



HORIZON 2020

LE PROGRAMME DE RECHERCHE ET
D'INNOVATION DE L'UNION EUROPÉENNE

Les appels TIC 2017

Technologies de l'information et de la communication

Claire FERTE

Orsay 18/01/16



Sommaire



1. Le PCN TIC
2. H2020 en bref
3. Éléments de la participation nationale
4. Les TIC dans H2020
5. Big Data et Réseaux/Infrastructures/Cloud
6. Informations utiles



LE PCN TIC

L'équipe du PCN TIC



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Claire
FERTÉ

Rôle

Coordinatrice du PCN

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PROSTIVALOR



Farzam
RANJBARAN

PCN suppléant

Université de Limoges



Isabelle
de SUTTER

PCN

Systematic Paris Région

H

2020

Notre rôle

Informer



Journées
d'information

Mise en ligne
d'information

Lettre du PCN

Orienter



Adéquation idée de
projet

Opportunités de
financement

Conseiller



Relecture d'abstract

Discussion autour
d'idées de projets

Relecture
Instrument PME

Comment lire une ligne d'appel



ICT-21-2016: Support technology transfer to the creative industries

Sujet - Année de l'appel

Specific Challenge: SMEs represent 85% of all actors in the creative industry sector. They co-exist with global players and often face difficulties in adopting state of the art ICT technologies and accessing finance. Moreover, they operate on fragmented and localised target markets and have to bear high market costs which affect their international competitiveness. In this context, ICT tools and technological innovation are fundamental for the creative industries and their competitiveness. They widen creative possibilities and improve efficiency in all sectors.

The goal is to increase the competitiveness of the European creative industries by stimulating ICT innovation in SMEs, by effectively building up and expanding a vibrant EU technological ecosystem for the creative industries' needs and by fostering exchanges between the creative industries SMEs and providers of innovative ICT solutions.

Scope: Innovation Actions

Actions should support creative industries SMEs in leveraging emerging ICT technologies for the development of innovative products, tools, applications and services with high commercial potential. Proposals should ensure that creative industries SMEs are participants in the consortium and take on a driving role in the action, i.e. leading the innovation activities and liaising with end-users, ensuring that the work responds to a clear market demand. The draft business plan provided should demonstrate that the solutions are cost-effective, market-ready and targeted at existing markets with a potential for cross-border extension.

Proposals should make clear if the action would lead to impacts at European or international level and explain how the achievement of those impacts would be measured.

The Commission considers that proposals requesting a contribution from the EU between EUR 0.5 and 1 million for a period between 12 and 18 months would allow this specific challenge to be addressed appropriately. This does not preclude the submission and selection of proposals with a different budget or duration.

Expected Impact:

- For the project portfolio resulting from the Call: tens of innovative solutions with high market potential ready to be deployed by European creative industries SMEs.
- Stronger collaboration between ICT innovative technologies providers and creative industries SMEs to improve the competitive position of the European creative industries.

Type of Action: Innovation action

Le défi à relever

Le périmètre de l'action

Indication sur le budget

Les impacts attendus

Le type d'action financée



ICT 1 Smart Cyber-Physical Systems				
a	Modelling and integration frameworks or smart cooperative and open CPS			56 000 000 €
b	Towards platforms and ecosystems or towards a "smart everywhere" society	70	100	37 000 000 €
c	Support action cross sectorial platform building structuring of constituencies and roadmapping		100	17 000 000 €
				2 000 000 €

a. Research & Innovation Actions should cover one or both of the following themes:

- Modelling and integration frameworks: modelling techniques and comprehensive integrated tool chains for clearly defined use cases. Major aspects to be addressed include the holistic modelling of the system behavioural, computational, physical and/or human aspects of CPS; and the seamless interoperability between CPS tools. Solutions should ensure flexibility and tractability of systems.

- Smart, cooperative and open CPS: Methods for engineering Cyber-physical Systems that are able to respond in real-time to dynamic and complex situations while preserving control, system safety, privacy, reliability, energy efficiency and dependability features, and addressing security and privacy "by design" across all levels. This includes CPS that are aware of the physical environment, enabling effective and fast feedback loops between actuation and sensing, possibly with cognitive and learning capabilities; further CPS with cooperation and negotiation capabilities supporting distributed services, autonomous, reactive and targeted problem solving and/or improved man-machine interaction. Also covered are open and heterogeneous CPS and Systems of Systems to facilitate seamless connectivity, dynamic reconfiguration as well as handling of emergent properties. The developed methods should enable evolutionary, adaptive and iterative system life-cycles and guarantee Quality of Service at functional and extra-functional level.

Projects are expected to be driven by industrial requirements, to be well balanced between industry and academia, and to include a demonstration and validation phase with realistic use cases.

b. Innovation Actions will stimulate innovation and connect innovators across value chains in view of broader adoption of novel embedded and cyber-physical systems technologies and their enablers in industrial and societal applications. Proposals should cover one or both of the following themes:

- Towards platforms and ecosystems: Prepare reference architectures and platforms

ICT 1 Smart Cyber-Physical Systems

			56 000 000 €
a	Modelling and integration frameworks or smart cooperative and open CPS	100	37 000 000 €
b	Towards platforms and ecosystems or towards a "smart everywhere" society	70	17 000 000 €
c	Support action cross sectorial platform building structuring of constituencies and roadmapping	100	2 000 000 €

Expected impact:

- Reduction of development time for CPS, by 30%, as compared to the state-of-the-art in 2013 and significant reduction in maintenance costs.
- Stronger pan-European collaboration across value chains and technology levels from the components and hardware to higher systems level creating open innovation eco-systems and stimulating consensus building on open tools, platforms and standards.
- Development in Europe of a competitive offer for next generation core ICT platforms spanning from operating systems and middle ware to application development and deployment tools with built-in security. This should translate into a significant increase of Europe's market share in this area and in higher added value generated from embedded ICT.
- Uplifting Europe's innovation capacity and competitiveness across all economic sectors with the wider adoption of networked embedded ICT, notably in SMEs.

Types of action:

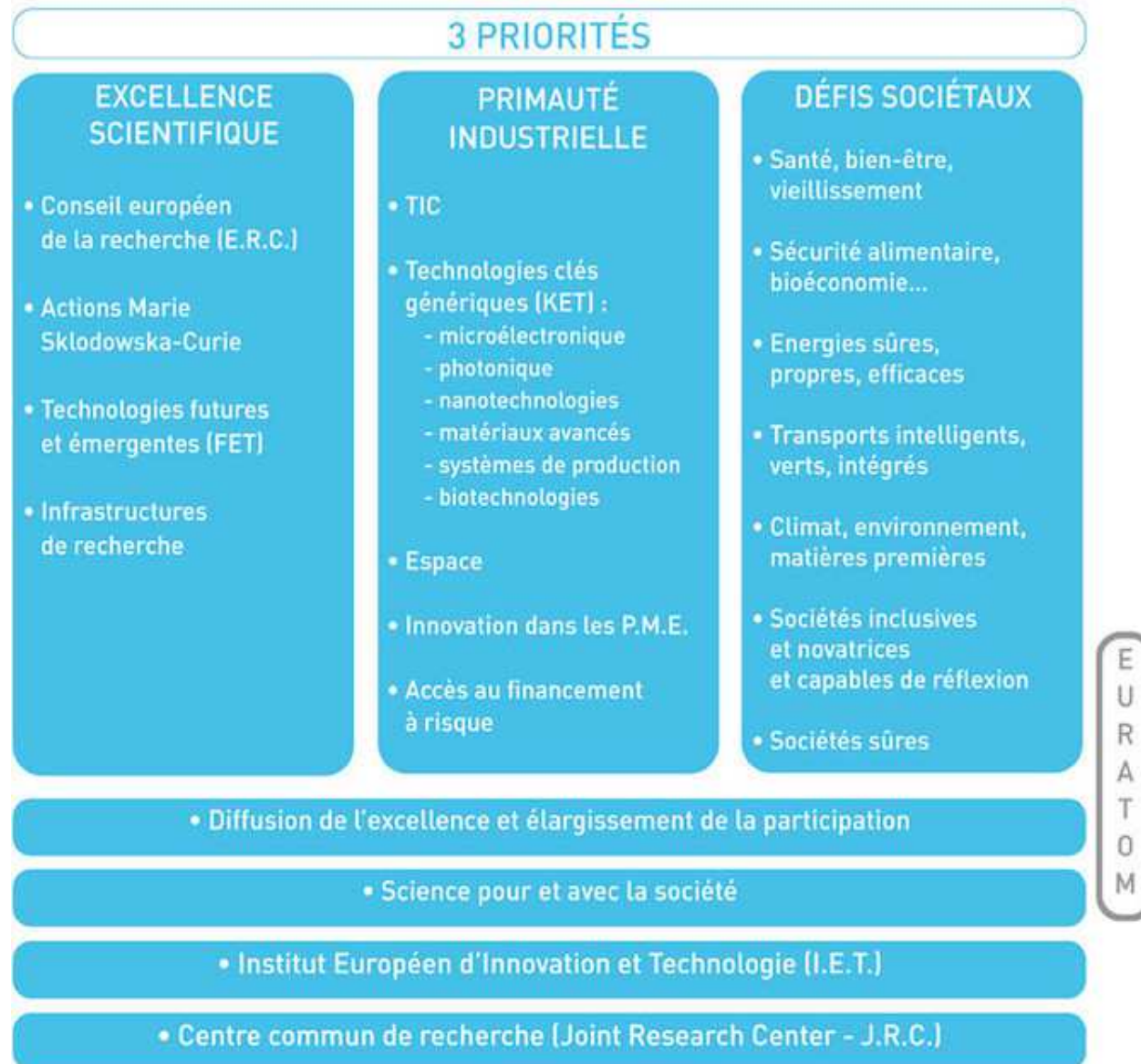
- a. Research & Innovation Actions – A mix of proposals requesting *Small and Large contributions* is expected
- b. Innovation Actions – A mix of proposals requesting *Small and Large contributions* is expected



