Jornada Connect-EU

Impulsa el teu projecte d'R+D i innovació a Europa

Generalitat de Catalunya

Co-organitzadors:
ACCIÓ i AGAUR

Amb el suport de:
iberCaja
enterprise europe network

División Programas de la UE

SO S+T

MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD

CDTI Centro para el Desarrollo Tecnológico Industrial

NEW OPPORTUNITIES IN H2020 FOR SECURITY, FOCUS ON 2018 CALLS

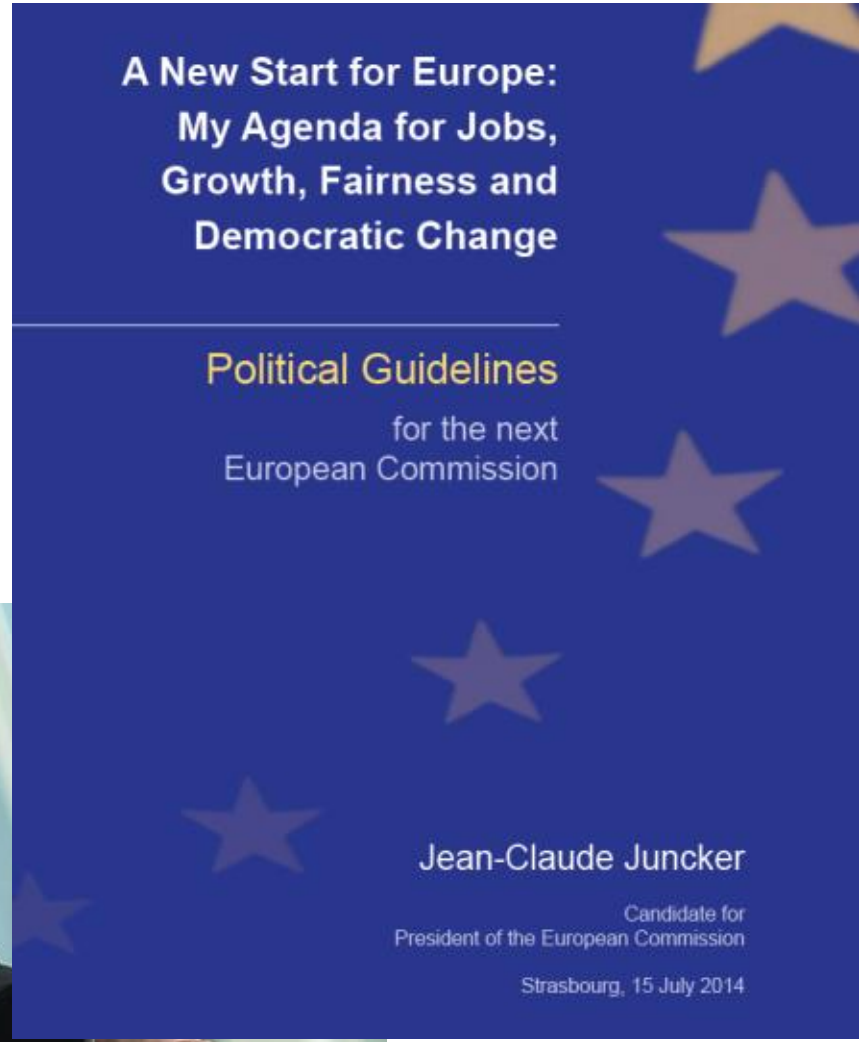
DR. MARINA MARTÍNEZ-GARCIA

SOST-CDTI, OFICINA DEL CDTI EN BRUSELAS

Contexto actual...

ara el Desarrollo
gico Industrial

Orientación de la Comisión Europea con el Presidente Junker



Orientación de la Comisión Europea con el Presidente Junker

EUROPEAN COMMISSION

Towards the Juncker Commission

European Commission > About the European Commission > Towards the Juncker Commission > 10 Priorities

Section contents

- Jobs, Growth, Investment
- Digital Single Market
- Energy Union
- Internal Market
- Economic & Monetary Union
- Free Trade
- Justice & Fundamental Rights
- Migration
- A Global Actor
- Democratic Change
- More on my priorities

10 Priorities

A New Boost for Jobs, Growth and Investment

My first priority as Commission President will be to strengthen Europe's competitiveness and to stimulate investment for the purpose of job creation. I intend to present, within the first three months of my mandate and in the context of the Europe 2020 review, an ambitious Jobs, Growth and Investment Package worth €300 billion .

A Connected Digital Single Market

I believe that we must make much better use of the great opportunities offered by digital technologies, which know no borders. To do so, we will need to have the courage to break down national silos in telecoms regulation, in copyright and data protection legislation, in the management of radio waves and in the application of competition law.

A Resilient Energy Union with a Forward-Looking Climate Change Policy

Current geopolitical events have forcefully reminded us that Europe relies too heavily on fuel and gas imports. I therefore want to reform and reorganise Europe's energy policy into a new European Energy Union. We need to pool our resources, combine our infrastructures and unite our negotiating power vis-à-vis third countries. We need to diversify our energy sources, and reduce the high energy dependency of several of our Member States.

A Deeper and Fairer Internal Market with a Strengthened Industrial Base

Orientación de la Comisión Europea con el Presidente Junker

Section contents

- Jobs, Growth, Investment
- Digital Single Market
- Energy Union
- Internal Market
- Economic & Monetary Union
- Free Trade
- Justice & Fundamental Rights
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- Democratic Change
- More on my priorities

A Deeper and Fairer Economic and Monetary Union

Over the next five years, I want to continue with the reform of our Economic and Monetary Union to preserve the stability of our single currency and to enhance the convergence of economic, fiscal and labour market policies between the Member States that share the single currency. I will do this on the basis of the "Four Presidents Reports" and the Commission's Blueprint for a Deep and Genuine Economic and Monetary Union, and always with Europe's social dimension in mind.

A Reasonable and Balanced Free Trade Agreement with the U.S.

