LAS TIC EN HORIZONTE2020
# LIDERAZGO INDUSTRIAL

PROGRAMA DE TRABAJO 2014-15

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CDTI

Asamblea PlaneTIC, 13 de enero de 2014

Horizonte 2020

Programa Marco de Investigación e Innovación (2014-2020)
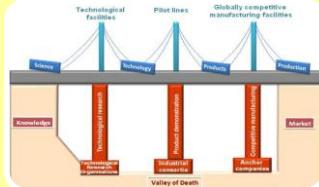
Excellent Science

- European Research Council (ERC)
- Future and Emerging Technologies (FET)
- Marie Skłodowska-Curie actions on skills, training and career development
- European research infrastructures

Industrial Leadership

- ICT
- Nanotechnology
- Biotechnology
- Advanced Materials
- Advanced Manufacturing & Processing
- Space
- Access to Risk Finance
- Innovation in SMEs

Societal Challenges

- 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

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Publicación del WP2014-15:

https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/H2020%20LEIT-ICT%20WP%202014-15%20-%2031%2010%202013.pdf

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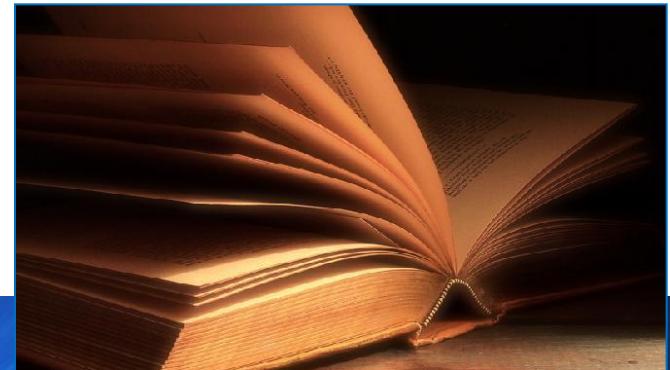
Objetivo:

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 oportunities*
    - *Business cases/plans*
    - *Exploitation plans*
    - *User requirements/validation*
    - *Standardisation*
- *Innovation Management*
    - *Open Calls*
    - *Mini-proposals*
- *Link with many other parts of H2020*

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Instrumentos:

R&D Activities — 100%

Innovation Activities — 70%

Coordination & Support Actions — 100%

ERA-Net Co-Fund — 33%

PCP & PPI — 70-20%

SME Instrument — Fase I: 50 k€ (*lump sum*) Fase II: 0,5 − 2M€ (70%)

