



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

## Action Plan on Smart Cities & Smart Systems

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- 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.

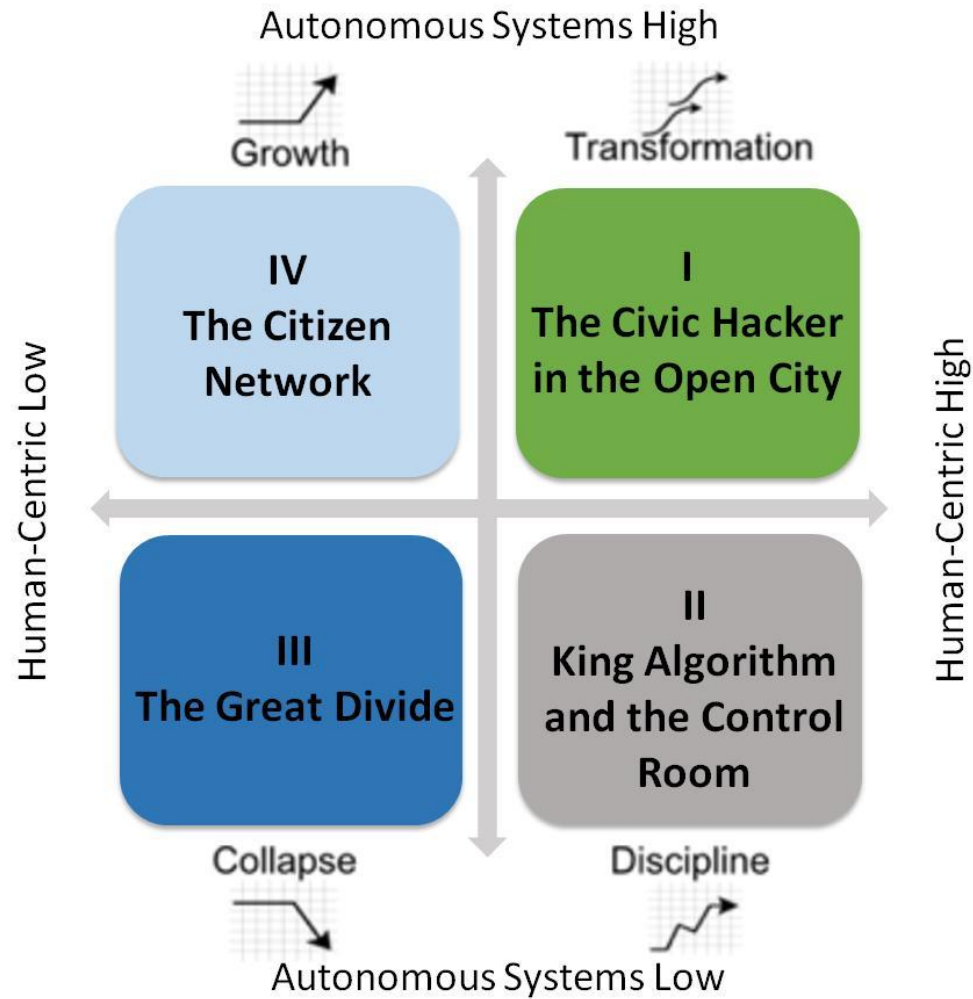
The topic Smart Cities & Smart Systems involves the use of **integrated digital systems**, many of them **autonomous**, to enable **efficiency, sustainability** and **wellness**, especially in cities, taking into consideration aspects of **energy, environment, health, wellness** and **electronic systems**.

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!

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