Under my presidency, the Commission will negotiate a reasonable and balanced trade agreement with the United States of America, in a spirit of mutual and reciprocal benefits and transparency. It is anachronistic that, in the 21st century, Europeans and Americans still impose customs duties on each other's products. These should be swiftly and fully abolished. I also believe that we can go a significant step further in recognising each other's product standards or working towards transatlantic standards

An Area of Justice and Fundamental Rights Based on Mutual Trust

Our European Union is more than a big common market. It is also a Union of shared values, which are spelled out in the Treaties and in the Charter of Fundamental Rights. Citizens expect their governments to provide justice, protection and fairness with full respect for fundamental rights and the rule of law. This also requires joint European action, based on our shared values.

Towards a New Policy on Migration

The recent terrible events in the Mediterranean have shown us that Europe needs to manage migration better, in all aspects. This is first of all a humanitarian imperative. I am convinced that we must work closely together in a spirit of solidarity to ensure that situations such as the one in Lampedusa never arise again.

A Stronger Global Actor

We need a stronger Europe when it comes to foreign policy. The Ukraine crisis and the worrying situation in the Middle East show how important it is that Europe is united externally. There is still a long way to go.

A Union of Democratic Change

The proposal and election of the President of the European Commission in the light of the outcome of the European Parliament elections is certainly important, but only a first step in making the European Union as a whole more democratic. A European Commission under my leadership will be committed to filling the special partnership with the European Parliament, as laid down in the Framework Agreement of 2010, with new life. I want to have a political dialogue with you, not a technocratic one.

More on my priorities

De cara a los programas 2018-2020…
A parte de cada programa temático existen unas FOCUS AREAS

- Personalising health and care
- Sustainable food security
- Blue growth: unlocking the potential of seas and oceans
- Smart cities and communities
- Competitive low-carbon energy
- Energy Efficiency
- Mobility for growth
- Waste: a resource to recycle, reuse and recover raw materials
- Water innovation: boosting its value for Europe
- Overcoming the crisis:
- Disaster-resilience
- Digital security

12 focus areas in WP 14-15

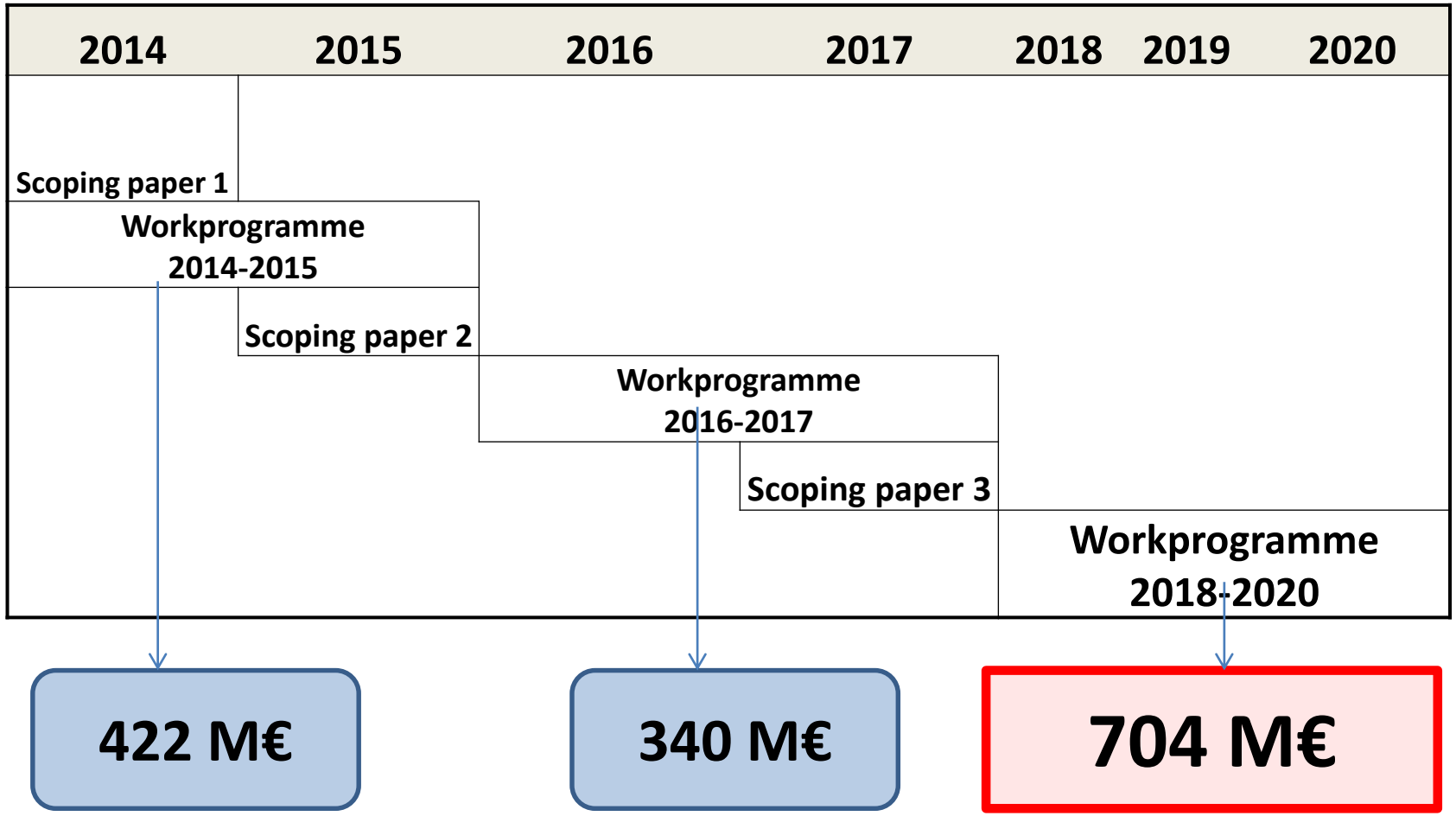
- Industry 2020 in the Circular Economy
- Internet of Things
- Smart and Sustainable Cities
- Sustainable Food Security – Resilient and resource-efficient value chains
- Energy Efficiency
- Digital Security
- Blue Growth - Demonstrating an ocean of opportunities
- Competitive Low-carbon Energy
- Automated Road Transport – The New Frontier

9 focus areas in WP 16-17

4 focus areas in WP 18-20

- Building a **low-carbon**, climate resilient future
- Connecting economic and environmental gains – the **Circular Economy**
- **Digitising** and transforming **European industry and services**
- **Boosting the effectiveness of the Security Union**

