Project no.:	**REGIONS-CT-2013-320043-CLINES**
Project full title:	**Cluster-based Innovation through Embedded Systems technology**
Project Acronym:	**CLINES**
Deliverable no.:	**D5.1**
Title of the deliverable:	**Internationalization Strategy**

Contractual Date of Delivery to the CEC:	**M24**
Actual Date of Delivery to the CEC:	**M24**
Organisation name of lead contractor for this deliverable:	**DSP Valley**
Author(s):	**Mark de Colvenaer, Geert Adriaens, Christian Thiel, Arne Skou**
Participants(s):	**Partners 1,2,3,4,5**
Work package contributing to the deliverable:	**WP4, WP2**
Nature:	**R**
Version:	**1.0**
Total number of pages:	**67**
Start date of project:	**01.09.2013**
Duration:	**36 months**

Abstract:

This document describes the CLINES joint internationalization plan. This joint internationalization plan complements the Joint action plan. In the joint action plan the CLINES consortium partners describe which actions they can take together to push economic development for embedded systems technology in the Smart Cities domain forward. The Joint Internationalization plan defines how to involve stakeholders from other regions and other continents to reinforce the CLINES consortium and increase the impact of the Joint action plan. The CLINES internationalization plan is built on 5 strategies which all relate to the overall objectives of the Joint Action Plan. Furthermore 4 pilot actions are defined. Those 4 pilot actions will be further elaborated on during the remainder of the project. This allows for further optimizing the internationalization plan. This optimized internationalization plan will be integrated in the final JAP.

Keyword list: smart cities, embedded systems, internationalization, strategy, pilot activities

Table of Contents

1   Introduction

Urban regions are confronted with unmet needs which can be solved by embedded system enabled solutions. The CLINES consortium has been setup to focus on those unmet needs and to push economic development in the area of Embedded Systems for Smart Cities (ESSC) forward. To reach this objective the consortium has developed a strategy which is documented in a Joint Action Plan (JAP). The JAP details what is required from the participating CLINES regions (North Jutland, Flanders, Basque country and Bavaria) to move forward.

The Joint Internationalization Plan (JIP) laid down in this document complements the Joint Action Plan. While the JAP focuses on the 4 regions involved, the JIP looks outward the existing consortium to other regions and aims to unlock new, global opportunities in the ESSC domain. By doing so, the CLINES consortium aims at reinforcing ESSC economic development with global activities in close collaboration with international partners.
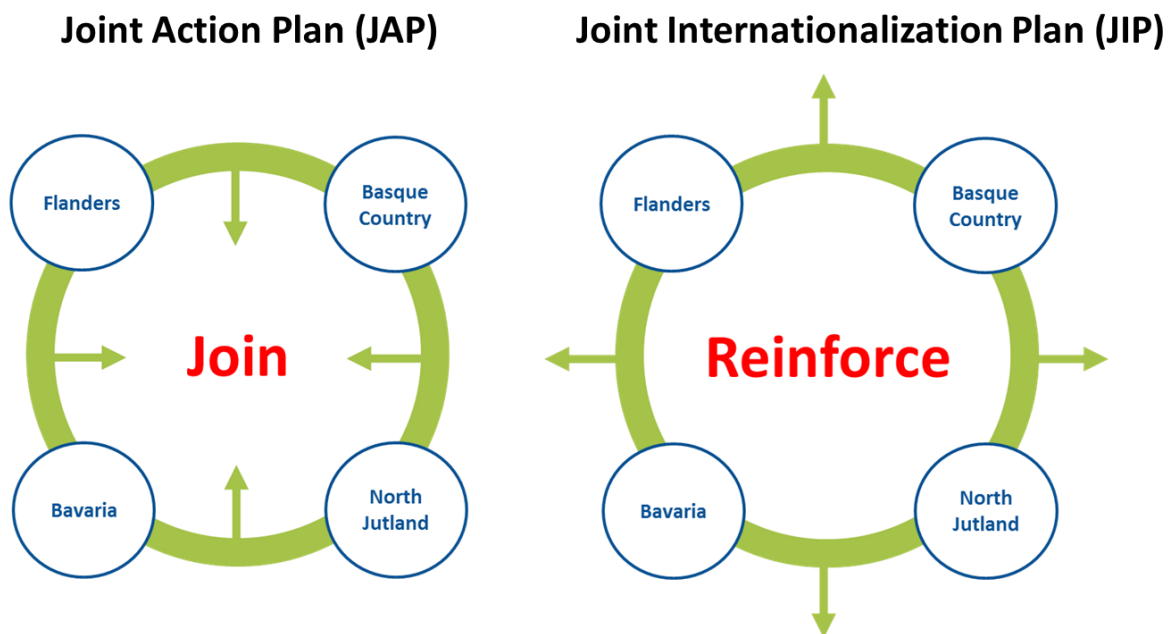
This internationalization plan will include clear internationalization objectives and goals, strategies and actions to reach the objective, a distribution of roles and responsibilities amongst CLINES consortium partners and other stakeholders, an overview of sources to fund the internationalization activities and results of preliminary analysis to define internationalization priorities. This plan will be aligned with the objectives and activities in the Joint action plan and will be submitted for validation to the regional interest groups in each participating region.

2   Relevance of a cluster internationalization strategy for ESSC

There are numerous reasons why organizations benefit from 'internationalization'. To name a few: access to new markets, access to natural or human resources, acquisition of intellectual property, legal requirements. In the domain of Embedded Systems for Smart Cities there are specific reasons to develop an internationalization strategy.

The embedded systems industry is a global business. Many of the ES companies, whether large or small enterprises are part of global value chains. This means that competition takes place not on a regional nor on a national level, but on a global level. Therefore internationalization has become increasingly important to improve the competitiveness of enterprises of all sizes.

In contrast to the global character of the embedded systems industry, the challenges of cities have a very local or regional character rooted in the city ecosystems and culture. Matching 'local' smart city needs with 'global' embedded systems solutions requires a sound internationalization strategy based on detailed analysis of local ecosystems, culture and needs. The fact that major 'mega cities' are situated in Africa and Asia, makes it even more challenging for European ESSC stakeholders to grab global Smart City opportunities. While big multinational companies can rely on their established global network to access foreign cities, small companies need support to take advantage of those global opportunities.

The specificities of the ESSC domain calls for internationalization activities on different levels: local, regional, national, continental, global. Different levels of action aiming at collaboration between different types of organisations with different stakes and aligning a top down CLINES vision with bottom up ESSC reality. This multi-level collaboration is already reflected in the CLINES consortium which consists of cluster organisations from 4 regions: Brains business (DK), DSP Valley (BE), Gaia (ES), and BICCnet (GE).

Cluster organizations are considered as new and highly efficient form of innovation support providers that channel specialized and customized business support services, especially, to SMEs. A cluster organization can be defined as the legal entity engineering, steering and managing cluster.[1]

---

[1] Source : The Concept of clusters and cluster policies and their role for competitiveness and innovation: main statistical results, European Commission Staff Working Document SEC (2008)

A cluster is/can be defined by a geographic concentration of inter-connected companies and institutions working in a common industry. It represents a synergy, a dynamic relationship and a network between all kinds of stakeholders: companies, government, academia, investors, users.

Cluster organizations are ideally positioned to reconcile top down ESSC vision and bottom up ESSC reality. Setting up the CLINES consortium was a first step towards synchronizing ESSC activities between 4 regions. With a 'cluster' internationalization strategy laid down in this document, CLINES aims at broadening its ESSC activities to other regions/continents by engaging other cluster-like organizations in the CLINES activities and leveraging on the value of clusters' in internationalization strategies[2] :

- Networks and clusters with an internationalization strategy act more successfully on an international scale than those without a strategy.

- Good network and cluster management is capable of systematically reducing some of the barriers to internationalization, and there is ample empirical evidence that companies in networks and clusters find it easier to engage in international cooperation

- The internationalization of cluster programs is important for the continuous growth of the cluster as cluster organizations that engage internationally will be able to promote fruitful collaboration between their members and relevant organizations in other countries and regions.

- The consistent international orientation of regional networks and a network management specialized in this area enable affiliated companies to reach their foreign target markets more easily and successfully

- Internationalization activities also improve all the other business activities of companies within a cluster and of cluster management organizations. Research shows that in cases where network and cluster management is responsible for internationalization, the positive impact on business activity is considerably higher.

---

[2] Source : http://internationalcleantechnetwork.com/about-clusters/why-an-international-cluster-network/#sthash.9l9Iq9zr.dpuf

3   Key CLINES principles on internationalization

3.1   Beachhead organizations as access to stakeholders

Involving a huge number of stakeholders is key to drive the economic development in the area of ESSC. For the CLINES consortium it is already a challenge to mobilize those stakeholders in the participating regions. It is even a bigger challenge to involve partners from other regions and continents. CLINES uses a "cluster beachhead approach" to implement and accelerate its internationalisation strategy. The idea is to leverage contacts with clusters and intermediaries outside the CLINES consortium itself, and use those contacts to get access to the stakeholder ecosystem around them, as shown in the following picture:
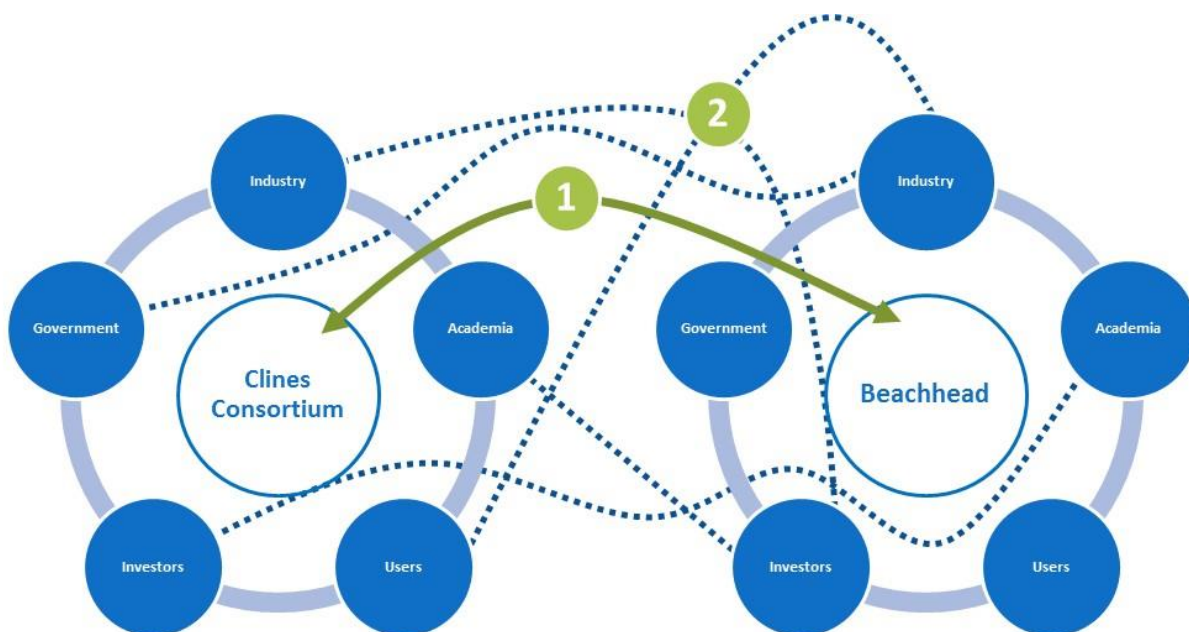
After contacts are initiated from intermediary to intermediary (labelled with "1"), the goal is to quickly look for ways to create links between the different stakeholders of the ecosystems managed by the intermediaries (labelled with "2").

3.2   Opportunity analysis driving the internationalization approach

The CLINES internationalization strategy is opportunity driven. It starts from the basic idea that stakeholders need a concrete focus to evaluate if collaboration is valuable to pursue. Those opportunities can either be the result of thorough analysis by the CLINES consortium or can be driven by external stakeholders. Therefore, internationalization analysis & research is a key internationalization activity which is initiating and driving the CLINES internationalization. Those analysis and research activities are a key responsibility of the CLINES consortium.

The outcome of the analysis & research activities will be an elaborated list of internationalization opportunities: e.g. new interesting regions or stakeholders which can be engaged for the CLINES

initiative, new smart city programs which are/will be launched, funding programs, new support measures, etc. The outcome of the analysis & research activities serves as input to the priority setting process. Following a structured and iterative process the CLINES consortium will periodically draft and update a list of priorities to focus on. Impact on the KPIs related to the internationalization goals will be the key parameter to decide upon priorities.
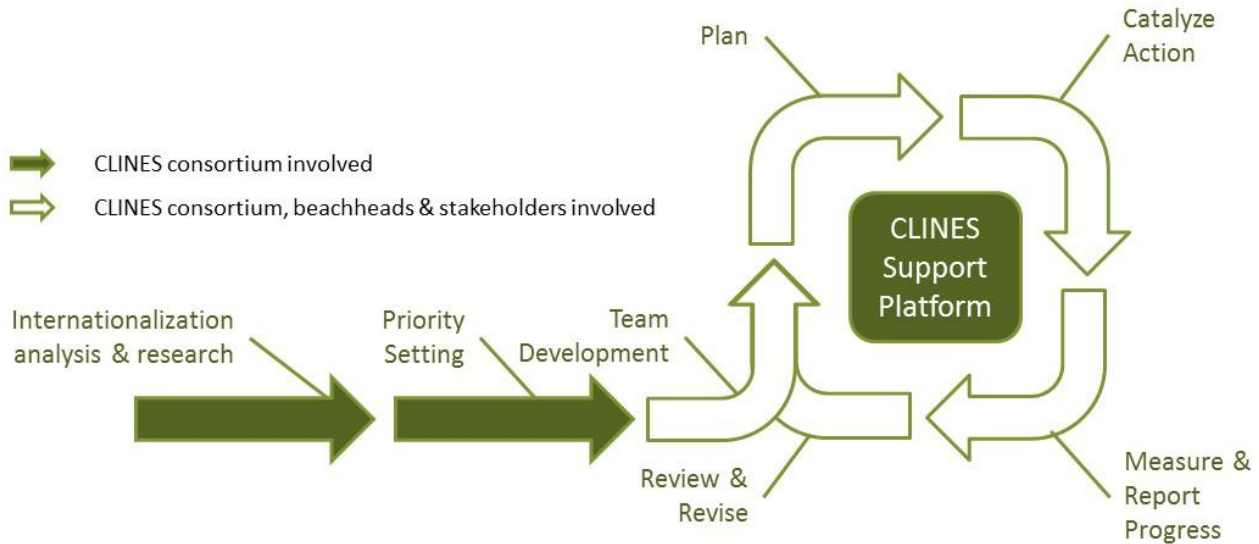
Once priorities are agreed upon CLINES consortium partners, beachhead partners and stakeholders are mobilized to take on responsibility and to develop a team which will further develop and execute an action plan to take advantage of the prioritized internationalization opportunities. When monitoring and revising the internationalization activities impact on the KPIs related to de internationalization goals will, again, be the key parameter.

