

# HORIZON 2020: APPELS IA 2019





# Horizon 2020: un programme majeur pour les ressources externes des équipes FR

Programmes (pérennes) de financement non-récurrent des équipes nationales de RDI entre 2014 et 2017 (en M€/an)



■ H2020 ■ FUI ■ ANR

## Règles de base:

- Collaboratif: min. 3 part. de 3 pays (sauf Instrument PME et ERC)
- Taux attractifs
  - Assiette = 125% des coûts directs
  - Sub = 70%/100% de l'assiette
- Contractualisation sous 8 mois
- Répondre à un WP!



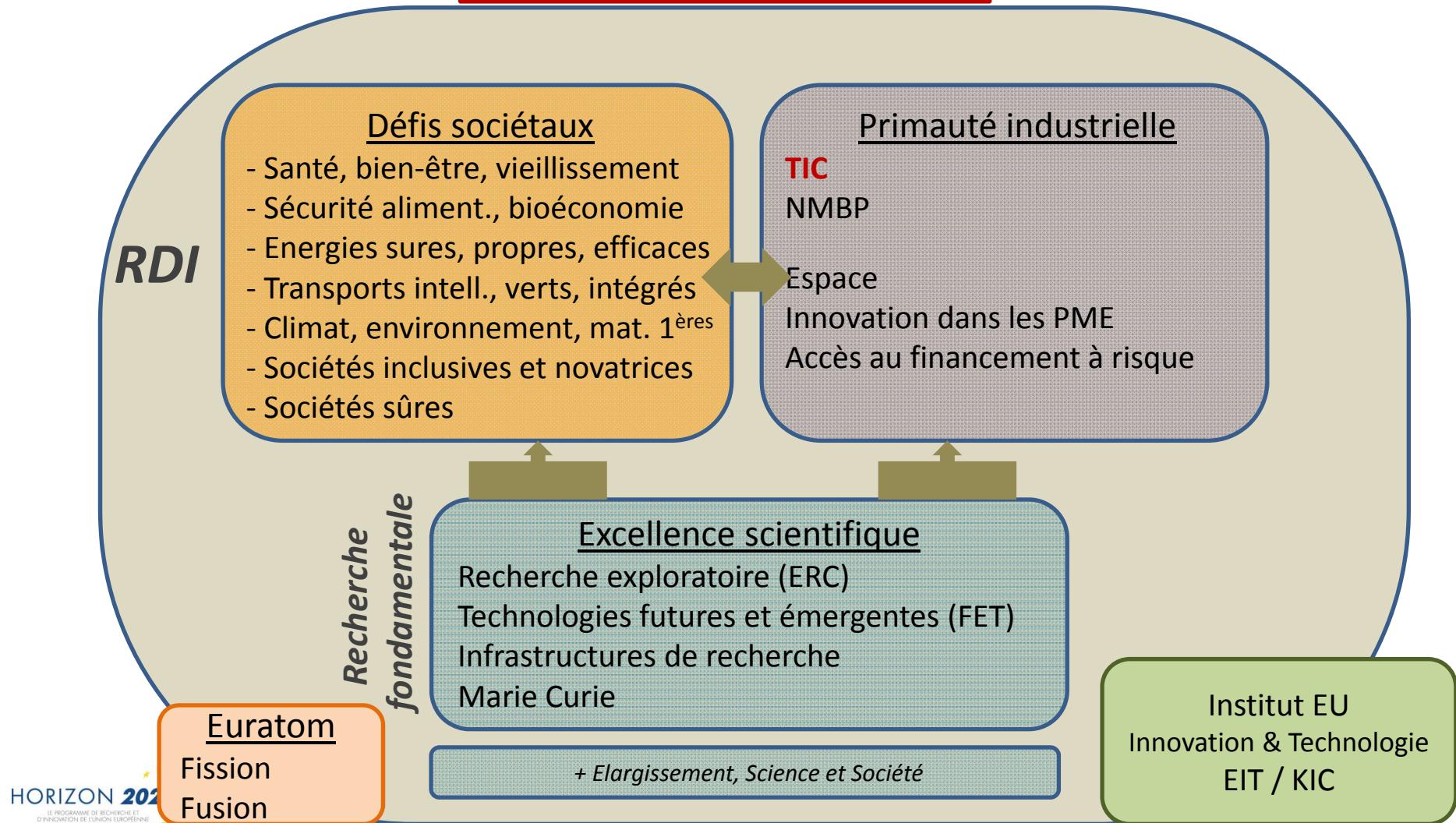
**Taux de retour FR de 11% vs. potentiel de ~16%  
Soit un potentiel d'~450 M€/an additionnel!**





# Horizon 2020: architecture

**77,2 Md€ pour 2014-20**

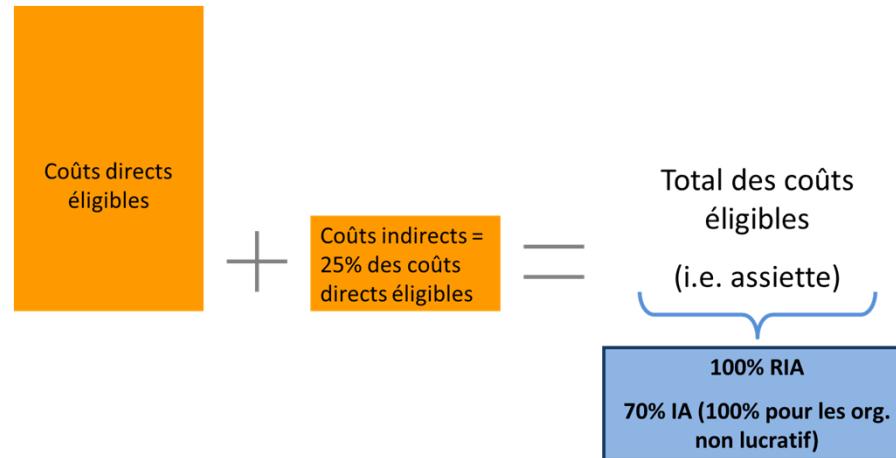




# Horizon 2020: les règles de base

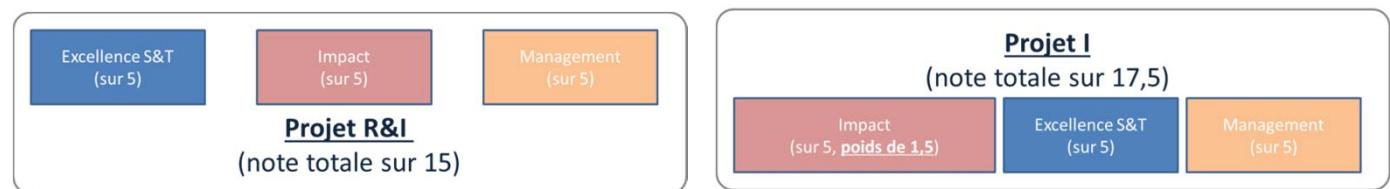
## 0. Des projets collaboratifs européens (min. 3 partenaires de 3 pays)

### 1. Taux



A comparer aux taux nationaux !

### 2. Critères



### 3. Quelques autres « instruments »:

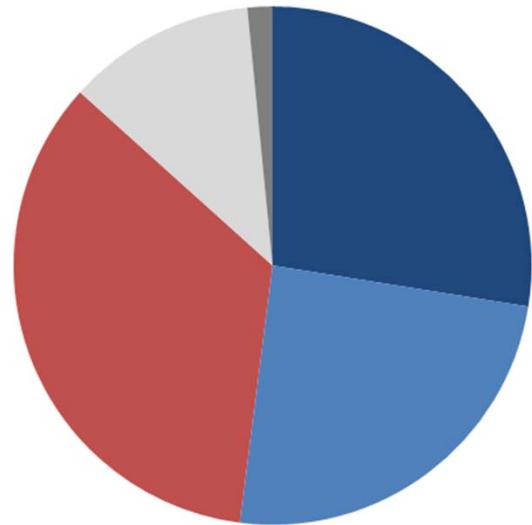
- PCP and PPI
- SME instrument, bourses (ERC, MSCA)
- *Fast Track to innovation (FTI)*

