



www.clines-project.eu

INTERMEDIATE JOINT ACTION PLAN

Four European research-driven regional clusters joined forces to bundle their experience and track record in the domain of **Embedded Systems for Smart Cities**:

- **BrainsBusiness**: Information and Communication Technology, Denmark
- **DSP Valley**: Smart Electronic Systems, Belgium
- **BICCnet**: Information and Communication Technology, Germany
- **GAIA**: Electronics, IT and Telecommunications, Spain

CLINES wants to build a sustainable multi-cluster international eco-system focused on **Embedded Systems for Smart Cities** in order to stimulate international cooperation, innovation and economic development for **Europe**.

The Joint Action Plan

The Overall Objective

This strategic plan will pinpoint what it will take for the involved partners to push economic development in the four regions by enabling innovative research and technology partnerships within the collaborative area of embedded systems for smart cities (ESSC).

The Joint Action Plan will be defined through interaction with all the stakeholders to ensure that it meets the expectations of the different stakeholders, that it is relevant to these stakeholders, founded in their strongholds, and creates commitments of the stakeholders leading to the expected economic development in the involved regions.

00 REGIONAL
INFORMATION ANALYSIS



01 THE INTERMEDIATE
JOINT ACTION PLAN



02 THE FINAL
JOINT ACTION PLAN



03 REGIONAL POLICY
RECOMMENDATIONS

5 Goals to improve the domain of Embedded Systems for Smart Cities in Europe

Goal 1 Improve ESSC Specialisation

The goal is to improve the regional smart specialisation in the domain of embedded systems for smart cities (ESSC) by utilizing the regional strengths and through joint actions, thus creating a joint vision with particular foci within research, business and public agencies.

It also involves relevant and significant stakeholders in each of the regions covering all the roles of the value chain and influential policy-makers both in the private and public sectors.

SUBGOALS:

- ✓ Create a joint vision
- ✓ Appreciate and leverage regional and joint strengths
- ✓ Focus research effort
- ✓ Involve stakeholders
- ✓ Collaborate across sectors
- ✓ Create public and political awareness

The suggested actions to meet this goal and these subgoals are prioritised as follows:

1. Create a common vision for ESSC that is well founded in the SWOT analyses and in the trend roadmaps and show how the common vision links to both regional strongholds as well as other European clusters within ESSC.
2. Mediate between otherwise separate business sectors and between public agencies because these need to collaborate to enforce the specialisation ESSC and potentially facilitate mutual interests through the CLINES innovation workshops. Support public procurement agencies within ESSC to push collaboration further.
3. Turn the Regional Interest Groups (RIGs) from being specific to the CLINES project into valuable ESSC specialization groups beyond the project lifecycle by engaging a broader set of stakeholders, including influential business people and public policy makers.
4. Communicate the common vision for ESSC and how it links to / relates to regional smart specialisation strategies, potentially through: exemplar stories of collaboration within the ESSC vision; the CLINES show cases; and identified important ESSC problems.
5. Comprehend, appreciate and influence the regional strategical bodies to make smart specialization policies more aligned with ESSC goals and so, provide a suitable field wherein ESSC initiatives may look in the same direction as structural funds.

Goal 2 Build a Vibrant ESSC Eco-System

The goal is to build and cultivate an eco-system for ESSC that is vibrant and resonates with regional businesses, public agencies, and research institutions by strengthening the regional cluster organisations and the cross-cluster collaboration.

It also involves improving both the visibility of the regional eco-systems' strongholds and their attractiveness for other ESSC eco-systems to collaborate with and leading to the creation of increased value in joint activities and to strengthen competitiveness of European ESSC.

