

# eNOTICE European Network Of CBRN TraIning CEntres

# D2.5 Framework and Sustainability plan for the European CBRN Training Centres network

#### **Authors and contributors:**

#### Leading author:

Daniele Di Giovanni, Mariachiara Carestia, Pasquale Gaudio (UNITOV) Kathleen Van Heuverswyn (VESTA)

#### Contributors:

Olga Vybornova (UCL)
Bavo Cauwenberghs (VESTA)
Andreas Schultz, Maximilian Kiehl (UPB)
Wolfgang Reich (JCBRND CoE)
Elif Surer (METU)
Magdalena Pokora (CNBOP-PIB)
Elizabeth Benson (WMP)

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12	War Studies University, CBRN Defence Training Centre (WSU)	
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## **Executive Summary**

This document depicts the European CBRN Training Centre network (eNOTICE) Framework, and provides a proposal for the sustainability plan of this network. eNOTICE is a Horizon 2020 European Commission (EC) funded project, under the Grant Agreement n° 740521, which aims at building a European network of CBRN TC.

Task 2.4 was dedicated to the elaboration of a conceptual framework and sustainability plan for the implementation of a successful European CBRN TC network. This will be based on a clear mission, clear objectives, complementarities to existing networks (avoiding duplication), an adequate management structure ensuring its sustainability and a mix of appropriate instruments and activities according to the members' interests.

Task 2.4 builds on the results of all previous activities in Work Package (WP2) which have set the ground for a thorough preparation and planning for building the network. Such background information was essential to understand the daily reality of TCs and practitioner's processes, to firmly anchor the network into their reality, to identify concrete sustainability parameters in order to ensure network activities and results with the ambition to last beyond the project duration.

The following cornerstone activities, performed in previous tasks, were carried out: Mapping the capabilities and facilities provided by CBRN TCs (D2.1, February 2018); Mapping needs and gaps analysis of the CBRN stakeholders (D2.3, April 2018); Report on Key Performance Indicators for a successful CBRN network (D2.4, June 2018); Development of a CBRN Capacity Label (D2.2, December 2018)<sup>1</sup>.

In D2.5, a review of the literature on sustainability has been performed and an integration and adaptation of the different available sources led to the elaboration of a means that allows to elaborate a framework and a sustainability plan for security networks based on the KPI of eNOTICE D2.4.

#### Way forward

The presented approach was applied to the eNOTICE case study to formulate proposals for the elaboration of a sustainability plan. The plan will mature during the remaining years of the project, taking in full consideration trends and lessons learnt from other security network

<sup>&</sup>lt;sup>1</sup> All Deliverables are publicly available at the eNOTICE web-based platform, at: https://www.h2020-enotice.eu/static/publications.html





initiatives (promoted at the EU and at the national level), as well as feedbacks from the eNOTICE network initiatives, structuring the network to achieve the highest level of effectiveness and efficiency with a long-lasting perspective. As the process of developing and defining the plan is key to sustainability, it will be constantly performed looking for maximum involvement of the Consortium partner and the network members. involvement. The developments of the process will be monitored as part of WP5 on project management and quality monitoring.



### Nomenclature & acronyms

API: Application Programming Interface

CBRN: Chemical, Biological, Radiological, Nuclear

CoU: Community of Users for Secure, Safe and Resilient Societies

DB: Database

DG ECHO: Directorate-General European Civil Protection and Humanitarian Aid Operations

DG DEVCO: Directorate-General for International Cooperation and Development

DG HOME: Directorate General Migration and Home Affairs

DM: Disaster Management

DM-TRAINET: Disaster Management Training Network

DoA: Description of Action

DRMKC: Disaster Risk Management Knowledge Centre

EC: European Commission

ECC: eNOTICE Community Centre

eNOTICE: European Network of CBRN Training Centres

**GM**: General Matters

**GP:** Green Procurement

HRSA: U.S. Department of Health and Human Services Health Resources and Services

Administration

JA: Joint Activity

JRC: Joint Research Centre

**KPIs:** Key Performance Indicators

PPP: People, Planet, Profit

**PSS: Product Services Systems** 

R&D: Research & Development

RDI: Research, Development, Innovation

SCP: Sustainable Consumption and Production

SDG: Sustainable Development Goal

TC: Training Centre

**WG:** Working Group

WP: Work Package



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## **Chapter 1**

#### 1. Introduction

#### 1.1. Objectives and methodology

#### 1.1.1. Overall objectives of eNOTICE

The main purpose of the eNOTICE project is to build a dynamic, functional and sustainable pan European network of CBRN training centres, testing and demonstration sites (CBRN TC).

The eNOTICE TCs network aims at enhancing CBRN training capacity for improved European preparedness, resilience and incident response to CBRN attacks and emerging threats through close multi- (stakeholders) and single-discipline (practitioners) interactions.

The rationale of the project consists of building a bridge between Research, Development, Innovation (RDI), technology providers and practitioners (who are the end users of innovative solutions for improved preparedness and response), exploiting the combination of the Training Centres' network of practitioners, their available infrastructures and their annual program of practical training and exercises to organize shared activities of common interest for all these actors.

To achieve these objectives, CBRN TCs are strategically placed in the core of the eNOTICE network as they are the natural operational link between all civilian and military CBRN actors, EU relevant bodies and policy-makers, as well as the best cradle for expansion of a CBRN network of professionals.



