

Convocatorias 2014 del Programa ICT Horizonte 2020 - Liderazgo Industrial

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Valencia, 30 de enero de 2014

Índice de Contenidos

1. ¿Quién es quién en ICT-LEIT H2020?
2. ICT del 7PM a H2020: cambios relevantes.
3. Las convocatorias 2014.
4. Aspectos a tener en cuenta.
5. Epílogo.

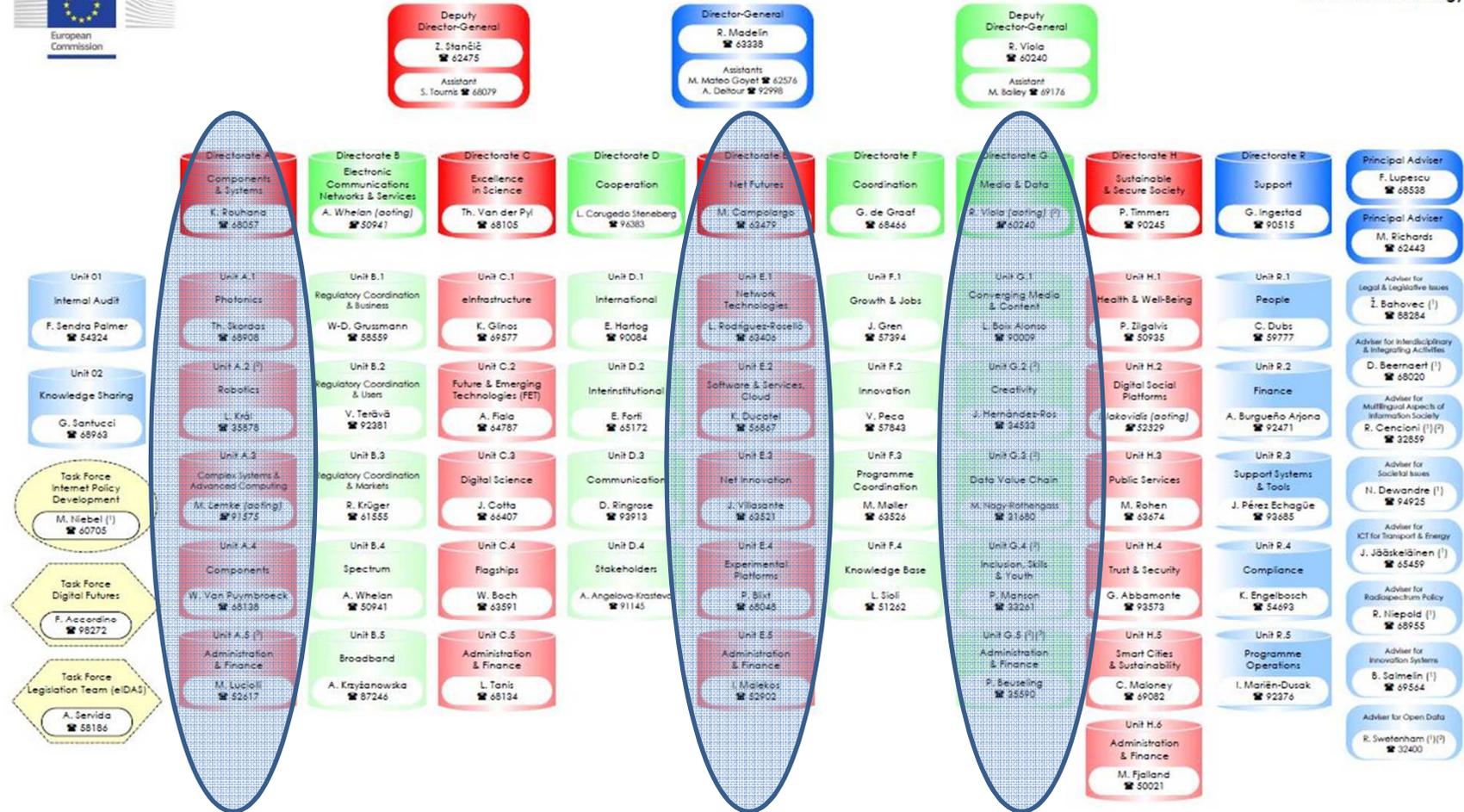
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1. ¿Quién es quién en ICT-LEIT H2020?



DG CONNECT
'Communications Networks,
Content & Technology'



(1) Adviser to the Director-General.
(2) Luxembourg.
(3) Unit A.5 is also AFU for Unit G.1; Unit G.5 is also AFU for Unit A.2.

1. ¿Quién es quién en ICT-LEIT H2020?

La Delegación española en el Comité de Gestión ICT-LEIT



Dirección Programas Internacionales

Fernando Rico Ríos
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SG de Relaciones Internac. y con Europa

Mariano Alcañiz Raya
malcaniz@labhuman.i3bh.es

El Punto Nacional de Contacto (NCP) de ICT-LEIT en España



Dirección Programas Internacionales

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SG de Relaciones Internac. y con Europa

Claudio Feijoo González
cfeijoo@cedint.upm.es



1. ¿Quién es quién en ICT-LEIT H2020?

El equipo CDTI

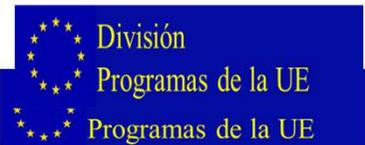


CDTI Centro para el
Desarrollo
Tecnológico
Industrial

Dirección Programas
Internacionales

Esther Casado Moya
esther.casado@cdti.es

Paloma Dorado Aguilar
Paloma.dorado@cdti.es



División
Programas de la UE
Programas de la UE



CDTI Centro para el
Desarrollo
Tecnológico
Industrial

Personas de Contacto en CDTI:



Leadership in Enabling and Industrial Technologies: ICT



Esther Casado Moya: Content Technologies & Information Management. SME Instrument.
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Paloma Dorado Aguilar: Components & Systems. μ -n-electronics. ECSEL JTI.
paloma.dorado@cdti.es