SUBGOALS:

- ✓ Strengthen European competitiveness on ESSC
- ✓ Create joint value
- ✓ Improve attractiveness
- ✓ Foster transnational collaboration between regional eco-systems
- ✓ Strengthen cluster organisations

The suggested actions to meet this goal and these subgoals are prioritised as follows:

1. Create joint events with common ESSC agendas and use these for frequent exchanges of information on funding opportunities, calls, projects, knowledge and research on ESSC and possibly involve the Regional Interest Groups (RIGs) as well.
2. Establish a formal CLINES office to manage common logistics for the regional clusters.

3. Create matchmaking across sectors and across regions driven by quadruple helix thinking and with an elaborate knowledge of interests and competences of businesses, public agencies, research institutions, and other relevant stakeholders. Facilitate pre-competitive public procurement to favour the matchmaking.

4. Connect to similar projects within Smart Cities, Embedded Systems, and their combination, and exchange experience and information.

Goal 3 Develop Innovation Capacities

The goal is to develop as well as improve capabilities and capacities to innovate in the domain of ESSC developing competences for local and global innovativeness. It also involves the linking between and the closing of gaps between research and technology on the one hand and application and value creation on the other hand.

SUBGOALS:

- ✓ Develop innovation competences and capabilities
- ✓ Close research & technology gaps
- ✓ Stimulate SMEs as international innovators

The suggested actions to meet this goal and these subgoals are prioritised as follows:

1. Create access to research groups, research labs, testbeds, and technical infrastructure for ESSC companies and utilise collaboration and alliances with researchers to close research and technology gaps.

2. Support comprehension and communication of innovation specifically for ESSC through innovation workshops in particular, but also expositions, show cases, demonstrators, and knowledge sharing demonstrating both existing and future innovation and innovativeness.
3. Support understanding of users and consumers through use cases, business cases, and by exchanging user analyses as background for creating value for customers and citizens.
4. Support business' and public agencies' access to innovation competence, mentors, coaches, and training for relevant stakeholders.
5. Transfer knowledge and experience to involved regions through CLINES innovation workshops.

■■■■ Goal 4 Create More Business

The goal is to increase the volume and quality of business within the ESSC eco-systems supported by new and improved business models and entrepreneurial capabilities. It also involves a particular focus on start-ups and SMEs, as well as connecting with international partners and unleashing new opportunities through alliances, networks and close collaboration.

SUBGOALS:

- ✓ Develop entrepreneurship
- ✓ Develop business models
- ✓ Unlock new opportunities
- ✓ Improve access to international partners
- ✓ Focus on SMEs and start-ups

The suggested actions to meet this goal and these subgoals are prioritised as follows:

1. Facilitate exchange of ESSC knowledge, its problems, consumers and citizens, solutions, and technologies.
2. Matchmaking both regionally and between regions supported by scouting for new business, utilisation of open development models, consortia creation, SME bundling, and SME and large enterprise linking.
3. Facilitate an international outreach for regional businesses.
4. Develop and diffuse knowledge of business models and value creation based on quadruple helix, alliances, and networks, and train SMEs in developing business models.
5. Exchange knowledge and experience between universities to address both entrepreneurial and technical skills.
6. Foster the public procurement as a lever for private-public-partnering in particular within ESSC.