A central role in this internationalization approach is assigned to the CLINES support platform which will drive the internationalization activities forward and which will take care of the analysis & research activities, the priority process, the team development process and progress toward the internationalization goals. Furthermore this support team will align internationalization activities with the overall joint action plan. The CLINES office, which is discussed in the joint action plan, can also have the responsibility for driving the internationalization activities.

3.3   *Be clever about smart city internationalization*

Firstly, many organizations do have representatives in major cities. Regional governments' foreign trade and investment agencies already offer internationalization support. So, internationalization can start in CLINES' back yard, taking advantage of the numerous, existing internationalization initiatives.

Secondly, Smart Cities are not new. The European Innovation Partnership on Smart Cities and Communities, Smart Cities council, Smart City Expo, Connected Smart Cities Network are just a few examples of ongoing Smart City initiatives. Because of its specific focus (ESSC) CLINES is an interesting consortium to join and reinforce those ongoing initiatives which are paving the way for future economic development of embedded systems for smart cities.

Finally, the World Wide Web is a loyal partner. It isn't just an invaluable source of knowledge and information but it allows for efficient communication with people around the globe. To build its vibrant ecosystem, CLINES has to leverage on this virtually connected world. Skype, Webinars, social networks offer an effective and efficient channel to get acquainted and collaborate with people from other regions.

4 Internationalization strategy

4.1 Overview

Objective	Increase involvement of stakeholders from other regions and continents in CLINES activities
Goals	**Strategies**
3 additional beachhead partners per year 10 additional stakeholders involved in CLINES activities per beachhead/per year	Provide key information and knowledge on internationalization
	Obtain international visibility and recognition
	Stimulate stakeholders towards internationalization
	Activate the international collaboration among stakeholders from different regions
	Support individual internationalization efforts

4.2 Objective and goals

Within the scope of the CLINES activities, internationalization has been defined as the process of increasing involvement of stakeholders from other regions and continents in the CLINES activities. This definition is translated in a straight forward objective for this internationalization plan:

To increase the number of stakeholders from other regions and continents involved in CLINES activities.

This objective can be translated into a few simple and measurable goals:

- Goal 1: engage 3 additional 'beachhead' partners in the CLINES consortium per year
- Goal 2: 10 additional stakeholders involved in CLINES activities per beachhead/per year.

This internationalization objective supports the realization of the CLINES objective and related goals but puts the CLINES activities in a global context. The combined joint action & internationalization plan will lead to particular actions taken by CLINES partners and regions to improve the domain of Embedded Systems for Smart Cities **globally**. The Joint Action & Internationalizations plan must drive economic development through both joint actions and **global**

actions within Embedded Systems for Smart Cities for the benefit of citizens. This overall objective will be reached through 5 strategic actions:

- Improve ESSC Smart Specialization.
- Build a vibrant and **global** ESSC Eco-System
- Develop **global** Innovation Capacities
- Create more local and **global** business
- Mobilize **global** Funding Sources for ESSC

4.3   Strategies and actions

To increase the number of international stakeholders involved in ESSC activities the CLINES consortium has defined 5 internationalization strategies each of them grouping a number of internationalization actions and related Key Performance Indicators. As the internationalization strategy has as objective to reinforce the joint action plan, those 5 strategies are related to the overall clines goals and contribute to the realization of the overall clines objective. The figure below gives an overview of the 5 CLINES internationalization strategies and their relationship to the CLINES goals.
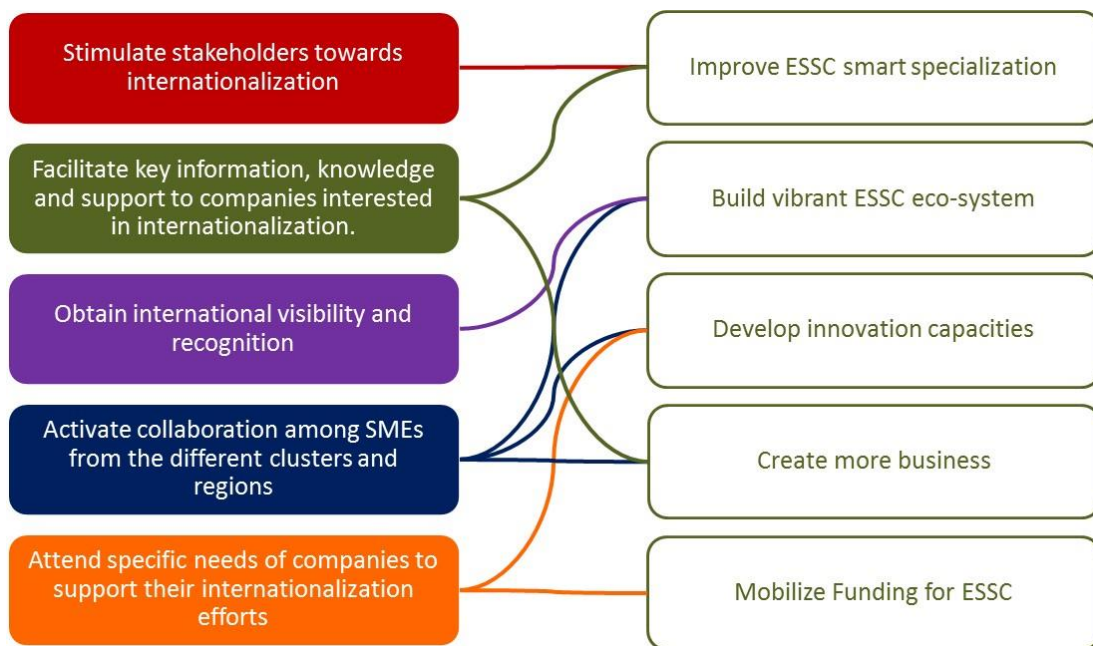
4.3.1 Provide key information and knowledge on internationalization

Definition
This goal aims at developing key insights which could be of interest for stakeholders interested in setting up international ESSC activities. This insight is key to take well informed internationalization decisions about opportunities, priorities, market, partners, strategies, etc.

Related Actions
1. ESSC Desk Research & Analysis (DR&A) with a focus on other regions and other continents. This DR&A will focus on emerging opportunities, important trends, major stakeholders, ESSC value chains, value models, best practices, complementary trade and investment initiatives, supporting policy measures, assessment of competences and capabilities, impact analysis, technology roadmaps.

2. ESSC Field Research (FR) which includes setting up meetings/telcos with representatives of organizations in other regions, organisation of exploratory missions, stakeholder consultations.

3. Prioritization of regions and beachhead partners with the potential for collaborations including drafting detailed action plans and validation with core CLINES stakeholders and regional interest groups. Impact on KPI's will be a key parameter to decide upon priorities.

4. Collect data to monitor progress and impact of CLINES internationalization activities. This data is key to revise, refine, change the CLINES internationalization approach.

5. Developing of CLINES ESSC reports which can be published and distributed to inform stakeholders about the results and the progress of the CLINES activities. Those reports and related 'raw' research data can serve as input for the 4 other CLINES internationalization strategies.

Indicator

- Number of subscriptions to CLINES internationalization reports.

- Attendees to intelligence workshops/webinars.

Contribution to Clines Goals
Information and knowledge is invaluable to all of the CLINES goals. Knowledge about foreign markets, international best practices, leading organisations, global technological evolutions, etc. will allow for a more elaborated ESSC strategy. It allows for focusing the priorities on tangible opportunities.

4.3.2 Obtain international visibility and recognition.

Definition
To stimulate economic development in the ESSC domain stakeholders have to be convinced of the opportunities in this domain and the added value that the CLINES consortium can offer. A first

step is to make the CLINES initiative visible on the international scene. As a second step to get recognized as a valuable ecosystem, CLINES has to prove its added value.

Related Actions

1. Develop and maintain a communication plan focused on creating international visibility and recognition amongst global ESSC stakeholders.

2. Develop multi-lingual marketing and branding material as basis for communication. This material can range from 'general' flyers to white papers, study results, market surveys, stakeholder directories and profiles, or technology presentations. Information and knowledge developed under strategy 4.3.1 will be key input. This content can either be published on paper or on line.

3. Develop an 'online virtual' communication strategy.   Using modern 'communication channels' will lower the barriers to get in touch with global stakeholders. This strategy has to include the development and maintenance of the CLINES website, development of an online 'CLINES' community using existing social networks, organization of 'webinars', participation in online activities of other organizations.

4. Develop an 'offline' communication strategy.   Face to face meetings and contacts with potential partners is still key to build a 'trustworthy' relationships'.   Off- and online communication has to reinforce each other.   Clines offline communication has to leverage on existing internationalization activities organized by e.g. foreign trade and investment agencies, representations of foreign organization in Brussels/Clines regions.   This 'offline' communication strategy can include:

   a. Participation in trade fairs, expos and conferences,

   b. Leveraging on presentation opportunities to disseminate key 'CLINES' content.

   c. Organization of and participation in international exploratory, incoming or outgoing missions and field visits.

   d. Stakeholder consultations

Contribution to Clines Goals

Visibility and recognition are key requirements for a vibrant ESSC ecosystem. Stakeholders wants to associate themselves with initiatives which create benefits for their activities and which are recognized as adding value to the ESSC scene. Hugh international opportunities exist but it is key to position CLINES as the most valuable initiative to create international ESSC business.

Indicator

- Number of contacts in the target market.

- Number of stakeholders from targeted regions/countries participating in CLINES internationalization activities

4.3.3   Stimulate stakeholders towards internationalization

Definition
This goal is to stimulate stakeholders to open up for internationalization and to look for other opportunities in other regions and continents. This includes increasing awareness with regard to the added value of internationalization, increasing awareness of the added value of CLINES internationalization activities and creating an internationalization vision and strategy.

Related Actions

1. Stakeholders who want to go international have to go through a learning curve. They must be convinced it is worth the investment. The CLINES information & knowledge on internationalization brought to the stakeholder community is already a first step towards awareness creation.

2. Set up 'generic' activities which lower the internationalization barriers/risk for CLINES stakeholders. This could be 'materialized' into LOIs, MOUs, agreements with 'beachhead' partners from other continents/regions. This could include access to facilities in another region, access to funding for internationalization activities, access to trustworthy representatives in other regions, etc.

3. Involve 'role models' into the internationalization. Experienced organizations and people who can convince other stakeholders 'by example'.

4. Stakeholders have to be convinced to participate into preparatory activities. During those activities stakeholders will be able to co-create internationalization activities which fits their needs. This could be done by workshops on joint international strategy development, participation in exploratory webinars with other regions/continents, co-organization of field visits or study trips.

Contribution to Clines Goals
This goal improves ESSC Smart Specialization as it contributes to creating joint and international vision, opens up priority setting to international opportunities, includes practices from other regions and international stakeholders.

Key Performance Indicator

- Number of partners in the CLINES consortium

- Number of stakeholders from CLINES consortium participating in CLINES internationalization meetings and events.

4.3.4   Activate the collaboration among stakeholders from the different clusters and regions

Definition
The ultimate goal is to have an increase of partnerships and agreements between partners in the ESSC domain. This could as well be in a research context, business context as public context.

Active participation of stakeholders in other strategic CLINES internationalization activities is a prerequisite to build trust and formal partnerships between stakeholders.

Related Actions

The information and knowledge activities will lead to an overview of international ESSC opportunities. This could include smart city investment programs in major cities, a research program on ESSC topics, EU programs with call for proposals, interesting conferences, etc. Stakeholders will be involved in activities to take advantage of those opportunities. For this reason the CLINES consortium can organize:

- International match-making events

- ESSC Working groups on internationalization topics,

- Innovation/creativity approach

- Access to test infrastructure, test communities

- Online, international collaboration platform

- Support based on a jointly developed service portfolio

- Access to key competences

- Support in team development

- Staff exchange programs

- Set up of training programs

Contribution to Clines Goals

Active collaboration between stakeholders is key to a vibrant ecosystem. This collaboration can focus on sharing competences, building innovation infrastructure, closing gaps between research and technology, co-developing ESSC solutions, etc.

Indicator

- Number of contacts established

- Number of projected collaborations (= a collaboration is likely because partners have defined a next step after a first contact)

- Number of signed MOUs, LOIs or contracts

4.3.5 Support individual internationalization efforts

Definition

A specific customized service can be offered to help individual stakeholders in their internationalization activities. As this service will be tailor-made, delivery of this service can be subject to a commercial agreement between the 'stakeholder' and the 'Clines Consortium'

Related actions

- Mentoring program

- Focused training programs

- Access to specialized service providers (e.g. legal, IPR)

- Direct targeting activities. Stakeholders with a specific question are matched with other partners.