WP 2018-2020


2014
2015
2016
2017
2018
2019
2020
Scoping paper 1
Workprogramme 2014-2015
Scoping paper 2
Workprogramme 2016-2017
Scoping paper 3
Workprogramme 2018-2020
422 M€
340 M€
704 M€

De cara a los programas 2018-2020…

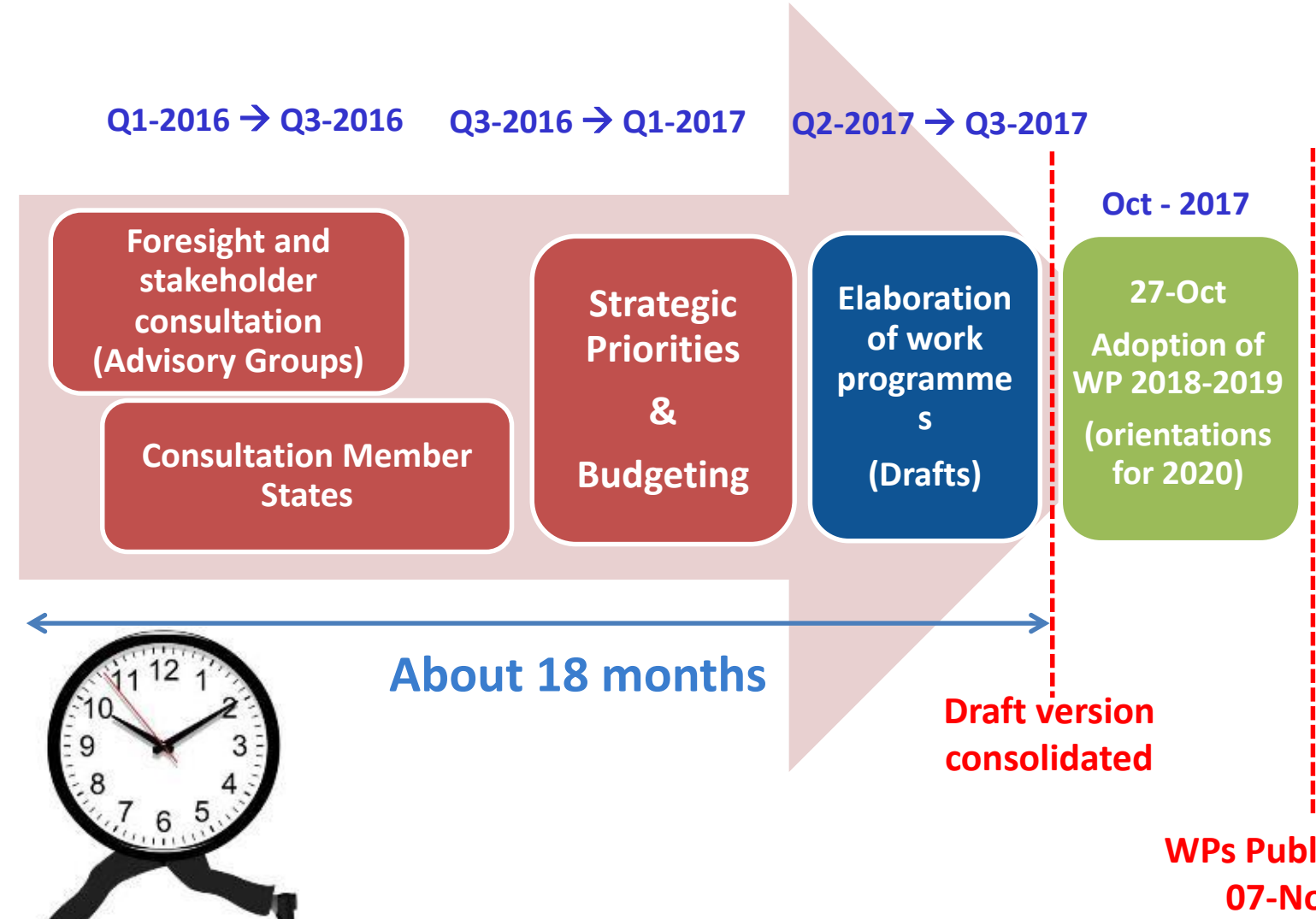
4

Focus Area: Boosting the effectiveness of the Security Union

Budget: ca. €1,000m

Mission	Component	Source
✓ New technologies and processes to meet needs of security practitioners, including for fighting and preventing crime	✓ Better match R&D objectives with Security Union policy needs.	✓ LEIT-ICT
✓ Reduced loss of life and damage from natural and man-made disasters	✓ Strengthen impact of security-related research: involving practitioners and stimulating new markets.	✓ LEIT-Space
✓ Key infrastructure better protected	✓ Identify security-related research in other H2020 societal challenges, and contribute to other policies (Digital, Space, Health, etc.)	✓ SC - Health
✓ EU borders better secured		✓ SC - Energy
✓ Secure and trusted digital environment		✓ SC – Reflective Societies
		✓ SC – Secure Societies

Timming…


Q1-2016 → Q3-2016
Q3-2016 → Q1-2017
Q2-2017 → Q3-2017
Foresight and stakeholder consultation (Advisory Groups)
Consultation Member States
Strategic Priorities & Budgeting
Elaboration of work programmes (Drafts)
Oct - 2017
27-Oct
Adoption of WP 2018-2019
(orientations for 2020)
About 18 months
Draft version consolidated
WPs Published 07-Nov

¿Dónde encontrar el WP?

