Smart Specialisation Platform for Industrial Modernisation

Thematic Partnership

Cybersecurity - European Cyber Valleys

Start Date February 2018

MONITORING PROGRESS REPORT

Reporting Period: *from* ***June 2018*** *to* ***December 2018***

This Report is presented to the relevant Working/Steering Committee.
It contains three parts:

I. Management Report *prepared by the Lead Region(s)*
II. Progress Report *prepared by the Lead Region(s)*
III. Previous versions of the Progress Report*; i.e., part II of past reporting periods*

The report is a "cumulative" report, i.e. it is updated every six months and covers the entire period of the Partnership.

Confidentiality: this document (part I) will be made available to the public via the Partnership's web page except for chapter *II.E. Self evaluation*.

Based on the monitoring results, the European Commission will decide on the following year's support.

Executive summary (max. 250 words):

Cybersecurity risks in Europe are dramatically increasing: cyberespionage, cybercrime and theft of personal data are amongst the more pressing threats to the European society and economy. In the meanwhile, the development of European cyber technologies and of a cybersecurity industry is an opportunity for economic growth and job creation. Yet, cybersecurity in Europe is a nascent market still fragmented.

The aim of the partnership "European cyber Valleys" is to develop interregional cooperation in order to:

- *create synergies among the existing specialized regions in cybersecurity*
- *facilitate the development of EU cybersecurity value chain*
- *address the challenges that hamper commercialisation of existing and new products and services in Europe*
- *foster business investment on cybersecurity.*

National and regional authorities and representatives from the quadruple helix involved in this partnership have already developed a wide range of activities supporting cybersecurity development. Indeed, strengthening cyber local ecosystems in Europe has a fundamental role in structuring the still "young" European sector.

In this context, this partnership aims to foster cooperation between already existing mature ecosystems which has defined cybersecurity as a priority of their Strategy for Smart Specialisation (S3).

Developing the cybersecurity sector and providing mechanisms for regions to cooperate and engage industry, academia and end-users is forefront to the success of this partnership and of the EU as a whole..re...

I. Management Report prepared by the Thematic Platform/Lead Region(s)

I.A. Partnership Action Fact Sheet

- **Partnership:** *Cybersecurity - European Cyber Valleys e...*
- **Partnership's web-page:** *http://s3platform.jrc.ec.europa.eu/cybersecurityr here...*
- **S3 Thematic Platform:** *Industrial Modernisation*
- **Objectives:** *Fostering cooperation between European Cyber Valleys and supporting the commercialisation of local SMEs .*
- **Lead Region(s):** *list of regions/countries leading this partnership*

Brittany / France.
Please enter here...
Any other comments

- **Official partner regions:** *list of regions/countries that have officially committed to follow this partnership and have been active in the last six months.*

Castilla y Leon	*Please enter here...*	*Please enter here...*
Central Finland	*Please enter here...*	*Please enter here...*
Estonia	*Please enter here...*	*Please enter here...*
North Rhine Westphalia	*Please enter here...*	*Please enter here...*
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Any other comments		

- **Other regions:** *list of regions/countries that have expressed their interest in this partnership but have not signed a commitment letter).*

Council of Oulu Region	*Please enter here...*	*Please enter here...*
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Any other comments		

- **Intentions to join:** *list any regional/national authorities*
(Please list here all other regions that have expressed their interest to join the partnership)

- **Other participants (other than national/regional authorities):**
(Please list here all other (non-region) participants (clusters, institutes, RTOs, etc.))

The partnership is supported by the European Cyber Security Organisation (ECSO) established in June 2016 which provide the technical expertise on industrial policy. *Academia/research centres:*	*Please enter here...*	*Please enter here...*

