

International Cooperation for R&D: European Union-Brazil

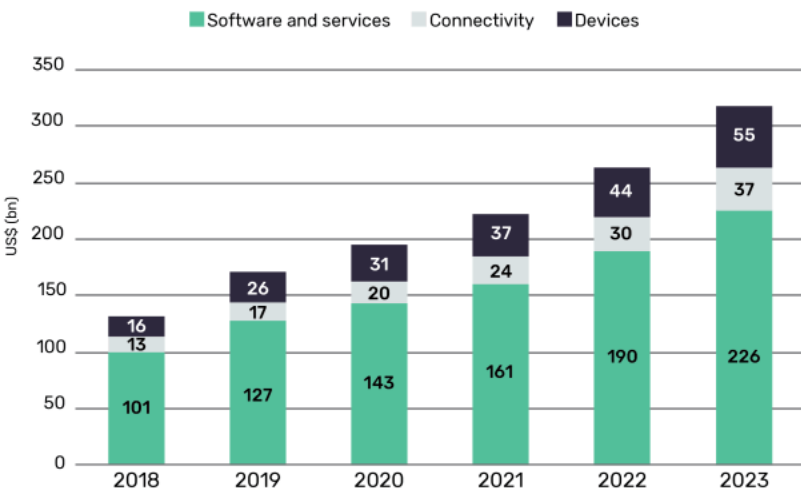
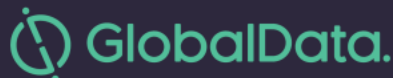
Wanderson Paim de Jesus

National Research and Education Network (RNP)

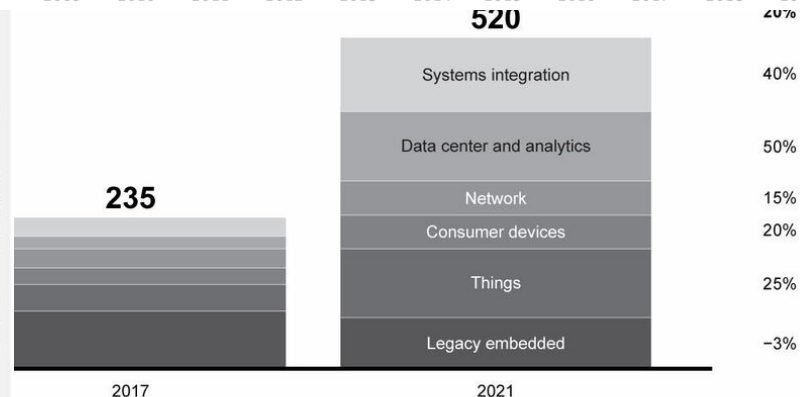
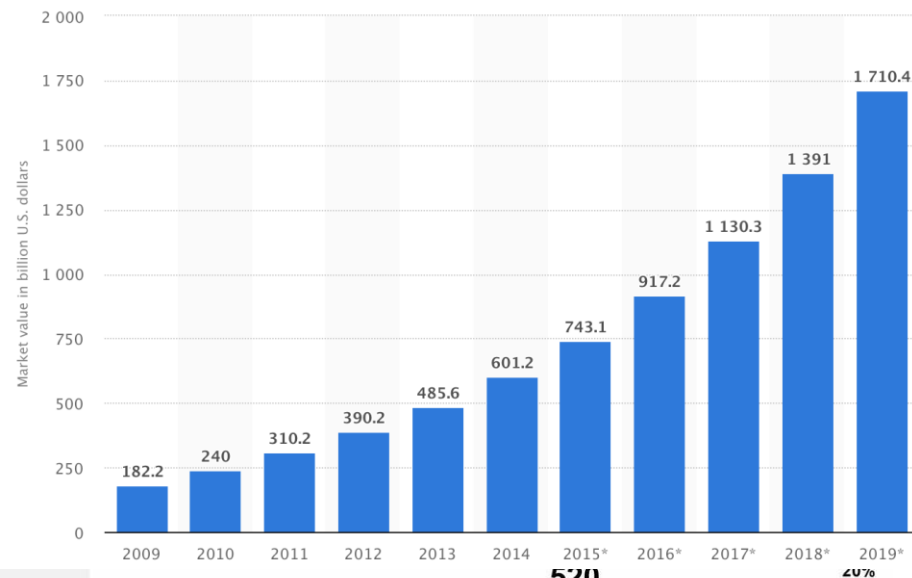
- In general, IoT prospections are focused in market potential