Prizes — 0,5M€
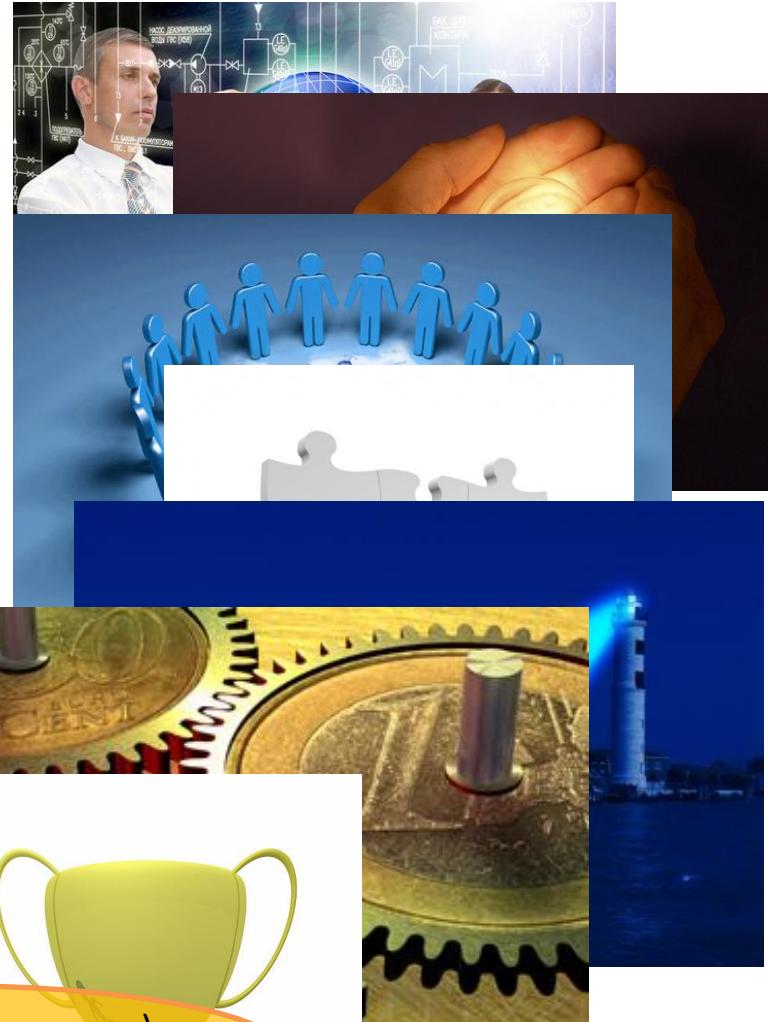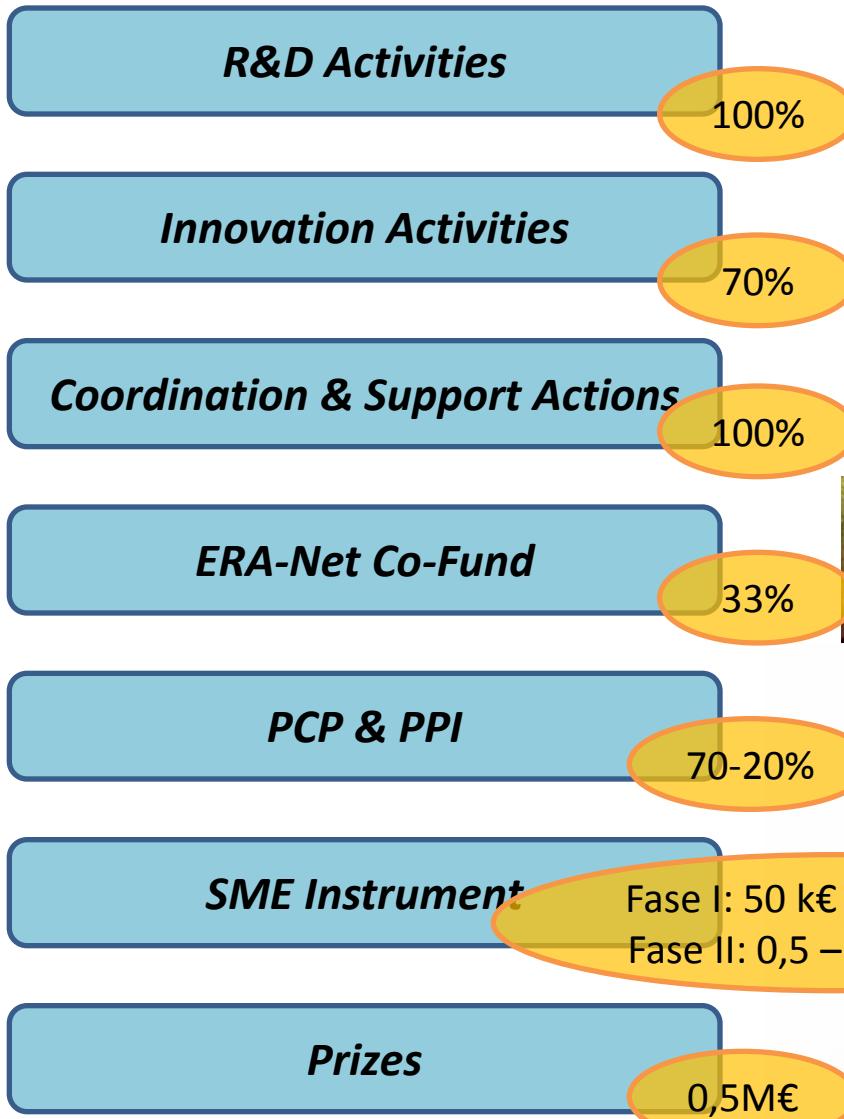
En general:

Small contribution: 2 − 4 M€

Large contribution: 5 − 8 M€

Cambios en los contenidos:

# Cambios en los contenidos:

What's

OUT

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

ALL?