- Access to funding: subsidies, investors, etc.

Contribution to Clines Goals

The one 2 one service offering enables individual stakeholders to optimize their innovation capacities, gain access to funding, etc.

Indicator:

- Number of bilateral support activities.

- Number of stakeholders involved in total/per activity/

4.4   Roles & Responsibilities

The tabel underneath gives an overview of the role different cluster stakeholders can play in realizing the internationalization strategy.

Action Area	Stakeholder			
	Clines Consortium	**Government**	**Academia**	**Business**
Provide key information and knowledge on internationalization	• Plan, facilitate, execute and monitor activities	• Provide access to T&I information and experts • Financial support	• Participate in studies on internationalization. • Provde access to international experts • Provide access to studies on internationalization	• Provide access to international partners and experts • Financial support
Obtain international visibility and recognition	• Plan, facilitate, execute and monitor activity	• Support communication and promotional activities • Organize T&I activities	• Participate in communication and promotional activities.	• Participate in communication and promotional activities
Stimulate stakeholders towards internationalization	• Plan, facilitate, execute and monitor activity	• Specific policy measures to stimulate internationalization	• Develop an internationalization vision and strategy	• Develop an internationalization vision and strategy

Activate the collaboration among stakeholders from the different clusters and regions	• Plan, facilitate, execute and monitor activity	• Financial support to cross regional activities	• Develop international activities. • Participate in international activities	• Develop international activities. • Participate in international activities
Support individual internationalization efforts	• Plan, facilitate, execute and monitor activity	• Financial support for mentoring & coaching programs	• Active participation • Financial support for individual internationalization support	• Active participation • Financial support for individual internationalization support

4.5   *Timing*

The formal delivery date of the internationalization strategy is 31/8/2015.   As this strategy has to be consolidated with the Joint Action Plan and is only a framework to start preparing concrete actions. The work is not finished.   Additional task are scheduled and the overview is given in the Gantt chart below.

Task	aug/15	sep/15	okt/15	nov/15	dec/15	jan/16	feb/16	mrt/16	apr/16	mei/16	jun/16	jul/16	aug/16	sep/16	okt/16	nov/16	dec/16	jan/17
Submission Internationalisation Plan	*																	
Preparing pilot actions with shortlisted regions		* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* *									
Validate Internationalisation Plan with RIGs			* * * *			* * * *			* * * *	* * * *								
Update JIP and integration in the final JAP										* * * *	* * * *	* * * *	* *					
Evaluate and acquire funding		* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *					
Implement updated JIP														* * * *	* * * *	* * * *	* * * *	* * * *
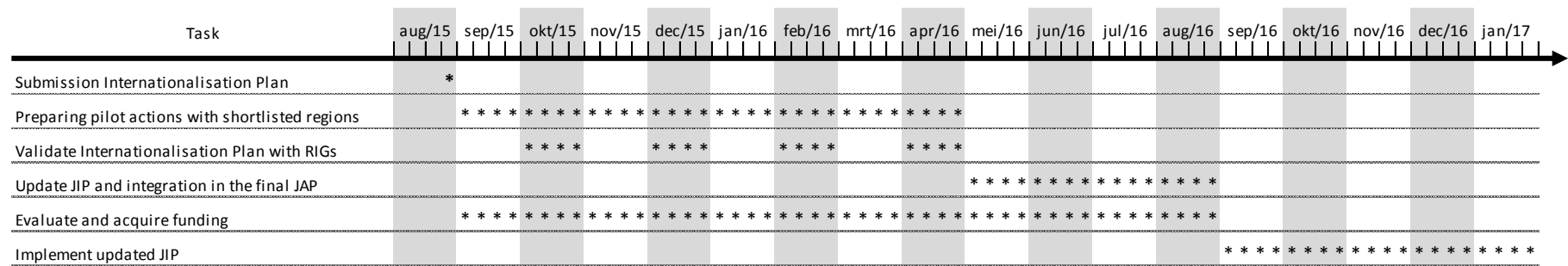
Together with the JAP this internationalization plan will be discussed and validated with the regional interest groups following the process decided by the WP4 team. In between concrete pilot actions are prepared. During the preparation of this internationalization strategy a list of potential beachhead partners was developed together with the CLINES consortium partners. First talks with those partners are ongoing (cfr. Infra) and are be the basis for defining pilot internationalization actions.

At the end of the project the JAP and the internationalization strategy will be included into one consolidated document, taking feedback of RIGs and further evolution of pilot actions into account. Hopefully, the consortium will be able to secure additional funding to continue with CLINES internationalisation activities once this first funding period will be finished.

4.6 *Funding opportunities*

4.6.1   Commercial Revenues

The CLINES portfolio of internationalization services is defined to meet the needs of the individual stakeholders. Some of those services have a more 'general' character whereas other services are focusing on individual stakeholders. In both cases the stakeholders will have to financially contribute to benefit from the CLINES internationalization services. How this 'commercial contribution' will be organized will depend on the type of service and the 'commercial policy' of CLINES partners, e.g.

- More general services such as, access to internationalization knowledge or representation on international meetings, could be part of a yearly membership fee.

- Specific mentoring or coaching activities, participating in a trade fare must be paid for upon delivery of the service

Those commercial revenue streams will be a first source of funding for the CLINES activities in general and the internationalization activities in particular.

4.6.2   Government Support

With economic development in the area of Embedded Systems for Smart Cities as focus, CLINES is an interesting partner for policy makers. CLINES can support those policy makers in preparing and implementing specific policy measures regarding regional and economic development. By consequence it is very likely that CLINES can address 'public programs' as source of funding for its activities. Those public programs can have as well a European or regional scope. Some examples of relevant funding sources are described below. The ideal cocktail of funding for internationalization can be further detailed once concrete (pilot) actions are prepared.

4.6.2.1   European Support Programs

Interreg: European Territorial Co-operation[3]
The fifth programming period of Interreg has a budget of EUR 10.1 billion invested in over 100 cooperation programmes between regions and territorial, social and economic partners. This budget also includes the ERDF allocation for Member States to participate in EU external border cooperation programmes supported by other instruments (Instrument for Pre-Accession and European Neighbourhood Instrument).

- 60 Cross-border – Interreg V-A, along 38 internal EU borders. ERDF contribution: EUR 6.6 billion.

- 12 IPA Cross-border: Instrument for Pre-Accession and European Neighbourhood Instrument

- 16 ENI Cross-border :International Cooperation and Development

---

[3] Source: http://ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial/

- 15 Transnational – Interreg V-B, covering larger areas of co-operation such as the Baltic Sea, Alpine and Mediterranean regions. ERDF contribution: EUR 2.1 billion.

The interregional co-operation programme, INTERREG Europe, and 3 networking programmes (Urbact III, Interact III and ESPON) cover all 28 Member States of the EU. They provide a framework for exchanging experience between regional and local bodies in different countries. ERDF contribution: EUR 500 million.

This program can support CLINES in establishing cooperation with other regions throughout Europe. Regions which are not involved yet in the CLINES consortium/activities. -

Horizon 2020: Europe as Global Actor
In 2015 the European Commission launched a call H2020–INT-INCO with as topic: Enhancing and focusing research and innovation cooperation with the Union's key international partner countries - proposals targeting Australia, USA, Brazil, South Africa, Ukraine. Although this call is closed now, one can assume that the EU will further invest in its relationship with its key international partner countries.

This program can support CLINES in setting up concrete cooperation with stakeholder from the key international partner countries.

4.6.2.2   Regional Support Programs

Bayern International: www.bayern-international.de
Bayern international is an export promotion company of the Free State of Bavaria for small and medium-sized Bavarian companies as well as for the marketing of Bavaria as a business location.

Germany Trade & Invest: www.gtai.de
Germany Trade & Invest's TRADE section offers companies established in Germany up-to-date information on foreign markets, international tender opportunities, investment and development projects, legal information, customs regulations, as well as access to business partners.

Go International: www. Go-international.de
The Foreign Trade Centre Bavaria with headquartered Nuremberg was opened in 2001 with the goal of developing new foreign markets for small and medium business.

The Centre develops together with the company an individual internationalization plan. Then actions are listed which are necessary for a successful career in the target country. Then the implementation of these actions can be funded. There is a maximum funding of 25% is possible.

Export Credit Guarantees of the Federal Republic of Germany:
www.agaportal.de/en/aga/index.html
Federal export credit guarantees support to German enterprises in their efforts to open difficult markets and expand traditional markets in unfavourable time. By taking out Federal guarantees, German exporters and banks protect themselves from the country and buyer risks involved in export transactions.

Baltic Sea Region Innovation express

Innovation Express represents a common European approach for supporting the internationalisation of SMEs through cluster initiatives.

Innovation Express is a joint call for proposals implemented within the framework of the BSR Stars programme. The call is funded by national/regional funding agencies to initiate, develop or enhance transnational cooperation activities – leveraging cluster organisations (or similar) to develop proposals for their SME members.

FOMIN

The Multilateral Investment Fund (MIF), funded by 39 donor countries, supports the development led by the private sector for the benefit of the poor, their businesses, crops and homes. Its mission is to provide the poor with the tools to increase their income: market access and capacity building needed to compete in these markets, access to finance and access to basic services, including green technology. http://www.fomin.org/es-es/

MINTIC

The Ministry of Information Technologies and Communications, under Law Act 1341 of ICT in Colombia, is the entity responsible for designing, adopting and promoting policies, plans, programs and projects in the Technology Information and Communications area in the country. One of its main objectives is to increase and facilitate access for people in the country to the Information and Communications Technologies and to let them reap the benefits. http://www.mintic.gov.co

5   Pilot actions

During the process of drafting the CLINES internationalization strategy an analysis was set up to short list beachhead partners.   The idea behind this analysis was to make the CLINES internationalization strategy as concrete as possible by learning from the experience and expertise from the short listed partners. The meetings with the beachhead partners were focused on exploring concrete opportunities and ideas for internationalization activities. The outcome of those meetings, combined with former CLINES analysis (WP2) and in depth desk research resulted in a list of opportunities. Those opportunities are needed to initiate the CLINES internationalization approach as described in paragraph 3.2.

The figure below positions those CLINES internationalization opportunities in relationship to ongoing Smart City projects, existing (smart city) networking initiatives and technology trends relevant for embedded systems as enabling technology.   This positioning allows for defining the internationalization pilot projects which can be used as concrete examples to further elaborate on the negotiations with the short listed beachhead partners. The pilot project described below are exemplars of potential CLINES internationalization activities. CLINES internationalization will not be limited to those actions but they give a good basis to further elaborate on the CLINES internationalization strategy throughout the project.

5.1   Pilot 1: Documenting international ESSC value chains

5.1.1   Description

Embedded systems are a key technology enabling most of the major tech trends/solutions such as IoT, Smart Machines (e.g. robots, wearables). Most of those novel tech solutions have added value in an urban context. CLINES as a consortium has access to key competences. Organizations which can design, build and maintain those novel tech solutions for specific projects. The objective of this pilot action is to:
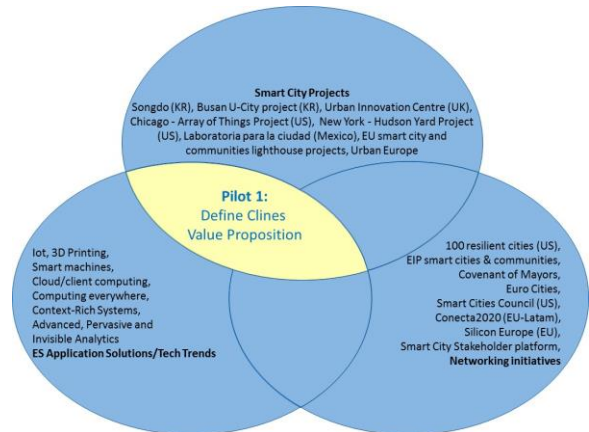
1. Analyse the context, scope and requirements of concrete Smart City Projects such as Songdo, Centum in Korea, the New York and Chicago projects in the US.

2. Draft a generic value chain based on the project requirements and define which role the CLINES consortium, CLINES beachhead partners and CLINES stakeholders can play in this value chain.

3. Complement the value chain analysis with (beachhead) partners from other regions who can fill in the missing links in a specific value chain.