IoT Market Predicted To Double By 2021, Reaching \$520B

Global IoT revenue by technology segment (\$bn), 2018–2023



Attractive Opportunities in Consumer IoT Market



- **IoT** or other emerging technologies

is **much more** than



- This is a **narrow vision** of the whole **potential impact** of emerging technologies

- It is necessary to emphasize what comes **beyond the market potential**
- What will be the **social impacts, environment sustainability, gain of scale, mobility, farming/industry productivity or even reduction of inequalities?**

When it comes to IoT in the scenario of **International Cooperation**, the impacts goes even further.

We're talking about **diplomacy, exchange of know how, about sharing research infrastructures, interchange of researchers** and an alignment of how to tackle **global challenges**, such as the **SDGs**, stated by UN.



COORDINATED CALL
BRAZIL-EUROPEAN UNION

- **EU-BR Coordinated Calls on ICT**

- 1st EU-BR Coordinated Call (2010)
- 2nd EU-BR Coordinated Call (2012)
- 3rd EU-BR Coordinated Call (2014/2015)
- 4th EU-BR Coordinated Call (2016/2017)

- **Last prioritized topics:**

- Cloud Computing, HPC, Experimental Platforms, 5G Networks and Internet of Things

- Statistics of the collaboration

- **193** proposals received

- 43 in the 1st Call
- 61 in the 2nd Call
- 38 in the 3rd Call
- 51 in the 4th Call

- **20** projects selected

- Europe and Brazil already applied

- **€50 millions** total

How it comes to **reducing inequalities?**



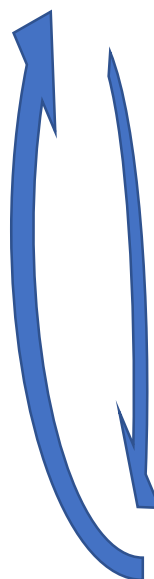
EU-BR Coordinated Calls Working Process



MCTIC
Min. of Foreign Affairs
RNP
US\$ 1.86M GDP



European Commission
DGConnect
US\$ 18.7M GDP



1. Negotiate topics and budget
2. Launch the Call in BR and EU
3. Joint Selection
4. Grant agreements with RNP in BR and EC in EU
5. The same projects starts at the same day in Europe and Brazil
6. Joint RNP-EC monitoring procedures (quarterly and annually)