Pôle excellence cyber (PEC) including universities, research centers and higher education (France) *JYVSECTEC / Institute of Information Technology / JAMK (Finland)* *University of Applied Sciences (Finland)* *CPS.HUB – Competence Center for Cyber Physical Systems, Institut SIKoM+/ Bergische Universität Wuppertal (Germany)* *INCIBE (National Cybersecurity Center) and Cluster - AEI Ciberseguridad y Tecnologías Avanzadas (Spain)* *+ Universities from the different regions* *Industry sector:* *Bretagne Développement Innovation (BDI) (France)* *nrw.uniTS – IT-Security network North Rhine-Westphalia (Germany)* *Startup Estonia (Estonia) with more than 20 startups specialized in cybersecurity* *Estonia Defense Industry Association (Estonia)* *Pôle excellence cyber (France) (including large industry players such as Thales, Orange, Sopra Cap Gemini,… and SMEs such as Amossys, Diateam, Secure-IC…)* *INCIBE (National Cybersecurity Center) and Cluster - AEI Ciberseguridad y Tecnologías Avanzadas) (Spain)* *Centro de Computación (Spain)* *Public institutions:* *ICE - Institute for Business Competitiveness of Castilla y León (Spain)* *City of Leon (Spain).* *Please enter here...*		
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Any other comments		

Representative of Lead Region 1: *(name, institution, address, phone, e-*	**Representative of Lead Region 2** (if applicable)**:** *(name, institution, address,*

mail) *Annie Audic - Brittany Region* *annie.audic@bretagne.bzh*	*phone, e-mail)* *Please enter here...*
European Commission Coordinator: *(name, e-mail)* *Please enter here...*	*Any other relevant information*: *Please enter here...*

I.B. Thematic Working Areas (WA)

• **Thematic Working Areas** *(if any, please list of WAs, region(s) in charge of it, names and affiliations of involved regional/national authorities, and other actors)*

Working Area	*Region in Charge*	*Involved regions*	*Other actors*
Mapping of European cybersecurity capabilities (to support business development).	*Region in Charge*	*ALL*	*Other actors*
Smart commercialisation (startups and SMEs)	*Region in Charge*	*ALL*	*Local scaleups from regions*
Business model for training platform /cyber range/cyber training platform	*Region in Charge*	*ALL*	*Other actors*
Facilitating the visibility of "European cyber valleys	*Region in Charge*	*ALL*	*Other actors*
Any other comments			

I.C. Overview of past activities (past six months, the 2nd half of 2018)

Past Meetings

Title	*Date*	*Place*
5th Partnership meeting.	*20.09.2018*	*Brussels*
Technical Workshop on the role of regions in the cybersecurity framework post 2020	*21.11.2018*	*Rennes*
Investors meeting	*27.11.2018*	*Berlin*
Any other comments		

Past Workshops

Title	*Date*	*Place*
Refer to 1st monitoring report	*Please enter date here...*	*Please enter place here...*
Please enter title here...	*Please enter date here...*	*Please enter place here...*
Any other comments		

Past Dissemination Activities

Title	*Date*	*Place*
Refer to 1st monitoring reprot	*Please enter date here...*	*Please enter place here...*

Please enter title here...	*Please enter date here...*	*Please enter place here...*
Any other comments		

I.C. Overview of future activities (the next 6 months – the 1st half of 2019)

Future Meetings

Title	*Date*	*Place*
Implementation of the Work Package 2 on the design of the inter-regional acceleration programe .	*TBD*	*Please enter place here...*
Please enter title here...	*Please enter date here...*	*Please enter place here...*
Please enter title here...	*Please enter date here...*	*Please enter place here...*
Any other comments		

Future Workshops

Title	*Date*	*Place*
Please enter title here...	*Please enter date here...*	*Please enter place here...*
Please enter title here...	*Please enter date here...*	*Please enter place here...*
Any other comments		

Future Dissemination Activities

Title	*Date*	*Place*
Please enter title here...	*Please enter date here...*	*Please enter place here...*
Please enter title here...	*Please enter date here...*	*Please enter place here...*
Any other comments		

II. Progress Report *prepared by the Lead Region(s) of the partnership, describing* ***results achieved during this period****, in no more than 3 pages (the report is "cumulative").*
All items listed in Sections A, B, and C, below, must be addressed.

Additional documentation such as extended technical reports and/or proceedings of workshops may be provided separately as an annex to this report (and should be referenced in the report).

II.A. Innovative results

- Innovative results and achievements that could be attributed to the Partnership.
  (Specific examples of Results vs. Objectives)

Objectives 1 : Better identifying European cybersecurity capabilities (to support business development)

Benefits: improve the visibility of local ecosystems and facilitate the meeting with end-users (customers) large provider/integrator (to partner) other SMEs (to find suitable business cases and counterparts) and investors (market intelligence).