4. Based on this value chain analysis a CLINES (international) value proposition has to be drafted.

This value chain analysis allows for a clear, focused positioning of the CLINES consortium into the process of value delivery in a smart city context. This focus will clarify what CLINES stakeholders can realize and were additional partners are needed. A generic value chain is visualized in the figure below.
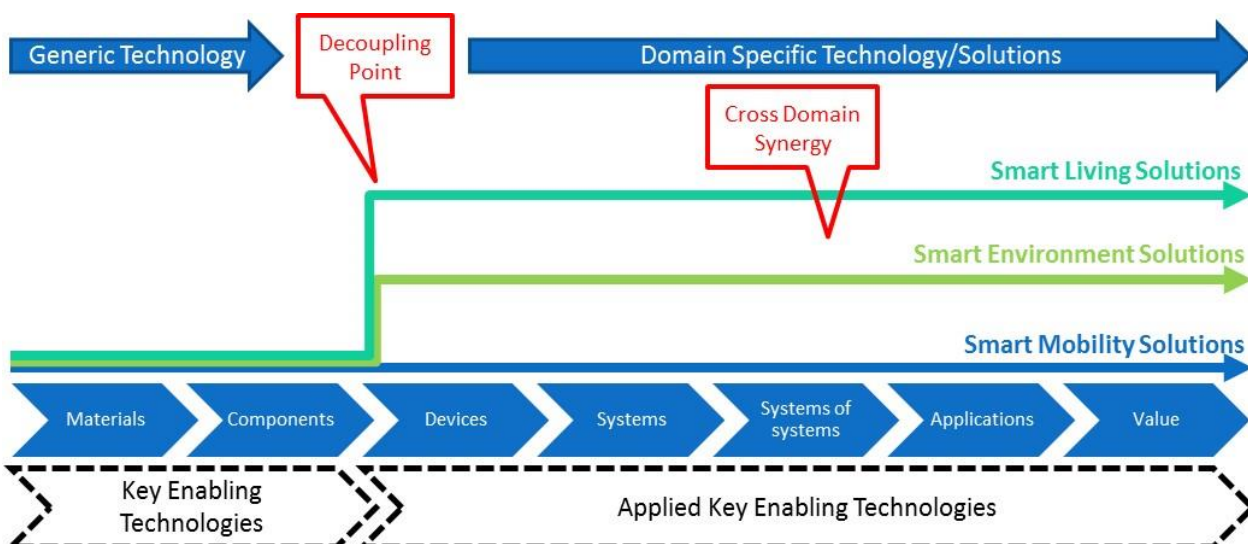
This value chain can be further detailed answering some of the key questions:

1. Where to position the decoupling point? In other words, how far downstream the value chain can generic technology be used to build smart city solutions.

2. How to create cross domain synergy? Despite the differences between Smart Living, Smart Environment, Smart Mobility solutions are there any common components, methods, structures.

5.1.2   Impact on the internationalization strategy

Strategies	Expected qualitative impact
Provide key information and knowledge on internationalization	• The value chain analysis will allow for a positioning of CLINES in a global Smart Cities value chain. • Potential CLINES beachhead partners can be better positioned in relationship to the core CLINES competences • Insights can be gained on influence of cultural differences during the implementation of smart city projects
Obtain international visibility and recognition	• The CLINES value proposition will clarify what CLINES can offer in an international context. This offer (and related practices) can be communicated to create recognition and visibility
Stimulate stakeholders towards internationalization	• The value chain analysis allows individual stakeholders to better define were they can add value. • The concrete projects can make it clear how value can be generated from real smart city projects.
Activate the international collaboration among stakeholders from different regions	• Analysis of concrete projects in combination with the value proposition exercise can be used as input to target the right partners/project as first step to initiate collaboration.
Support individual internationalization efforts	• The insights and knowledge gathered can be used during coaching and mentoring programs which can be organized by demand of individual CLINES stakeholders

5.2 Pilot 2: Mutual International missions

5.2.1 Description

Several major cities are running large scale smart city initiatives. Some of those initiatives are on other continents e.g. Songdo (KR), New York (US), Laboratoria para la ciudad (Mexico). Other initiatives are in Europe, e.g. Urban Innovation Centre (UK), BerlinTXL (GE). This pilot is focusing on setting up international ESSC missions to those cities and facilitate mutual networking between different continents/regions. Beachhead partners will play a major role in preparing those international missions. Setting up such an external mission can follow a structured process. Taking Korea as an example, a mission to Songdo, Busan could be prepared as follows:

1. Get further acquainted with Korea via Desk Research, representatives from Korea based in Europe (e.g. KIST Europe, Korean companies, Consulates, Embassies), European organizations which have a working relationship with Korea (e.g. T&I agencies, academia, companies), existing initiatives for missions, etc. During the beachhead analysis, KIST (the Korean Institute of Science and Technology), popped up as a potential CLINES beachhead in Korea.
2. Define the scope of a mutual international mission between Europe and Korea: e.g. visit to cities, workshops, etc. and detail the objectives.
3. Organize a first webinar between Korean and European stakeholders on ESSC topics. The objective of this webinar is to evaluate the relevance of a mutual mission between Korea and Europe. A webinar is a low cost medium to get further acquainted, zoom in into several ESSC topics and evaluate if it is worth the investment to continue with a mutual mission.
4. Organize an exploratory, fact finding mission to Korea. A small CLINES delegation travels to Korea to visit Songdo, Busan, KIST and other relevant organizations. This mission has as objective to prepare a big mission to Korea.
5. ESSC mission to Korea
6. After mission activities: gather lesson learned, follow up on established contacts, list of new opportunities
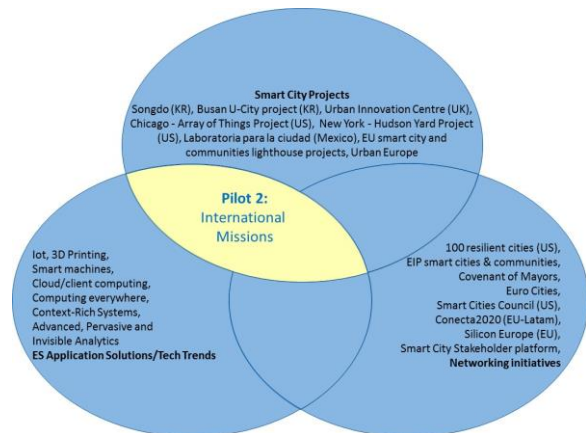
5.2.2 Relationship to internationalization strategy

Strategies	Expected qualitative impact
Provide key information and knowledge on internationalization	• Consequent steps in mission preparation will provide relevant information on ESSC opportunities, partners in other regions.
Obtain international visibility and recognition	• This mission will give the opportunity to promote the CLINES consortium and related stakeholders and give them visibility in other regions.

	• Successful missions will help improving the recognition of CLINES as a trustworthy partner for ESSC activities.
Stimulate stakeholders towards internationalization	• By organizing international ESSC missions CLINES stakeholders will be able to take a first step to other regions and will no longer be hindered by 'the unknown' of other regions
Activate the international collaboration among stakeholders from different regions	• During the international ESSC missions, CLINES stakeholders can be asked to play an active role to optimize the likelihood for initiating new projects
Support individual internationalization efforts	• By organizing a joint mission, participants can start internationalization with minimal logistical efforts. • In some regions T&I programs provide financial stimuli to participate in international missions.

5.3   *Pilot 3: Organize networking opportunities*

5.3.1   Description

CLINES is only one of the numerous networking initiatives focusing on the challenges of modern cities. However CLINES' ESSC focus is unique when compared to the other initiatives. With its specific focus, CLINES can be a very valuable source of knowledge, best practices and/or experts for other smart city networking initiatives. This pilot has as objective to evaluate how the specific CLINES expertise can be of use to other Smart City networking initiatives to create valuable networking activities. This pilot project can start from the numerous networking events which are organized by other organizations. Some examples:
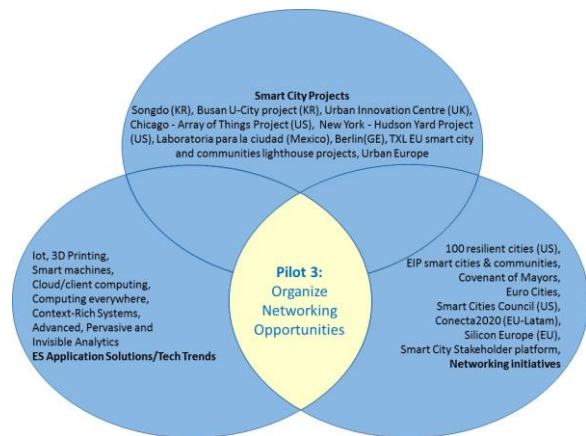
- Eurocities 2015, Living Cities – sustainable growth and quality of life, Copenhagen/Malmö, 4 – 6 November, 2015

- European Mobility Week, 16 – 22 September 2015, an organization of the European Commission

- EUROCITIES Economic Development Forum, 7-9 October 2015, Zagreb

- Open Days 2015, 13th European week of Regions and Cities, 12-15 October 2015, Brussels

- Smart Cities Week, Sep 15 2015 to Sep 17 2015, Washington, D.C.

- TM Forum Smart City InFocus, Sep 12 2015 to Sep 13 2015, Yinchuan, China

- 2nd International Conference on Mobility in IoT, Oct 26 2015 to Oct 27 2015, Rome

- Guadalajara: International Forum on Innovation and Metropolitan Governance, Nov 23 2015 to Nov 24 2015, Guadalajara, Mexico

Numerous relevant events can be added but it will be extremely important to select those events which creates the most impact for the CLINES consortium and its stakeholders.

5.3.2   Relationship to internationalization strategy

Strategies	Expected qualitative impact
Provide key information and knowledge on internationalization	• Making an inventory of other relevant networking initiatives gives an insight in which stakeholders are actively involved in which domains. • Other network events are valuable sources of insights which can feed the CLINES market intelligence.
Obtain international visibility and recognition	• By actively participating through booths, presentations, showcases, etc. CLINES and its stakeholders can gain visibility and recognition
Stimulate stakeholders towards internationalization	• Network events give CLINES stakeholders additional insights on opportunities and trends
Activate the international collaboration among stakeholders from different regions	• By stimulating individual stakeholders to participate in networking events CLINES offers them a platform to get in touch with other organizations and to initiate new partnerships
Support individual internationalization efforts	• In some regions T&I programs provide financial stimuli to participate in international networking events.

5.4   *Pilot 4: International innovation workshops*

5.4.1   Description

CLINES is elaborating on a concept of innovation workshops. Those workshops have as objective to generate new project ideas, to initiate project implementation and to generate new partnerships around those project ideas. Those innovation workshops can as well be organized on a regional level as on an international level. Throughout the project those workshops are already piloted in Brussels, Aalborg and Munich. This international pilot has as objective to elaborate on the concept of innovation workshops and to evaluate the applicability of it by running those workshops in an international context. Those workshops start from concrete city challenges. An international multidisciplinary team is mobilized to discuss possible solutions based on ES application solutions. During those workshops the team can look at potentials solutions from different viewpoint (technology, market, operations). In parallel to those workshops prototypes can be developed and new business models can be simulated. The ultimate goal of those workshops it to mobilize stakeholders around concrete, opportunity/challenge driven ESSC solutions. Those CLINES international innovation workshops can be promoted through existing networking initiatives or can be even organized as part of those initiatives.

5.4.2   Relationship to internationalization strategy

Strategies	Expected qualitative impact
Provide key information and knowledge on internationalization	• Innovation workshops can give insight in relevant new ESSC solutions. • When looking at those ideas from different viewpoints those workshops can generate insights on technological, operational, commercial and financial feasibility.
Obtain international visibility and recognition	• In case those innovation workshops are successful CLINES can gain step by step recognition as a valuable player generating new and innovative ESSC projects
Stimulate stakeholders towards internationalization	• By organizing those workshops with global ESSC stakeholders CLINES stakeholders get acquainted with working on a global scale on ESSC solutions.
Activate the international collaboration among stakeholders from different regions	• The innovation workshops have as ultimate goal to initiate new collaboration between partners from different regions on specific Smart City challenges
Support individual internationalization efforts	• Coaching, mentoring, support by experts form specific disciplines can be provided to make those innovation workshops a major success.

6   Next steps

This internationalization strategy is the result of analysis executed by the CLINES consortium. Based on the internationalization priorities of each of the partners involved a long list of potential, international 'beachhead' partners was developed. Criteria related to operational excellence, thematic and regional complementarity were used to reduce the long list to a short list of potential beachhead partners: TicBioMed (ES), Advancity (FR), Systematic (FR), Catapult Future Cities (UK), Innopolis (KR), Relais Internacional (UR) and Citris (US).

The outcome of meetings with the shortlisted partners, combined with desk research lead to the current internationalization plan aiming at a clear goal: To increase the number of stakeholders from other regions and continents involved in CLINES activities. The internationalization plan to realize this goal is based on 5 strategies:

- Provide key information and knowledge on internationalization
- Obtain international visibility and recognition
- Stimulate stakeholders towards internationalization
- Activate the collaboration among stakeholders from the different clusters and regions
- Support individual internationalization efforts

The job on internationalization in the area of embedded systems for smart cities (ESSC) is not done. The CLINES internationalization plan and related strategy is just a start. It gives a framework which has to be further optimized in close cooperation with all CLINES stakeholders. The pilot actions defined in this internationalization plan are concrete and tangible opportunities which will be discussed with regional interest groups. Based on the results of discussions with Regional Interest groups, this Internationalization plan will be optimized, updated and integrated in the final joint action plan.

7   Annex – Analysis of potential beachhead partners

7.1   Management Summary

7.1.1   Shortlisted 'beachhead' organizations

As a first phase of 'Internationalization Planning' a shortlist of 12 organisations was collected. Those partners were selected by each of the four CLINES partners from its own long list. Their own regional selection was based on 3 main criteria:

- Regional complementarity to the CLINES consortium

- Thematic Complementarity

- Operational Excellence

Regional Complementarity
When looking to the regional complementarity criterion 9 of the shortlisted organizations are located in Europe, and 3 of the shortlisted partners are located on other continents.

4 CLINES consortium members (green) and 12 shortlisted international partners (red)

Thematic Complementarity
With regard to thematic complementarity 8 of the shortlisted organizations have a focus on smart cities. 4 of them focus on embedded systems and smart cities.

Embedded Systems only	Embedded Systems + Smart Cities	Smart Cities
None	Silicon Saxony	City of Bilbao
	Secured Communicating Solutions	Relais Internacional
	Conetic	Innopolis Foundation
	Systematic	TicBioMed
		Catapult
		Advancity
		Flanders Bike Valley
		Citris

Operational Excellence

All shortlisted partners where evaluated as mature enough to further be included in the internationalization planning activities. 7 of the organizations are completely new to the CLINES consortium. 5 of them have already established contacts with one of the consortium partners.