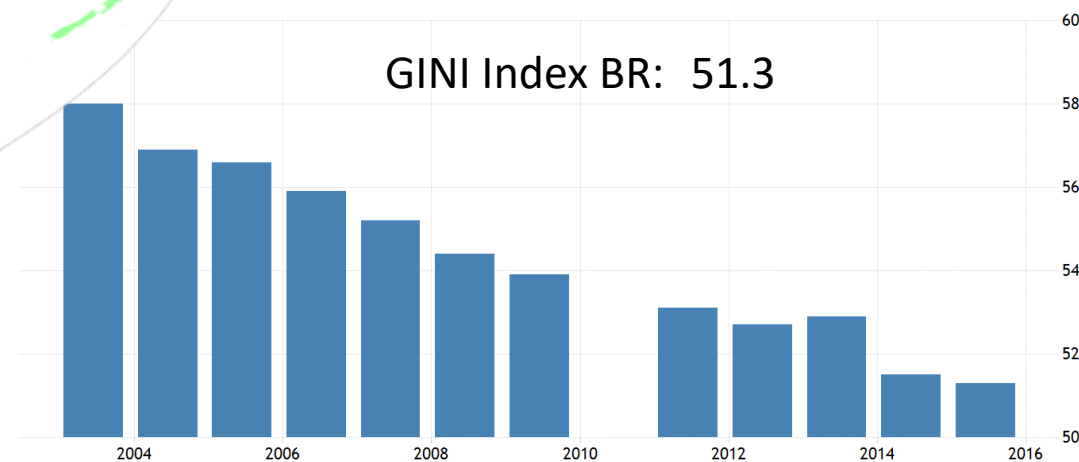
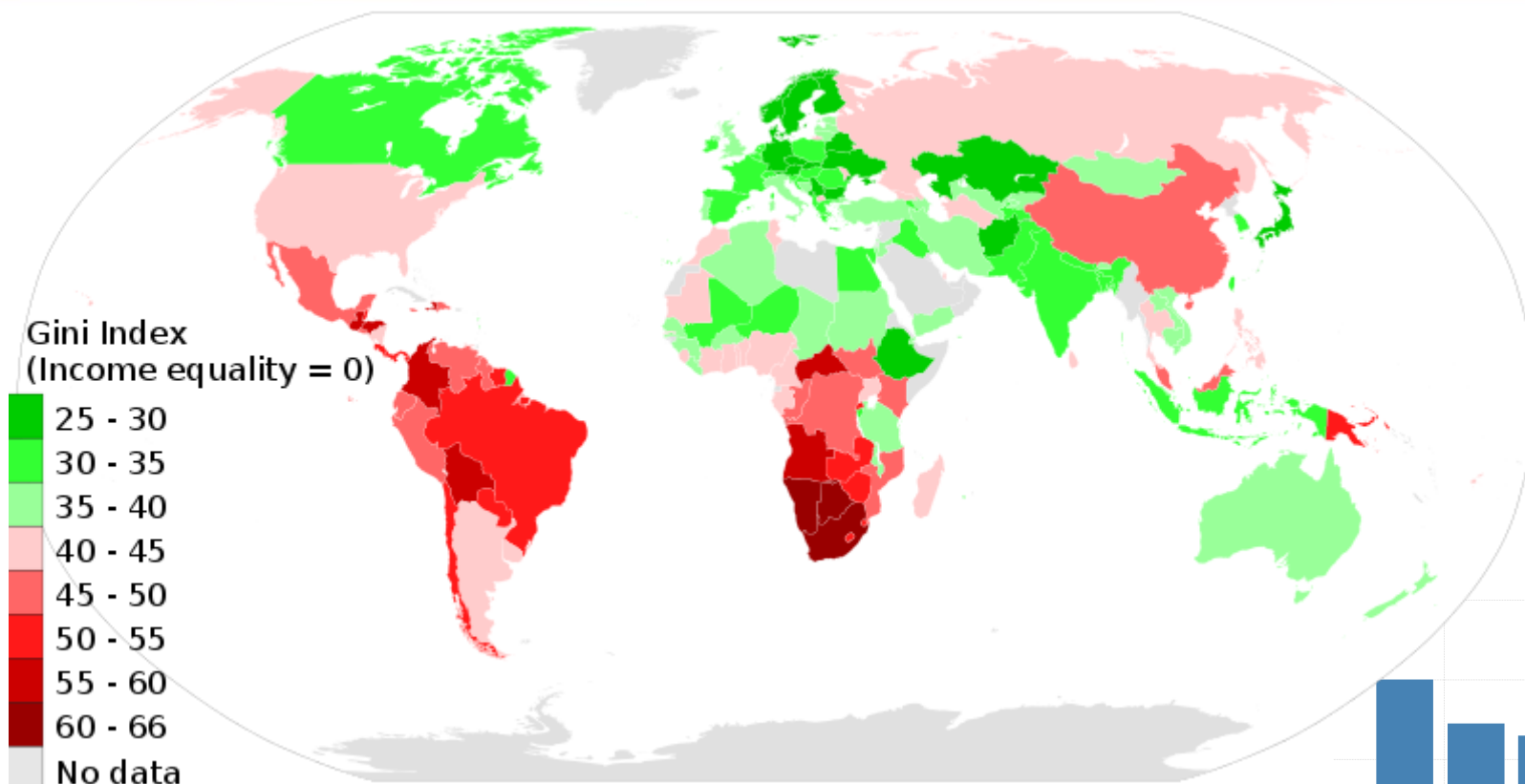
DO YOU KNOW HOW BIG BRAZIL IS?



208,5 million people



GDP contribution
per region

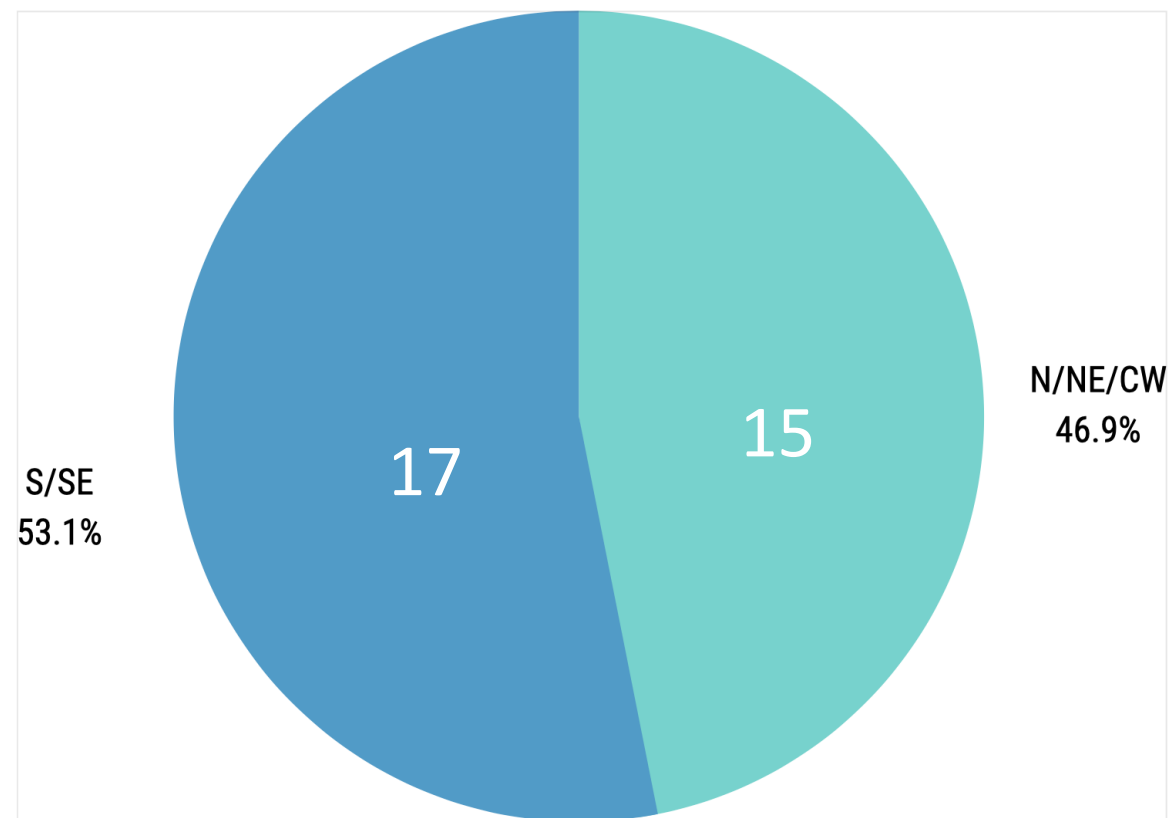


GINI Index Denmark: 28.2

4th EU-Brazil Coordinated Call

- 6 projects
- € 8 millions (each side)
- Maximum duration: 3 years
- Cloud Computing
- Internet of Things Pilots
- 5G Networks

% of winning institutions per region





<http://maps.ctic.rnp.br>



Team	Brazilian Partners	European Partners
Brazilian Coordinator Prof. Dr. Mauro Augusto da Rosa Universidade Federal de Santa Catarina (UFSC)	INESC P&D Brasil) Universidade Fed. de Santa Catarina (UFSC) Pontifícia Universidade Católica do Rio Grande do Sul (PUC-RS) Universidade Fed. de Goiás (UFG) Universidade Fed. da Bahia (UFBA) Embraer S.A. (EMB) Thyssenkrupp Elevadores Ltda (TSK) Bradel Distribuição Ltda (BRAD)	Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência (INESC TEC) Politecnico de Milano (POLIMI) Embraer Portugal (EMBPT) Pace Aerospace Engineering and Information Technology (PACE) Consorzio Intellimech (iMech)
European Coordinator Dr. César Toscano INESC TEC		
Website www.fastenmanufacturing.eu	Contact fasten@inescbrasil.org.br	



Strategic Value Networks for Industry 4.0 ⌚ 1 hour 9:45 AM - 10:45 AM | [Musikhuset Aarhus](#) , Lille Sal

Moderator John Soldatos (Athens Information Technology, Greece) | Piero Orlando (Siemens) | Juan Manuel Jauregui Becker (Mobile World Capital Barcelona) | Constantino Roldán (IK4-TEKNIKER) | [Enzo Morosini Frazzon](#) (Industrial and Systems Engineering Department (EPS) of the Federal University of Santa Catarina (UFSC))