H2020 en bref

Structure, règles de participation, critères d'éligibilité, préparation des appels et jeux d'acteurs

Son architecture



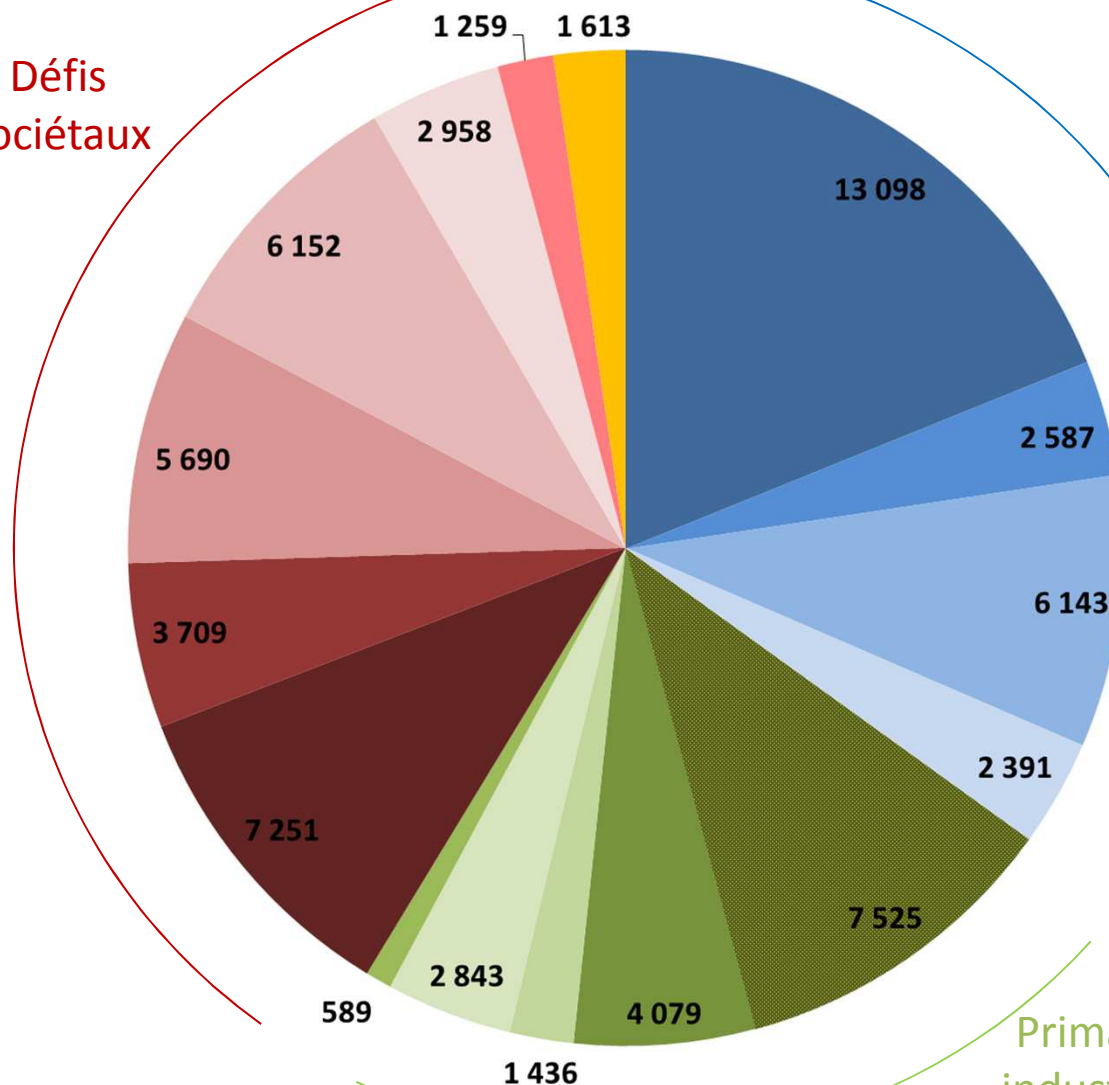
Ventilation budgétaire



- ERC
- FET
- MSCA
- RI
- TIC
- NMPB
- Espace
- RF
- PME
- Santé
- Food
- Energie
- Transport
- Climat
- Sociétés innov.
- Sécurité

Défis
Sociétaux

Excellence
scientifique



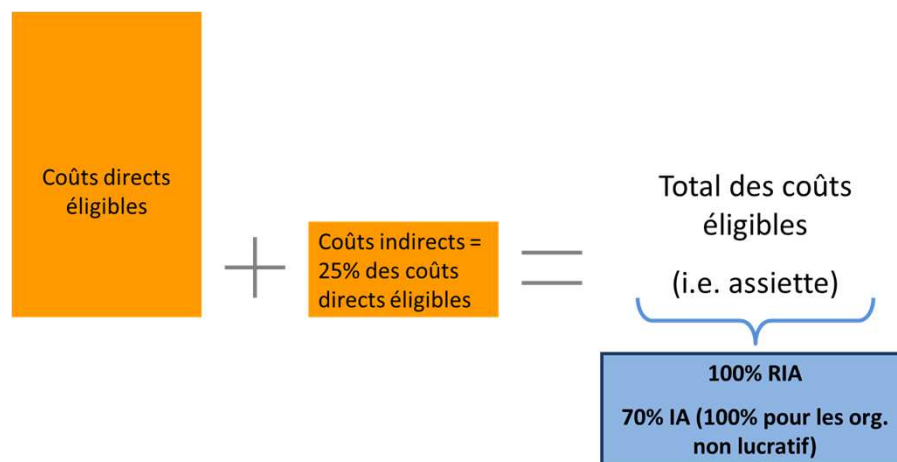
Primauté
industrielle

LES PRINCIPALES RÈGLES D'HORIZON 2020



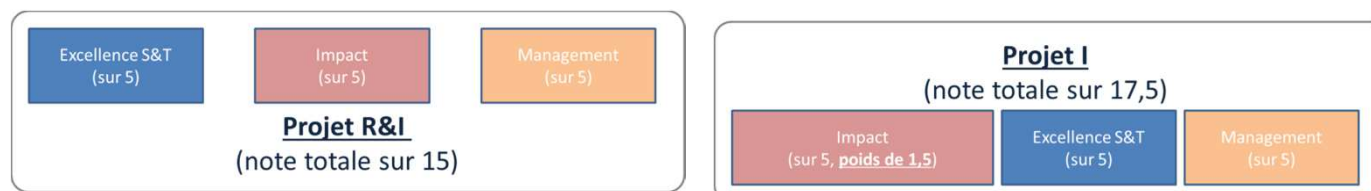
0. Des projets collaboratifs européens (min. 3 partenaires de 3 pays)

1. Des taux de subvention « simples »



A comparer aux taux nationaux !