7.1.2   Potential mutual benefits

All CLINES partners were able to list some mutual benefits for their shortlisted 'beachhead' organizations. Those mutual benefits make it interesting for both the CLINES consortium and the 'beachhead' partners to become involved in joint activities.

From the CLINES viewpoint	From the 'Beachhead' viewpoint
Exchange of expertise with regard to security	Technological partnerships
Technology partnerships	Joint European projects
R&D partnerships	Improvement of visibility and impact in Europe
Development of innovation capacity by providing knowledge and infrastructure	Cooperation with research Teams and Universities
Access to growing Asian market	Access to competent companies in the area of embedded systems
Access to e-health community	Entry to embedded software development competences

Entry to key chip design competences	Access for a city to international exchange programs and to promote a city internationally
Access to a broad cluster network	Access to technologies to improve smart city concepts.
Ongoing or planned smart city projects	International positioning.
Insight and knowledge with regard to city related matters (e.g. access to labour markets, support to business, funding formulas, studies and publications)	Support to structure internationalization activities
Cross regional exposure	Access to regions of the CLINES consortium
Access to administrations	
Access to R&D&I funding	
Access to Latin America	
Insight in real challenges of metropolitan areas	
Access to best practices with regard to smart city approaches and policy measures (e.g. catapults in the UK)	
Access to other UK organizations	
Access to other technologies than embedded systems technologies	
Insight in 'cluster' service portfolios	
Access to Paris region	
Develop a joint service or product offering	

7.1.3   Cooperation Initiatives

CLINES consortium partners were asked to list some existing or new cooperation initiatives which could be a concrete start to set up a working relationship with the 'beachhead' organizations. They came up with:

- Business matchmaking
- Mutual visits
- Joint EU projects

- Working groups

- Collaboration on academic research

- Gathering/distribution of information on export to other regions

- Innovation/creativity workshops

- Gathering/distribution of information about competences

- Joint expo's / trade fairs / conferences

- Joint strategy development

- Projects

- Set up of training programs, mentoring programs

- Use of test infrastructure, test communities

- Develop market intelligence: which are the emerging opportunities, important trends, major players, etc.

- Teaming up to remove barriers to innovation

- Online, international collaboration platform

- Stakeholder consultations

- Develop a joint service portfolio

7.2   Longlist of potential partners

Consolidated Long List Internationalization Partners
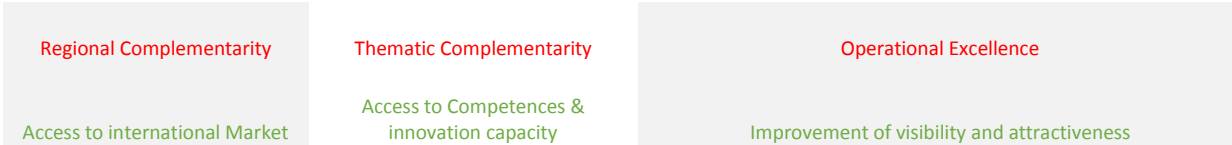
						Regional Complementarity				Thematic Complementarity		Operational Excellence			
						Access to international Market				Access to Competences & innovation capacity		Improvement of visibility and attractiveness			
Input Partner	Short List	Name	Organisation Type	Country	Region	Embedded Systems	Smart Living	Smart Environment	Smart Mobility	CLINES contact established	Mature Organisation	# Cluster stakeholder categories involved	Established Partnerships	Mutual Benefits
DSP Valley		Systematic	Pôle de competitivité	France	île de France	Yes	Yes	Yes	Yes	DSP Valley	Yes	3	Yes	Yes
DSP Valley	Yes	Flanders' Bike Valley	Cluster	Belgium	Flanders	No	Yes	Yes	Yes	DSP Valley	No	3	No	Yes
DSP Valley		Smart Grids Flanders	Cluster	Belgium	Flanders	No	No	Yes	No	DSP Valley	Yes	4	Yes	Yes
DSP Valley		NMI	"more than just a trade organization"	UK	not specified	Yes	No	No	No	DSP Valley				
DSP Valley		TechUK Electronics Network	trade association	UK	not specified	Yes	No	No	No	DSP Valley				
DSP Valley		Minalogic	Pôle de compétitivité mondial	France	Grenoble Rhône-Alpes	Yes	No	Yes	No	DSP Valley				

DSP Valley		SCS, Solutions Communicantes Sécurisées	Pôle de compétitivité mondial; Gold Label Cluster Excellence	France	PACA (Provence Alpes Côte d'Azur)	Yes	No	No	No	DSP Valley				
DSP Valley		ARCSIS	trade association, part of SCS	France	PACA (Provence Alpes Côte d'Azur)	Yes	No	No	No	DSP Valley				
DSP Valley		Silicon Saxony	"trade association"; Gold Label Cluster Excellence; coordinator Spitzencluster CoolSilicon	Germany	Saxony	Yes	No	No	No	DSP Valley				
DSP Valley		High Tech NL	"trade association"	The Netherlands	not specified	Yes	No	No	No	DSP Valley				
DSP Valley		Infinit	network	Denmark	North Jutland	Yes	No	No	No	DSP Valley				
DSP Valley	Yes	Advancity	Pôle de compétitivité	France	Île-de-France (Paris)	No	Yes	Yes	Yes	None				
DSP Valley		MikroSystemTechnik Baden-Württemberg (MST BW)	Spitzencluster; Gold Label Cluster Excellence; coordinator Spitzencluster MicroTEC Südwest	Germany	Baden-Württemberg	No	No	Yes	Yes	DSP Valley				
DSP Valley		Smart Cities Council	for-profit partner-led association	US	global	No	Yes	Yes	Yes	DSP Valley	Yes			Yes
DSP Valley		Mid-America Regional Council (marc.org)		US		No	No	Yes	Yes					
DSP Valley		Smart Grid Cluster (smartgridcluster.com)		US	Mid-West	No	No	Yes	No					

DSP Valley		(Serveral local clusters in San Diego area, such as Commnexus, Cleantechcluster, San Diego Regional Innovation Cluster,...)		US	San Diego									
DSP Valley		Japan Embedded Systems Technology Association (JASA, www.jasa.or.jp)		Japan		Yes				DSP Valley				
DSP Valley	Yes	Catapult	Catapults are physical centres for innovation that connect businesses with the UK's research and academic communities.	UK	Nationwide	No	Yes	Yes	Yes	GAIA	Yes	3	No	Yes
DSP Valley		Artemis-IA	Industry Association	NL	EU	Yes	No	No	No	DSP Valley	Yes	2	Yes	Yes
DSP Valley		City of Petersborough	City	UK	Petersborough	No	Yes	Yes	Yes	DSP Valley	Yes	5	No	Yes
DSP Valley		City of Mexico	City	MEX	Mexico City	No	Yes	Yes	Yes	None	Yes			
DSP Valley		City of Kyoto	City	JA	Local	No	Yes	Yes	Yes	None	Yes	5		
DSP Valley		City of Berlin	City	Germany	Local	No	Yes	Yes	Yes	None	Yes			
DSP Valley		City of Hamburg	City	Germany	Local	No	Yes	Yes	Yes					
AAU	Yes	TecBioMed	Cluster	Spain	Murcia	No	Yes	No	No	None	Yes	4	No	Yes
AAU	Yes	Silicon Saxony	Cluster	Germany	Saxony	Yes	No	No	Yes	DSP Valley	Yes	4	Yes	Yes
AAU	Yes	Systematic	Cluster	France	Paris	No	Yes	Yes	Yes	None	No	4	Yes	Yes

BICC net	Yes	Secured Communicating Solutions (citris)	Certified World Competitiveness Cluster	France	Provence-Alpes-Côte d'Azur	Yes		Yes		BICC net	Yes		Yes	Yes
BICC net		TiS Innovation Park Networks	Links economy with science, cluster of cluster	Italy	Bolzano		Yes	Yes			Yes			Yes
BICC net		High Tech NL (smart City)	Association for high tech companies and Knowledge Institutions	Netherland	Zoetermeer	Yes	Yes	Yes	Yes	(Also DSP Valley partner)	Yes			Yes
BICC net		Systematic, Paris region systems & ICT Cluster	Cluster	France	Paris	Yes		Yes	Yes	BICC net	Yes		Yes	Yes
BICC net		Digital Place	Cluster	France	Toulouse	Yes					Yes			No
BICC net		Cap Digital	Cluster	France	Paris		Yes		Yes	BICC net	Yes			Yes
BICC net		US Market Access Centre	tech accelerator	USA	Silicon Valley						Yes			
BICC net		Silicon Vikings	non-profit member organization for networking and promotion of technologies and businesses intersecting Silicon Valley) and the Nordic (incl the Baltics) region	USA	Silicon Valley		Yes				Yes			Yes
BICC net		Smart Grid Cluster	Cluster	USA	Chicago			Yes			Yes			Yes
BICC net		Cleantech San Diego	nonprofit member organization	USA	San Diego			Yes			Yes			Yes

BICC net		Minalogic	digital cluster for micro- and nanoelectronics and software,	France	Rhône-Alpes	Yes					Yes			
BICC net		Zhongguancus Science Park	Hightech-Park	China	Peking	Yes	Yes	Yes			Yes			Yes
BICC net		Clean Tech Open	nonprofit member organization	USA	Palo Alto			Yes			No			Yes
BICC net	Yes	Silicon Valley	Cluster	USA	California		Yes	Yes						Yes
BICC net		Gyeonggi Technopark	Cluster	South Korea	Gyeonggi	Yes	Yes		Yes		Yes			Yes
BICC net		Ansan IT Industry Promotion Agency	Ansan IT Industry	South Korea			Yes		Yes		Yes			Yes
BICC net		New York's Tech Valley	Centre of excellence in the field of nanotechnology, semiconductory industry	USA	New York	Yes					Yes			Yes
BICC net	Yes	CITRIS	public entity,	USA	Berkeley		Yes	Yes	Yes		Yes			Yes
BICC net	Yes	Innopolis Foundation	a global innovation cluster	South Korea	Daejeon		Yes	Yes			Yes			Yes
GAIA		ACLIMA	Cluster Association of Environmental Industries	Spain	Basque Country		Yes	Yes	Yes	Not yet	Yes	Local	Yes	Collaborations between clusters and companies

GAIA		AFM	Spanish Association of Manufacturers of Machine Tools, Accessories, Parts and Tools	Spain	National	Yes				Not yet	Yes	Local	Yes	Collaborations between clusters and companies
GAIA		MLC ITS Euskadi	Cluster of Mobility and Logistics	Spain	Basque Country				Yes	Not yet	Yes	Local	Yes	Collaborations between clusters and companies
GAIA	Yes	CONETIC	Spanish Confederation of Information Technology, Communications and Electronics, Business	Spain	National	Yes	Yes	Yes	Yes	Not yet	Yes	National	Yes	Collaborations between us and companies
GAIA		FENAEIC	National Federation of Clusters and Innovative Organizations	Spain	National	Yes	Yes	Yes	Yes	Not yet	Yes	National	Yes	Collaborations between us and companies
GAIA		ORKESTRA	Basque Institute of Competitiviness	Spain	Basque Country	Yes	Yes	Yes	Yes	Not yet	Yes	Local	Yes	Survey analysis and industry knowledge

GAIA		INNOBASQUE	Basque Innovation Agency	Spain	Basque Country	Yes	Yes	Yes	Yes	Not yet	Yes	Local	Yes	Survey analysis and industry knowledge
GAIA		SPRI	Business Development Agency that provides support and service Basque industry.	Spain	Basque Country	Yes	Yes	Yes	Yes	Not yet	Yes	Local	Yes	Rely on the development of projects
GAIA		ETIC	Smart Cities Innovation Centre	Spain	Basque Country	Yes	Yes	Yes	Yes	Not yet	Yes	Local	Yes	Develop projects in embedded software
GAIA		IK4 Alliance	IK4 Alliance	Spain	Basque Country	Yes	Yes	Yes	Yes	Not yet	Yes	Local	Yes	Partners in projects
GAIA		UPV/EHU	Basque Country University	Spain	Basque Country	Yes				Not yet	Yes	Local	Yes	Partners in projects
GAIA	Yes	RELAIS	Latin american Network of Software Industry	Brasil, Colombia, Mexico, Perú	All the 4 countries		Yes	Yes	Yes	Not yet	Yes	International	Yes	Establish collaborations between Europe and Latin America

| GAIA | | CANIETI | National Chamber of Electronics, Telecommunication and IT Technologies of Mexico | Mexico | National | Yes | Yes | Yes | Yes | Not yet | Yes | International | Yes | Transfer of technology and knowledge |
| GAIA | | CCT | CORDOBA TECHNOLOGY | Argentina | Cordoba | Yes | Yes | Yes | Yes | Not yet | Yes | International | Yes | Transfer of technology and knowledge |

7.3   *Profiles of shortlisted partners*

7.3.1   Secured Communicating Solutions (SCS) (via BICCnet)

7.3.1.1   Contact details

Name Organisation	Secured Communicating Solutions (SCS)
Address	Business Pole 1047 route des Dolines, Allée Pierre Ziller Building B, entered B, 1st stage 06560 Valbonne – Sophia Antipolis
City	Sophia Antipolis
Country	France
Website	http://en.pole-scs.org/
Contact	Olivier Chavrier / Management
E-mail contact	olivier.chavrier@pole-scs.org

7.3.1.2   Short description of the activities of the partner

The SCS cluster brings together players in the field of microelectronics, software, telecommunications, services and uses of Information and Communications Technologies in the Provence-Alpes-Côte d'Azur region. The three specific smart specialisation areas are: contactless technology, networks, M2M & mobile services and security & digital identities.

The SCS cluster offers a whole range of customized services for its members: development of equity, access to testing platforms, tailored intelligence service, training sessions on various subjects preparing to go to market, establishing relations with prospective customers and partners, international development and so on.