Fernando Martín Galende: Advanced Computing. Robotics. Photonics. Factories of the Future. EU-Brazil Actions.
fernando.martin@cdti.es

Fernando Rico Ríos: Future Internet. ICT Cross-cutting Activities. Access to finance, Innovation and Entrepreneurship. EU-Japan Actions.
fernando.rico@cdti.es

Personas de Contacto en CDTI:



Societal Challenges: ICT Applications



Health: eHealth, Ageing, AAL, etc.

marta.gomez@cdti.es

carolina.carrasco@cdti.es

Energy: ICT for Energy Efficiency, Smart Cities, ICT for Smart Grids, Energy Efficient Buildings, etc.

luisa.revilla@cdti.es

Transport: Intelligent Transport Systems, Green Cars, Urban Mobility, Logistics, etc.

alejandro.ruiz@cdti.es

Climate: ICT for Environment, Water Management, Waste Management, etc.

carolina.rodriguez@cdti.es

lydia.gonzalez@cdti.es

Personas de Contacto en CDTI:



Societal Challenges: ICT Applications
LEIT: Public Private Partnerships



Security: Privacy, Access Control, Secure Information Sharing, Trust eServices, Critical Infrastructures Protection, etc.

maite.boyero@cdti.es

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Food: Food Chain Data Standardisation, etc.

josemanuel.gonzalez@cdti.es

marta.conde@cdti.es

NMBP: PPP of Factories of the Future and Energy Efficient Buildings.

lucia.iñigo@cdti.es

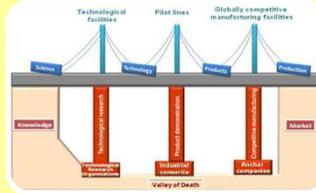
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2. ICT del 7PM a H2020: cambios relevantes

Programa Marco de Investigación e Innovación (2014-2020)



Excellent Science

Industrial Leadership

Societal Challenges

European Research Council (ERC)

Future and Emerging Technologies (FET)

Marie Skłodowska-Curie actions on skills, training and career development

European research infrastructures

ICT

Nanotechnology

Biotechnology

Advanced Materials

Advanced Manufacturing & Processing

Space

Access to Risk Finance

Innovation in SMEs

Health, demographic change and wellbeing

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy;

Secure, clean and efficient energy;

Smart, green and integrated transport;

Climate action, environment, resource efficiency and raw materials

Europe in a changing world-Inclusive, innovative and reflexive societies

Secure Societies: Protecting freedom and security of Europe and its citizens

2. ICT del 7PM a H2020: cambios relevantes

En cuanto a:

- Contenidos.
- Enfoque.
- Instrumentos aplicables.

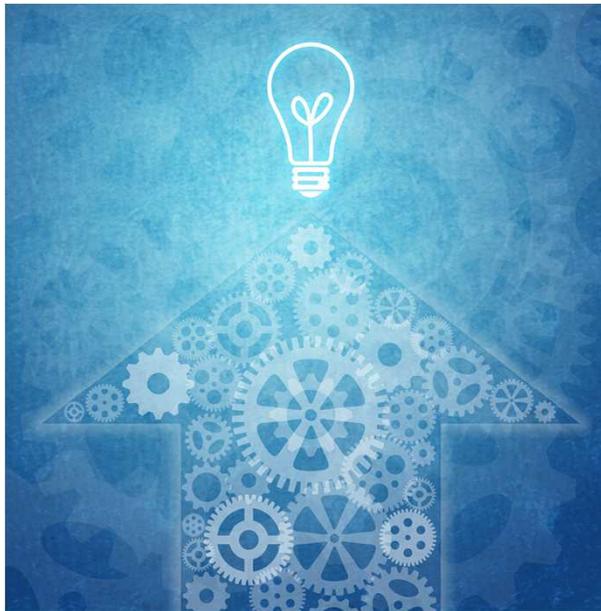
Cambios en los contenidos



Technology roadblocks



Cambios en los contenidos



What's
IN



Cambios en los contenidos



What's

OUT

ALL ICT Applications go to the Societal Challenges
**(EeB center of gravity in NMP)*

All FET Activities go to Excellent Science
Future & Emerging Technologies

FLAGSHIPS

Cambios en el enfoque: ¡¡INNOVACIÓN!!



Superar el Valle de la Muerte

- **More “topic-free”. More “objective-oriented”**
- **Industry-driven. Commitment towards industrialization.**
- **Application/Industry Validation**
 - Health, Food, Security, Manufacturing, Inclusion...
- **Bigger focus on innovation**
 - Business opportunities
 - Business cases/plans
 - Exploitation plans
 - User requirements/validation
 - Standardisation
- **Innovation Management**
 - Open Calls
 - Mini-proposals
- **Link with many other parts of H2020**



How?

- *Support Research and Innovation from lab to market*
- *Encourage incremental and disruptive innovation*
- *Promote a closer relationship between research and entrepreneurship*
- *Put SMEs in the lead in delivering innovations to the market.*
- *Use more evaluators from the business and investor domains involved in the selection process*
- *Provide greater access to risk capital for innovative SMEs & midcaps*
- *Ensure a clear emphasis on innovation in the selection of projects*





The result?

*Support for innovation is
mainstreamed in Horizon 2020*





How is innovation taken into account in the evaluation of proposals?





Evaluation criteria

- Different aspects of innovation are embedded in **each** of the 3 evaluation criteria used for selecting projects
- The same criteria will be used to evaluate:
 - 'Research and Innovation' actions (100% funded)
 - 'Innovation' actions (70% funded)
 - SME actions (70% funded)
- Investors (VCs, BAs) and market experts will be secured for panels evaluating proposals.

Criteria will be interpreted by evaluators within the context of the topic addressed by the proposal, taking into account the WP text, the type of action and the nature of the proposed activities.



In concrete terms....