2. Une évaluation différenciée

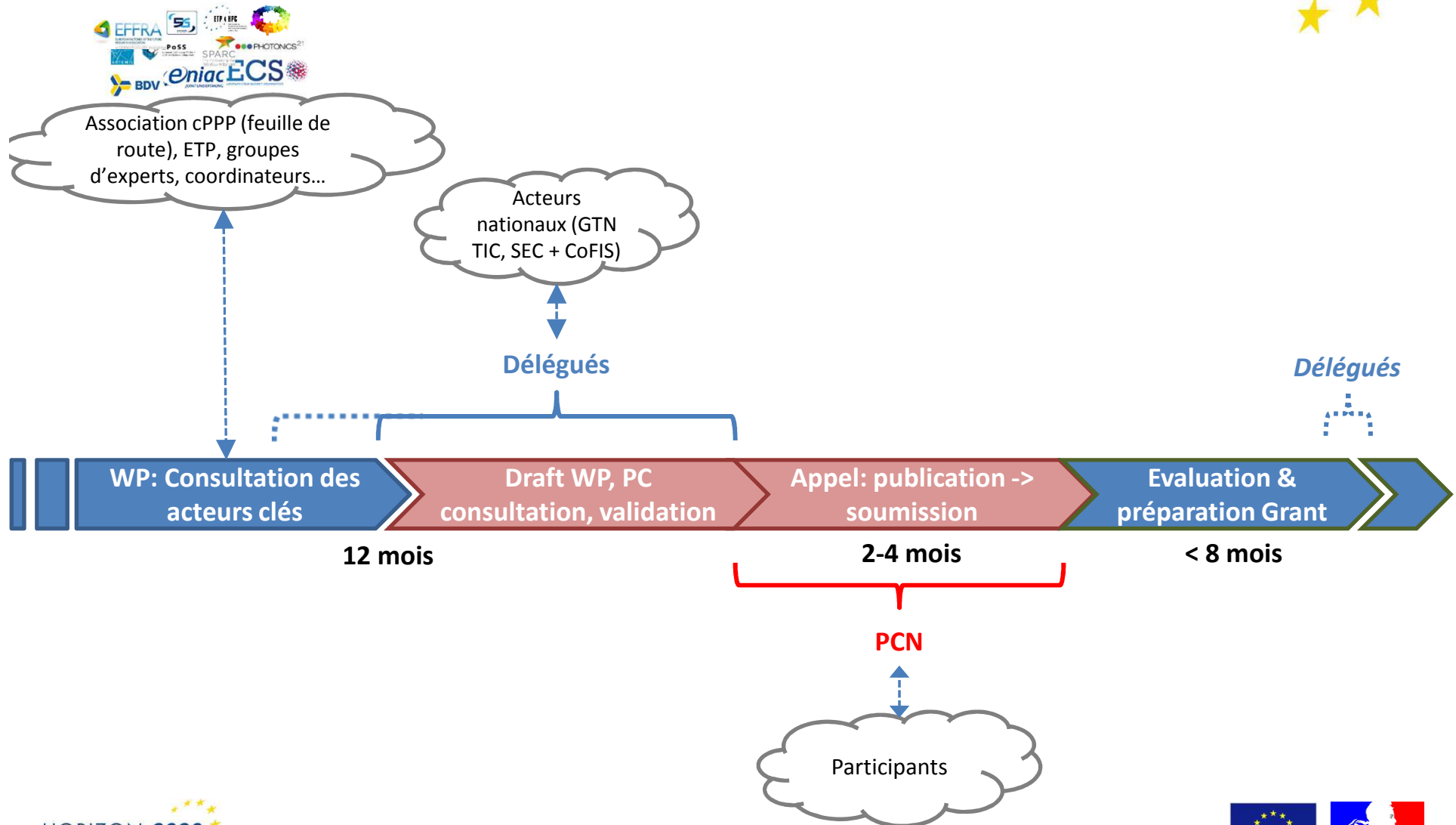


3. Une gamme d'« instruments » plus larges :

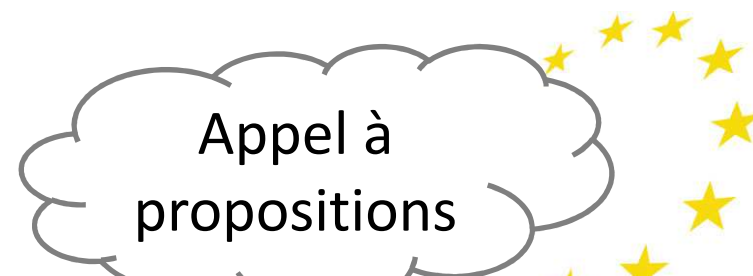
- De plus en plus de PCP
- L'instrument PME
- L'instrument *Fast Track to innovation (FTI)*

4. Un « time-to-grant » de 8 mois max.

Le processus des appels



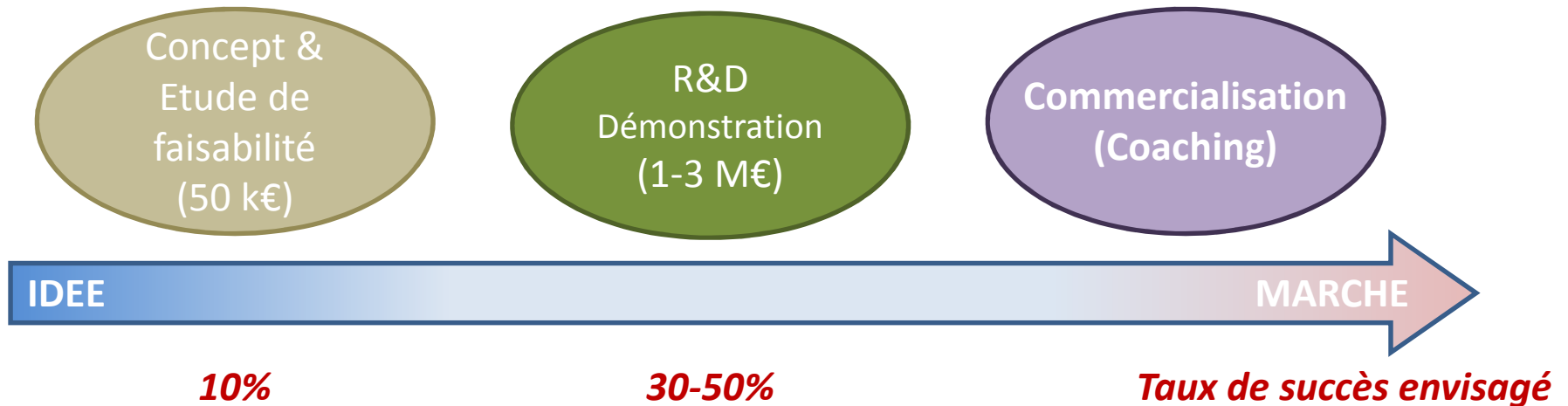
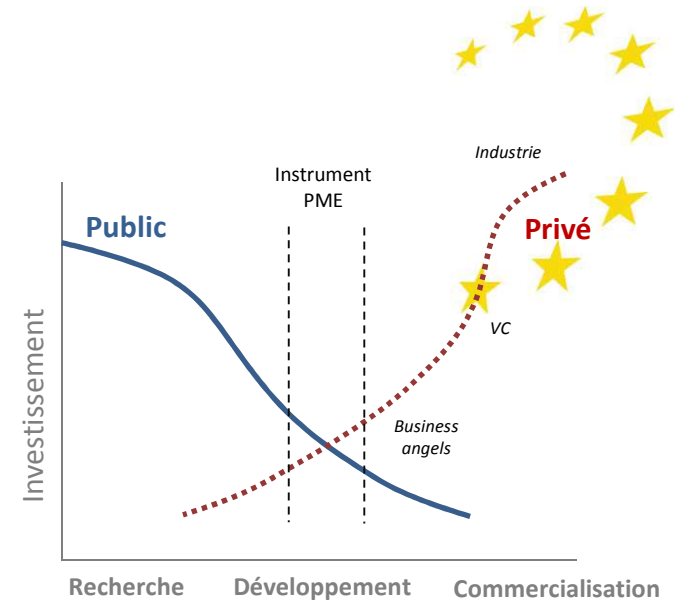
Quels types de projets?



Type d'action	Objectif	Tx de co-financement		Eligibilité
RIA: Research & Innovation Action	Projet de recherche collaboratif s'attaquant à des enjeux clairement définis	100%	100%	au moins 3 entités légales , établies dans des pays (membres de l'U.E. ou associés) différents (*)
IA: Innovation Action	Projet collaboratif de démonstration, activités de prototypage, de test,... TRL>4	100%	70% entreprise	au moins 3 entités légales , établies dans des pays (membres de l'U.E. ou associés) différents (*)
CSA: Coordination & Support Action	Mesures de coordination, d'accompagnement et de réseautage (normalisation, dissémination, sensibilisation...)	100%		au moins 1 entité légale , établies dans un pays membre de l'U.E. ou associé (*)
PCP: Pre-commercial procurement	cofinancement des achats publics avant commercialisation en vue de promouvoir l'innovation	90%	30% pour les activités de coordination	Min 3 partenaires et au moins 2 acheteurs publics établis dans 2 Etats membres ou pays associés différents
PPI: Public Procurement of Innovative Solutions	Cofinancements des achats publics de solutions novatrices en vue d'investir dans des solutions communes	35%	50% pour les activités de coordination	Min 3 partenaires et au moins 2 acheteurs publics établis dans 2 Etats membres ou pays associés différents

Instrument PME

- ☐ Phase 1: idée/concept,
 - Input: Business plan I (10 p.)
 - Activités: faisabilité, analyse risques, IP, recherche partenaires, pilote...
 - Output: Business plan II
 - 50 k€, ~ 6 mois
- ☐ Phase 2: R&D, démonstration, *market replication*
 - Input: Business plan II et description des activités de la phase 2 (30 p.)
 - Activités: développement, prototypes, test, pilotes, miniaturisation, scale-up...
 - Output: investor ready Business plan III
 - 1-3 M€, 12-24 mois
- ☐ Phase 3: Commercialisation
 - Coaching sur l'accès aux financements, formation, IP management...



Questions?





Éléments de la participation nationale

Horizon 2020: un programme majeur au niveau national



Programmes (pérennes) de financement RDI récurrents en 2014 et 2015 (en M€/an)



Positionnement de la France (1)