The SCS cluster ecosystem includes nearly 250 members, 16 establishments and research organizations and 3 expertise centres: The Centre of Innovation and Uses in Health, The National Reference Centre Health in Residence & Autonomy and National centre RFID.

The region is home to the European Telecommunications Standards Institution (ETSI) and the World Wide Web Consortium (W3C). Developing innovative and competitive R&D projects is one of the key missions of the SCS cluster. 177 projects financed with more than 290 million euros of public allocations including 77 million euros for the TPE/PME. These financed projects represent 766 million euros of R&D expenditure implying 315 companies and 134 research laboratories.

7.3.1.3   Justification for shortlisting this partner

Established contact with BICCnet, and thematic complementarity are reasons for shortlisting this partner.

7.3.1.4   Mutual benefits

7.3.1.4.1   *Your viewpoint*

SCS has a genuine ambition to become the recognized player in the field of secured communicating solutions by covering the entire value chain of ICT business lines from silicon to chain of ICT business lines, from silicon to usages:

- Microelectronics
- Telecommunications
- Software

It does this based on cluster's focused smart specialisation areas for the benefit of high-growth markets: Health, Administration, Energy, Smart Grids, Smart Meters, and so on.

Considering the results of Deliverable 2.1 "Description of cluster Competencies" the area "Security" gets low attention by the embedded companies in Bavaria. The SCS Cluster is a valuable partner for the BICCnet ecosystem in this area. The main objective of BICCnet is to facilitate technological partnerships with the SCS cluster ecosystem.

There is a strong focus on R&D projects in the SCS cluster. The cluster deploys a European strategy starting from the end of 2013 that includes the partnerships with strategic clusters to facilitate the search of technological partners working in the SCS Cluster's fields, and to obtain better knowledge of European R&D funding mechanisms. This cluster could be a potential CLINES partner in the domain of embedded systems and security for the application domain "smart environment".

7.3.1.4.2   *Partner's viewpoint*

The main objective of the SCS Cluster is to establish business relations or technological partnerships between its ecosystem and BICCnet ecosystem with a view to creating joint European projects.

7.3.1.5   Cooperation initiatives

7.3.1.5.1   *Existing initiatives*

Business Matchmaking mutual visits

7.3.1.5.2   *New initiatives*

Creating joint European projects.

7.3.1.6   Funding opportunities

Bayern International: www.bayern-international.de
Bayern international is an export promotion company of the Free State of Bavaria for small and medium-sized Bavarian companies as well as for the marketing of Bavaria as a business location.

Germany Trade & Invest: www.gtai.de

Germany Trade & Invest's TRADE section offers companies established in Germany up-to-date information on foreign markets, international tender opportunities, investment and development projects, legal information, customs regulations, as well as access to business partners.

Export initiative for renewable energy: www.export-erneuerbare.de

The Federal Ministry of Economics and Technology (BMWi) supports German companies- and especially small and medium sized- in the development of foreign markets and the export of renewable energy technologies.

BMBF – (Bundesministerium für Bildung und Forschung) Federal Ministry of Education and Research in Germany : www.bmbf.de

The main focus of the department of education and research (BMBF) lies in the long-term creation of growth, by creating new opportunities and improving the existing research and education structure. It aims at maintaining the competitiveness of Germany and at creating new jobs through innovative technologies and services.

7.3.2   CITRIS (via BICCnet)

7.3.2.1   Contact details

Name Organisation	The Centre for Information Technology Research in the Interest of Society (CITRIS)
Address	UC Berkeley – CITRIS Headquarters and the Banatao Institute @ CITRIS Berkeley 330 Sutardja Dai Hall, MC 1764 Berkeley, CA 94720-1764
City	Berkeley
Country	USA
Website	http://citris-uc.org/visitor-information/
Contact	Lisa Slater, Administrative Assistant, CITRIS @ Santa Cruz (831) 459-3696
E-mail contact	lmslater@soe.ucsc.edu

7.3.2.2   Short description of the activities of the partner

The Centre for Information Technology Research in the Interest of Society (CITRIS) was formed in 2001. CITRIS addresses the most pressing social and environmental issues facing California. The focus of the Centre is on four core initiatives: Energy, Health Care, Intelligent Infrastructure, and Data and Democracy.

- The i4Energy Initiative employs sensors and emerging technology to gather, manage, and utilize information about energy conservation and expenditure from the household-level to the grid.

- The Health Care Initiative aims to improve access and reduce disparities and costs in health care across the state by developing and integrating technology advances in telehealth, sensors, services and gaming.

- The Intelligent Infrastructure Initiative addresses the areas of water, cities, and transportation to develop and deploy intelligent "cyber-physical" systems to better manage scarce resources and promote sustainability.

- The Data and Democracy Initiative creates tools to foster public engagement in critical social, political, and economic issues by exploring the dynamic relationships between digital media and democratic practices.

CITRIS facilitates partnerships and collaborations among more than 300 faculty members and thousands of students from numerous departments at four University of California campuses (Berkeley, Davis, Merced, and Santa Cruz) with industrial researchers from over 60 corporations. CITRIS represents a bold and exciting vision that leverages one of the top university systems in the world with highly successful corporate partners and government resources.

7.3.2.3   Justification for shortlisting this partner

Access to competences and innovation capacity and operational Excellence are reasons for shortlisting this partner. It also adds a geographical dimension, as it brings in the US as a major international market.

7.3.2.4   Mutual benefits

7.3.2.4.1   *Your viewpoint*

Our main objective is research, development and innovation (RDI) collaboration.   RDI collaboration is the sharing of technical and organisational knowledge, facilities and ides between members of the network.

The CITRIS setup includes strong research groups. Research competences include activities in the CLINES focus areas: Smart Living, Smart Environment and Smart Mobility. CITRIS can support the CLINES goal " Development of innovation capacity" by providing knowledge and infrastructure to the CLINES ecosystem.

7.3.2.4.2   *Partner's viewpoint*

The RDI collaboration between the CLINES ecosystem and CITRIS Cluster leads to the improvement of CITRIS's visibility and impact in Europe.

7.3.2.5   Cooperation initiatives

7.3.2.5.1   *Existing initiatives*

7.3.2.5.2   *New initiatives*

The collaboration may be achieved through meetings, working groups and collaboration on academic research in the CLINES selected focus areas.

7.3.2.6   Funding opportunities

Bayern International: www.bayern-international.de
Bayern international is an export promotion company of the Free State of Bavaria for small and medium-sized Bavarian companies as well as for the marketing of Bavaria as a business location.

Germany Trade & Invest: www.gtai.de
Germany Trade & Invest's TRADE section offers companies established in Germany up-to-date information on foreign markets, international tender opportunities, investment and development projects, legal information, customs regulations, as well as access to business partners.

Export initiative for renewable energy: www.export-erneuerbare.de
The Federal Ministry of Economics and Technology (BMWi) supports German companies- and especially small and medium sized companies in the development of foreign markets and the export of renewable energy technologies.

BMBF – (Bundesministerium für Bildung und Forschung) Federal Ministry of Education and Research in Germany : www.bmbf.de
The main focus of the department of education and research (BMBF) lies in the long-term creation of growth, by creating new opportunities and improving the existing research and education structure. It aims at maintaining the competitiveness of Germany and at creating new jobs through innovative technologies and services.

7.3.3   INNOPOLIS Foundation (via BICCnet)

7.3.3.1   Contact details

Name Organisation	INNOPOLIS Foundation
Address	27-5, 123 beon-gil, Expo-ro, Yuseong-gu, Daejeon 305-340, South-Korea TEL +82-42-865-8800 FAX. +82-42-8658819
City	Daejeon
Country	South-Korea
Website	http://innopolis.or.kr/eng/
Contact	
E-mail contact	

7.3.3.2   Short description of the activities of the partner

INNOPOLIS Foundation is an R&BD (Research and business development) cluster designated by the South-Korean government in accordance with the special Act on the Support of R&D Zones. It aims to become a global innovation cluster where the virtuous circle of R&D, technology commercialization and reinvestment takes place. The Foundation connects INNOPOLIS Gwangju, INNOPOLIS Daegu and INNOPOLIS Busan to INNOPOLIS Daedeok within a single organization.

INNOPOLIS Daedeok is where 14% of the R&D spending and 12% of the Ph.D level researchers in South-Korea are concentrated. The Four specialized fields of INNOPOLIS Daedeok are: IT Governance, Bio-Medical, Nano Convergence and Precision Equipment. The cluster setup includes research entities, including government-sponsored research and private sector institutions, universities, including KAIST and venture company collaboration zones.

The five specialized fields of INNOPOLIS Gwangju are: Next generation optical convergence, environmentally friendly automobile parts, smart grid, design and culture content and Bio Materials.

With designation of five specialized technologies (information, mechatronics, medical, green and bio) as the research focus areas to support the three growth industries of the Daegu/Gyeongbuk area (information technology, mechanical/automotive and parts/materials) INNOPOLIS Daegu is working hard to develop and become global cluster for advanced value added products and services in the field of smart IT, medical equipment and materials, green energy and mechatronics convergence industries.

The INNOPOLIS Busan is R&D − based shipbuilding & offshore plant cluster with three specialized fields: Shipbuilding and offshore plant materials, green marine machinery and offshore plant engineering and services.

7.3.3.3   Justification for shortlisting this partner

Access to international market, thematic complementarity and improvement of visibility and attractiveness are reasons for shortlisting this cluster.

7.3.3.4   Mutual benefits

7.3.3.4.1   *Your viewpoint*

South-Korea is one of the leading markets for information and communication technology. Access to this markets and identifying business opportunities for BICCnet ecosystem are our main objectives.

A steady expansion of the IT infrastructure, the use of mobile ICT applications in business and society (Smart City solutions for mobility, health and education), open-mined population and a continued high demand for innovative goods make South-Korea an ideal market for CLINES innovative solutions in embedded technologies and Smart Cities.

7.3.3.4.2   *Partner's viewpoint*

Collaboration between INNOPOLIS research Teams and Universities within CLINES Ecosystem.

7.3.3.5   **Cooperation initiatives**

7.3.3.5.1   *Existing initiatives*

7.3.3.5.2   *New initiatives*

Provision of information on export of services to South Korea to CLINES Ecosystem.

7.3.3.6   **Funding opportunities**

Bayern International: www.bayern-international.de
Bayern international is an export promotion company of the Free State of Bavaria for small and medium-sized Bavarian companies as well as for the marketing of Bavaria as a business location.

Germany Trade & Invest: www.gtai.de
Germany Trade & Invest's TRADE section offers companies established in Germany up-to-date information on foreign markets, international tender opportunities, investment and development projects, legal information, customs regulations, as well as access to business partners.

Aka Bank: www.akabank.de

The Bank support companies by customized financing and processing their international trade-finance transactions.

Export initiative for renewable energy: www.export-erneuerbare.de
The Federal Ministry of Economics and Technology (BMWi) supports German companies- and especially small and medium sized companies in the development of foreign markets and the export of renewable energy technologies.

Go International: www. Go-international.de
The Foreign Trade Centre Bavaria with headquartered Nuremberg was opened in 2001 with the goal of developing new foreign markets for small and medium business.

The Centre develops together with the company an individual internationalization plan. Then actions are listed which are necessary for a successful career in the target country. Then the implementation of these actions can be funded. There is a maximum funding of 25% is possible.

IHK export academy: www.ihk-exportakademie.de
At the Chamber of Commerce export Academy experts and executives from companies can attend seminars on foreign trade issues.

Export Credit Guarantees of the Federal Republic of Germany:
www.agaportal.de/en/aga/index.html
Federal export credit guarantees support to German enterprises in their efforts to open difficult markets and expand traditional markets in unfavourable time. By taking out Federal guarantees,

German exporters and banks protect themselves from the country and buyer risks involved in export transactions.

7.3.4   TicBioMed (via AAU)

7.3.4.1   Contact details

Name Organisation	TicBioMed
Address	Campus Universitario, 7
City	CP 30.100 Espinardo
Country	Murcia
Website	http://www.ticbiomed.org/english/
Contact	Jorge Gonzalez
E-mail contact	jorge.gonzalez@ticbiomed.net

7.3.4.2   Short description of the activities of the partner

Its funding purposes are:

- To highlight the technological innovation capacity of its members.

- Fostering research, development and innovation in Information and Communication Technology (ICT) applied to biology and medicine.

- To promote collaboration between research centres, businesses, government and professionals, to provide practical solutions to real problems.

- Promoting bio-health ICT projects and transfer of technology between research institutions and enterprises. Exposing projects and initiatives found on the web or within the Network

- Reinforcing quality training for professionals and highly skilled researchers.

- Provide a coordinated response to the needs of network members.

Most of its members are located in the Region of Murcia (South-East Spain), but it is willing to collaborate with entities in other regions.

7.3.4.3   Justification for shortlisting this partner

This partner complements the 'smart living' profile of CLINES through its leadership of the RoK cluster ReadiForHealth (http://www.readiforhealth.eu/).

7.3.4.4   Mutual benefits

7.3.4.4.1   *Your viewpoint*

This partner can provide an entry to the e-health community, which is hard to establish for AAU because of the lack of companies within the region of AAU.

7.3.4.4.2   *Partner's viewpoint*

CLINES can provide access to highly competent companies within the area of embedded systems.

7.3.4.5   Cooperation initiatives

7.3.4.5.1   *Existing initiatives*

AAU is in the process of interaction with its local region.

7.3.4.5.2   *New initiatives*

Matchmaking and innovation workshops with the Murcia region.