'Excellence' criterion *(excerpt)*

- *Extent that proposed work is ambitious, **has innovation potential**, and is beyond the state of the art*

'Impact' criterion *(excerpt)*

- *Enhancing **innovation capacity** and integration of new knowledge;*
- *...developing **innovations meeting the needs of European and global markets**; and, where relevant, by **delivering such innovations to the markets***

'Quality & efficiency of the implementation' *(excerpt)*

- *Appropriateness of the management structures and procedures, including risk and **innovation management**.*

Note: For 'Innovation' actions and SME Instrument the score for 'impact' will be **weighted by a factor of 1.5**



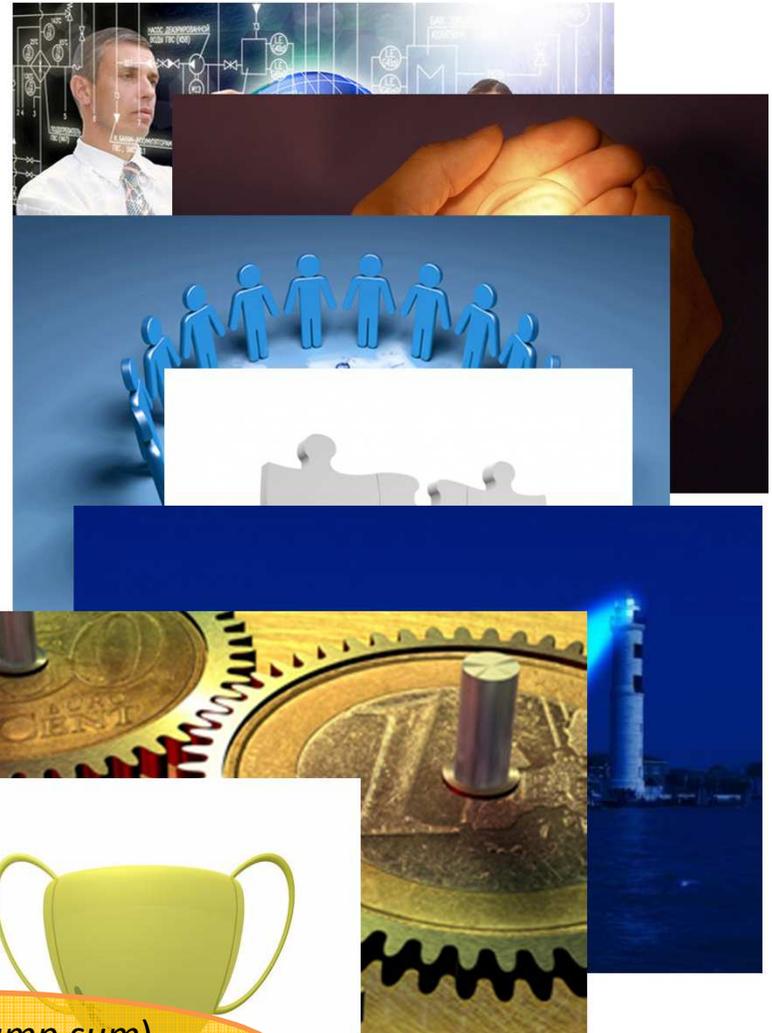
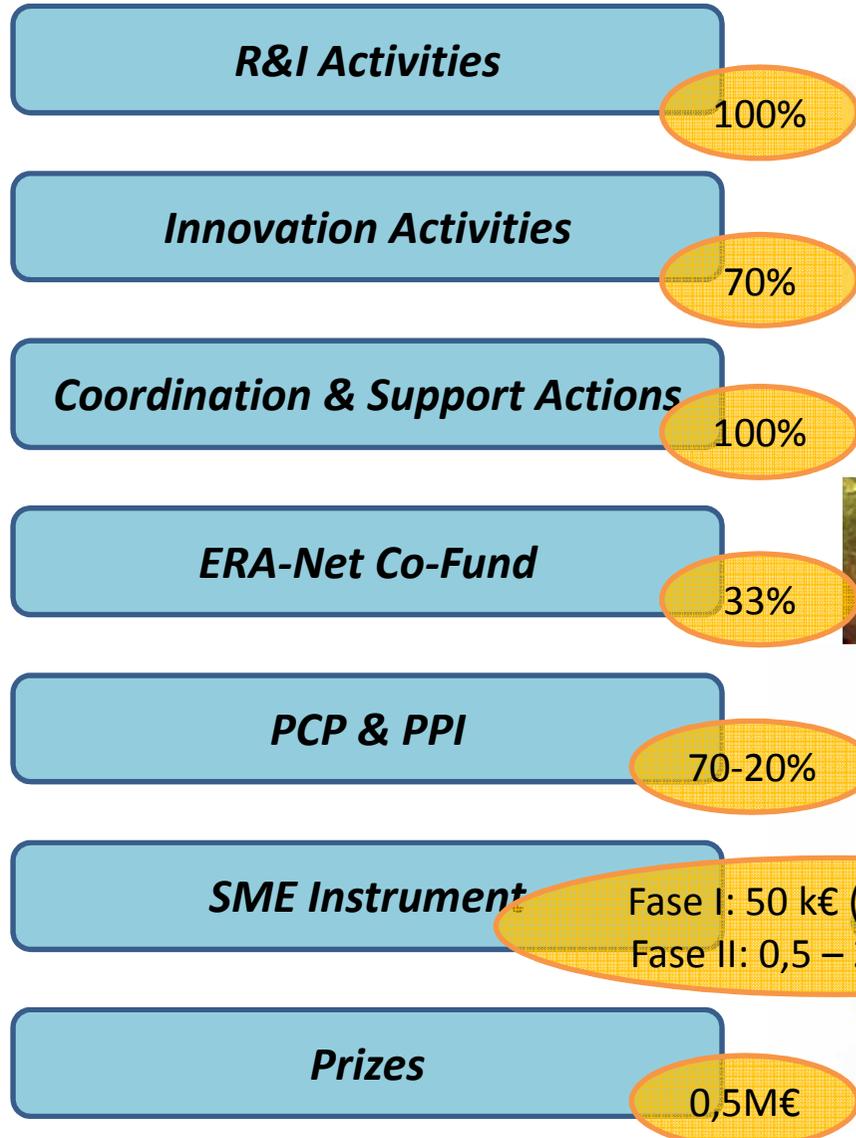
Less is more...