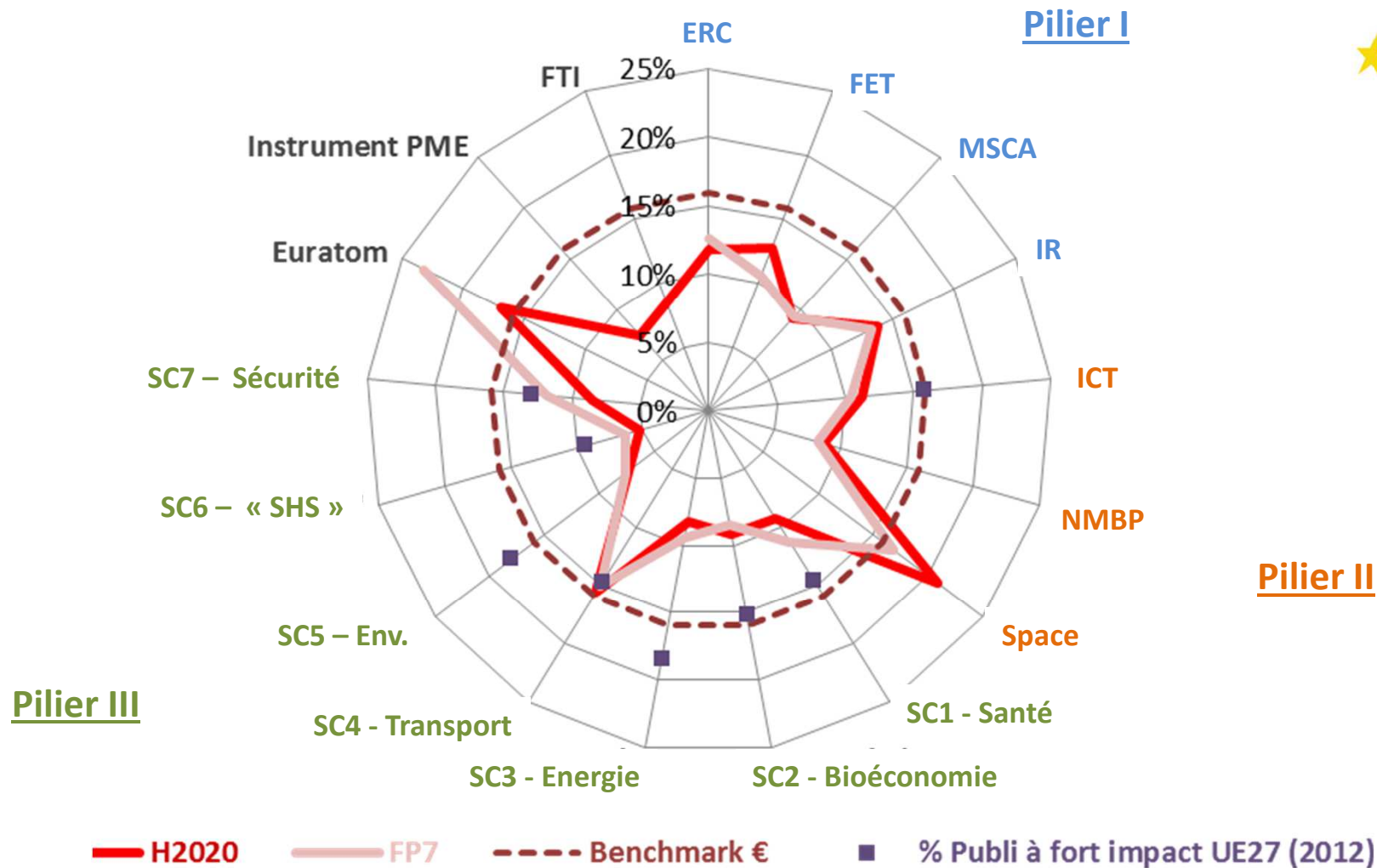
Chiffres donnés à titre de comparaison

	Etat	% Horizon 2020	Contr. budget UE (2014-16)	Taux de retour
1	DE	16,1%	21,4%	77%
2	UK	15,2%	12,2%	127%
3	FR	10,7%	15,9%	69%
4	ES	9,1%	8,0%	117%
5	IT	8,4%	11,7%	74%
6	NL	7,8%	5,6%	142%
7	BE	4,3%	3,9%	114%
8	SE	3,5%	3,2%	111%
9	AT	2,8%	2,2%	130%
10	DK	2,5%	1,3%	199%

% GERD UE28 (2014)	% ETP pers. R&D UE28 (2014)	% ETP cherch. UE28 (2014)	% demandes brevet OEB UE28 (2013)	Intensité RDI (2014)
29,5%	21,8%	20,1%	39,3%	2,9%
13,5%	14,1%	15,6%	9,4%	1,7%
16,9%	15,3%	15,3%	15,8%	2,3%
4,5%	7,3%	7,0%	2,6%	1,2%
7,3%	8,9%	6,8%	7,3%	1,3%
4,6%	4,5%	4,3%	5,9%	2,0%
3,5%	2,5%	2,7%	2,7%	2,5%
4,8%	3,0%	3,8%	5,0%	3,2%
3,5%	2,4%	2,3%	3,3%	3,0%
2,8%	2,1%	2,3%	2,8%	3,1%

Sources: eCorda (après retraitement MENESR) et Eurostat

Positionnement de la France (2)



Quelques chiffres clés LEIT/ICT (2014-2016) (hors SME-INST)

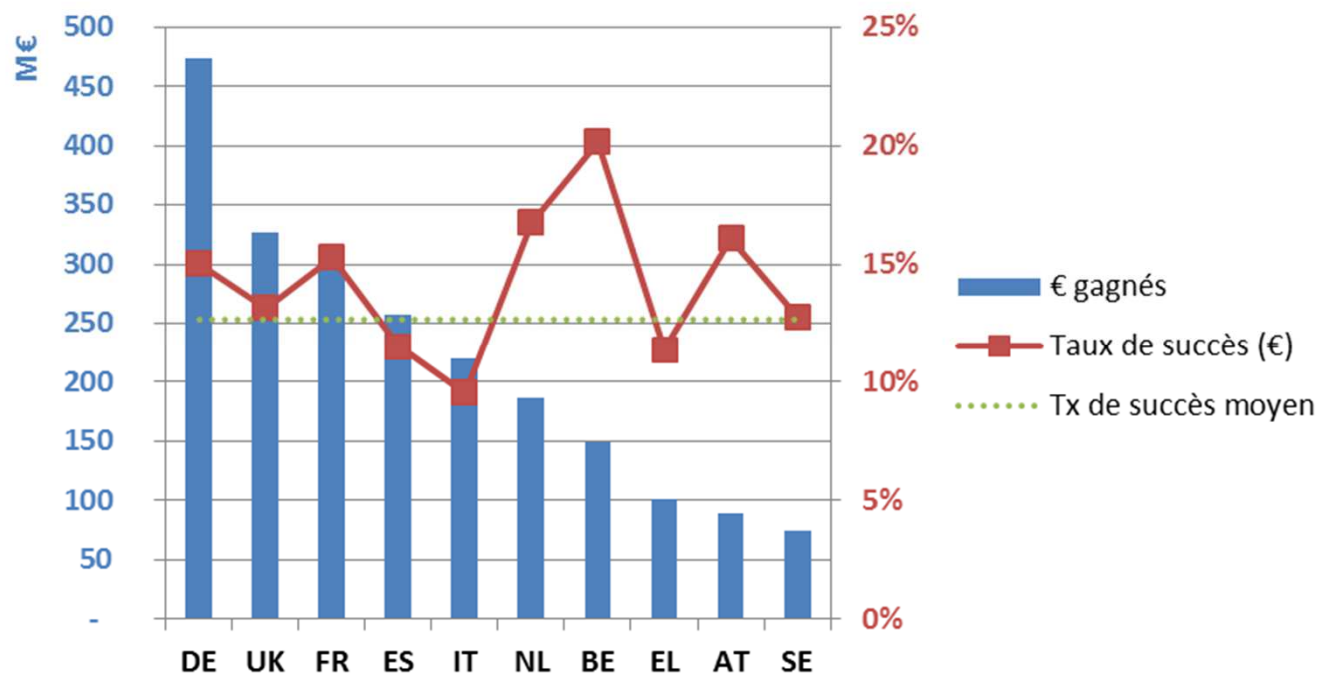


3500 propositions/an dont 1.400 à participation FR
160 projets retenus/an dont 80 à participation FR
4,4 Md€/an demandés pour 660 M€/an distribués
Soit un taux de succès (€) de 15%

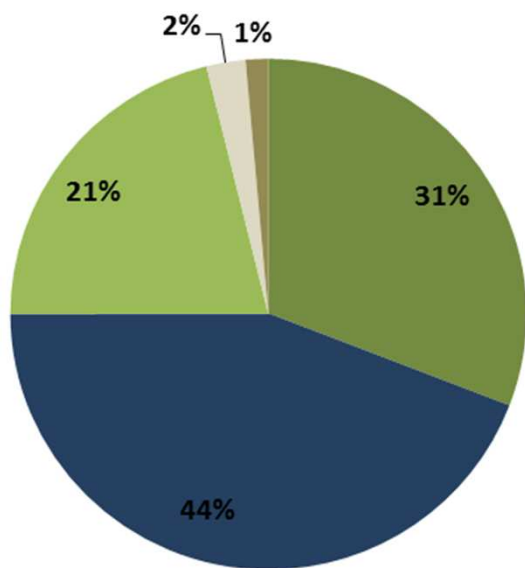
410 M€/an demandés par les équipes FR (9,2%)
81 M€/an gagnés par les équipes FR (12,2%)
Soit un taux de succès (€) de 19,8%

Un total de 11.000 participants dont 1.750 FR
~ 280 bénéficiaires FR (après consolidation)

LEIT/ICT: comparaison pays

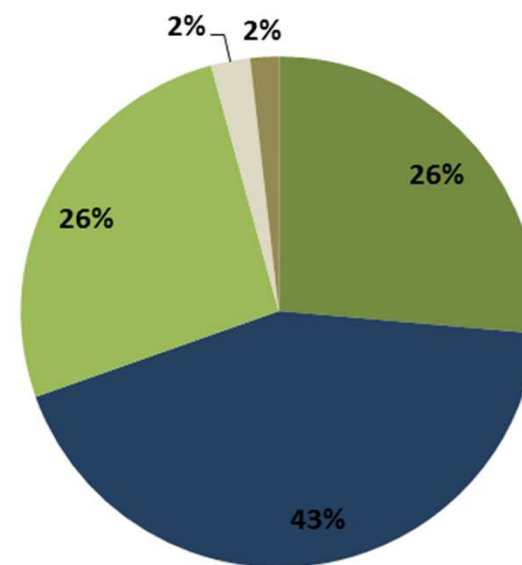


LEIT/ICT: un programme driven par l'industrie mais (très) ouvert au secteur académique



Propositions

- Higher or Secondary Education
- Private for Profit
- Research Organisation
- Other
- Public Body