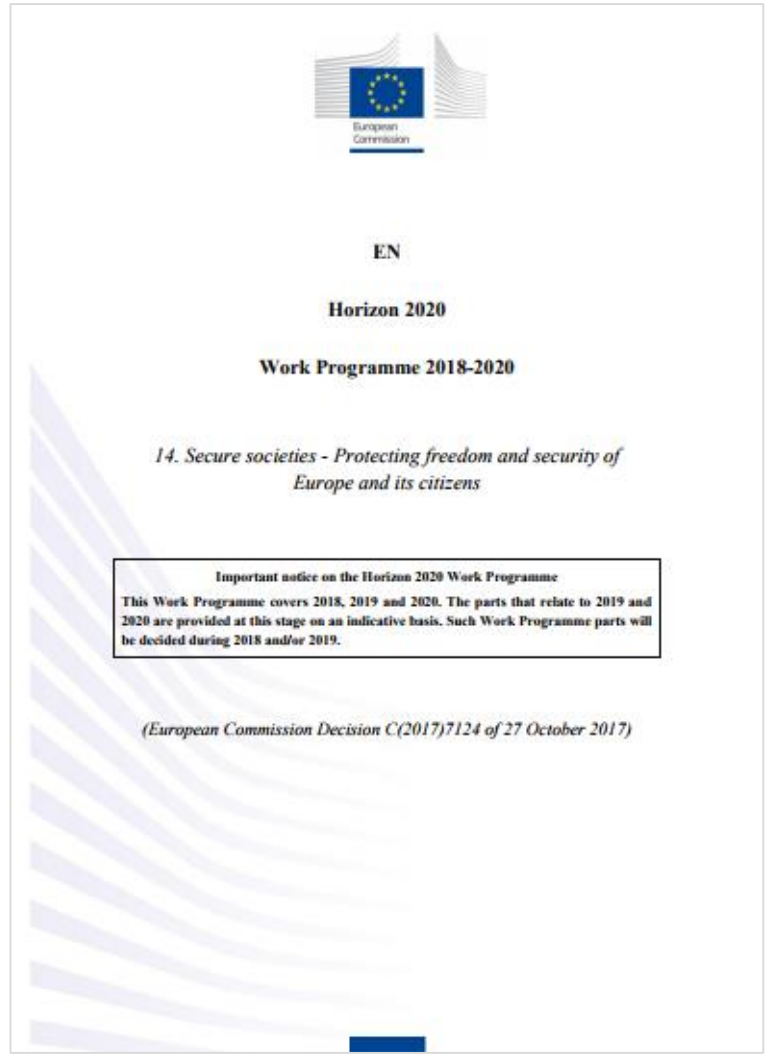
http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-security_en.pdf

Timeline CALL-2018

OPENING = 15 Mar 2018

DEADLINE = **23 Aug 2018**

Awarded projects will start by Apr-May 2019



EN

Horizon 2020

Work Programme 2018-2020

14. Secure societies - Protecting freedom and security of Europe and its citizens

Important notice on the Horizon 2020 Work Programme

This Work Programme covers 2018, 2019 and 2020. The parts that relate to 2019 and 2020 are provided at this stage on an indicative basis. Such Work Programme parts will be decided during 2018 and/or 2019.

(European Commission Decision C(2017)7124 of 27 October 2017)

Opportunities in “Secure Societies”...

ara el Desarrollo
gico Industrial

OVERVIEW Structure for 2018-2020

- Protecting the Infrastructure in Europe
- Disaster - Resilient Societies
- Fight Against Crime & Terrorism
- Border & External Security
- General Matters
- Digital Security - Cybersecurity

Protecting the Infrastructure in Europe

SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe 8
SU-INFRA02-2019: Security for Smart Cities and "soft" targets in Smart Cities..... 11

2 years projects

Participation of industry required!!!!

Protecting the Infrastructure in Europe

SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe

IAs of bout 8 M€ and TRL 7 for deploying solutions that allow forecast, prevention, detection, response, and in case of failure, mitigation of consequences (including novel installation designs) over the life span of the infrastructure and also the neighbouring populations and the environment.

- Interdependent physical (e.g. bombing, plane or drone overflights & crashes, spreading of fires, floods, seismic activity, space radiations, etc.) and cyber threats and incidents (e.g. malfunction of SCADA system, non-authorised access of server) and consider the cascading risks.
- Scenarios of real life in real-time and tackling physical and cyber threats.
- **SECTORS:** Water systems, energy infrastructure (power plants and distribution), transport infrastructure, communication infrastructures, health services, e-commerce and the postal infrastructure, and financial services.
- **At least 2 operators** (not necessary to be coordinators) of the chosen type of critical infrastructure operating in 3 Member States or Associated Countries.

24 M€ for call-2018 → About 3 projects!

Protecting the Infrastructure in Europe

SU-INFRA02-2019: Security for Smart Cities and "soft" targets in Smart Cities

IAs of bout 8 M€ and TRL 7 for deploying pilots in **at least 2 cities** (or metropolitan áreas) that cover at least one of the next aspects:

- Simulation, detection and analysis of the additional security threats and risks created through the interconnection of smart systems (e.g. IoTs, in particular those IoT objects used by security practitioners) and smart infrastructures (e.g. smart (government) buildings, smart railways, smart ports, smart factories, smart bridges, smart hospitals, large gathering of people in smart infrastructure) within a smart city;
- Delivery of a cyber-security framework to make easy the collaboration across all smart cities stakeholders (urban planners, infrastructure operators, security practitioners, IT supervisors and providers) across smart organizations within the city;
- Support and implementation of a common approach to securing and managing the data from all the smart infrastructures and systems hosted in a smart city supporting the citizens, the public authorities, the security practitioners, and the urban economy.

16 M€ for call-2019 → About 2 projects!

No es necesario que la ciudad sea ganadora previa de un proyecto "Smart Cities Lighhouse" ni coordinador!

Disaster - Resilient Societies

SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies 19
SU-DRS02-2018-2019-2020: Technologies for first responders..... 22
SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies 24
SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster... 25
SU-DRS05-2019: Demonstration of novel concepts for the management of pandemic crises

SOME TOPICS HAVE DIFFERENT SUB-TOPICS depending on the year!!!!!!

Disaster - Resilient Societies

SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies

RIA of 5 M€ (ONLY 1 Project in 2018) for deploying tools for national, regional and local authorities to address recent dramatic events either related to **natural causes** (flash floods, earthquakes, avalanches) or **terrorist attacks** have alas illustrated that European society is not well prepared to react to disasters or industrial dissasters.

- Involvement of first responders (**at least 3**), city authorities and citizens.
- International collaboration encouraged (not mandatory) with **Japan** (funded by Japan Science and Technology Agency).