Page limits to encourage clarity in proposals

- SME instrument:
 - 10 pages for phase 1
 - 30 pages for phase 2
- Support actions: 50 pages
- 'Innovation' / 'Research & Innovation' actions: 70p
- PCP / PPI proposals: 90 pages

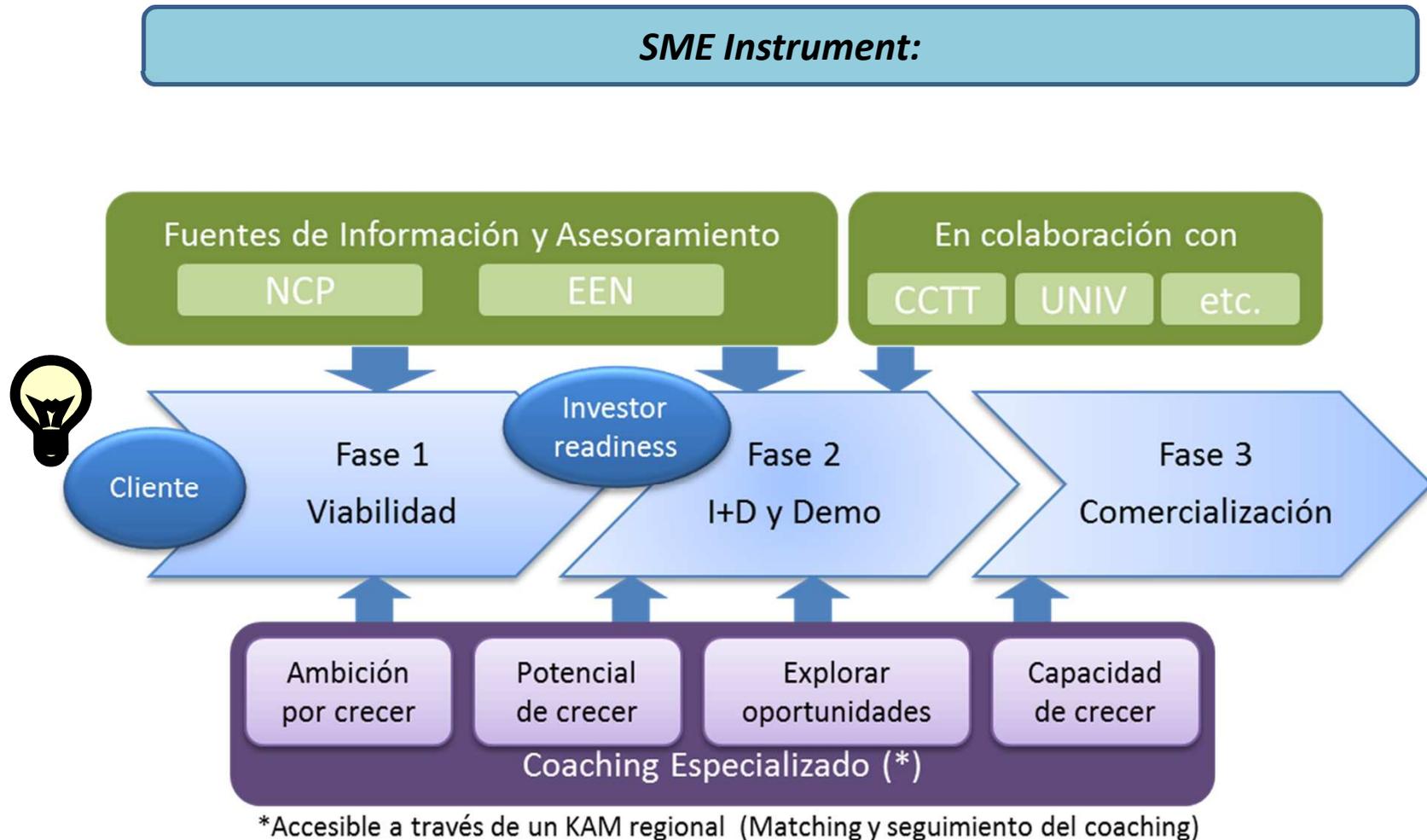


Instrumentos:



En general:
Small contribution: 2 – 4 M€
Large contribution: 5 – 8 M€

Programa ICT-LEIT: El Instrumento PYME



Programa ICT-LEIT: El Instrumento PYME

SME Instrument:

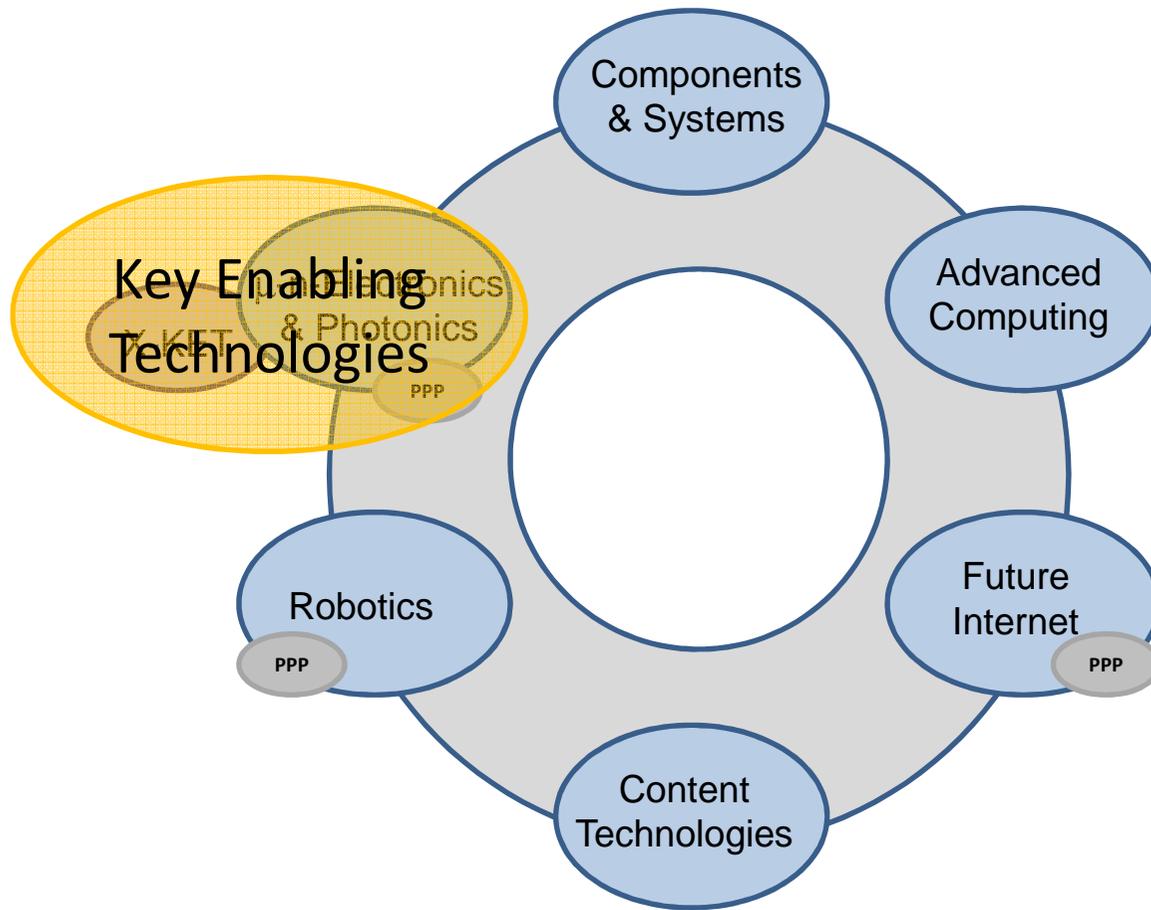


- *Targeted at all types of innovative SMEs showing a strong ambition to develop, grow and internationalise (EU dimension)*
- *Combination of demonstration and market replication encouraging the involvement of end users/potential clients, research as appropriate*
- *Only SMEs allowed to apply for funding. Single company support possible*
- *Simple rules and procedures*
- *Continuous open call*
- *No obligation for applicants to sequentially cover all three phases; Each phase open to all SMEs. However SME encouraged to go in phase1*
- *Bottom-up approach, each SC & LEIT themes defines a broad topic*
- *Central implementation through Executive Agency*

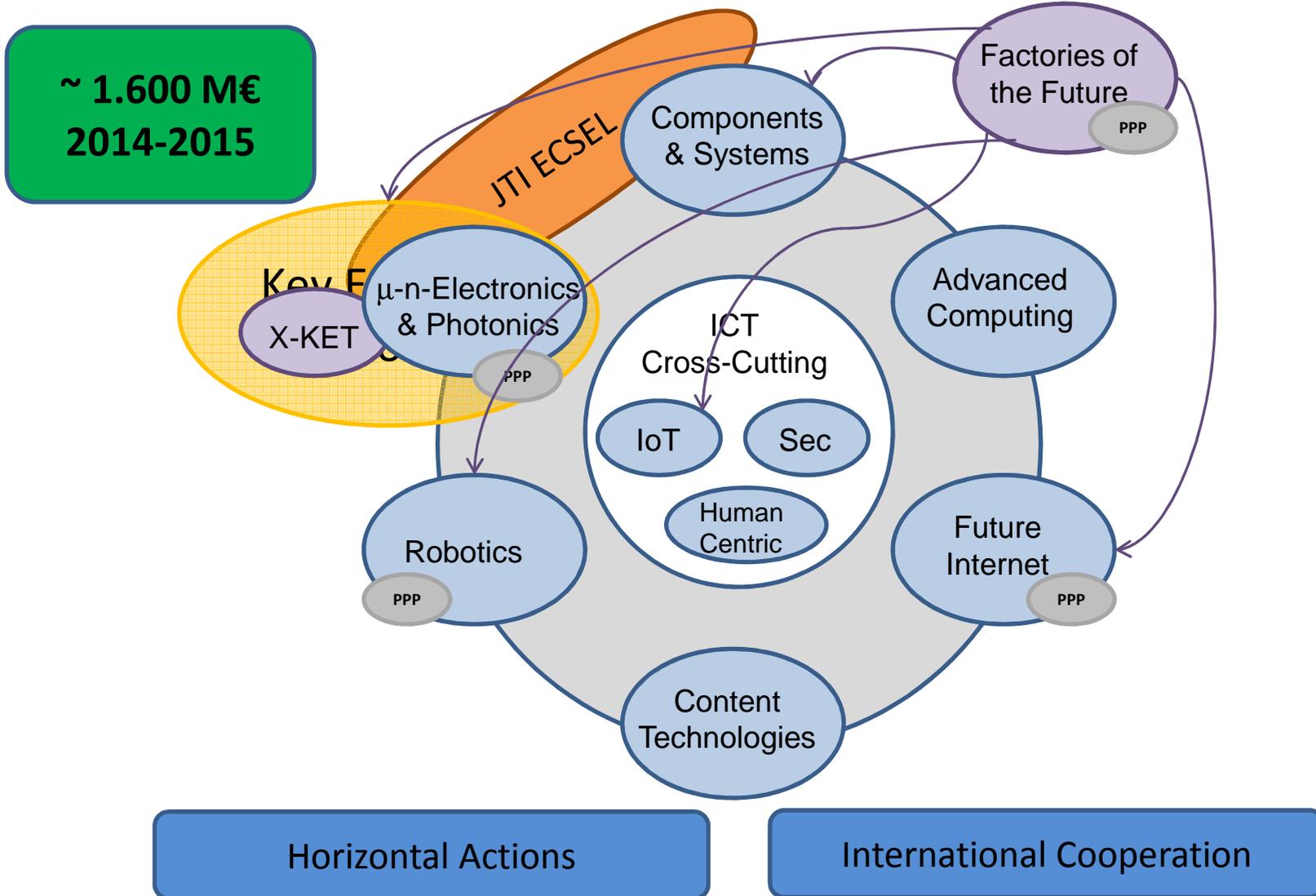
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Seis Grandes Líneas en el PT 2014-2015 (I)



Seis Grandes Líneas en el PT 2014-2015 (II)