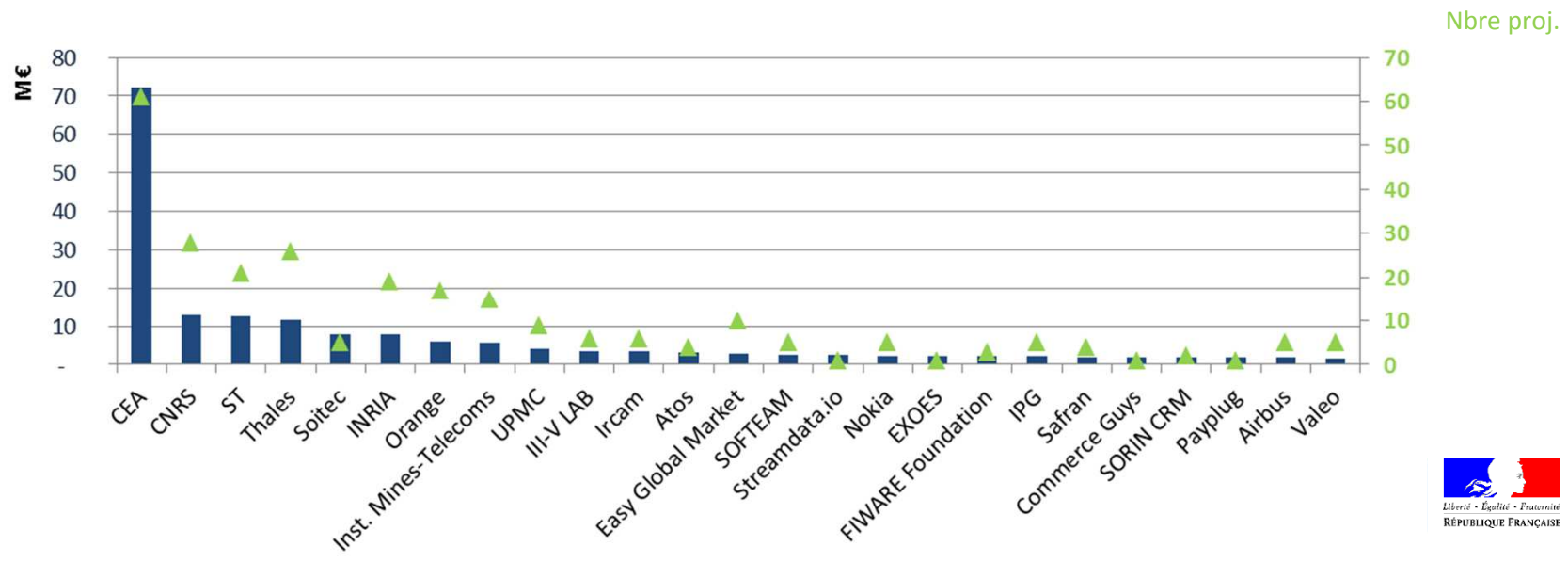
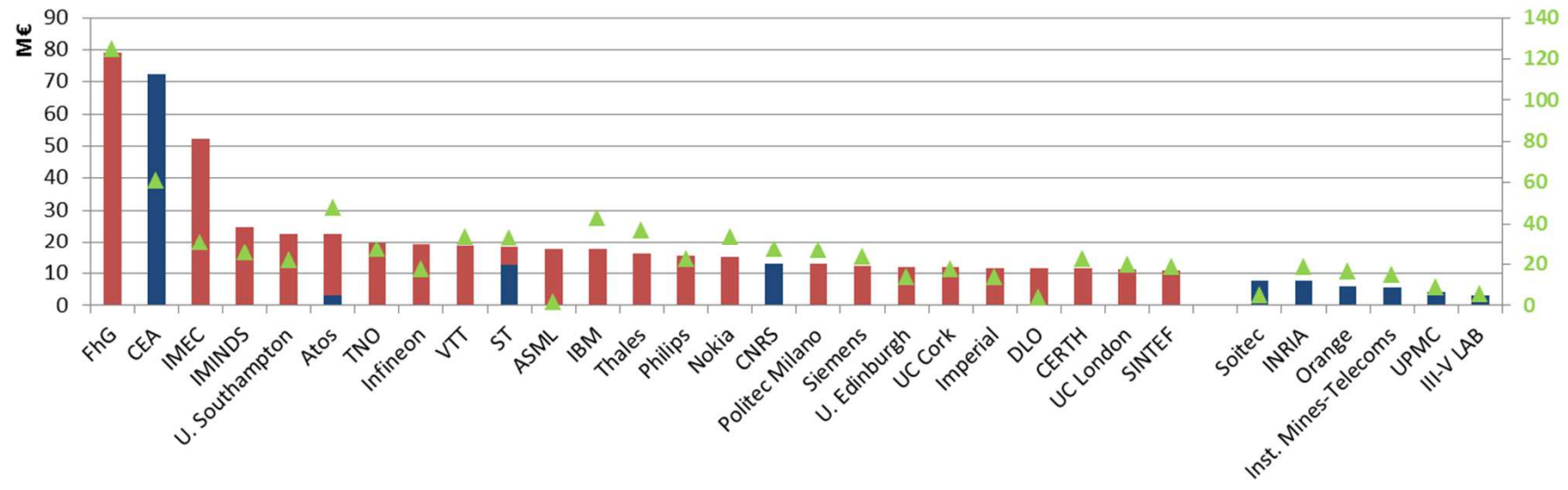