### 4. « time-to-grant » garanti!

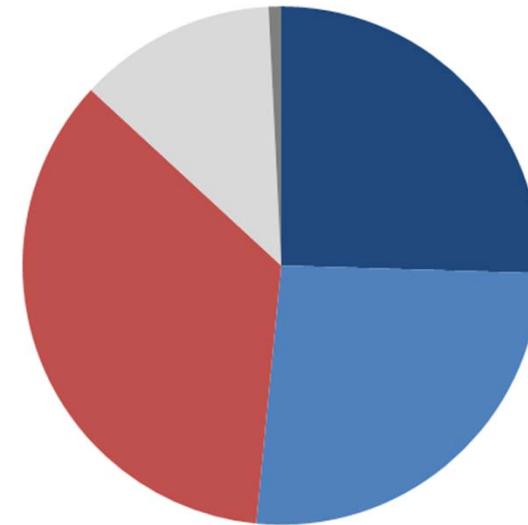


# Typologie (appels TIC 2018)

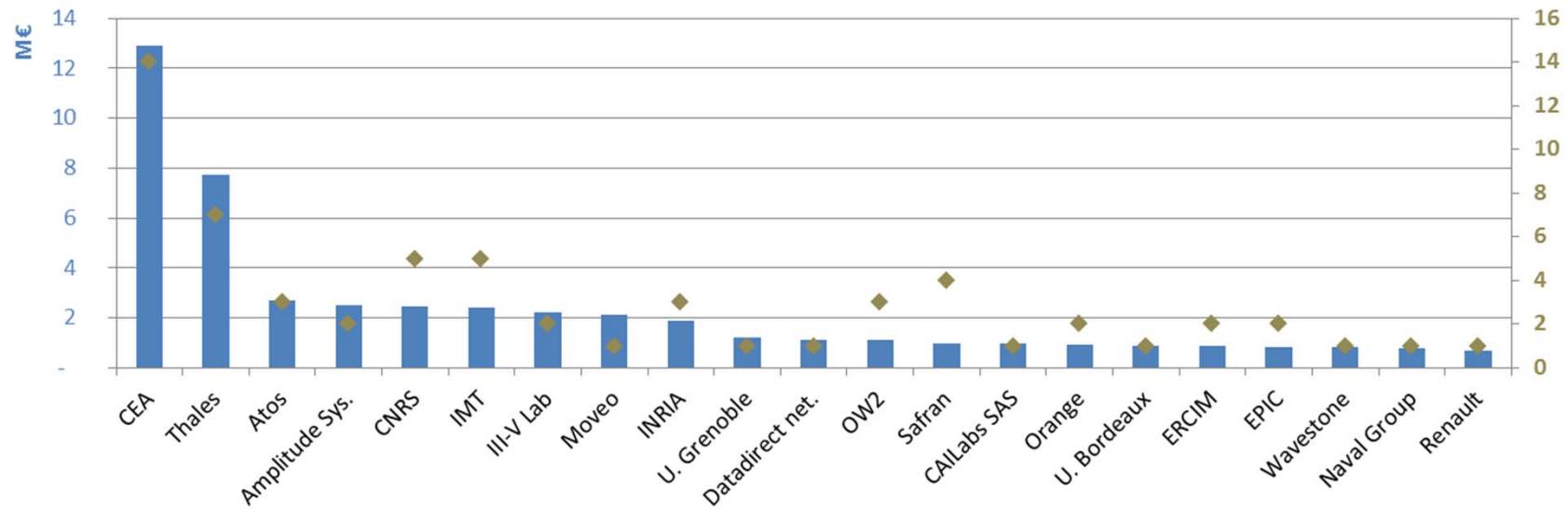
Participants



Bénéficiaires



# Grands bénéficiaires (France) (appels TIC 2018)



**Top 1: 20%**  
**Top 2: 31%**  
**Top 10: 60%**



# De (très) nombreux appels liés à l'IA

Pas de nouveau sujet « purement » IA avant 2020:

- ICT-26-2018-2020: Artificial Intelligence
- ICT-38-2020: Artificial intelligence for manufacturing

Inventaire exhaustif CE:

- [http://www.ijcai-18.org/wp-content/uploads/2018/07/1\\_20180717\\_IJCAI\\_ECAI\\_Cecile-Huet.pdf](http://www.ijcai-18.org/wp-content/uploads/2018/07/1_20180717_IJCAI_ECAI_Cecile-Huet.pdf)
- 45 sujets sur l'ensemble d'H2020 juste en 2019 (hors appels blancs)! En particulier les sujets Big-Data (cf slide suivant)

# Big-Data



## ICT-13-2018-2019: Supporting the emergence of data markets and the data economy

- IA for setting up and operating platforms for secure and controlled sharing of "closed data" (proprietary and/or personal data).
  - *Personal data platforms*
  - *Industrial data platforms*
  - 4-6 M€/projet pour une enveloppe totale de 48 M€
- RIA to advance the state of the art in the scalability and computational efficiency of methods for securing desired levels of privacy of personal data and/or confidentiality of commercial data, particularly when they are combined from multiple owners
  - 10 M€ d'enveloppe

# SU-FCT03-2018-2019-2020



- Titre:** *Information and data stream management to fight against (cyber)crime and terrorism*
- Challenge:**
  - *A Large amounts of data and information from a variety of origins have become available to practitioners involved in fighting crime and terrorism.*
  - *Full advantage is not currently taken of the most advanced techniques for Big Data analysis, and artificial intelligence*
- Mots clés:** vitesse; *predictive analytics; behavioural/anomaly detection systems; hétérogénéité des données...*

Type	Output TRL	Durée Projet	Budget/proj. (M€)	Budget total (2018)	Conditions d'éligibilité
IA	5-7	<24 mois	8	8 M€	3 LEA



# Work Programme topic ICT-10-2019-2020: Robotics Core Technology

**RIA – 42M€ (5~10M€/action)**

Proposals should address one of the four core technologies:

- AI and Cognition
- Cognitive Mechatronics
- Socially cooperative human-robot interaction
- Model-based design and configuration tools

and target the development of core technology modules and tool kits for use in deployable systems platforms that meet the requirements of applications in four prioritized applications areas:

- Healthcare
- Infrastructure Inspection and Maintenance
- Agri-Food
- Agile production



## ICT-10-2019-2020

### 2. What do we NOT want?

- Proposals not addressing at least one of the four core technologies indicated by the call
- Proposals not addressing one of the four prioritized application areas
- Proposals not connecting with any of the DIH actions arising from DT-02-2018
- Proposals developing non-open or proprietary modules and tool kits



## ICT-10-2019-2020 – topic evolution

### 3. Is this new or has it been called before?

*This topic complements the actions of last year topic H2020-DT-ICT-02-2018 “Robotics – Digital Innovations Hubs (DIH)”.*

*The goal of last year was to provide a sustainable ecosystem of robotics stakeholders covering the entire value network. 50% of the budget was devoted to Financial Support to Third Parties (FSTP).*

*The actions sought this year should focus on the development of core technology modules and tool kits. This year there is no FSTP.*

*This topic is also linked to the topic ICT-09-2019-2020 “Robotics in Application Areas” in the current Work Programme.*



## ICT-10-2019-2020 – topic evolution

### 4. Current project portfolio

*825263 RODIN – CSA: coordinating the four DIH networks*

*824964 DIH<sup>2</sup> – IA: DIH network on agile production*

*825196 TRINITY – IA: DIH network on agile production*

*825196 RIMA – IA: DIH infrastructure inspection and maintenance*

*825003 DIH-HERO – IA: DIH network on healthcare*

*On-going redressing appeal for a DIH network on agri-food*

*These actions were awarded in the H2020-DT-ICT-2018-1 call.*

*They are planned to start on 1/1/2019.*



## ICT-10-2019-2020 – Key actors

### 5. Who are the leading players?

*Academia and industry developing or using intelligent robots.*

### 6. Is there a key group of actors driving this?

*PPP SPARC - EU-Robotics "The partnership for robotics in Europe"  
<https://www.eu-robotics.net/sparc/index.html>*



## ICT-10-2019-2020 - Future Outlook

This topic will be called again in 2020.



# ICT-10-2019-2020

## Upcoming events / information days

- Events: (planned infodays, etc.)  
**Brokerage event possibly on 18/12/2018 in Brussels  
(to be confirmed)**  
check: <https://www.eu-robotics.net/>
- Contacts: CNECT-A1@ec.europa.eu