All FET Activities
go to Excellent
Science

Future & Emerging
Technologies

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Seis Grandes Líneas:

(14/01/2014)
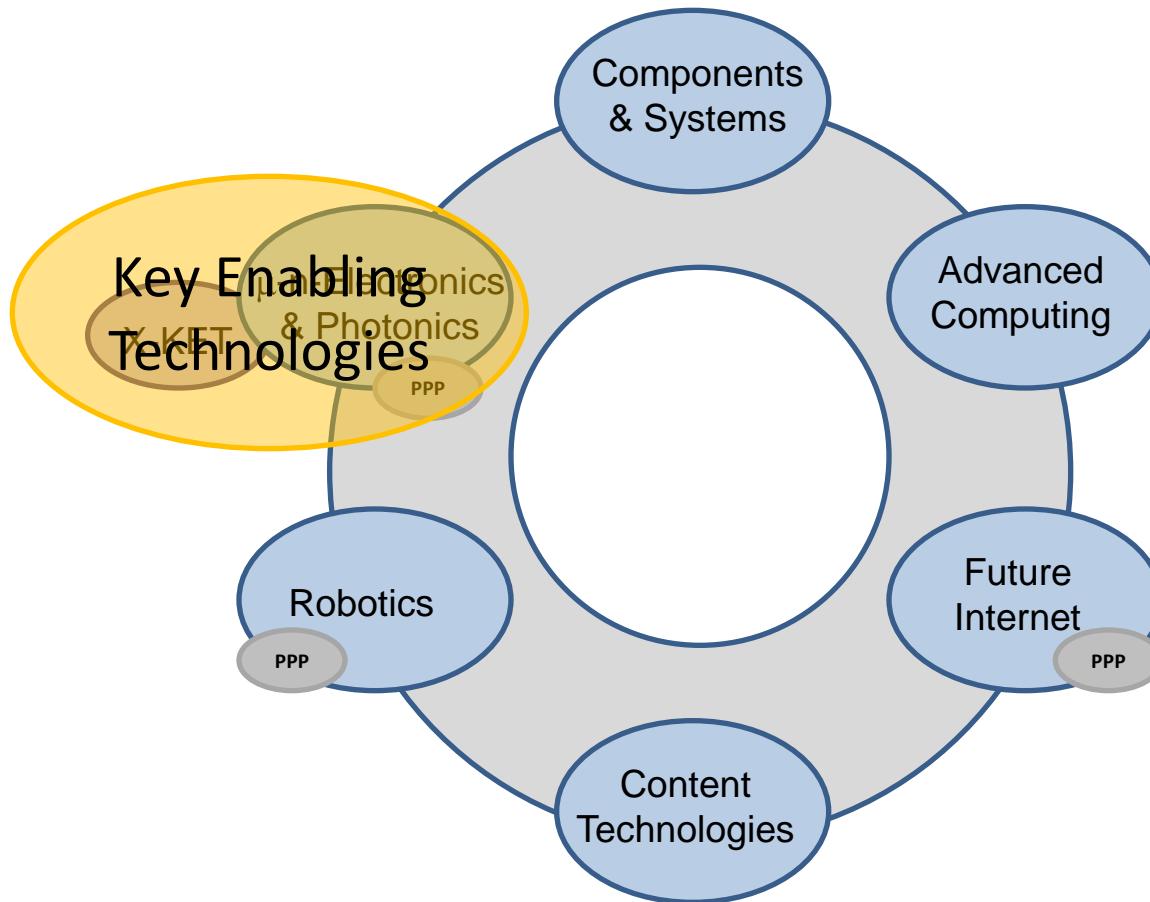
Seis Grandes Líneas:

~ 1.600 M€
2014-2015

Factories of the Future — PPP

Components & Systems

JTI ECSEL

Key E... X-KET

μ-n-Electronics & Photonics — PPP

ICT Cross-Cutting

IoT   Sec

Human Centric

Advanced Computing

Robotics — PPP

Future Internet — PPP

Content Technologies
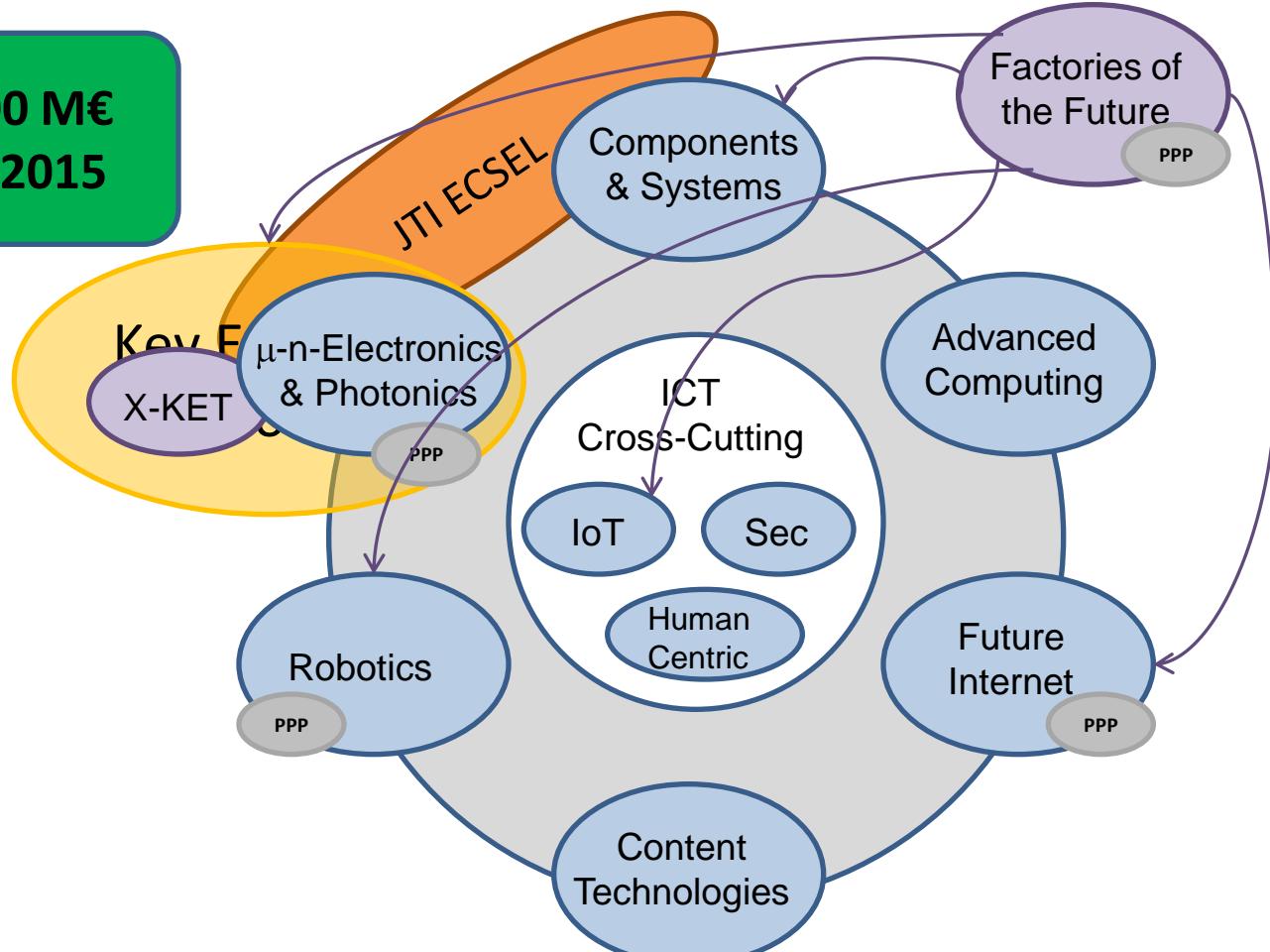
Horizontal Actions

International Cooperation

Programa ICT: Líneas temáticas en H2020 (I)
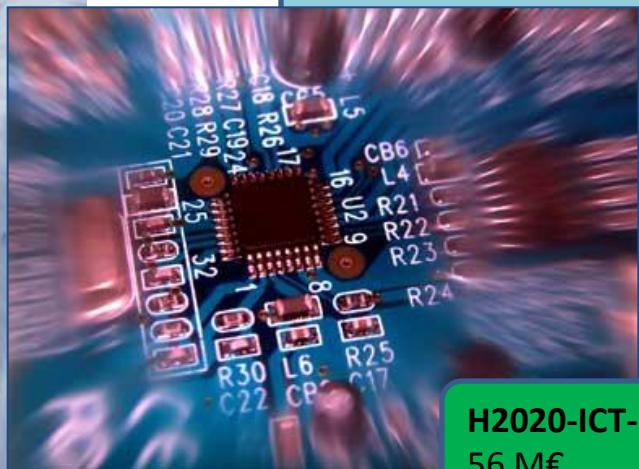
JTI ECSEL 1.200 M€

*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 52 M€	Smart Systems Integration
H2020-ICT-2014 38 M€	Advanced Thin, Organic and Large Area Electronics

Programa ICT: Líneas temáticas en H2020 (II)

Advanced computing: Next generation and secure computing systems and technologies.

| **H2020-ICT-2015** 57 M€ | Customised and Low Power Computing |

Programa ICT: Líneas temáticas en H2020 (III)