SU-DRS02-2018-2019-2020: Technologies for first responders

RIA of 7 M€ & TRL 4-6 (About 4 Projects in 2018) for developing technologies in:

- **OR well, Victim-detection technologies , 2018**
- OR well, Innovation for rapid and accurate pathogens detection, 2019
- OR well, Methods and guidelines for pre-hospital life support, 2020
- **OR well, "Other technologies" including UAVs, robots, etc…, 2018-2019-2020**

In all **at least 3 first responders, but 5 for "Other".**

Disaster - Resilient Societies

SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies

IAs of 6 M€ & TRL 6-7 (ONLY 1 Project in 2018) for issues related to pre-standardisation in:

- OR well, Pre-standardisation for the **security of water supply, 2018** → Uptake results from previous FP7 projects but also to integrate current technologies in the existing water safety network.

- OR well, Pre-standardisation in **CBRN-E crisis management & Natural hazards, 2019**

- OR well, **First aids vehicles deployment**, training, maintenance, logistic and remote centralized coordination means, 2020

In all **at least 3 first responders or agencies or operators…**

Fight Against Crime & Terrorism

SU-FCT01-2018-2019-2020: Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism 28
SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism 31
SU-FCT03-2018-2019-2020: Information and data stream management to fight against (cyber)crime and terrorism 33
SU-FCT04-2020: Explosives: detection, intelligence, forensics 35

SOME TOPICS HAVE DIFFERENT SUB-TOPICS depending on the year!!!!!!

Fight Against Crime & Terrorism

SU-FCT01-2018-2019-2020: Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism

At least 3 LEAs, but 5 for "OPEN".

RIAs of 5 M€ (About 2 Projects in 2018) for developing new approaches for:

- OR well, **New methods to prevent, investigate and mitigate trafficking of human beings and child sexual exploitation, 2018**
- OR well, **Understanding the drivers of cybercriminality, and new methods to prevent, investigate and mitigate cybercriminal behaviour, 2019**
- OR well, Developing comprehensive multi-disciplinary and multi-agency approaches to prevent and counter violent radicalisation in the EU, 2020
- OR well, "**OPEN", 2018-2019-2020** → Other way to solve issues in fighting against crime and terrorism, **but supported by a larger number of LEAs**.

Fight Against Crime & Terrorism

SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism

At least 3 LEAs, but 5 for "OPEN".

RIAs of 7 M€ & TRL 4-6 (About 3 Projects in 2018) for new knowledge and targeted technologies for fighting against crime and terrorist organisations:

- OR well, **Trace qualification, 2019**
- OR well, **Digital forensics in the context of criminal investigations, 2018** → New forensic tools and methodologies, while fully respecting fundamental rights and privacy.
- OR well, **Money flows tracking, 2020**
- OR well, "**OPEN", 2018-2019-2020** → Other ways and technologies including augmented reality, autonomous systems, technologies to support better protection of public figures, etc…, **but supported by large numbers of practitioners**.

For all the sub-topics, LEAs training and (joint) exercises, and of information packages for the wider public and civil society organisations is mandatory.

Fight Against Crime & Terrorism

SU-FCT03-2018-2019-2020: Information and data stream management to fight against (cyber)crime and terrorism

At least 3 LEAs

IAs of 8 M€ & TRL 5-7 (ONLY 1 Project) for developing solutions (in compliance with EU societal values, including privacy and fundamental rights) that allows the LEAs **to manage voluminous and heterogeneous data** (images, videos, geospatial intelligence, communication data, traffic data, financial transactions related date, etc.) and turn it into **actionable intelligence**.

- **Trend analysis of emerging cybercrime** activities based on past of (cyber)criminal activities, on technological developments, and on trends in the society.
- **Behavioural/anomaly detection** systems (using a large variety of sensors) and methodologies .
- **Balance** of IT specialists, psychologists, sociologists, linguists, etc. exploiting big data and predictive analytics: a) to caracterize trends in cybercrime and in cybercriminal organizations and b) to enhance citizens' security against terrorist attacks in places considered as soft targets, including crowded areas (shopping malls, entertainment venues, etc.).
- **Societal aspects** (e.g. perception of security, possible side effects of technological solutions, societal resilience) have to be addressed.

Border & External Security

SU-BES01-2018-2019-2020: Human factors, and social, societal, and organisational aspects of border and external security.....30
SU-BES02-2018-2019-2020: Technologies to enhance border and external security.....32
SU-BES03-2018-2019-2020: Demonstration of applied solutions to enhance border and external security.....34

ALL TOPICS HAVE DIFFERENT SUB-TOPICS depending on the year!!!!!!!

Border & External Security

SU-BES01-2018-2019-2020 → RIA of 5 M€ (About 2 Projects in 2018):

- **Sub-topic 1 (2018): Detecting security threats possibly resulting from certain perceptions abroad, that deviate from the reality of the EU**
- Sub-topic 2(2019): Modelling, predicting and dealing with migration flows to avoid tensions and violence
- Sub-topic 3(2020): Developing indicators of threats at the EU external borders on the basis of sound risk and vulnerability assessment methodologies
- **Sub-topic 4(2018-2019-2020): Open** (max 18 months)

SU-BES02-2018-2019-2020 → RIA of 7 M€ & TRL 4-6 (About 3 projects in 2018)

- **Sub-topic 1 (2018): Providing integrated situational awareness and applying augmented reality to border security**
- **Sub-topic 2 (2018): Detecting fraud, verifying document validity and alternative technologies to identifying people**
- Sub-topic 3 (2019): Security on-board passenger ships
- Sub-topic 4 (2019): Detecting threats in the stream of commerce without disrupting business
- Sub-topic 5 (2020): Disruptive sensor technologies for border surveillance
- **Sub-topic 6 (2018-2019-2020): Open** (max 18 months)

SU-BES03-2018-2019-2020 → IA of 5M€ (About 2 Projects in 2018)

- **Sub-topic 1 (2018): Remotely piloted aircrafts and underwater autonomous platforms for off-shore patrol vessels**
- Sub-topic 2 (2019): New concepts for decision support and information systems
- Sub-topic 3(2020): Improved systems for the detection, identification and tracking of small boats
- **Sub-topic 4(2018-2019-2020): Open** (max 18 months)

At least 3 authorities/end-users, but 5 for "OPEN".