Todas las convocatorias del Programa de Trabajo 2014-2015

Las fechas marcadas como () son indicativas y están sujetas a una decisión de financiación específica para 2015.*



H2020-ICT-2014: 11/12/2013 – 23/04/2014
excepto: PPP 5G (cierre 25/11/2014)
excepto: ODI (diversas fechas de corte)

H2020-ICT-2015: 15/10/2014 – 21/04/2015(*)

H2020-FoF-2014/2015: 11/12/2013 – 20/03/2014
9/12/2014
(convocatoria específica en el programa NMBP)

H2020-EUB-2015: 15/10/2014 – 21/04/2015(*)

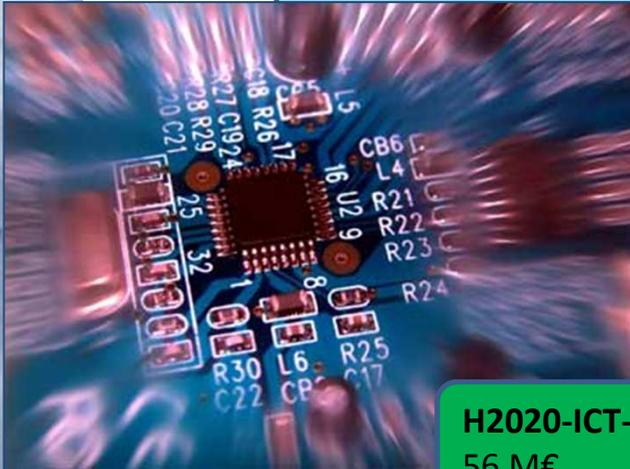
H2020-EUJ-2014: 7/01/2014 – 10/04/2014

Fast Track for Innovation : TBD

Convocatoria H2020-ICT-2014

JTI ECSEL
1.200 M€

A new generation of components and systems: Engineering of advanced, embedded and energy and resource efficient components and systems.



H2020-ICT-2014
56 M€

Smart Cyber-Physical Systems (CPS)

H2020-ICT-2014
48 M€

Smart Systems Integration

H2020-ICT-2014
54 M€

Advanced Thin, Organic and Large Area Electronics

Convocatoria H2020-ICT-2014

Future Internet: software, hardware, infrastructures, technologies and services.



H2020-ICT-2014
23 M€

Smart Networks and novel Internet Architectures

H2020-ICT-2014
32 M€

Smart Optical and Wireless Network Technologies

H2020-ICT-2014
73 M€

Advanced Cloud Infrastructures and Services

Convocatoria H2020-ICT-2014

Future Internet: software, hardware, infrastructures, technologies and services.



H2020-ICT-2014
21 M€

Tools and Methods for Software Development

H2020-ICT-2014
31,5 M€

Future Internet Research & Experimentation

H2020-ICT-2014
10 M€

Web Entrepreneurship

H2020-ICT-2014
125 M€

Advanced 5G Network Infrastructure for the PPP
Future Internet

5G

Convocatoria H2020-ICT-2014

Content technologies and information management: ICT for digital content, cultural and creative industries.



H2020-ICT-2014
50 M€

Big Data

H2020-ICT-2014
15 M€

Cracking the Language Barrier

H2020-ICT-2014
15 M€

Support for ICT Innovative Creative SMEs

Convocatoria H2020-ICT-2014

Content technologies and information management: ICT for digital content, cultural and creative industries.



H2020-ICT-2014
17 M€

Digital Gaming/Gamification Technologies

H2020-ICT-2014
31 M€

Multimodal and Natural Computer Interaction

Convocatoria H2020-ICT-2014

Robotics: Advanced interfaces, robotics and smart spaces.



H2020-ICT-2014
74 M€

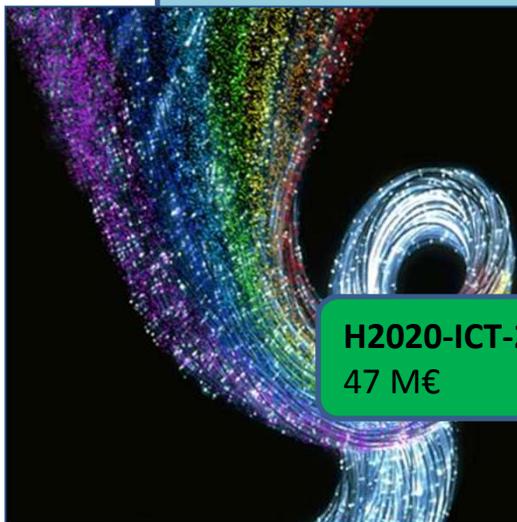
Robotics PPP

PPP
Robótica

<http://www.eurobotics-project.eu/robotics-ppp/>

Convocatoria H2020-ICT-2014

Micro- and nanoelectronics and photonics: Key Enabling Technologies related to micro- and nanoelectronics and to photonics covering also quantum technologies.



H2020-ICT-2014
47 M€

Photonics

JTI ECSEL
1.200 M€

PPP
Fotónica

Convocatoria H2020-ICT-2014

ICT Cross-Cutting Activities: Basic and generic ICT technologies of use for the development of products, services and technologies in the six main lines and beyond.



H2020-ICT-2014
7 M€

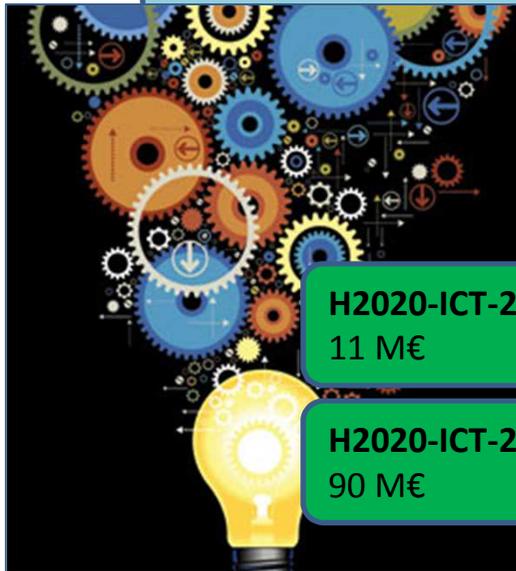
Human-centric Digital Age

H2020-ICT-2014
38 M€

Cybersecurity, Trustworthy ICT

Convocatoria H2020-ICT-2014

Horizontal ICT Innovation Actions: Ensure best leverage of innovation actions across the challenges and ICT R&D in H2020 delivers the intended impact on growth and competitiveness.