Results : To facilitate the development of a European cyber value chain and cooperation along this value chain, the partnership is currently developping a comprehensive mapping of key EU cyber hub, competences centres, clusters, and SMEs' associations in Europe. This mapping will allow end-users to have a clear and detailed view of the EU cybersecurity offers in Europe.

In addition, it will give more visibility to the EU solutions and thus support development of local solutions on a broader market. In particular, the local and regional level play a crucial role in establishing trusted relationship between providers and end-users. Besides, the visibility of the European local ecosystem would facilitate the marketing of such solutions in regions specialised in other domains (e.g. agri-food, energy) and looking at cybersecurity solution to protect their assets.

To do so, the partnership has decided to use a tool called Craft developed by the Regional Innovation Agency of Brittany, Bretagne Développement Innovation (BDI). CRAFT is a comprehensive platform for collaborative and strategic mapping of regional competencies. It has already been successfully used in different European Regions (more information in the Annex 2).

In addition to this tool, the partnership agreed on a common and detailed taxonomy and a training session with local stakeholders has been organised as the first steps for the implementation of the mapping of local ecosystems.

The complete mapping of regional ecosystems (including RTOs, end-users, and vendors) is a powerful communication tool which will support the business cooperation within Europe

METHODOLOGY in 7 steps for this action :

STEP 1 identification of the key stakeholders/experts who knows the Cyber players (businesses, Research centers…).

STEP 2 Meeting with all the identified stakeholders from the 4 regions

STEP 3 Creation of the Cyber database

STEP 4 Inventory of the players competencies (entreprise, labs, skills..) in each region according to the agreed taxonomy

STEP 5 Population of the database

STEP 6 Mapping of the 5 regions

STEP 7 Training « database uses : updating, search engine, data outputs/exports »

Objectives 2 : Supporting local SMEs and start-ups' access to markets

Benefits:The access for funding for SMEs and the difficulties for local start-ups/SMEs in getting the first customer has been identified as bottlenecks for the development of a EU cyber market.

Results : The partnership has carried out an analysis of economic barriers and industrial challenges faced by local SMEs to compete globally. This analysis has been made through meeting up and conducting interviews with expert and local stakeholders.

Main need identified :

Raising awareness (visibility) of cybersecurity issues among SMEs

Supporting SMEs to access market with help of certified level of cyber security

Market validation

Technological development

Financing of projects

Development of management skills

Financing entreprenuers in their initial stage for solution whose arrival to market is not immediate

Development of a process of a Pre-commercial Public Procurement to solve some challenges in the field of Cybersecurity

Facilitate access to finance /flexibility

Promoting the acquisition of cybersecurity solutions by SMEs and companies

Financing of prototypes and development of cybersecurtiy projects in the field of R&D&I

Supporting cybersecurity certification

Enhancing development of cybersecurity sector

Facilitate the participation of SMEs

Develop new products/services

Community building

Access to finance

Access to first large customer

To address these issues, after extensive discussion, the partnership has decided to focus its activities on developing an Inter-regional accelerator, a programme to develop Startups/Scaleups (Critical mass for local players). A road map has been defined and this project is now under construction.

Expected outcome in January 2019 : the detailed acceleration programme which will be presented to further investors (both public and private).

Exemples of actions tobe put in place:

- *Exchange of best practices*
- *Create a network of local startups associations and set a common catalogue of services*
- *Fund a tutor/mentor programme from business developers*
- *Select a pool of scaleups and provide pitch training*
- *Support marketing and sales training- Look for Regional Resellers/Distributors*
- *Create a common catalogue/directory of solutions*
- *Networking and matchmaking session with investors*
- *B2B with large companies*

Objectives 3 :Develop a common business model of Cyber range and training platform

Benefits:facilitate the development of new economic model, provide visibility to existing - but still local- cyber training platform and develop their interoperability and thus facilitate SMEs to access a larger market

Results : ongoing discussion on developping a cyber range methodology and approach which may then lead to a European approachPlease enter here...