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

| H2020-ICT-2014 24 M€	Smart Networks and novel Internet Architectures
H2020-ICT-2014 30 M€	Smart Optical and Wireless Network Technologies
H2020-ICT-2014 73 M€	Advanced Cloud Infrastructures and Services
H2020-ICT-2015 22 M€	Public Sector Productivity/Innovation through Cloud Computing Services

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Programa ICT: Líneas temáticas en H2020 (III)

Future Internet: software, hardware, infrastructures, technologies and services.
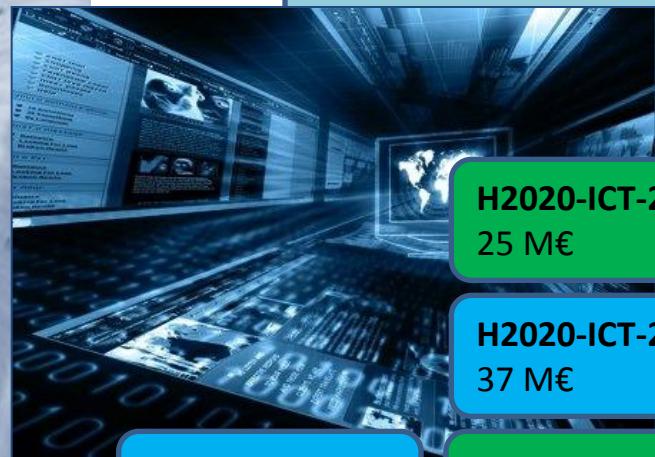
H2020-ICT-2014 25 M€	Tools and Methods for Software Development
H2020-ICT-2015 37 M€	Collective Awareness Platforms for Sustainability and Social Innovation
H2020-ICT-2015 18 M€ / **H2020-ICT-2014** 31,5 M€	Future Internet Research & Experimentation
H2020-ICT-2014 10 M€	Web Entrepreneurship
H2020-ICT-2014 125 M€1	Advanced 5G Network Infrastructure for the Future Internet — PPP 5G
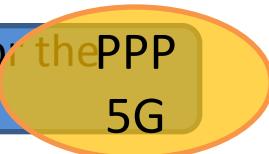
Programa ICT: Líneas temáticas en H2020 (IV)

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

H2020-ICT-2015 39 M€	**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
	H2020-ICT-2015 41 M€	Technologies for Creative Industries, Social Media and Convergence
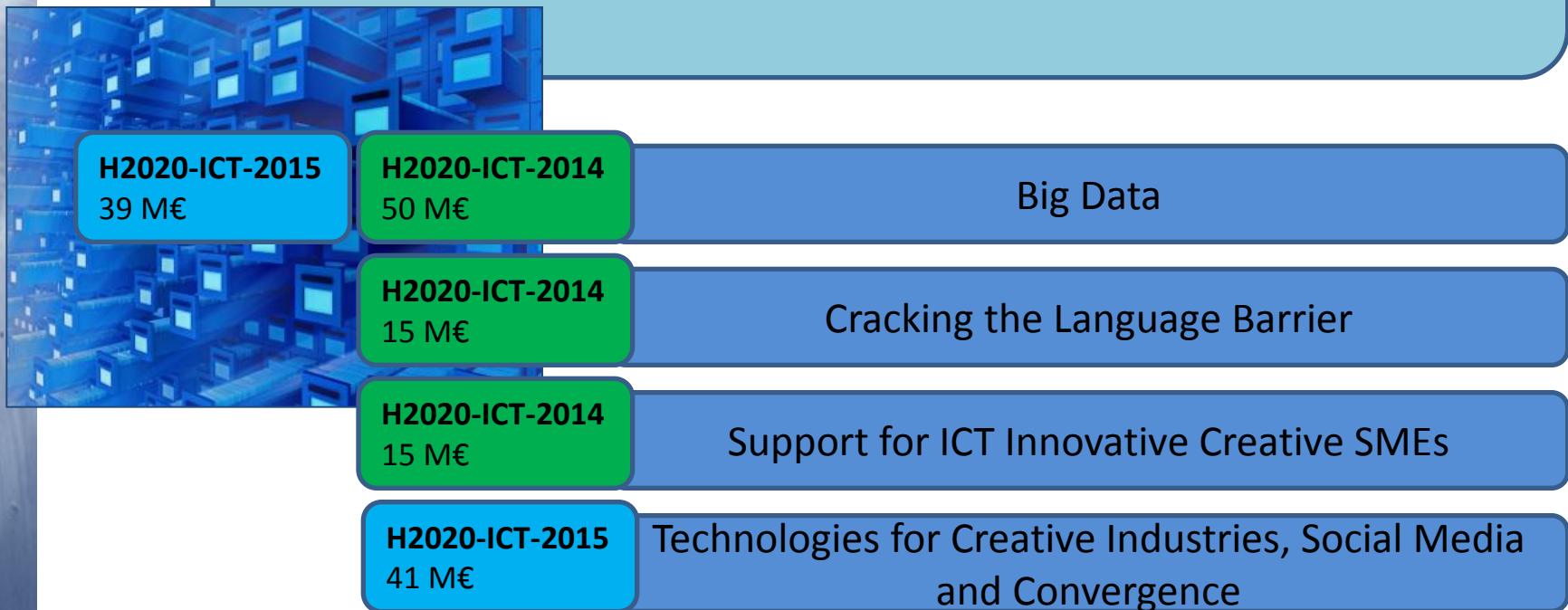
Programa ICT: Líneas temáticas en H2020 (IV)