Goal 5 Mobilize Funding Sources for ESSC

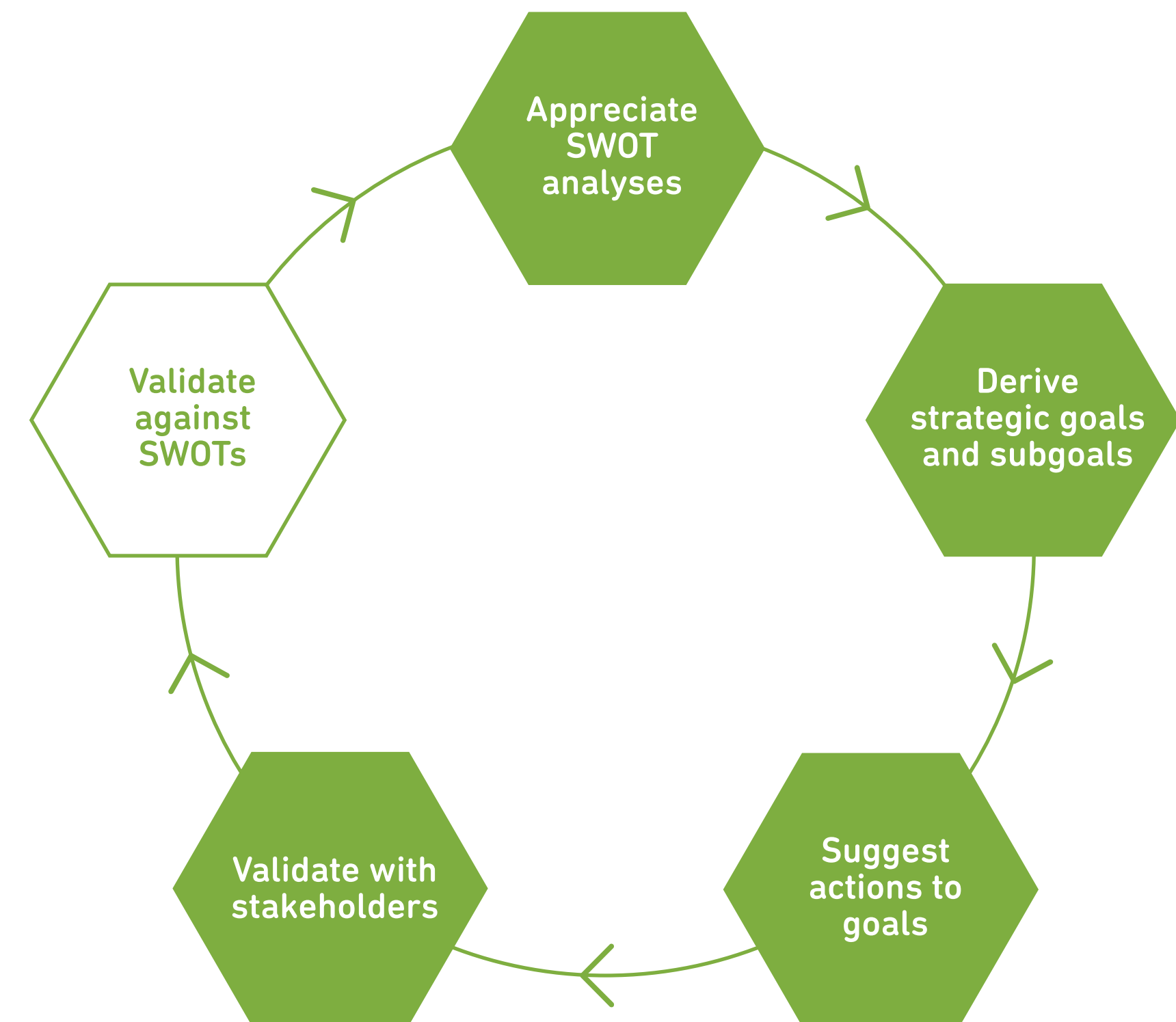
The goal is to identify and report on all funding sources relevant to promote ESSC both joint and regionally. This involves both public funding, e.g., for research, cluster organisations, SMEs, and commercial investment, e.g., venture capital. This may also involve informing policy-makers and funding agencies of the attractiveness of funding ESSC activities.

SUBGOALS:

- ✓ Facilitate public-private-partnering
- ✓ Provide knowledge of commercial investment, entrepreneurial funding, and venture capital
- ✓ Provide knowledge of public funding opportunities

The suggested actions to meet this goal and these subgoals are prioritised as follows:

1. Disseminate and facilitate the exchange of knowledge regarding European, national and regional funding opportunities through regional lobby and funding offices whether these are for research, business, public agencies, or for partnerships.
2. Facilitate the exchange of knowledge of commercial investment in entrepreneurial business, of venture capital, and of crowd funding.



Partners:

