



INCREASING INTERNATIONAL STI COOPERATION BETWEEN **BRAZIL** AND THE **EUROPEAN UNION**

Action Plan on Smart Cities & Smart Systems

Pedro Guedes

Porto Digital



The INCOBRA project has received funding from the European Union's Horizon 2020 Research and Innovation programme, under the Grant Agreement number 692520. This publication reflects only the author's view and the Commission is not responsible for any use that may be made of the information it contains.



- 1. Action Plan Dimensions**
- 2. Methodological Approach**
- 3. Smart Cities & Smart Systems Relevance**
- 4. Smart Cities & Smart Systems Action Plan Focus**
- 5. Robust Trajectories in Smart Cities & Smart Systems for the Action Plans**
- 6. Recommendation for future cooperation EU-BR**

The overall objective of the Action Plan for Smart Cities & Smart Systems is to provide a set of actions to the INCOBRA team to help the project in the purpose of increase R&I cooperation activities such as partnership, consortia and joint R&I projects and enhance framework conditions addressing EU-BR R&I cooperation areas.

INCOBRA plans activities such as:

- ✓ technological foresight
- ✓ open consultation
- ✓ patent and publication analysis and
- ✓ foresight studies

This background allowed to INCOBRA developing strategic Action Plans to foster R&I cooperation in five Priority Areas:

- Green Energy
- Sustainable Use of Bioresources
- Food Security and Adaptation of Agriculture to Climate Change
- Advanced Manufacturing and Nanomaterials and
- Smart Cities and Smart Systems

Concise Scenarios looking for framework conditions for R&I cooperation



Robust Trajectories



Actions per Robust Trajectories

- Not originally part of the scope
- Innovation, technology, research and cooperation goal converged to applications connected to urban problems and their solutions.
- Very high impact in how cities will work in the future.
- The SFW showed that connected urban environments would influence and be influenced by other priority sectors such as food, energy, environment, health, electronics, etc.

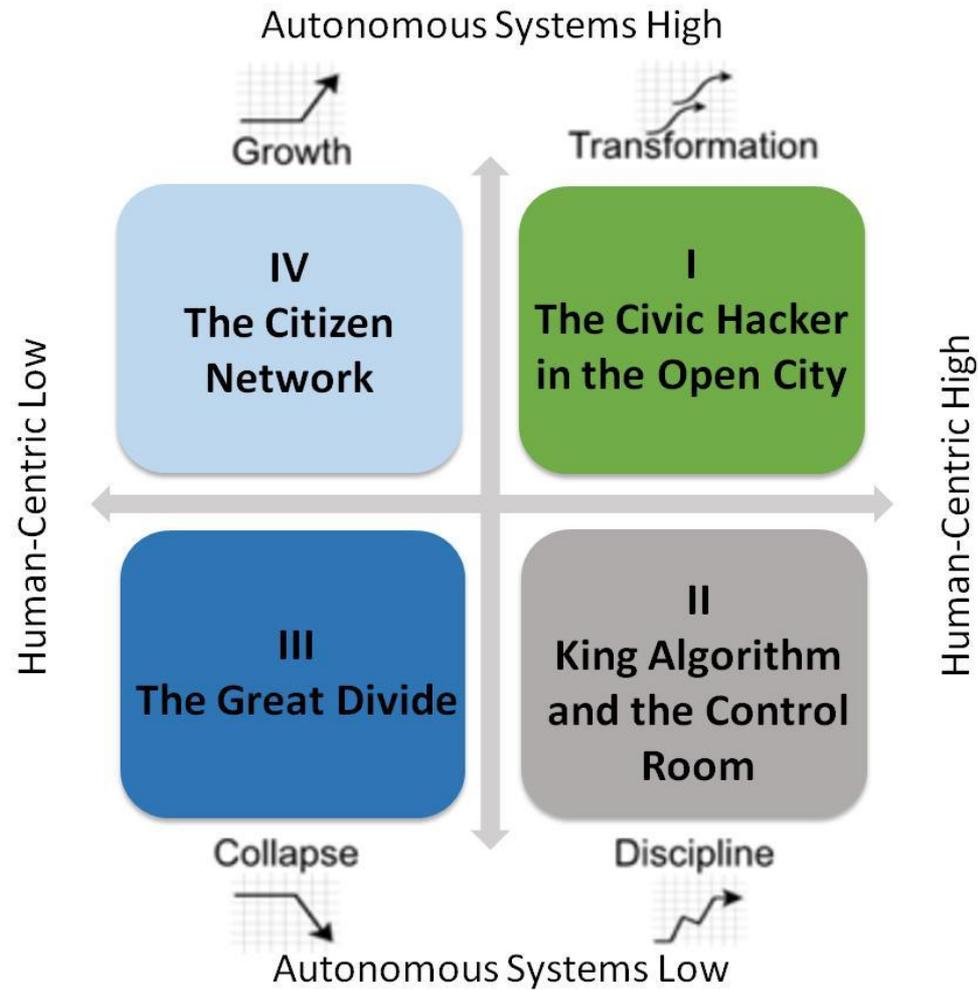
The topic Smart Cities & Smart Systems involves the use of **integrated digital systems**, many of them **autonomous**, to enable **efficiency, sustainability** and **wellness**, especially in cities, taking into consideration aspects of **energy, environment, health, wellness** and **electronic systems**.

Since Smart Cities and Smart Systems is a broad and complex theme that can't be isolated from other topics and their policies, this plan focuses on the centrality of cities and smart systems for the cooperation as a whole.

- Citizen engagement - including **distributed governance** and sharing economy;
- Ecosystems of wellbeing - including **urban environment, health and social security**;
- Privacy and Security - including **Blockchain, data policies and analytics**;
- New economies - including **fintech, cryptocurrencies and collaborative economy**;
- Internet of Everything - including **autonomous systems, sensors, big data and analytics**;
- Entrepreneurship - including **innovation ecosystems, urban solutions and social change**.

1. Brazil/EU startup **ecosystem** for urban innovation
2. Bilateral Brazil/EU commitment to **long-range funding**
3. **Cross-research** between priority areas
4. Brazil/EU common knowledge, research and development of **IoT protocols and solutions** and next generation networks
5. Joint policy development for **net neutrality, data security, privacy and management**
6. Development and sharing of Brazil/EU **makerspaces and research facilities**
7. Joint development of policies and new business models for **work, health and mobility platforms**
8. Joint research and innovation in **blockchain technologies** (cryptocurrencies and smart contracts)
9. Joint strategies for **digital inclusion & “smart slums”**
10. Joint design of new **city governance labs**

Critical variables



A crosscutting analysis of the set of Robust Trajectories - and Actions referred in each of the Priority Areas - has shown eight major strategies that can be understood as of highly important to the endeavor of building up R&I cooperation among Brazilian and European stakeholders. The next item presents these findings:

1. Monitoring of and contributing to regulation and policy

2. Maintaining long-term funding support

3. Sharing common knowledge and facilities to leverage economies of scale and scope

4. Selecting common R&I topics across the five Priority Areas that leverage the complementary knowledge, framework conditions and longstanding cultural linkages between Brazil and EU

5. Identifying pioneering coalitions for R&I cooperation

6. Engaging the business sector as a core contributor in R&I cooperation

7. Involving civil society as a core stakeholder

8. Establishing best governance practices for R&I cooperation

Thank you!

Pedro Guedes

www.incobra.eu

info@incobra.eu

www.portodigital.org

pedroguedes@portodigital.org