General Matters

SU-GM01-2018-2019-2020: Pan-European networks of practitioners and other actors in the field of security 43
SU-GM02-2018-2020: Strategic pre-commercial procurements of innovative, advanced systems to support security 45
SU-GM03-2018-2019-2020: Pre-commercial procurements of innovative solutions to enhance security 47

General Matters

- **SU-GM01-2018-2019-2020** → 4 sub-topics and **at least 8 users**:
  - Sub-topic 1 (2019-2020): Practitioners in the same discipline and from across Europe
  - **Sub-topic 2(2018): Innovation clusters from around Europe and training facilities**
  - **Sub-topic 3(2018): Procurement agencies**
  - Sub-topic 4(2019): Border and coast guard organizations

- **SU-GM02-2018-2020** → 2 sub-topics and **at least 6 users**:
  - **Sub-topic 1 (2018): Common requirements specifications for innovative, advanced systems to support security**
  - Sub-topic 2 (2020): Procurement of prototype systems among those specified as a result of sub-topic 1

Topic	Instrument	Deadline	M€
SU-GM01-2018-2019-2020	CSA; 1,5 – 3,5 M€	8/2018 8/2019	5 10,5
SU-GM02-2018-2020	CSA; 1 M€	8/2018	6
SU-GM03-2018-2019-2020	PCP CO-FUND; 2-12 M€	8/2018 8/2019	8,2 7

Digital Security - Cybersecurity

Cybersecurity, Digital Privacy and data protection 55

SU-DS01-2018: Cybersecurity preparedness - cyber range, simulation and economics..... 56

SU-DS02-2020: Management of cyber-attacks and other risks 59

SU-DS03-2019-2020: Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises 59

SU-DS04-2018-2020: Cybersecurity in the Electrical Power and Energy System (EPES): an armour against cyber and privacy attacks and data breaches 62

SU-DS05-2018-2019: Digital security, privacy, data protection and accountability in critical sectors..... 65

Digital Security - Cybersecurity

SU-DS01-2018: Cybersecurity preparedness - cyber range and economics → IAs of 5-6 M€ of TRL 7 (About 2 Projects)

SU-DS04-2018-2020: Cybersecurity in the Electrical Power and Energy System (EPES): an armour against cyber and privacy attacks

IA of 6-8 M€ and TRL 7 (20M€ for 2018) for developing solutions for protection, early detection and recovery of power plants from cyber-attacks.

- Protection to the consumers (Smart-metters at home) and the grid as well.

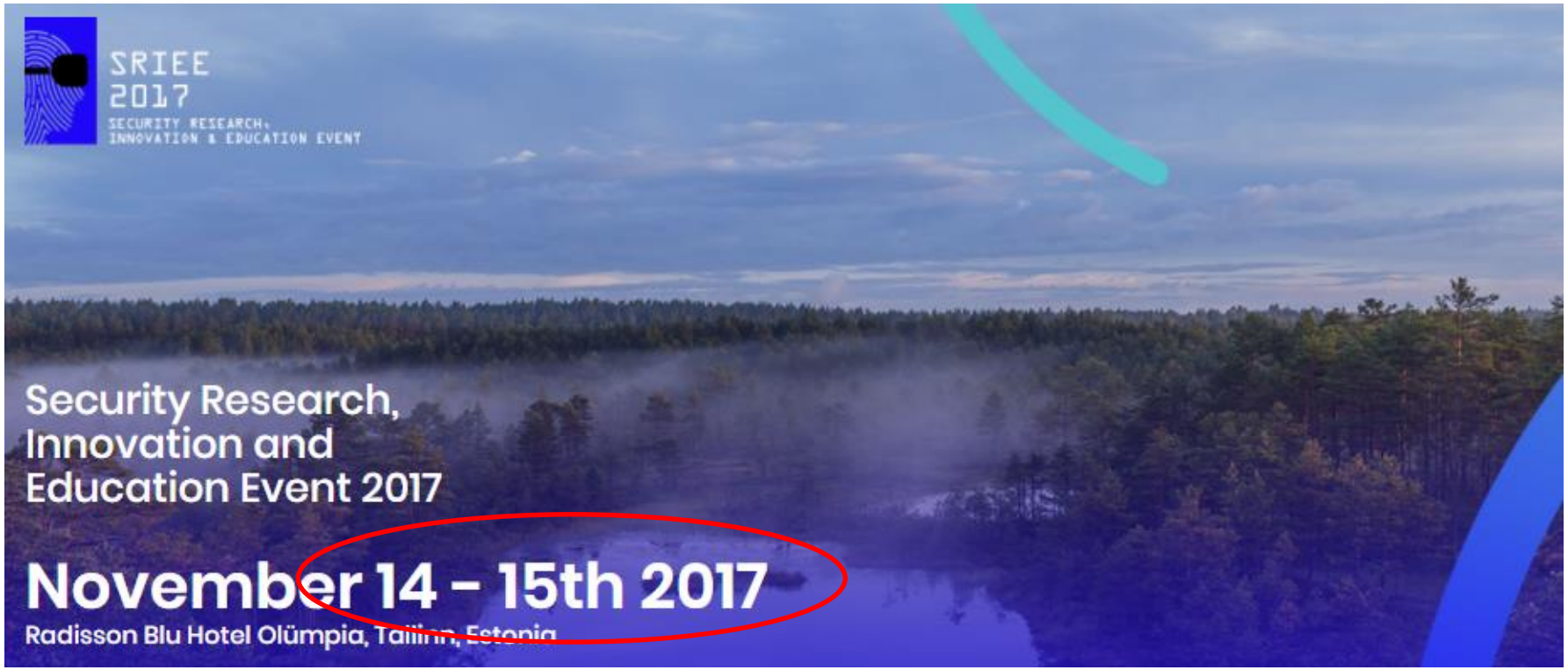
SU-DS05-2018-2019-2020: Digital security, privacy and accountability in critical sectors

IAs of 3-4 M€ and TRL 7 (8,5 M€ for 2018) for developing cyber-protection solutions for:

- OR well, In **multimodal transport systems**, 2019
- OR well, In the healthcare ecosystem, 2019
- **OR well, In the finance sector, 2018**

Interesting events to attend...

Events preparing the Call-2018…



Events preparing the Call-2018…

INFODAY & Networking event call-2018

https://ec.europa.eu/digital-single-market/en/events/ict-proposers-day-2017

ICT Proposers' Day 2017

ICT Proposers' Day 2017 will take place on 9 and 10 November in Budapest, Hungary. This networking event centres on European ICT Research & Innovation with a special focus on the Horizon 2020 Work Programme for 2018-20. An Opening Ceremony and Social Event will be organised by the Hungarian Ministry of National Development and will take place on 8 November.