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

H2020-ICT-2015 52 M€	Technologies for better Human Learning and Teaching
H2020-ICT-2014 17 M€	Digital Gaming/Gamification Technologies
H2020-ICT-2014 31 M€	Multimodal and Natural Computer Interaction

Programa ICT: Líneas temáticas en H2020 (V)

PPP
Robótica

Robotics: Advanced interfaces, robotics and smart spaces.

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

H2020-ICT-2014
74 M€

Robotics 2014

Markets: Manufacturing, commercial, civil, agriculture

Technology Transfer: Robotics use cases

H2020-ICT-2015
83 M€

Robotics 2015

Markets: Healthcare, consumer, transport

Industry-Academia cross-fertilization

Technology Transfer: Robotics use cases

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Programa ICT: Líneas temáticas en H2020 (VI)

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

H2020-ICT-2015
50 M€ — Generic μ–n–Electronic Technologies

H2020-ICT-2014
47 M€ — Photonics

H2020-ICT-2015
56 M€ — Cross-Cutting ICT KETs

H2020-ICT-2014
18 M€ (9+9) — Development of Novel Materials and Systems for OLED Lighting or Displays

H2020-ICT-2015
44 M€

JTI ECSEL
1.200 M€

PPP
Fotónica

Joint
ICT+NMBP
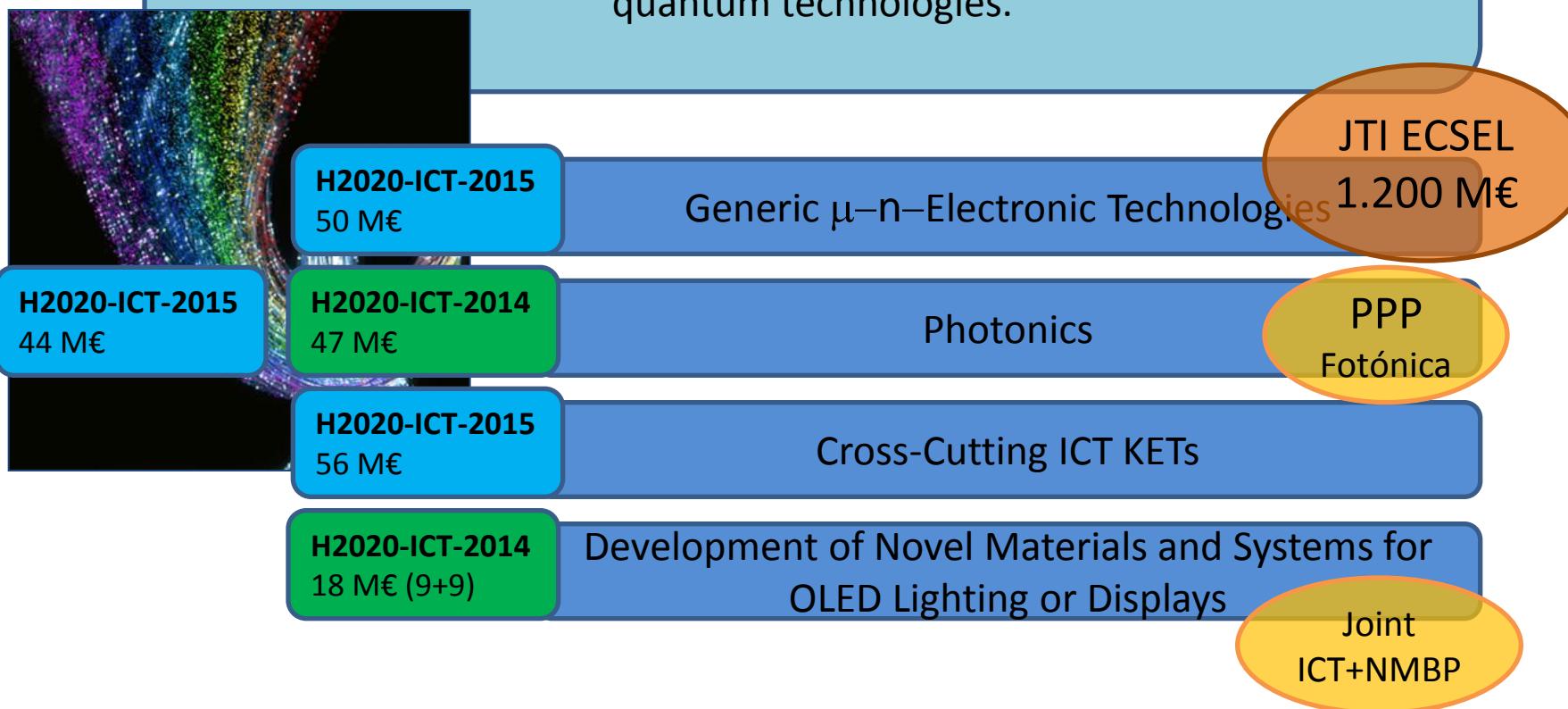
Programa ICT: Líneas temáticas en H2020 (VII)

