative products and services for citizens, businesses and government. Policy makers are designing smart specialisation initiatives that engage the actors of regional digital innovation ecosystems and lead to efficient academy-industry cooperation contributing to growth and global competitiveness.

The eDigiregion International Conference is an annual event supported by the European Commission that presents novel approaches of businesses and policy makers to reap the benefits of the digital innovation ecosystems. The eDigiregion International Conference will exchanges experience on smart specialisation initiatives, and business models that have contributed to boosting regional innovation ecosystems based on advances in information and communication technologies.

The eDigiregion 2015 International Conference will be the first event in this series, and will take place in Budapest, Hungary on 19th May 2015. In 2015 the conference focuses on future internet and internet of things technologies and applications.



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Thank you for your attention!

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