H2020-ICT-2014
11 M€

Innovation and Entrepreneurship Support

Contests,
PCP, Prizes...

H2020-ICT-2014
90 M€

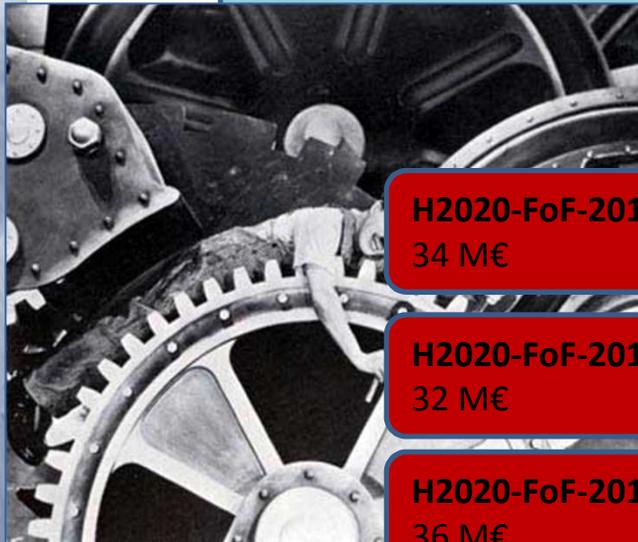
Open Disruptive Innovation Scheme (ODI)

SME
Instrument

Convocatoria H2020-FoF-2014 (NMPB)

PPP
FoF

Factories of the Future: Modernising Europe's Manufacturing Capabilities.



H2020-FoF-2014
34 M€

Process Optimisation of Manufacturing Assets

H2020-FoF-2015
32 M€

ICT-enabled Modelling, Simulation, Analytics and Forecasting Technologies

H2020-FoF-2015
36 M€

ICT Innovation for Manufacturing SMEs (I4MS)

H2020-FoF-2014
9 M€

Development of Novel Materials and Systems for OLED Lighting or Displays

Convocatoria H2020-EUJ-2014

International Cooperation: EU-Japan Research and Development Cooperation in Net Futures.



H2020-EUJ-2014
6 M€

Technologies combining Big Data, Internet of Things in the Cloud

Access Networks for Densely Located Users

Optical Communications

Experimentation and Development of Federated Japan-EU Testbeds

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Tipos de proyectos

Se financian proyectos en todas las fases del proceso que lleva de la investigación al mercado:

- que aporten **valor añadido a nivel europeo**,
- que sean de **aplicación exclusivamente civil** (no militar)
- que respeten los **principios éticos** y la legislación nacional, de la Unión Europea e internacional aplicable
- que se desarrollen de forma general en **consorcio transnacional**, con la participación de *al menos 3 entidades independientes entre sí de 3 Estados Miembros de la Unión Europea o Estados Asociados*, aunque hay determinados tipos de proyectos en los que se puede participar de **forma individual**.
- que se **ajusten a las líneas específicas de investigación e innovación** detalladas en los programas de trabajo y las convocatorias correspondientes
- con un **presupuesto global** y una **duración** que puede variar dependiendo del alcance de las actividades.

Qué es lo que no financia H2020

- Acciones que no respondan a actividades de investigación, desarrollo tecnológico, demostración e innovación u otras actividades financiadas dentro de H2020 y los respectivos Programas de Trabajo
- Tengan carácter local, regional o nacional, en los que la dimensión europea no esté justificada
- No presenten un avance real sobre el conocimiento ya existente a nivel europeo (proyectos de investigación), o una innovación real para el mercado europeo (proyectos de innovación).
- Dimensión presupuestaria o temporal muy reducida

Aspectos a tener en cuenta

- **Aspectos de Innovación:**
 - **Impacto (criterio principal en Acciones de Innovación e Instrumento PYME)**
 - **Identificar SIEMPRE primero el impacto descrito en el WP para ese objetivo/topic!**
 - **Compromiso Industrial**
 - **Plan de Explotación**
 - **Gestión de los DPI:** <https://www.iprhelpdesk.eu/>
 - **Contribución a Standards:** <http://ec.europa.eu/digital-agenda/events/cf/ict2013/item-display.cfm?id=11541>
 - **Posibles Patentes (ojo a cuándo se desvela la documentación técnica)**
 - **Aspectos de Open Access y Data Management Plan:** <https://ec.europa.eu/digital-agenda/en/news/open-access-eu-project-results-go-public>
 - **Etc**
- **Evaluación remota y en una única fase (salvo excepciones). Multi-step?**
- **Plazos previstos de 5+3 meses: Apenas habrá tiempo para negociaciones. Las propuestas seguirán la estructura de la DoW del Grant Agreement.**
- **Ojo a las posibles limitaciones de páginas: warn & watermark**

Aspectos a tener en cuenta

- **Comprobar SIEMPRE la viabilidad financiera de los coordinadores y el estatus de PYME; es posible que no haya tiempo para cambios después:**
 - [Financial Viability Check Tool](#)
- **Darse de alta en la base de datos de evaluadores/revisores de la Comisión para H2020:**
<http://ec.europa.eu/research/participants/portal/page/experts>
- **Atentos a los Infodays CDTI:**
 - **21/01 – Network Technologies**
 - **28/01 – Content Technologies**
 - **4/02 – Micro-Nano-Electronics, Photonics and Robotics**
- **Documentación Convocatoria 2014:**
<http://www.cdti.es/index.asp?MP=9&MS=31&MN=2&TR=A&IDR=7&xtor=RSS-4&id=584>

Aspectos a tener en cuenta



Open Access:

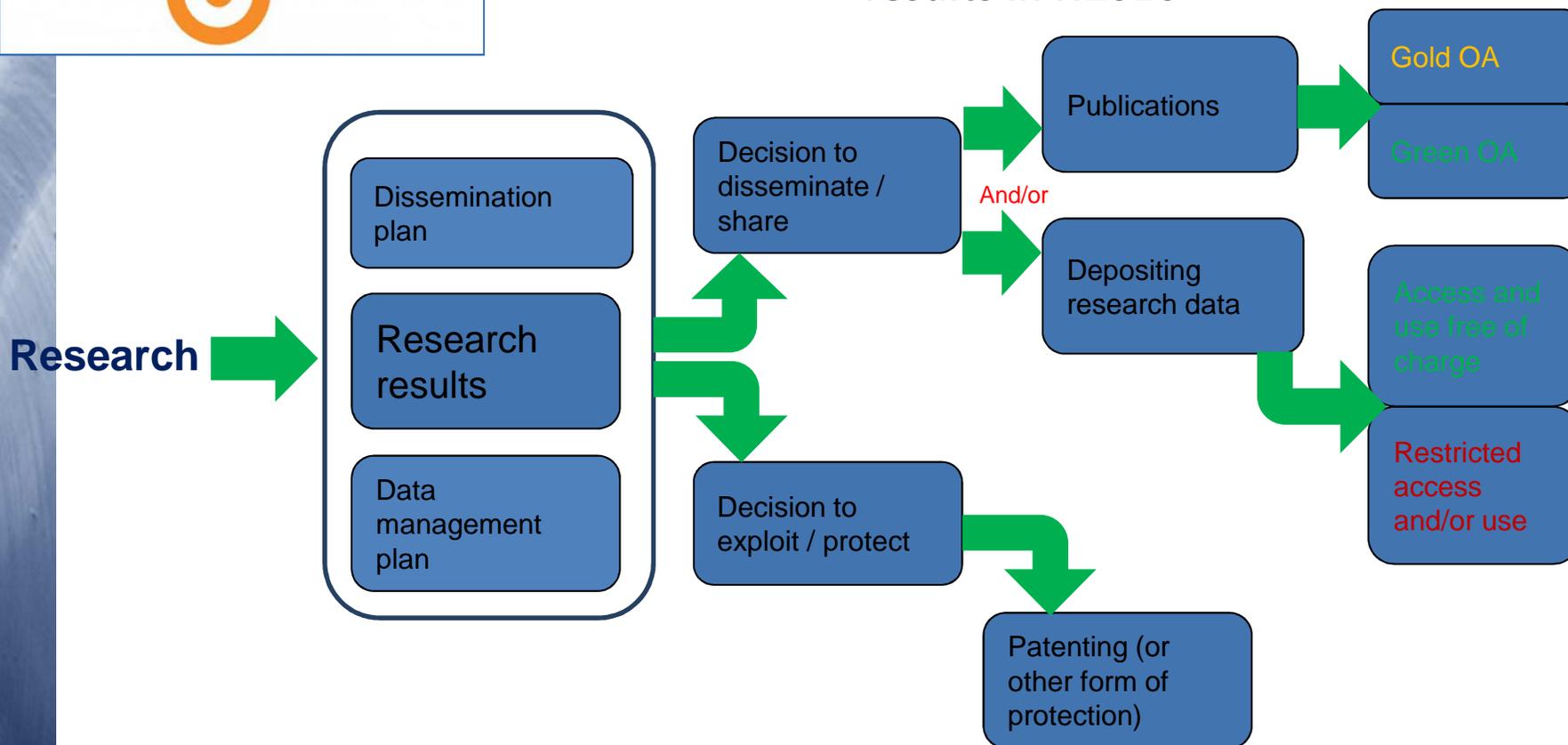
- **Open access *mandate* in H2020**
 - **Obligation** to provide OA to publications
 - **All areas**
 - Peer-reviewed publications
 - Allowed embargos: 6/12 months
 - Green and Gold OA supported
 - **Beneficiaries must aim to deposit the research data needed to validate the results presented in publications ('underlying'/'linked' data)**
- Introduction of **Data Management Plans (DMPs)**: proposals will contain a brief DMP:
 - What data will be collected / generated?
 - What data will be shared / made open?
 - How metadata will be generated?
 - How will data be curated and preserved?

Aspectos a tener en cuenta



Open Access:

Dissemination and exploitation of research results in H2020



Aspectos a tener en cuenta



Open Access Infrastructure Support:



www.openaire.eu

- Started as an infrastructure for the EC FP7 Open Access Pilot (covering 20% of FP7 funding)
 - Harvests information of the whole FP7 publication output and generates relevant statistics (currently: 41000+ publications; 16000+ OA publications)
 - Helpdesk & contact points in the EU Member States
 - Repository for 'homeless' publications (Orphan repository)
 - Is prepared to provide same support for H2020 including the Open Data Pilot (+ automatic data exchange with EC)
- Expected to become legal entity

Aspectos a tener en cuenta



Open Access:

- Open access and Digital science: means improving efficiency, quality and impact of publicly-funded research for society and innovation in Europe.
- Open access to publications: a general principle in H2020. Both **Green** and **Gold** open access models are promoted. Depositing underlying data is encouraged.
- Open access to data : a pilot in H2020 will analyse experiences.
- Open access policy is not a goal in itself, but an element in promoting digital science practices for future research, education and innovation

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Epílogo

1. Cambios relevantes de **contenido**:
 - Permanecen las tecnologías.
 - Aplicaciones a los Retos Sociales.
 - FET a ciencia Excelente.
2. Tres **nuevas PPP** (5G, Robótica, Fotónica), la **JTI ECSEL** como fusión de las JTI ARTEMIS y ENIAC + microsistemas (EPoSS).
3. Cambios relevantes de **enfoque e instrumentos**: INNOVACIÓN (Acciones de Innovación, PCP/PPI, Premios, Instrumento PYME, criterios de evaluación..) pero sin olvidar la I+D.
4. **Otros aspectos a tener en cuenta**: "open access", limitación de páginas, reducción plazo de negociación...
5. El Programa de trabajo **determina** enfoque e instrumento.



Muchas gracias por su atención