Events preparing the Call-2018…

Events preparing the Call-2018…

SAVE-THE-DATE FOR THE SMI2G MEETING 2018

As in previous years, the Security Mission Information & Innovation Group (SMI2G) is organising a two-day event in Brussels to discuss on the upcoming 2018 Secure Societies and ICT calls of Horizon 2020. This brokerage event will provide a unique networking platform to stimulate innovative ideas and facilitate the creation of consortia. All security topics will be represented.

This event will be held on Thursday 1st and Friday 2nd February 2018.

This year the SMI2G is kindly hosted again by Université Catholique de Louvain (UCL) in Brussels.

Don't miss out on this excellent opportunity to expand your network and find partners for your proposals! Details and link for registration will be send in due time.

ORGANISED BY:

EARTO Security Research Group

Seren3 Network

European Organisation for Security

Last but not least...

ara el Desarrollo
gico Industrial

Relevant Stakeholders…

ECSO members

Application form

FAQ

RTO/UNIVERSITIES

AIT - Austrian Institute of Technology(Austria)
BGU - Ben-Gurion University of the Negev(Israel)
BU - Bournemouth University - Department of Computing & Informatic(United Kingdom)
CEA - Commissariat à L'énergie Atomique et aux Energies Alternatives(France)
CEFRIEL(Italy)
CEPS(Belgium)
CERTH/ITI - Centre for Research and Technology Hellas/Information Technologies Institute(Greece)
CINI - Consorzio Interuniversitario Nazionale per l'Informatica(Italy)
CNR - Consiglio Nazionale delle Ricerche(Italy)
CNRS - Centre National de la Recherche Scientifique(France)
CNTI - Cyprus Neuroscience & Technology Institute(Cyprus)
CSIT - Centre for Secure Information Technologies, Queen's University, Belfast(United Kingdom)
Digital Catapult (DICICAT)(United Kingdom)
DTU - Technical University of Denmark(Denmark)
EURECAT(Spain)
FORTH - Foundation for Research and Technology - Hellas(Greece)
Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.(Germany)
Fundación APWG(Spain)
Global Cyber Alliance(Belgium)
Goethe-Universität Frankfurt(Germany)
Gradiant - Fundación Centro Tecnolóxico de Telecomunicacións de Galicia(Spain)
IK4 Research Alliance - Asociación IK4 Research Alliance(Spain)

División
Programas de la UE

o para el Desarrollo
ológico Industrial

Instrumentos de financiación 2018-2020

- ✓ **Research and Innovation Action (RIA)**
- ✓ **Innovation Action (IA)**
- ✓ **Coordination and Support Action (CSA)**
- ✓ **SME Instrument**
- ✗ **Pre-Commercial Procurement Cofund (PCP)**
- ✓ **Fast Track to Innovation Pilot**

Relación tipología / TRL

RIA

- **TRL 1** – basic principles observed
- **TRL 2** – technology concept formulated
- **TRL 3** – experimental proof of concept
- **TRL 4** – technology validated in lab

IA

SMEs

PCP

- **TRL 5** – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- **TRL 6** – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- **TRL 7** – system prototype demonstration in operational environment
- **TRL 8** – system complete and qualified
- **TRL 9** – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space).

CSA → Redes de usuarios, redes de excelencia, organización de eventos y conferencias, estudios y actividades de recomendaciones para políticas y regulaciones europeas futuras, etc... NO INVESTIGACIÓN.

Research and Innovation Action (RIA)

- **Objetivo**: Establecer nuevo conocimiento o explorar la viabilidad de una tecnología nueva o mejorada de un proceso, producto, servicio o solución.
  - Puede incluir investigación fundamental o aplicada, desarrollo tecnológio e integración, testing y validación de un prototipo a pequeña escala en un laboratorio o entorno simulado.

- **Financiación**: Hasta el **100%** de los costes elegibles

- **Criterios de elegibilidad: Tres entidades legales** independientes, establecidas en 3 Estados Miembro o países asociados distintos.

Innovation Action (IA)

- **Objetivo:** Producir planes y estructuras o diseños de nuevos productos, procesos o servicios modificados o mejorados
  - Puede incluir prototipos, testing, demostraciones, pilotos, validación de productos a gran escala y replicación de mercados.

- **Financiación: Hasta el 70% de los costes elegibles (hasta el 100% para organizaciones sin ánimo de lucro)**

- **Criterios de elegibilidad: Tres entidades legales** independientes, establecidas en 3 Estados Miembro o países asociados distintos.

Coordination and Support Action (CSA)

- **Consiste en**: Medidas de acompañamiento tales como normalización, difusión, sensibilización y comunicación, creación de redes, servicios de coordinación o de apoyo, diálogos sobre políticas y ejercicios y estudios de aprendizaje mutuo, incluyendo estudios de diseño de nuevas infraestructuras y también puede incluir actividades complementarias de planificación estratégica, creación de redes y coordinación entre programas en diferentes países.

- **Financiación:** Hasta el 100% de los costes elegibles

- **Criterios de elegibilidad:** Una entidad legal establecida en un Estado Miembro o país asociado.

Otras opciones de instrumentos de financiación…

SMEs Instrument

- **Descripción**: El instrumento de las PYME está dirigido a todo tipo de PYME innovadoras que muestren una fuerte ambición de desarrollar, crecer e internacionalizarse. Proporciona apoyo que abarca todo el ciclo de la innovación en tres fases, complementados por un servicio de "mentoring" y "coaching".

Cambios en la evaluación de FASE-2 a partir de 2018!!!

- **Financiación**: Hasta el **70%** de los costes elegibles
  - Fase-1 → Lump Sum de 50 k€ y duración 6 meses
  - Fase-2 → 0,5-2,5 M€ EC requested y duración hasta 2 años
  - Fase-3 Comercialiación → No funding y sólo apoyo (mentoring, training, red EEN…)

- **Criterios de elegibilidad:** PYMEs con ánimo de lucro. Sólo se aceptarán solicitudes de PYMEs establecidas en Estados Miembro de la UE o asociados.