PPP FoF

Factories of the Future: Modernising Europe's Manufacturing Capabilities.
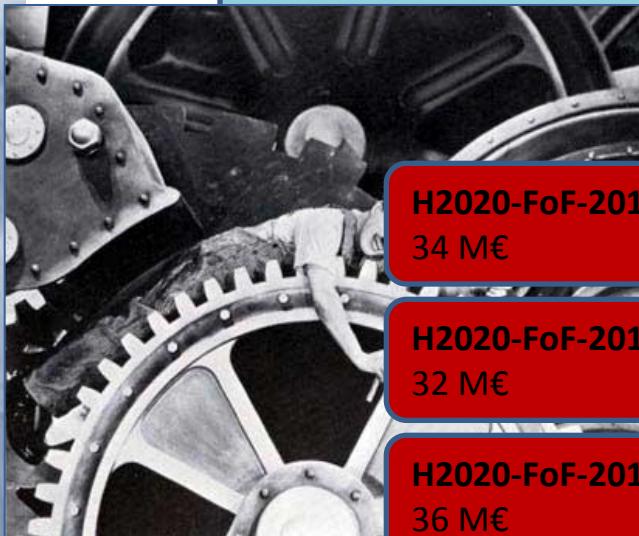
H2020-FoF-2014 34 M€	Process Optimisation of Manufacturing Assets
H2020-FoF-2015 32 M€	ICT-enabled Modelling, Simulation, Analytics and Forecasting Technologies
H2020-FoF-2015 36 M€	ICT Innovation for Manufacturing SMEs (I4MS)

Convocatoria en NMBP!!

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Programa ICT: Líneas temáticas en H2020 (VIII)

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-2015 51 M€	Internet of Things and Platforms for Connected Smart Objects
H2020-ICT-2014 7 M€	Human-centric Digital Age
H2020-ICT-2014 38 M€	Cybersecurity, Trustworthy ICT

Programa ICT: Líneas temáticas en H2020 (IX)

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-2015 15 M€	Support for Access to Finance	**Financial Instruments**
H2020-ICT-2014 11 M€	Innovation and Entrepreneurship Support	**Contests, PCP, Prizes…**
H2020-ICT-2014 90 M€	Open Disruptive Innovation Scheme (ODI)	**SME Instrument**
¿¿¿???	Fast Track for Innovation	**¿¿Fast, Open, Bottom-up??**