7.3.4.6   Funding opportunities

National funding of Innovation Express

7.3.5   Silicon Saxony (via AAU)

7.3.5.1   Contact details

Name Organisation	Silicon Saxony
Address	Manfred-von-Ardenne-Ring 20
City	01099 Dresden
Country	Germany
Website	http://www.silicon-saxony.de/en/the-network.html
Contact	Frank Bösenberg
E-mail contact	frank.boesenberg@silicon-saxony.de

7.3.5.2   Short description of the activities of the partner

Silicon Saxony is one of Europe's most successful trade association for the semiconductor, electronic, microsystems and software industries. The number of members has risen to 300 at present.

In order to create effective and efficient networks the association enables vibrant forums for its members and specialists. These work groups are an essential driving force in the development of new technologies and procedures, e. g. cyber-physical-systems based on high-quality microlectronics and software.

7.3.5.3   Justification for shortlisting this partner

Complements the competences of CLINES.

7.3.5.4   Mutual benefits

7.3.5.4.1   *Your viewpoint*

Silicon Saxony can offer a fast entry to companies with key chip design competences.

7.3.5.4.2   *Partner's viewpoint*

CLINES offers strong competences within embedded software development.

7.3.5.5   Cooperation initiatives

7.3.5.5.1   *Existing initiatives*

AAU is in the process of interaction with its local companies.

7.3.5.5.2   *New initiatives*

Matchmaking and innovation workshops with the Saxony region.

7.3.5.6   Funding opportunities

National funding of Innovation Express

7.3.6   Systematic (via AAU)

7.3.6.1   Contact details

Name Organisation	Systematic
Address	Site Nano Innov 8, avenue de la Vauve bâtiment 863 - CS 70005
City	91127 PALAISEAU Cedex
Country	France

Website	http://www.systematic-paris-region.org/en
Contact	Isabelle De Sutter
E-mail contact	i.desutter@systematic-paris-region.org

7.3.6.2   Short description of the activities of the partner

"World class" French cluster, Systematic brings together more than 650 key players in the Paris Region. Each of them working in the field of software-dominant systems with a strong societal dimension.

Systematic seeks to boost the economy and employment through innovation, training and partnerships. The researchers, industries, training organisations and local governments involved with the cluster have three priorities:

- consolidate the major integrators' leadership in order to secure the sustainability of their R&D activities in the Paris Region
- foster the emergence of start-ups and the growth of technological SMEs with global ambitions
- strengthen the Paris Region's attractiveness by developing its image on an international scale in order to attract new global companies' R&D departments

7.3.6.3   Justification for shortlisting this partner

Has all relevant competences.

7.3.6.4   Mutual benefits

7.3.6.4.1   *Your viewpoint*

Systematic is a very broad cluster.

7.3.6.4.2   *Partner's viewpoint*

AAU can offer high expertise within embedded software.

7.3.6.5   Cooperation initiatives

7.3.6.5.1   *Existing initiatives*

AAU is revisiting its regional competences.

7.3.6.5.2   *New initiatives*

Matchmaking and innovation workshops with the Paris region.

7.3.6.6   Funding opportunities

National funding of Innovation Express

7.3.7   Bilbao City Hall (via GAIA)

7.3.7.1   Contact details

Name Organisation	Bilbao City Hall
Address	Plaza de Ernesto Erkoreka, 1, 48007 Bilbao, Bizkaia
City	Bilbao (Bizkaia)
Country	Spain
Website	*https://www.bilbao.net*
Contact	Josu Santacruz Cenitagoya
E-mail contact	jsantacruz@cimu.bilbao.net

7.3.7.2   Short description of the activities of the partner

Bilbao's City Hall offers different activities, as can be seen on their webpage: http://www.bilbao.net/, but as a summary the city of Bilbao is focusing on the promotion of the following strategic sectors for the city:

- **Art, Technology and Design**
    - o   Art Institutions and Schools
    - o   Museums, Galleries and Cultural Centre
    - o   Fashion and Industrial Design
    - o   Digital Design
    - o   Performing Arts

- **Eco-technology and Urban Solutions**
    - o   Architecture + Urban Design
    - o   Alternative Energy Design
    - o   Infrastructure, Sustainable Transportation and Urban Mobility
    - o   Transparent Governance

- **Tourism, Health and Quality of Life**
    - o   Cultural Tourism
    - o   Public Health Institutions

      o   Wellness Tourism

      o   Gastronomy

http://www.bilbao.net/bilbao/BilbaoNext_City_Marketing.pdf

7.3.7.3   Justification for shortlisting this partner

We have chosen this partner because it is a city that is pushing the concept of a smart city. They have several initiatives underway and in work package 2 we analysed the strategy of the City of Bilbao on the concept of Smart City. This analysis gives us an overview of the current situation of Bilbao city, and allows us to identify particular experiences and good practices, facilitating the exchange and learning with Bilbao city.

Another important reason is that collaboration has already been established in a project on the topic of a smart city.

7.3.7.4   Mutual benefits

7.3.7.4.1   Your viewpoint

Cooperation with this partner is very desirable as they have several projects around the Smart City concept. This is a usual collaboration partner and we have just started working with them in one project.

Apart from that, it is a public organisation and we believe it will be benefitial to establish public-private partnerships.

They can offer us:

- Knowledge and skills to facilitate access and continuity in the labour market.

- Opportunities to encourage job creation and the implementation of new business projects.

- Support for local businesses and for the economic, business and strategic development of the city and its neighbourhoods.

- Innovation resources, management excellence, social responsibility and technological skills.

- Funding formulas for entrepreneurial projects aimed at driving economic activity and employment.

- Studies and publications on socio-economic development that are placed at the disposal of social institutions and agents

On the other hand, this partner can help CLINES to reach the 'internationalization' objectives because another key factor for the economic development of smart cities is internationalization. Globalization involves the need for cities to address the most effective strategies to join global exchange circuits, so in this way Bilbao has developed a sort of plan or strategy for the international promotion of the city.

Internationalization initiatives undertaken by Bilbao city include developing specific plans, organising international events and promoting twinning or agreements with other cities.

Furthermore, in order to achieve the internationalization of its territories, Bilbao has also sought to develop flagship projects seeking international recognition.

In addition to developing flagship strategies and projects, Bilbao is aware of the need to share its experiences and knowledge with other cities.

Finally, in recent years, the Bilbao City Council, has become aware of the need and importance of achieving international recognition, and has embarked on an internationalization process to position itself as an international benchmark in areas such as urban regeneration, city management, environmental management, etc.

The internationalization activities undertaken by the City Council of Bilbao include: signing twinning and cooperation agreements with other cities, hosting delegations, receiving international awards, participation in international networks of cities and the participation in and organisation of events and conferences at international level.

http://www.bilbaointernational.com/

7.3.7.4.2   *Partner's viewpoint*

As mentioned before, Bilbao City Hall has its own Smart City Strategy, in which the use of new technologies is necessary. Apart from that GAIA has several initiatives in collaboration with the Bilbao City Hall and there is a very good relationship between us.

GAIA can offer technologies, experience and knowledge to improve the concept of Smart City in the Bibao City Hall.

7.3.7.5   **Cooperation initiatives**

7.3.7.5.1   *Existing initiatives*

The city of Bilbao has come a long way since the early 1980s when it was a situation of deep crisis and decline; a situation that, almost thirty years later, it has managed to overcome, to reinvent itself as a city adapting to changing times.

Bilbao is an exemplary city that seeks to continuously evolve and reinvent itself, adapting to constant changes, and inspire other cities worldwide. Bilbao's experience as an "integrated city project" carried out over 25 years has achieved the profound transformation of the city.

As a result of this extraordinary transformation, the urban, economic and sustainable rehabilitation of Bilbao has been recognized internationally, as evidenced by the fact that it was selected to participate in the Urban Best Practices Area at Expo Shanghai 2010 and that it was awarded the "Lee Kuan Yew World City Prize" in 2010 in recognition of its comprehensive approach to urban transformation.

http://www.bilbaointernational.com/en/category/bilbao-expo-shanghai-2010/

Bilbao is implementing its Bilbao Digital Agenda 2007-2012. This is a Strategic Plan which aims to promote the improvement of the human, economic and cultural level of Bilbao, both individually and collectively, thereby promoting and using resources provided by information and communication technologies and ensuring equal opportunities for all citizens to access them.

http://www.bilbao.net/agendadigital/

7.3.7.5.2   *New initiatives*

Nowadays, we are working with Bilbao City Hall in the **e-Menhir:** CPSs for the development of new public-**private services** in the City 2.0 project. In this project, eleven Basque entities come together to develop and market an innovative system for managing communications and services in cities, such us safety issues, communications, sensors, lighting... We are developing the project website.

7.3.7.6   **Funding opportunities**

With this partner we can find different funding sources:

- Knowledge and skills to facilitate access and continuity in the labour market.

- Participation in international networks

- Offering us space for drivers in the city

- Helping us to find financial resources for the implementation of projects

7.3.8   **Conetic (via GAIA)**

7.3.8.1   **Contact details**

Name Organisation	Conetic
Address	Eurobusiness Centre Building. Calle Francisco Giralte nº2
City	Madrid
Country	Spain
Website	http://www.conetic.info/
Contact	Gloria Diaz
E-mail contact	gerente@conetic.info

7.3.8.2   **Short description of the activities of the partner**

Conetic is the Spanish Confederation of Business in Information Technology, Communications and Electronics. It was created on 16 November 2005 as a non-profit entity at state level.

Its activities consist of:

- Training services which help young people enter the labour market in coordination with the demand for our companies, committed to employability.

- Training services for working professionals who have a positive impact on improving their individual skills, but also for the companies they belong to.

- Project CMMI and SPICE certification at different levels, UNE-ISO / IEC 20000, Safety or through UNE ISO / IEC 27001.

- CONETIC is a point of PIDI network supporting R&D by providing information and advice to businesses. This network is deployed by the Centre for the Development of Industrial Technology (CDTI) / http://www.cdti.es/

7.3.8.3   Justification for shortlisting this partner

We have chosen this partner because they are working around the concept of Smart City, and because it organises a Congress on Digital Cities. In 2015 this congress will be held in Galicia-Spain, and could be a possible way to disseminate the CLINES project. http://www.ciudadesdigitales.info/

Another reason is that Conetic is a point of PIDI network, which is developed by the Centre for the Development of Industrial Technology (CDTI) / Spanish Government.

Finally, GAIA is a member of Conetic.

7.3.8.4   Mutual benefits

7.3.8.4.1   *Your viewpoint*

First, it is a trusted partner with whom we have been working since it was created in 2005. They are located in Madrid, so its representation is nationwide. This gives us a good position inside the national administration so the TEIC sector is represented by Conetic. In this way, it can help us to spread and disseminate our activities around the nation.

On the other hand, as we have also mentioned, Conetic belongs to the network of technological development CDTI. CDTI is the Centre for Industrial Technological Development (CDTI) is a Public Business Entity, answering to the Ministry of Economy and Competitiveness, which fosters the technological development and innovation of Spanish companies. It is the entity that channels the funding and support applications for national and international R&D&I projects of Spanish companies. The CDTI thus seeks to contribute to improving the technological level of the Spanish companies by means of implementing the following activities:

- Financial and economic-technical assessment of R&D projects implemented by companies.

- Managing and fostering Spanish participation in international technological cooperation programmes.

- Fostering international business technology transfer and support services for technological innovation.

- Supporting the setting up and consolidating technological companies.

In this sense, we believe that they can help CLINES to reach the 'internationalization' objectives.

7.3.8.4.2   *Partner's viewpoint*

Conetic was created in 2005 driven by GAIA and other similar national associations. In this sense, this kind of initiatives help Conetic to position itself in Europe, meet other organizations and develop new initiatives in the field of smart cities.

7.3.8.5   Cooperation initiatives

7.3.8.5.1   *Existing initiatives*

As of today, GAIA has some initiatives that they are working on with Conetic:

- Insertic Project: Training program and job placement for job seekers in the ICT sector.

- Mentoring Project: Specialized advice in eCommerce. The objective of this project is to develop the capacity of the SMEs to facilitate their positioning on Internet.

- Competic Project: Implementation of Model CMMI (Capability Maturity Model Integration) Maturity Level 2 and 3 and ISO / IEC 15504-SPICE (Software Process Improvement and Capability Determination) standard.

- PYME Security Project: Implementation of a Management System of Information Security in accordance with the UNE-ISO / IEC 27001: 2007.

- Sector Technical Workshop to develop in Colombia: The objective of this action is to increase the chances of success of Spanish TEIC companies in marketing their products in foreign markets.

- Temis Project: Improving health through objective measurements and personalised monitoring. http://www.temis-project.eu/en/index.html

7.3.8.5.2   *New initiatives*

As new initiatives at this time, we are defining a technical conference in Peru. The objective of this action is to increase the chances of success of Spanish TEIC companies in marketing their products in foreign markets.

7.3.8.6   Funding opportunities

- Facilitate the participation in international networks

- Helping us to disseminate the CLINES project

- Helping us to find financial resources for the implementation of projects with the Spanish government

7.3.9   Relais Internacional (via GAIA)

7.3.9.1   Contact details

Name Organisation	Relais Internacional.- Latin American Network of Software Industry
Address	Organización de los Estados Americanos
City	Montevideo
Country	Uruguay
Website	http://www.relaisoft.org
Contact	Fredy Bentancurt Prada
E-mail contact	fredyb@gmail.com

7.3.9.2   Short description of the activities of the partner

The Latin American Network of Software Industry (RELAIS by its Spanish acronym)**,** is a regional organization currently coordinated by four leading institutions located in Brazil, Colombia, Mexico and Peru. Its primary objective is to improve competitiveness in the software industry in Latin America and the Caribbean (LAC) by increasing quality standards in the production and procurement processes of software and services.

Their mission is improving business opportunities and economic development of MSMEs (micro, small and medium enterprises) by strengthening the quality of software in Latin America and the Caribbean.