- Tangible short- and medium-term socio-economic impacts achieved or expected. *(Specific examples)*

Cybersecurity sector is developing very fast: a lot of specialised competence centres/platforms and clusters have emerged in the last years. Mappings of existing actors have already been developed among regions/Members States of the partnership. However, they do not provide a comprehensive and detailed view of the current situation throughout Europe both in terms of technology and services. The complete mapping of regional ecosystems (including RTOs, end-users, and vendors) currently under development is a powerful communication tool which will support the business cooperation within Europe.

European ecosystems have a critical need to scale-up in order to be successful in the extremely competitive market of cybersecurity solutions (with American and Asian competitors very aggressive in terms of marketing and offering). In fact, while European cybersecurity companies tend to be innovative, their market penetration and size are smaller in comparison to their global counterparts, making it difficult for them to face fierce global competition. This is due, among others, to the fragmentation of the European market, the limited

availability of testing and experimentation facilities, and limited access to private investment. The partnership will contribute to address these challenges by working in supporting local start-ups/SMEs in scaling-up and in getting the first customer.

The European cybersecurity market is struggling to find skilled professionals for R&D, operational and business tasks. While the global shortage of skilled workforce in recognized at the policy level, the supply of specialized players and their strategic role is still misunderstood. In particular training platforms are a key asset which could facilitate the outflow of highly qualified specialists. Training of cybersecurity experts is commonly recognized as top political priority. Nevertheless according to the latest market studies, only a small part is being spent in Training and Education while the EU market is estimated 20 billion € in 2017. This trend can partially be explained by the fact that market model of training platform is still local-based and inefficient to address the European single market. This partnership aims to contribute addressing at medium-term this challenge Please enter here...

II.B. Inter-regional and inter-partnership collaborative results

- Additional results obtained from working *with other partnerships* under the thematic S3 Platforms. *(Specific examples)*

  None : synergies with other partnership has not yet been explored.

  The priority of the cybersecurity partnership is first to structurate its own priorities and activites in order to deliver concrete cooperation and projects.

- Evaluation of the involvement of relevant business sector (clusters, SMEs, business associations, chambers of commerce, etcetera) in the Partnership activities. *(Specific examples)*

  During meetings and activites of the partnership, representatives from the quadriple helice have been actively participating (SMEs, universites, representatives from large companies, regional development agencies, training platforms, etc.). They intensively share their needs and expertise to the partnership.

  Moreover, regional actors have shown a great interest in this inter-regional cooperation.

  The global invovlement of relevant business sector is therefore highly satisfactory..

- Evaluation of whether ***the level of inter-regional cooperation is sufficient*** to potentially provide *practical and relevant socio-economic impacts*. *(Specific examples)*

  Inter-regional cooperation is an ongoing process based on mutual interest, common understanding and vision of issues as well as trust between partners. Trust need time and concrete actions to be develop.

  From July to December 2018, 3 meetings are going to be organised between members of the partnership and external stakeholders, what facilitates common understanding and extensive dialogue.The inter-regional cooperation under this partnership is therefore constantly growing and common interest has been identified on a number of topics

  As the WP2 will be kick-off at the end of 2018 we expect to attarct much more membrs and stakeholders from existing partners and beyond.

II.C. New activities

- Involvement of regions from EU13 Member States in the Partnership, in particular with respect to scoping, mapping and/or matchmaking. *In addition, justification should be provided if no EU13 regions are involved.*

  Already involved

- Involvement of regions/countries from outside of EU28 Countries. *(Number of participants from non-EU countries. Specify their contribution)*

  Not relevant

- Advancement and promotion of the Partnership through publications and other communication/outreach activities. *(Number of outreach activities that resulted from the*

Partnership. A complete list with references and web-links should be given in an annex)

The priority of the partnership has been first to achieve results with the 5 regions already involved. To improve the visibility of the partnership will be a priority for the second semester 2018 : a communication and dissemination strategy will be developed including : organisation of an event in Brittany presenting the results and achievements of the interregional cooperation so far while identifying next steps and next potential regions to be involved. Now this event is planned on 21.11 Rennes. Another event is organised with investors on 28.11 in Berlin where we expect to present the WP2

- Activities and projects with partnerships working under <u>other</u> S3 Thematic Platforms *(Agri-Food, Energy and Industrial Modernisation).*

  Synergies to be explored with the Industry 4.0 platform in the future