NB: *Múltiples fechas de cierre. Consultar el programa de trabajo.*

Otras opciones de instrumentos de financiación…

Fast Track to Innovation (FTI)

- **Descripción**: Proyectos colaborativos pequeños (3-5 socios y unos ≈2 M€ EC requested) con idea de llevar a mercado una **solución innovadora y multidisciplinar en menos de 3 años**. No investigación, sino innovación, desarrollo, integración, validación y test a escala real, aproximación a mercado (usuario final). Importante peso empresarial. **Inicio TRL ≥ 6 → Final TRL = 9**

- **Financiación**: Hasta el **70%** de los costes elegibles (100% para entidades sin ánimo de lucro)

- **Criterios de elegibilidad:** Cualquier participante público o privado. Como mínimo 3 entidades establecidas en 3 Estados Miembros de la UE o asociados diferentes. Al menos 60% de presupuesto destinado a industria. Coordinador NO start-up (validación económica).

NB: *3 fechas de cierre al año.*
Consultar el programa de trabajo.

Vuelve a estar activo a partir de 2018!!!
Primer Cut-OFF 21-Feb-2018

Many thanks…

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eurecat
Centre Tecnològic de Catalunya

tecnio catalonia
Fins a 31/12/2019
ACCIÓ
Generalitat de Catalunya

Com hem afrontat la participació a H2020
Estratègia cap a l'èxit

Innovant amb les empreses

Programa Societats Segures H2020

- Secure Societies és un programa complex
  - Si som operador o usuari final
    - Definir quins són els reptes que es volen resoldre
  - Si som una empresa proveïdora de solucions
    - Tenir clarament definit quina oferta tecnològica tenim i podem oferir en un determinat entorn (millor si ja disposem de solucions implementades en algun sector)
  - I encara millor si fem tàndem entre un operador o usuari final i una empresa que ja li estigui proveint serveis

Projecte STOP-IT

Strategic, Tactical, Operational Protection of water Infrastructure against cyber-physical Threats

STOP-IT té com a objectiu crear eines tecnològiques d'anàlisis i prevenció de riscos en infraestructures de subministrament d'aigua per contrarestar ciberatacs o riscos naturals.

STOP-IT permetrà mesurar l'eficàcia de les tecnologies actuals i proposar noves mesures pal·liatives més eficients o complementàries per prevenir futures amenaces.

- 22 socis (+2 third parties)
- SINTEF coordinador
- Noruega, Alemanya, Espanya, Holanda, Israel, Grècia, Bèlgica
- 1043 PMs
- 9.6M Budget – 8.25M€ Funding
- Iniciat 1/06/2017 (48 mesos durada)

- Eurecat 1r soci en esforç

Claus d'èxit per un projecte Secure Societies

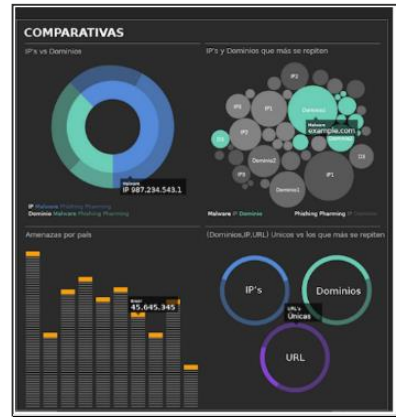
- Identificar necessitats dels usuaris finals
- Llistar les necessitats i prioritzar-les
- Definir solucions tecnològiques que poden aportar els socis
- Fer matching de necessitats i solucions tècniques
- Aquelles que no encaixin, es queden fora del projecte
- Identificar clarament en quin TRL es troba cada una de les tecnologies a l'inici del projecte i quin TRL final s'espera
- Fer llista preliminar de productes

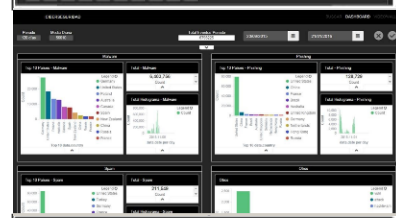
Com vam plantejar la nostra participació

- Tenim un bon posicionament en el sector de gestió de l'aigua
- Col·laborem amb centre de recerca de l'aigua (CETAQUA) associat a AGBAR
- Reunions amb responsable de seguretat d'AGBAR per definir prioritats i establir la validació de les solucions
- Complementem coneixement de domini oferint eines TIC per gestionar les infraestructures
  - Grup de **Smart Management Systems** d'Eurecat ofereix diverses solucions per gestió i simulació en distribució d'aigua i plantes de tractament
- Capacitats i solucions en gestió de ciberseguretat en sector financer
  - Grup de **IT Security** d'Eurecat disposa de solucions funcionant que s'han traslladar cap al sector aigua (visualització d'amenaces, atacs radiofreqüència, ...) i d'altres que es desenvoluparan de nou (detecció d'anomalies, integritat de dades utilitzant blockchain)

Què n'hem tret?

- Evolució de solucions tecnològiques ja existents
- Transferència de solucions tecnològiques a nous sectors
  - Cyber Intelligence Center
- Hem millorat el posicionament en sector aigua i en la protecció d'infraestructures
  - Detecció d'anomalies
  - Integritat de dades en entorn industrial amb solucions blockchain
- Hem incrementat el posicionament en gestió de seguretat en infraestructures a l'entorn català
  - Contractes directes de provisió de serveis amb operadors catalans





Us animem a participar

- Oferiu solucions que us interessi evolucionar en els propers anys
- Busqueu "mini-consorcis" locals per anar a un consorci important a nivell Europeu
- Quan entreu a un consorci, participeu-hi activament
- Participeu a esdeveniments genèrics i dedicats

  ICT Proposers day – 9 i 10 de Novembre, Budapest

  SMI2G – 1 i 2 de Febrer de 2018, Brussel·les

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GRÀCIES

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Public Programmes

HORIZON 2020
Seguretat i protecció d'Europa i els ciutadans

Entitats catalanes participants

A broad range of services for growth-oriented SMEs

enterprise europe network

Business Support on Your Doorstep

INTERNATIONAL PARTNERSHIPS	ADVISORY SUPPORT	INNOVATION SUPPORT
Partnership database	Advice on EU laws and standards	Access to finance and funding
Brokerage events	Market intelligence	Innovation Management Services
Company missions	IPR expertise	Technology transfer

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