Their services are:

Software producers:
- Models, standards and certifications with which the RELAIS are currently working:
  - Process improvement models (MPS as abbreviated in Portuguese) / process model for industrial SW (MoProSoft)

- Certifications:
  - ITMark, European certification scheme designed for SMB IT

Software buyers:
Relais has the aim to promote models to improve procurement processes and software maintenance, focusing on companies that do not develop themselves and instead have decided to outsource this work. Among the models they are currently using:

- Acquisition process improvement (MPS, Brazilian Software Process Improvement or Melhoria of Software Processes do Brasileiro in Portuguese). It is a model designed by SOFTEX to improve processes in organizations that buy and acquire software.

- Auto diagnostic software selection.

Professional certifications and trainings:

The goal of the Relais in this sense is to:

- Develop more and better human capital through new certifications generating a professional community dedicated to quality in the SW industry

- Train and certify those professionals responsible for major acquisitions of SW and technologies both in the public and the private sectors.

7.3.9.3   Justification for shortlisting this partner

We have chosen this partner because it belongs to the Latin American Network of Software Industry and they can help us in doing networking with the Latin American organization. On the other hand, GAIA has developed some project with Mexico as a way of helping companies to get certified in different software models.

7.3.9.4   Mutual benefits

7.3.9.4.1   *Your viewpoint*

Relais has as members:

- **FOMIN**: The Multilateral Investment Fund (MIF), funded by 39 donor countries, supports the development led by the private sector for the benefit of the poor, their businesses, crops and homes. Its mission is to provide the poor with the tools to increase their income: market access and capacity building needed to compete in these markets, access to finance and access to basic services, including green technology. http://www.fomin.org/es-es/

- **MINTIC**: The Ministry of Information Technologies and Communications, under Law Act 1341 of ICT in Colombia, is the entity responsible for designing, adopting and promoting policies, plans, programs and projects in the Technology Information and Communications area in the country. One of its main objectives is to increase and facilitate access for people in the country to the Information and Communications Technologies and to let them reap the benefits. http://www.mintic.gov.co

In both cases we can find ways of collaboration on projects.

7.3.9.4.2   *Partner's viewpoint*

This partner has decided to contact GAIA for partnerships with companies in Spain and the rest of Europe.

7.3.9.5   Cooperation initiatives

7.3.9.5.1   *Existing initiatives*

It is a recent contact, and until now GAIA has not established any cooperation with them. GAIA is going to meet with them in the NESSI event on 20 - 21 November 2014. http://www.nessi-europe.eu/default.aspx?page=home

7.3.9.5.2   New initiatives

Not now.

7.3.9.6   Funding opportunities

As we discussed earlier we can obtain resources through FOMIN / MINTIC / UE for the development of joint initiatives between Europe and LATAM.

7.3.10   Catapult Future Cities (via DSP Valley)

7.3.10.1   Contact details

Name Organisation	Catapult Future Cities
Address	Workspace Leathermarket, Weston St., Space unit 02.02.01,
City	London,SE1 3ER
Country	United Kingdom
Website	https://futurecities.catapult.org.uk/
Contact	Nuria Lozana
E-mail contact	nlozano@futurecities.catapult.org.uk

7.3.10.2   Short description of the activities of the partner

A Catapult is a global centre of excellence on urban innovation. A place where cities, businesses and universities come together to develop solutions to the future needs of our cities.

The Future Cities Catapult is one of seven 'Catapults' launched by Innovate UK. The aim for each of them is to become a world-leading innovation centre in its own specialist area.

As you can guess by the name, Future Cities Catapult is all about urban innovation. In particular, it is focused squarely on the challenge of urban integration: how cities can take a more joined-up approach to the way they plan and operate. To improve quality of life, strengthen their economy and protect the environment.

Based in the heart of London, the role of this catapult is to get people working together to solve real challenges faced by real cities right now.

Cities sharing what's worked for them in the past. Companies and universities working together. New innovations being road tested at scale. New solutions getting to market. Financiers, lawyers and city governments teaming up to remove barriers to innovation. The Future Cities Catapult is a neutral space where all this happens.

7.3.10.3   Justification for shortlisting this partner

The Future Cities Catapult has a clear focus on urban innovation and the challenges faced by cities. This knowledge can be valuable to define real market opportunities for embedded systems technologies in Smart Cities.

7.3.10.4   Mutual benefits

7.3.10.4.1   *Your viewpoint*

- Via Catapult Future Cities it must be feasible to gather insight in the real challenges metropolitan areas are faced with.
- The Catapult Future Cities follows a bottom up, challenge-based, collaborative approach. As collaboration is key to make smart city projects, the Catapult approach can be inspirational for the development of the CLINES JAP and Internationalization plan.
- Catapult Future Cities is based in London and possibly can serve as 'beachhead' in the UK, a country which is not yet covered by the current consortium.
- The Catapult program is driven by Innovate UK (UK department of Innovation, Business and skills) and has as objective to create economic growth. Via the Catapult future cities more insight can be gathered about the value of 'catapults' as instrument to create economic growth.

7.3.10.4.2   *Partner's viewpoint*

- The CLINES consortium can offer its embedded system expertise and capabilities as driver for solutions to some of the 'Catapult Future Cities' Challenges.
- The CLINES consortium can offer stakeholders from the UK insights in best practices from other European regions, access to other international markets or stakeholders
- As the Catapult Future Cities was only launched in June 2013 they are in 'start up' mode with a focus on the UK. CLINES internationalization activities can perhaps offer them a structure to add 'international' activities to their current operations.

7.3.10.5   Cooperation initiatives

7.3.10.5.1   *Existing initiatives*

For cities, business, academia and international institutions, working with catapult future cities could take many forms:

- Companies, cities and universities collaborating on big innovation challenges
- City leaders using our Cities Lab to test city-wide propositions before committing to investment
- Businesses working with our Futures team to identify where to focus their R&D resources in emerging city markets
- Innovators road testing new ideas at scale, and getting expert advice on how to deploy them
- Financiers, lawyers and city governments teaming up to remove barriers to innovation

It could be worthwhile to evaluate how CLINES partners could join catapult activities.

Furthermore, cooperation activities can be organized back to back to existing initiatives such as:

- DSP Valley's flagship event the 'Smart Systems Industry Summit'
- DSP Valley's B2B matchmaking event

7.3.10.5.2   New initiatives

- Challenge based, creative workshops with smart city & embedded system stakeholders back to back to existing events

- Online and international collaboration platform

- Jointly develop market intelligence

- Stakeholder consultations

- Sharing of 'test infrastructure & test population'

7.3.10.6   Funding opportunities

- Fees from participation in activities

- EU Funding: H2020

- Regional funds from: innovate uk, Flanders Investment & Trade

7.3.11   Advancity (via DSP Valley)

7.3.11.1   Contact details

Name Organisation	Advancity, pôle de compétitivité Ville et Mobilité Durables
Address	c/o Groupe ESIEE 2, Boulevard Blaise Pascal
City	93162 NOISY-le-GRAND cedex
Country	France
Website	http://www.advancity.eu/
Contact	Florence Castel
E-mail contact	florence.castel@advancity.eu

7.3.11.2   Short description of the activities of the partner

Advancity, the sustainable cities cluster, brings together more than 241 members (160 SME – EIS and 18 worldwide groups, 31 higher education institutes and 31 territorial authorities). Together,

they explore the fields of innovation within 4 Strategic Committees, authentic workshops for the emergence of projects.

Two fundamental goals organize the vision of a sustainable city within 4 committees:

Its "decarbonisation", that is to say the reduction of the levels of greenhouse gas emissions linked to the city's growth and functioning

Its adequacy to the fundamental needs of men & women, and future children that will live in the city: the increase of housing availability is to be linked with a bigger demand for a city where it is possible to live in better conditions. This assumes:

- a competitive city, that is to say able to produce goods or services in conditions at least equal to those in other cities or territories,

- a creative city, that has training, teaching and research institutions and a renown cultural offer,

- a friendly city, offering public spaces to make communication between people and mobility within the city easier,

- a consensual city that can take into account demands from the inhabitants, regarding its organization, functioning and its "co-construction".

As the unique cluster on sustainable cities, ADVANCITY will contribute to the development of a network of exchange and skills on the national level, in gathering the different clusters and the innovative cities.

Advancity has developed a full range of services: access to finance, labelling and funding of innovation projects, marketing and promotion activities, support regarding international development, etc.

The international development of Advancity is in the heart of the strategy for the period 2013-2018. One goal is to guide and help the members on their development at the international level, and to contribute in the process of partnerships. Under the brand "Advancity" the know-how of the members is promoted on the international scale.

7.3.11.3   Justification for shortlisting this partner

- Advancity clearly has some activities in the domain of smart environment, smart living and smart mobility which can be inspirational to CLINES.

- Advancity is located in a region complementary to the regions represented in the CLINES consortium.

- Advancity gathers almost all cluster stakeholders: government, academia, companies, investors.

- It puts 'internationalization' in the core of its activities.

7.3.11.4   Mutual benefits

7.3.11.4.1   *Your viewpoint*

- Advancity experience with smart city projects can give relevant insight in smart city challenges.
- Advancity offers access to other 'technologies' than embedded systems technologies.
- Advancity claims to have a 'structure' service portfolio for its customers. This service portfolio can be inspirational for a CLINES service portfolio.
- Advancity offers access to key stakeholders in the Paris region.

7.3.11.4.2   *Partner's viewpoint*

- Support in the implementation of Advancity's internationalization strategy.
- Access to relevant embedded systems expertise and capabilities.
- Access to relevant stakeholders in other regions.

7.3.11.5   Cooperation initiatives

7.3.11.5.1   *Existing initiatives*

- Participation in innovation projects funded via Advancity
- Participation in internationalization activities set up by Advancity.
- Invite Advancity stakeholders to activities of CLINES stakeholders.

7.3.11.5.2   *New initiatives*

- Development of a joint (pan European) service portfolio supporting SME's starting from Advancity service portfolio and promote this under a CLINES brand.

- Development of a European concept with regard to labelling of Smart City projects.

7.3.11.6   Funding opportunities

- Advancity has an instrument to fund innovation projects. Perhaps this could be a source of funds to initiate collaboration.

- Fees from cluster members

- Budgets from existing activities.

- H2020, Flanders Investment & Trade

7.3.12   Flanders Bike Valley (via DSP Valley)

7.3.12.1   Contact details

Name Organisation	Flanders Bike Valley
Address	Beverlosesteenweg 85

City	3583 PAAL
Country	Belgium
Website	http://www.flandersbikevalley.be/
Contact	Bert Celis
E-mail contact	bert.celis@flandersbikevalley.be

7.3.12.2   Short description of the activities of the partner

Flanders' Bike Valley ("The Global Cycling Centre") was established in 2013 as a bottom-up cluster in Flanders. As an Open Innovation Centre for the Cycling Industry the cluster was founded by 4 local SME's (bottom-up) which are leaders in their sector: BioRacer (a cycling clothes manufacturer), Lazer Sport (helmets), Ridley Race Productions, Voxdale (a specialist in aerodynamics who engineered and designed for Indycar), together with one knowledge institute: Flanders' Drive (a knowledge centre for the Automotive Industry, now part of the broader Flemish strategic research centre "Flanders MAKE").

Flanders' Bike Valley focuses on 6 major topics: Mobility, Sports (involvement of Belgian Cycling Foundation and Belgian Olympic Committee), Safety and Healthcare, Science & Technology, Industry&Government and Tourism.

Although the cluster recently started, the amount of members grew to more than 25 within the last 6 months. This number will still increase in the coming years. More than 50% of the members are other SME's which come from a diversity of sectors (not only the cycling sector) like electronics, design, ICT, Healthcare,…

Flanders' Bike Valley organizes partner matching events (often together with other clusters/valleys), is setting-up breakthrough open innovation projects for multiple partners and will also focus on joint internationalization and incubation (the goal is to set up a cycling technology incubation centre by 2016). Since cycling is anchored in the roots of the Flemish People (as early adopters for new cycling technologies) and all involved Flemish SME's are globally leading innovators in the cycling world, Flanders' Bike Valley is seen as a kind of smart specialisation for the Flemish Region.

7.3.12.3   Justification for shortlisting this partner

Although Flanders Bike Valley is located in Flanders, a region already represented in the CLINES consortium, this organisation is shortlisted because of its complementarity in content. Bicycles are a key solution in smart mobility solutions. Flanders Bike Valley is federating all important stakeholders related to the development of 'innovative' bicycle concepts. As bicycles have to become smarter, embedding smart electronics becomes key. For this reason Flanders Bike Valley needs organisations with embedded systems expertise and capabilities.

Clustering embedded systems and bicycle expertise can be a basis for an attractive smart mobility product & service offering.

7.3.12.4   Mutual benefits

7.3.12.4.1   Your viewpoint

- Access to stakeholders with expertise in specific smart mobility solutions, ic. Smart bicycles
- Increase attractiveness: Develop an attractive product & service offering.

7.3.12.4.2   Partner's viewpoint

- Access to embedded systems expertise, skills and capabilities
- Access to other regions

7.3.12.5   Cooperation initiatives

7.3.12.5.1   Existing initiatives

- Yearly brokerage event in Flanders where members from DSP Valley meet up with members from Flanders Bike Valley

7.3.12.5.2   New initiatives

- Export the brokerage event to other regions or invite stakeholders from other regions to the Flemish brokerage event

- Joint project proposals, both local (Flemish) and international (European)

7.3.12.6   Funding opportunities

- Flemish IWT (VIS framework for stimulating innovation)
- Flemish AO (Agentschap Ondernemen), "Enterprise Flanders"
- European H2020
- European Interreg