Team	Brazilian Partners	European Partners
Coordenador no Brasil: Dr. José Eurico de Vasconcelos Filho Universidade de Fortaleza (UNIFOR) Coordenador na União Europeia Dr. Leire Bastida Fundacion Tecnalia Research & Innovation (TECNALIA)	Universidade de Fortaleza (UNIFOR) WDA Tecnologia & Inovação Centro de Pesquisa e Desenvolvimento em Telecomunicações (CPqD) Núcleo de Tecnologias Estratégicas em Saúde (NUTES) Universidade Estadual do Ceara(UECE) Instituto Atlântico (IA)	Fundacion Tecnalia Research & Innovation (TECNALIA) Universidad Politecnica De Madrid (UPM) Ethniko Kentro Erevnas Kai Technologikis Anaptyxis (CERTH) Unparallel Innovation Lda (UNP) Colegio Virgen de Europa (CVE) Servicio Madrileño de Salud (SERMAS) Ellinogermaniki Agogi (EA)
SITE www.ocariot.com.br	CONTACT ocariot@unifor.br	



Security and Privacy Compliance with GDPR in IoT for Smart Living Environments for Healthy Ageing ⌚ 1 hour 15 minutes 2:15 PM - 3:30 PM |

Musikhuset Aarhus , Bag Scenen

Wed Jun 19

2:15 PM

Moderator Giuseppe Fico (Life Supporting Technologies - Technical University of Madrid) | Franco **Mercalli** (MultiMed Engineers) | Pasquale Annicchino (Archimede Solutions) | Sergio Luís Ribeiro (CPqD) | Olivier Horbowy (STMicroelectronics) | [Tiago Teixeira \(Unparallel Innovation\)](#)



Team	Brazilian Partners	European Partners
Brazilian Coordinator	Federal University of ABC (UFABC)	VTT Technical Research Centre (Finland)
Prof. Carlos Kamienski (UFABC)	Federal University of Pernambuco (UFPE)	University of Bologna (Italy)
	Federal University of Pernambuco (UFPE)	CBEC: Consorzio di Bonifica dell'Emilia Centrale (Italy)
	Centro Universitário da FEI	Intercrop Iberica (Spain)
European Coordinator	EMBRAPA - Brazilian Agricultural Research Corporation	Quaternium (Spain)
Prof. Juha-Pekka Soininen (VTT)	LeverTech Tecnologia Sustentável	
Website	Contact	Twitter
swamp-project.org	contact@swamp-project.org	@SwampProject

+ Applied IoT Value Creation ⌚ 1 hour 30 minutes 4:00 PM - 5:30 PM | [Musikhuset Aarhus](#) , Lille Sal

Jakob Mollerup Ladekær (Kapacity A/S) | [Carlos Kamienski](#) (Federal University of ABC (UFABC, Brazil)) | [Søren Pedersen](#) (HD Digital) | [Ulrich Borup Hansen](#) (APX10 A/S)

Panel **Artificial Intelligence & Smart Data**

Wed Jun 19

4:00 PM

There are still many **global challenges** for **EU-BR Cooperation** to address

Brazil dam: Startling pictures of Brumadinho collapse

🕒 1 February 2019

[f](#)
[m](#)
[t](#)
[e](#)
[Share](#)

Brazil dam collapse



Dramatic pictures have emerged of the collapse of a dam in southern Brazil at an iron ore mine which left more than 300 people dead or missing.

The number and impacts of disasters have increased in Europe in the period 1998-2009, a new report by the European Environment Agency (EEA) concludes. The report assesses the frequency of disasters and their impacts on humans, the economy and ecosystems and calls for better integrated risk disaster management across Europe.



The Buncefield fire, UK, 2005

Paris and London are Europe's most congested cities



São Paulo: 29.164.426 cars



International Cooperation for **IoT**

It maximizes social impacts, environment sustainability, gain of scale, farming/industry productivity and even reduction of inequalities while still delivering - and potentially increasing - market value.



COORDINATED CALL
BRAZIL-EUROPEAN UNION

Thank you!

Wanderson Paim de Jesus

wanderson.jesus@rnp.br



MINISTÉRIO DA
DEFESA

MINISTÉRIO DA
CIDADANIA

MINISTÉRIO DA
SAÚDE

MINISTÉRIO DA
EDUCAÇÃO

MINISTÉRIO DA
CIÊNCIA, TECNOLOGIA,
INOVAÇÕES E COMUNICAÇÕES