Projets

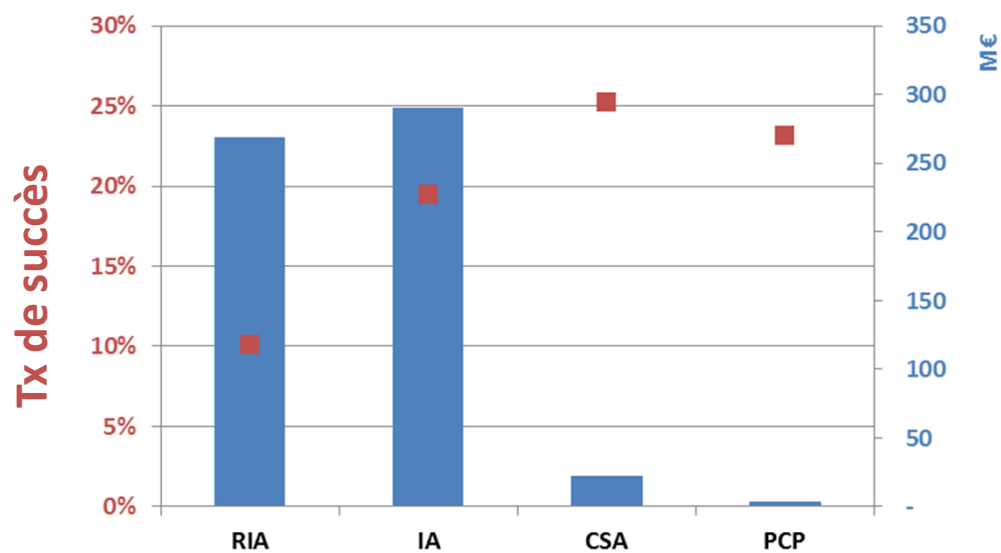
Chiffres hors Instrument PME



LEIT/ICT: grands bénéficiaires



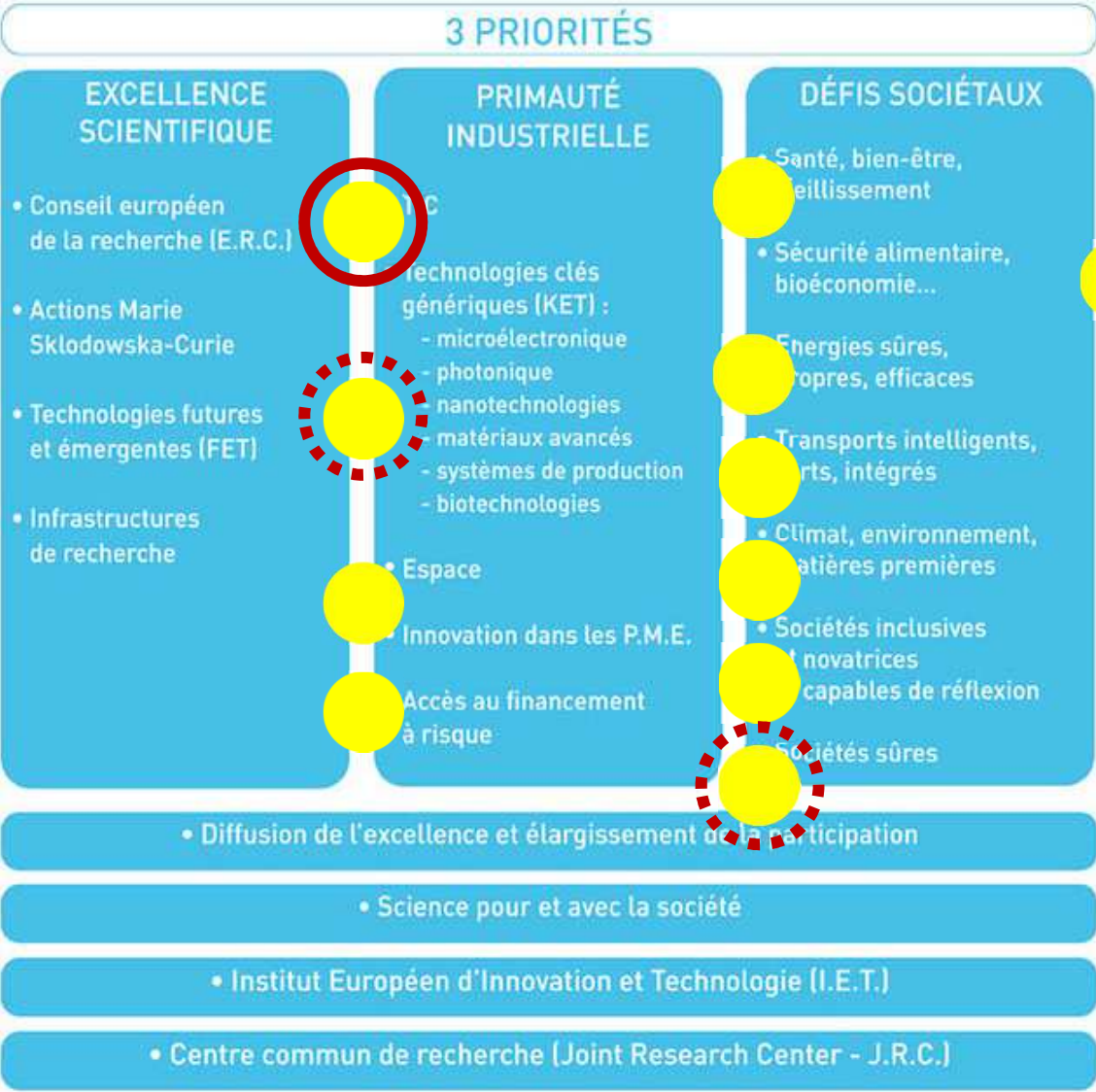
Ventilation par instrument





Les TIC dans H2020

Les TIC dans le programme H2020



E
U
R
A
T
O
M

Une programmation par l'industrie: cPPP



FP7

H2020



FUTURE INTERNET PPP & SME ACCELERATOR

Expansion of use cases

NETWORKING R&D



ADVANCED COMPUTING



CONTENT TECHNOLOGIES & INFO MANAGEMENT



ROBOTICS R&D



PHOTONICS R&D



FACTORY OF THE FUTURE



Structure LEIT ICT

6 CHALLENGES

A new generation of components and systems

Advanced Computing and Cloud Computing

Future Internet

Content

Robotics and autonomous systems

ICT Key Enabling Technologies

Cross cutting activities



-Factory of the Future

-Internet of Things

-Digital Security



Horizontal activities



-Innovation and entrepreneurship support

International cooperation



International
UE Brazil

Les TIC dans le pilier industriel



Programme de travail 2017

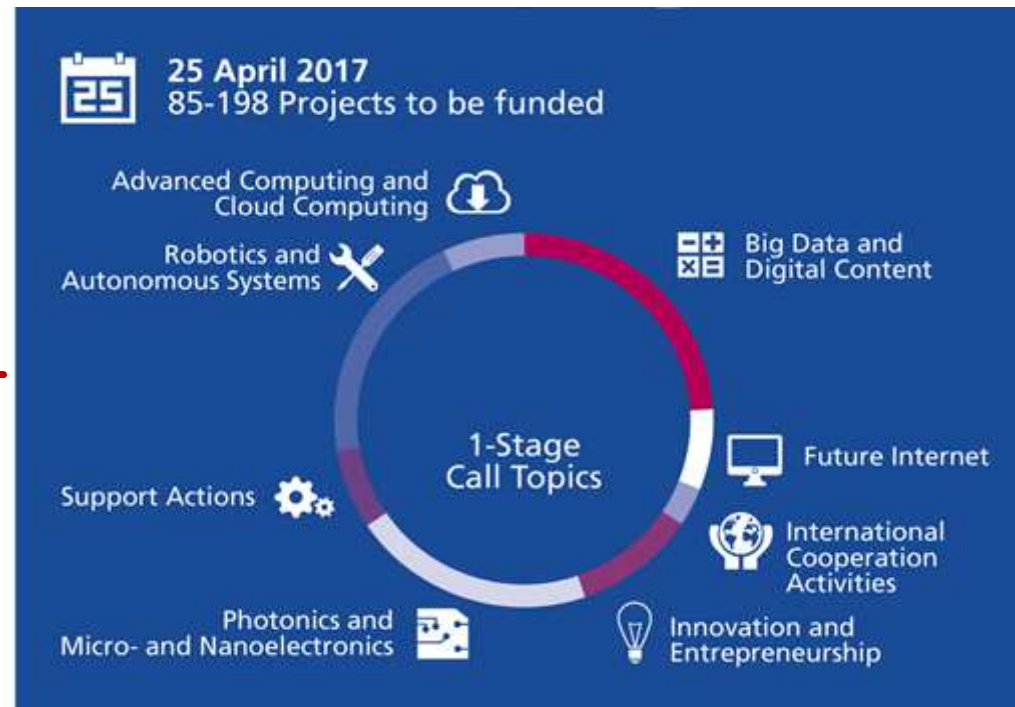
PRIMAUTE
INDUSTRIELLE



- De nombreux appels à venir:
 - TIC 2017,
 - Coopération internationale, EU-Brésil,
 - FoF 2017,
 - IoT 2017,
 - Instrument PME et Fast track to Innovation
 - 4 Prix
- Pour 2017
 - Ouverture : **08 décembre 2016**
 - Clôture : **25 avril 2016**
- Budget global > 800M€



- ICT-05-2017
- ICT-11-2017
- ICT-14-2016-2017
- ICT-15-2016-2017
- ICT-16-2017
- ICT-17-2016-2017
- ICT-19-2017
- ICT-20-2017
- ICT-23-2017
- ICT-25-2016-2017
- ICT-27-2017
- ICT-28-2017
- ICT-30-2017
- ICT-31-2017
- ICT-32-2017
- ICT-33-2017
- ICT-39-2016-2017
- ICT-40-2017
- ICT-41-2017
- EUB-01-2017
- EUB-02-2017
- EUB-03-2017



EU-Brazil Cloud cooperation

EUB 01 – 2017

H2020-EUB-2017

Total budget: 8 M€ EU contribution + BR Eq.

EUB-01-2017	Cloud Computing	2.4 M€
EUB-02-2017	IoT Pilots	4.5 M€
EUB-03-2017	5G Networks	1.0 M€

H2020-EUB-2017

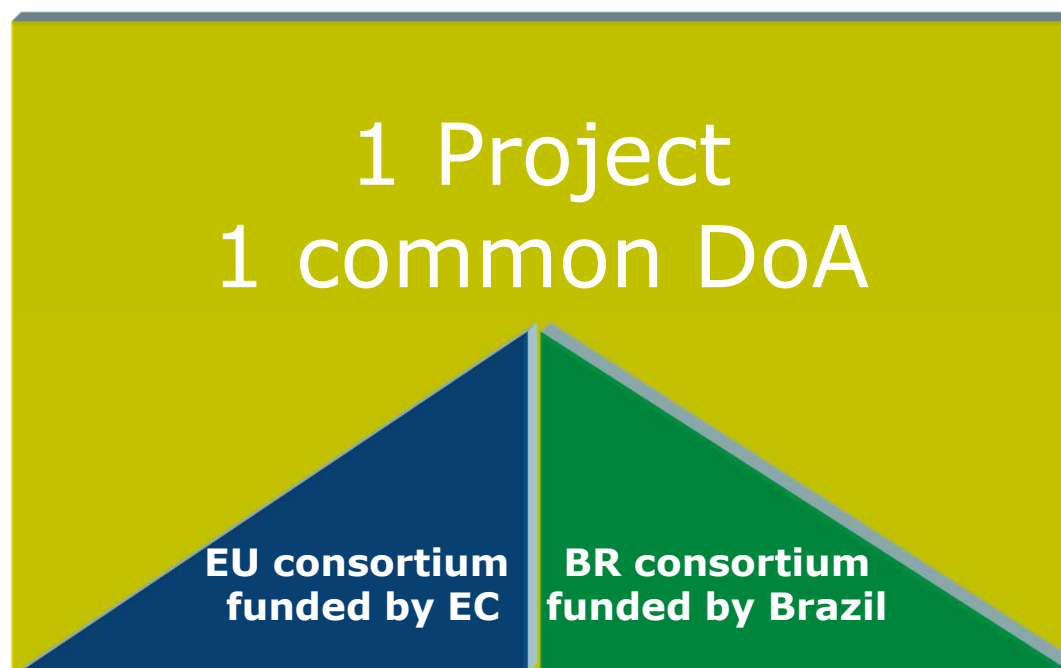
Dates

Call opening: 8th November 2016

Call deadline: **14th March 2017**

➤ The proposed project duration shall not exceed **36 months**

ONE Project, TWO Contracts



Coordinated proposals with balanced participation of EU and Brazilian partners should make a substantial contribution to the identified themes indicating the benefits of a joint effort



Additional eligibility criteria

- Participants in the EU collaborative projects are required to conclude a **coordination agreement** with the participants in the coordinated project funded by the **RNP (Rede Nacional de Ensino e Pesquisa - Brazilian National Research and Education Network)**. A draft of this agreement has to be provided with the proposal.
- Proposals submitted to this call which do not include coordination with [the corresponding] Brazilian proposal submitted to RNP for evaluation will be considered ineligible.





EUB1: Cloud computing,
including security aspects

Projects from the 1st coordinated call in H2020 WP2014-15

2 RIAs

SECURECLOUD

aims to remove technical impediments to dependable cloud computing by **ensuring the confidentiality, integrity, availability and security of applications and their data**. It will validate and demonstrate the benefits of the approach by applying it to realistic and demanding Big Data use cases in the domain of **critical infrastructures**.

EUBRA-BIGSEA

focuses on the development of advanced cloud services to support Big Data by providing services in the cloud for the processing of **massive data** coming from **highly distributed sources**.

1 CSA

EUBRAZILFORUM

- aims at establishing an organisational cooperation model that enables the EU and Brazil to formulate and develop a **common policy and research strategy** and approach for research & innovation in Cloud Computing in line with the priorities of each region.



Cloud Computing International priorities

- *in line with Digital Single Market (DSM) policy initiatives and EU Cloud strategy*

- **Targeted Cloud research** that is driven through **coordinated calls** in FP7 and H2020 (current collaboration activities include Japan, Brazil and South Korea)
- **Cloud policy** coordination on specific areas: **international standards for SLAs, certification and cross border data flows** (on-going bilateral dialogues and actions with USA and Brazil)
- ✓ *Results from international Cloud Research will facilitate **policy coordination** in the relevant areas between the EU and the involved third countries.*



Brazil cooperation on Cloud Computing: the political context



European Council Conclusions EU Heads of State and Government (25 October 2013)

Chapter on "Digital Economy, Innovation and Services"

- Several *strategic technologies* such as *Big Data* and **Cloud Computing** are important enablers for productivity and better services. Cloud Computing should improve access to data and simplify their sharing. Big Data aims to process, collect, store and analyse large amounts of data
- *EU action* should provide the right framework conditions for a *single market* for *Big Data* and *Cloud Computing*, in particular by promoting high standards for secure, high-quality and reliable *cloud services*

https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/139197.pdf

7th EU-Brazil Summit:

Brussels, 24 Feb 2014

Joint Statement, Chapter on "Boosting Competitiveness, Growth and Jobs, Paragraph 16:

"In the domain of ICT cooperation we welcomed the enlarged policy cooperation in Cloud Computing. On ICT infrastructure, we welcomed the plans for the future installation of a fibre-optic submarine cable linking Brazil and Europe, which will improve communications between the two continents, facilitate the take-up of broadband, stimulate ICT investments, reduce the interconnectivity costs for our businesses and researchers, enhance the protection of communications and provide better functional characteristics"

EC and Brazil Presidents: *"These aims should be translated into concrete initiatives by the next EU-Brazil Joint Action Plan 2015-2017"*





EUB-01-2017: Cloud Computing

Specific Challenge

Cloud computing is now an established global paradigm for the delivery of IT services in all sectors of the digital economy. However, further enhancements are still required in critical aspects of cloud computing, including **enhanced security and privacy; trustworthy clouds; resource pooling; data management and traceability; virtualization; and hybrid systems**. Support towards **intercontinental experimentation** on cloud infrastructures and services are necessary as well, especially in the context of EU-Brazil cooperation.