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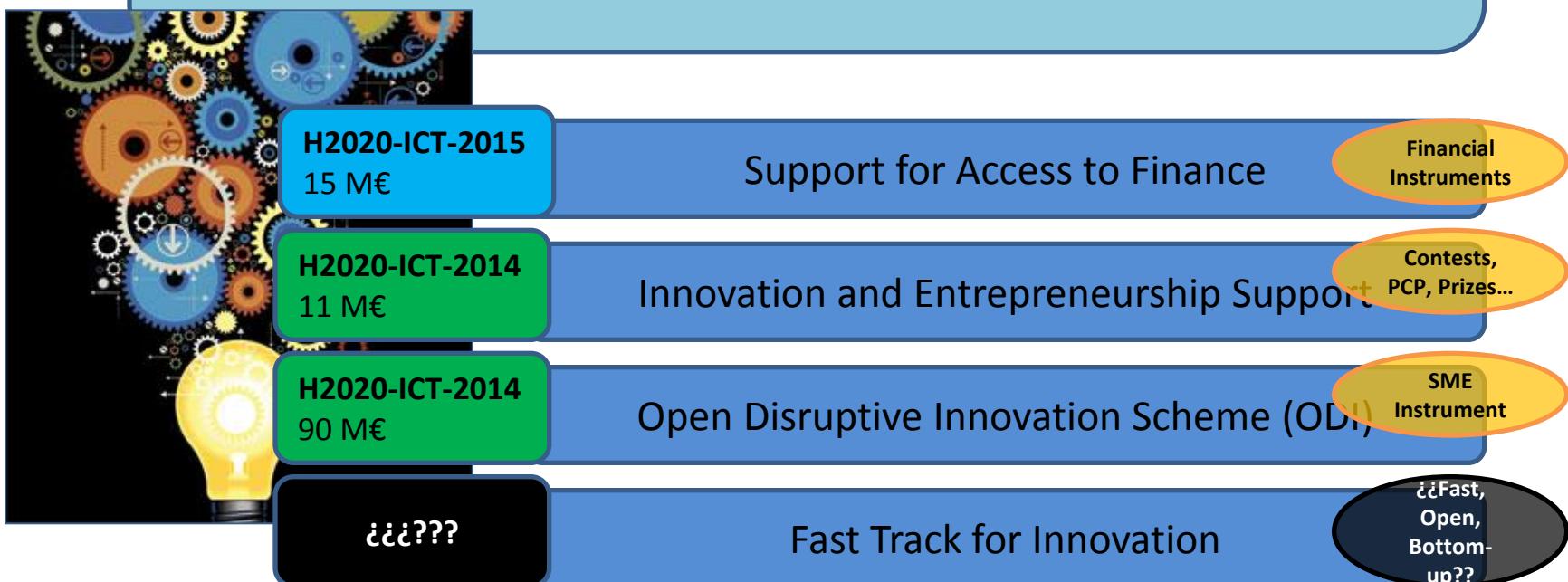
Programa ICT: Líneas temáticas en H2020 (IX)

SME Instrument:

Fuentes de Información y Asesoramiento
- NCP
- EEN

En colaboración con
- CCTT
- UNIV
- etc.

Cliente

Investor readiness

Fase 1
Viabilidad

Fase 2
I+D y Demo

Fase 3
Comercialización

Ambición por crecer

Potencial de crecer

Explorar oportunidades

Capacidad de crecer

Coaching Especializado (*)

*Accesible a través de un KAM regional (Matching y seguimiento del coaching)

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Programa ICT: Líneas temáticas en H2020 (X)

International Cooperation: International partnership building and support to dialogues with potential partners beyond Europe.

H2020-ICT-2015
3 M€

High Income Countries

CSA Actions

North America

East Asia / Oceania

H2020-ICT-2015
11 M€

Low and Middle Income Countries

R&D Actions

Sub-Saharan Africa

Programa ICT: Líneas temáticas en H2020 (X)

International Cooperation: EU-Brazil Research and Development Cooperation in Advanced Cyber Infrastructure.

H2020-EUB-2015
7 M€

Cloud Computing, including Security aspects

High Performance Computing

Experimental Platforms

Programa ICT: Líneas temáticas en H2020 (X)

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 Comunications

Experimentation and Development of Federated Japan-EU Testbeds

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Próximas Convocatorias:

Las fechas marcadas como (*) son indicativas y están sujetas a una decisión de financiación especifica 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 especifica 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

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Aspectos a tener en cuenta:

- *Aspectos de Innovación:*
  - *Impacto (criterio principal en Acciones de Innovación e Instrumento PYME)*
    - *Identificar <u>SIEMPRE</u> 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 <u>SIEMPRE</u> 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

Personas de Contacto en CDTI:

Leadership in Enabling and Industrial Technologies: ICT

Esther Casado Moya: Content Technologies & Information Management. SME Instrument.
esther.casado@cdti.es

Paloma Dorado Aguilar: Components & Systems. $\mu-n-$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

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Personas de Contacto en CDTI:

Societal Challenges: ICT Applications

Health: eHealth, Ageing, AAL, etc.
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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.
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marta.conde@cdti.es

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

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