EUB-01-2017: Cloud Computing Scope

Research and Innovation Actions (RIA)

- The focus of the joint research will be the development of **innovative technologies** for **next generation cloud infrastructures and services** able to cope with the challenges from different application domains in business and societal contexts. The technologies to be developed should aim at **future standardization** as well as take into account **interoperability** and **data portability**.





European
Commission

Expected impact

The joint EU-Brazil research is intended to develop **innovative cloud computing technologies leading to next generation solutions**. The research collaboration will also facilitate and enhance policy coordination between the EU and Brazil in relevant areas.

In particular, projects are expected to:

- Facilitate the development of **cloud-enabled, secure and trustworthy applications based on robust standardized technologies**.
- Develop technologies to manage **hybrid resources** in the cloud, as well as solutions for **cloud-centered** data management.
- Submit **joint contributions** towards **international standardization** activities.





Types of Action & funding

Research and Innovation Actions:

The Commission considers that proposals requesting a contribution from the EU **between EUR 1.0 and 1.5 million** would allow this specific challenge to be addressed appropriately by **two distinct projects**.

Total available EU funding = **€2.5 million with matching funds from Brazil**

Nonetheless, this does not preclude submission and selection of proposals requesting other amounts





Formalities and schedule

Additional admissibility criterion:

- Participants in the EU collaborative projects are required to conclude a **coordination agreement** with the participants in the coordinated project funded by the **RNP** (Rede Nacional de Ensino e Pesquisa - Brazilian National Research and Education Network). A draft of this agreement has to be provided with the proposal.

Additional eligibility criteria:

- Proposals submitted to this call which **do not include coordination** with a Brazilian proposal submitted to RNP for evaluation will be considered **ineligible**.
- The proposed project duration shall not exceed **36 months**.
- Proposals will only be selected on the condition that their corresponding coordinated Brazilian project will be funded by the RNP.

Opening date: **08 November 2016**

Deadline: **14 March 2017@17h00** (Brussels time)





Further information

H2020 WP2016-17

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-leit-ict_en.pdf

Call - EU-Brazil Joint Call (pages 115-120)

Horizon 2020

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

Participants Portal

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

Digital Single Market – Cloud Computing

<https://ec.europa.eu/digital-single-market/en/cloud>

EUB-01-2017 Call coordinator: maria.tsakali@ec.europa.eu

Proposers should contact their National Contact Point for pre-proposal check

« 5G »

EUB 03 – 2017 (Coopérations)



EU-Brazil 5G Cooperation



EU-Brazil 5G Cooperation

EUB 03 – 2017

Deadline: 14 of March

Network technologies (E1), DG CONNECT

EUB-03-2017: Scope of Joint Call

Type of Action: *Research and Innovation action*

Test and validation of technologies currently contemplated for early 5G standardisation, primarily at radio access level, but with a clear "use case" focus

- Examples of potential vertical business sectors: health care, automotive, smart factories, energy, smart cities, agribusiness, etc.
- Could address more specifically connectivity aspects of **Massive Machine-to-machine communication mMTC, Ultra-Reliable and Low Latency Communications (URLL)**.
- **Or** alternatively illustrate the efficient **coverage of low population density areas** (different spectrum options)

EUB-03-2017: Challenges & Budget

Challenges:

- *Go beyond 4G: new services, multiple applications*
- *Relatively wide scope for a limited budget (flexibility for industry but need to focus)*
- *Standardisation will take place in parallel between now and 2020 at ITU, 3GPP*
- *Must be industry-led*

Budget:

- *€1 million (50% EU/50% Brazil, funding rate: 100%)*
- *Possible synergies with joint call on IOT, 3 pilots (EUB-02-2017 (RIA) €4.50 million total budget)*

Vision & Standards – Proposed priorities

- ***Identify synergies regarding future use cases & 5G vision***
 - Reinforce mutual understanding regarding Vertical requirements
 - Try to converge on the broad definition/scope of 5G
 - JP/ROK give priority to video/VR distribution/ shorter time frames
 - China more aligned on EU re. Vertical Industries
 - Brazil/ US ?
 - Exchange information on work towards the future system architecture for 5G
- ***Global unicity of network operability standards***
 - Address any divergence of position in context 3GPP
 - Discuss other standardisation requirements

Next Generation Internet

ICT-41-2017



Problems

1. The Internet today is primitive.
2. The Internet looks like a set of silos, non-interoperable, proprietary platforms concentration of data.
3. Power is accumulated by a relatively small set of influential actors.
4. EU industry presence in the Internet economy is low



"It should offer more to people and to our society, providing better services and greater involvement and participation. It should be designed for humans, so that it can meet its full potential for society and economy and reflect the social and ethical values that we enjoy in our societies."

Roberto Viola



The scope of the initiative should therefore be broad

- Addressing technological opportunities arising from cross-links and advances in various research fields,
- Extending from new network architectures and software-defined infrastructures to open service platforms, and
- From application domains to aspects of social innovation.



Validation and testing market traction with minimum viable products are part of involving users and market actors at an early stage.



Key Aspects

#New: No overlap with ongoing RTD & I activities

#Think Big: Start now, prototype in H2020, flagship in FP9?

#Different process: Fast & flexible, continuously agile

#Different people: Real Internet researchers & innovators, stake-holders who are not part of community RTD&I today.

#Open: Build true partnership, national programmes & US

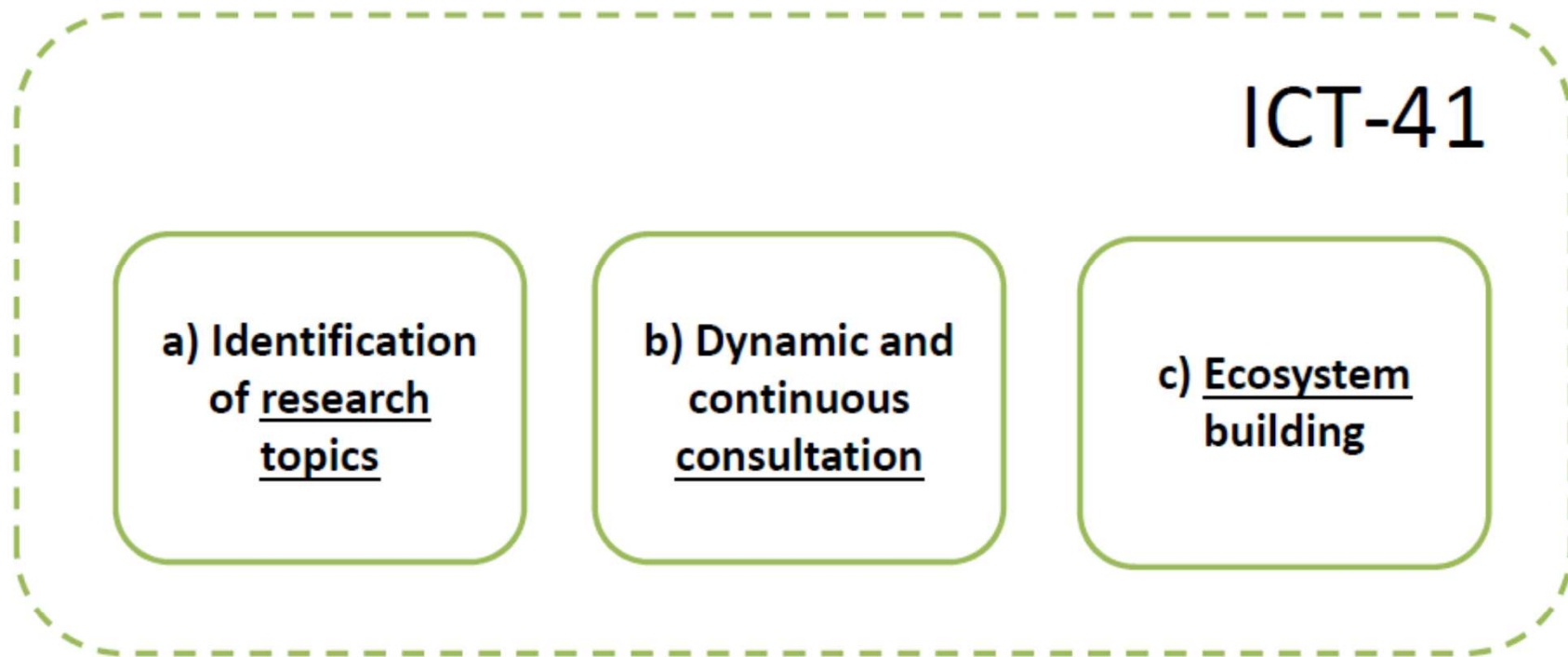
#Visible: Professional communication & marketing

#Multidisc: Cater for innovation coming from the unexpected

#Policy: Embed within the broader European policy lines

How to do?

- Create a strong programme logic
- Built all value steps **into** the programme, including the way to define the actual work topics.
- Short development cycles (24 months end-2-end)
- Work only with strong & committed stakeholders.
- Multi-disciplinary is key – open your mind.



Three Coordination and Support Actions - one for each area.

All three to act as one 'project'.

a) Identification of research topics

Design, build and apply a methodology to **identify continuously those key future technologies** that will support an Internet model more open and more inclusive in 10 years from now.

For this:

- Perform a portfolio analysis, coverage, mapping and gap analysis of ongoing and emerging research topics in future Internet.
- Identify those key future Internet technologies, i.e. the game-changers for an Internet in 2025, and deduct specific technology roadmaps.
- Analysis programmes and developments in Member States and Associated Countries, and activities in international partner countries.

b) Dynamic and continuous consultation

Build an **open, dynamic and continuous consultation process** which engages all relevant stakeholders in a long-term and multi-disciplinary fashion. For this include:

- The scientific community and outstanding scientists who lead the Internet technology research in Europe.
- Identifying the high-tech startup community, its competences and capacity, i.e. the relevant specific actors.
- Member States and Associated Countries along with national R&I funding bodies to shape the NGI in a fully synergetic way.
- The aspect that the NGI flagship is part of a global race towards mastering the future Internet.
- The benefits from ongoing research and policy activities, notably the roadmap-based research ongoing in areas such as 5G, IoT, cloud, data and cybersecurity.

c) A programme shape for of a Next Generation Internet initiative

This initiative will **mobilise the best researchers** and focus on a continuous scouting of developments with the potential to change the way the Internet is operated, often by an opportunistic and multidisciplinary combination of advances. For this:

- Identify and validate the constituent basic elements for a large Next Generation Internet flagship which includes characteristics such as speed and adaptability.
- Build a strong and fluid link and a feedback loop between short and long-term research to strengthen Europe's capacity to actually bring advanced technology to the market.
- Involve in a practical way new players and set a prototype interaction between the scientific community and today's best Internet innovators, the startups and SMEs.
- Make use of the research topics identified under (a) and the consultation and community identified under (b).
- Promote the notion of a European Next Generation Internet ecosystem by building a community among academia, researchers, startups, SMEs and corporates involved.

Advice

Consortium:

- 1-2 partners
- Credibility in the Internet research community
- Competent to lead the action

Proposal:

- Involve the real and leading European Internet researchers and innovators. Next generation of Internet by a new generation of people.
- Very concrete in terms of names and actors.
- Become one project with the other two actions, foresee resources for this. Stay agile, agile, agile!
- Communication and marketing are key.
- Ready to start 1 September 2017, front load, overall 18 months max.

Open Information Day planned for end January/February 2017

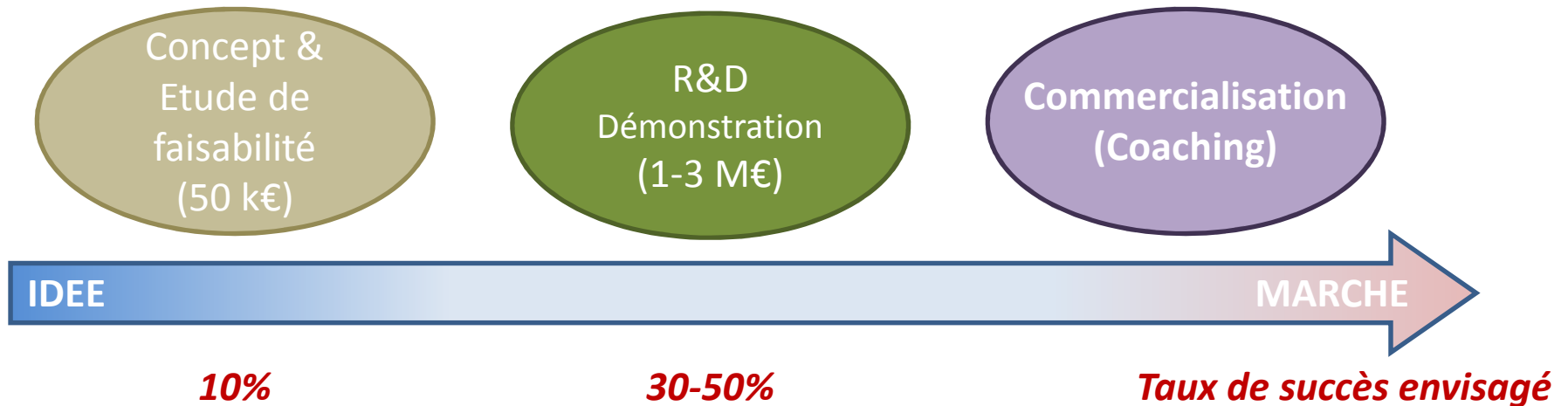
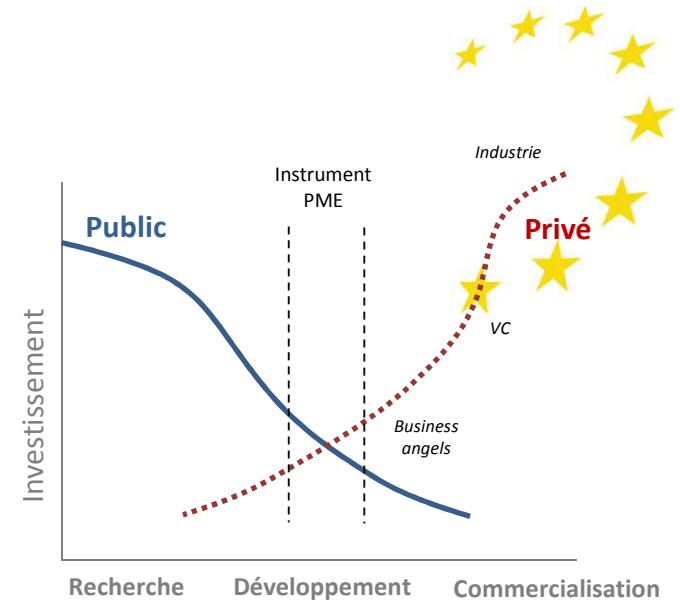
Questions?



Instrument PME

Instrument PME

- ☐ Phase 1: idée/concept,
 - Input: Business plan I (10 p.)
 - Activités: faisabilité, analyse risques, IP, recherche partenaires, pilote...
 - Output: Business plan II
 - 50 k€, ~ 6 mois
- ☐ Phase 2: R&D, démonstration, *market replication*
 - Input: Business plan II et description des activités de la phase 2 (30 p.)
 - Activités: développement, prototypes, test, pilotes, miniaturisation, scale-up...
 - Output: investor ready Business plan III
 - 1-3 M€, 12-24 mois
- ☐ Phase 3: Commercialisation
 - Coaching sur l'accès aux financements, formation, IP management...



« A avoir en tête » pour ODI



Etre disruptif (techno., business model, usage...)

Etre ambitieux

Ce n'est pas une proposition Horizon 2020 « classique »

Projet d'entreprise vs. projet tech. SME-INST

Quelques lauréats FR (phase 2)

in@motion
INTELLIGENT PROTECTION TECHNOLOGY



ATTESTATION LEGALE
UNE FOIS POUR TOUS



GREENWAVES
TECHNOLOGIES

MULTIPOSTING



STREAMDATA.IO

emulsar
la solution en émulsion

PayPlug **commerce**
guys

adways



Questions?





INFORMATIONS UTILES

http://www.horizon2020.gouv.fr/tic



The screenshot shows the website's header with the French Ministry of National Education, Higher Education, and Research, and the European Union flag. The main banner features the text "HORIZON 2020 LE PORTAIL FRANÇAIS DU PROGRAMME EUROPÉEN POUR LA RECHERCHE ET L'INNOVATION" over a globe and stars. A navigation bar includes "ESPACE EUROPÉEN DE LA RECHERCHE", "HORIZON 2020", "COMMENT PARTICIPER ?", "POUR VOUS AIDER", "AUTRES PROGRAMMES", and "PME". A search bar is present with the text "RECHERCHER...". A breadcrumb trail reads "Accueil > Horizon 2020 > Primauté industrielle > TIC". The main content area is titled "TIC - TECHNOLOGIES DE L'INFORMATION ET DE LA COMMUNICATION". A sidebar on the left shows an "AGENDA" with "22 SFP".

Liens utiles



INFORMATION

[Site français H2020 TIC](#)

[Digital Europe](#) - EUROPA

PROJET

[Portail du participant](#)

[Projet de programme de travail TIC 2016-2017](#)

RECHERCHE DE PARTENAIRE

[IDEAL-IST](#) plateforme d'idée de projet TIC

[CORDIS](#)

RESULTATS

[CORDIS](#)

Mécanismes de soutien

Aide au partenariat technologique (APT) -
Aider au montage d'un projet collaboratif européen (H2020, ERA-Net, Eurêka, Eurostars) ou national (FUI)

- Pour les PME et les entreprises de moins de 2000 salariés
- Plafonnement de la subvention à 50 k€ ; versement d'avances remboursables au-delà
- Dépenses éligibles : étude de faisabilité stratégique, recherche de partenaires, préparation des réponses aux appels à projets, assistance et conseil juridique

bpifrance

Accès aux programmes européens (APE) -
Diagnostic d'aide pour l'accès et l'orientation des

- Diagnostic flash, qui permet d'orienter la PME vers un programme de financement adapté à sa stratégie et à ses besoins – forfait de 1 k€ HT
- Poursuite de l'accompagnement – forfait de 4 k€ HT
 - Si la PME le souhaite, et sous réserve de l'accord de Bpifrance,
- Pour la préparation d'un dépôt de candidature à la phase 1 de l'Instrument PME, voire pour approfondir une stratégie de participation à d'autres programmes européen

Agence Nationale de la Recherche
ANR

Aide au montage de réseaux scientifiques, européens ou internationaux (MRSEI)

- En cas de partenariat fort avec un organisme de recherche public, possibilité de recourir au MRSEI proposé par l'Agence nationale de la recherche (ANR).
- Aide s'élevant en moyenne à 30 k€ pour une durée allant de 18 mois max.

Merci de votre attention !