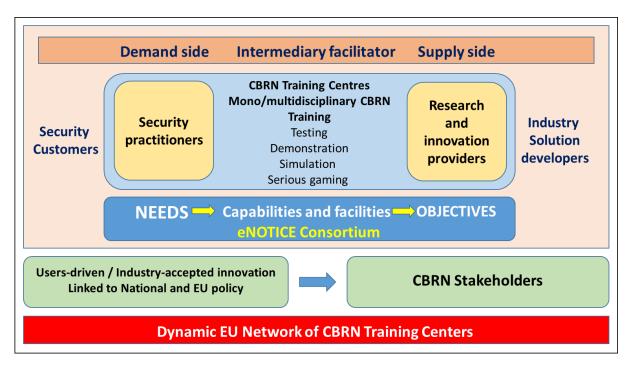


Figure 1 The key actors of the European Network Of CBRN TrainIng, Testing and Demonstration Centres (Pag. 10 D2.3).

#### 1.1.2. Objectives and scope of Task 2.4

- 1 The objectives of Task 2.4 are defined in the DoA as followed:
- The result of all previous activities in WP2 will serve as input for the elaboration of a conceptual framework and sustainability plan for the implementation of a sustainable European CBRN Training Centre network, based on a clear mission, clear objectives, complementarities to existing networks (avoiding duplication), an adequate management structure ensuring its sustainability and a mix of appropriate instruments and activities according to the members' interests.



Figure 2 Preparatory steps to build a sustainable pan European network of CBRN TC (Pag. 139 Grant agreement).

The Task description is directly linked to eNOTICE Sub-objective 1.5 as defined in the DoA as followed:



To elaborate a global framework for a sustainable European network of CBRN TC and associated stakeholders wishing to cooperate with peers, to build on the current eNOTICE consortium and expand it further. The framework will be based upon clear missions, realistic expectations and an adequate management structure ensuring its sustainability through better perception and understanding of the professional added value and return, and confidence-building between all parties.

The expected Deliverable for this task is a *Framework and sustainability plan for the European CBRN TC network* (D 2.5).

As will be discussed below, a sustainability plan is a dynamic tool that must be constantly adapted in order to take the most out of it. Besides, the sustainability of the eNOTICE network will be strongly affected by factors such as *leadership* and *economic sustainability* that are discussed in detail below and will change after the termination of the project.

and which will be widely discussed below, will change after the termination of the project.

The four remaining years of the eNOTICE project will be used to experiment different solutions to guarantee the long-term sustainability of the eNOTICE network, and, as will be shown afterwards, sustainability has an impact on all the different aspects of the project, from the eNOTICE Community Centre (ECC), to the organization of Joint Activities, to quality monitoring, and so on. Therefore, indicators for the monitoring of sustainability can be found in all the actions and WPs of the project.

As for the quality monitoring of the project, periodic assessment of the indicators for sustainability, and the revision of the sustainability plan must be scheduled and performed.

Periodic assessment of indicators for sustainability and the revision of sustainability plan will be included in the technical/quality management, as part of WP5 in task 5.2 and 5.2.1 Technical/Quality management activities.

#### Structure of D 2.5

Deliverable 2.5 is structured in 4 chapters:

- Chapter 1 introduces briefly the background and the scope of Deliverable 2.5, and references for the development of sustainability plans suitable for eNOTICE, based on previous work.
- Chapter 2 provides models for a theoretical framework and a sustainability plan for security network, based on results from previous deliverables of WP2 and a desk search of



- references for sustainability. The theoretical framework is generic and can be used as a reference for any security network.
- Chapter 3 proposes the first eNOTICE CBRN TC network framework long term sustainability plan. It follows the structure of the theoretical framework which is made concrete to the eNOTICE scope and objectives based on data from previous deliverables.
- Chapter 4 provides the structure of the eNOTICE sustainability plan, which includes data from previous deliverables, and proposals and food for thought, to support long term sustainability, coming from literature, discussion among the eNOTICE partners and ideas collected during annual workshop held back to back with the Joint Activity in Rieti in October 2018.
- Chapter 5 provides conclusions for the work, including recommendations for future actions.

Finally, three annexes are attached to this deliverable:

- ANNEX 1 Green Procurement
- ANNEX 2 Executive Summary
- ANNEX 3 Provisional yearly costs for the CBRN TC network



#### 1.1.3. Link between Task 2.4 and other eNOTICE tasks

Task 2.4 represents the point of convergence of the information and recommendations from all previous activities of WP2.

Input to Task 2.4 for the theoretical framework is collected from:

- Task 2.3 Identification of barriers, levers, Key Performance Indicators and good practices for a CBRN network, including market analysis, Deliverable D2.4 (June 2018).

Input to Task 2.4 for the concrete eNOTICE sustainability plan is collected from:

- Task 2.1.1 Roster of CBRN TC, testing and demonstration sites' capabilities and facilities, Deliverable D2.1 (February 2018).
- Task 2.2.1 Elaboration of a capacity label and development and preparation of a search function at the CBRN web-based information and communication platform, Deliverable D2.2 (December 2018)
- Task 2.2 Mapping needs and gap analysis of the CBRN stakeholders, future network members, Deliverable D2.3 (April 2018)

All eNOTICE Deliverables referred to are publicly available at the eNOTICE web-based platform at: <a href="https://www.h2020-enotice.eu/static/publications.html">https://www.h2020-enotice.eu/static/publications.html</a>



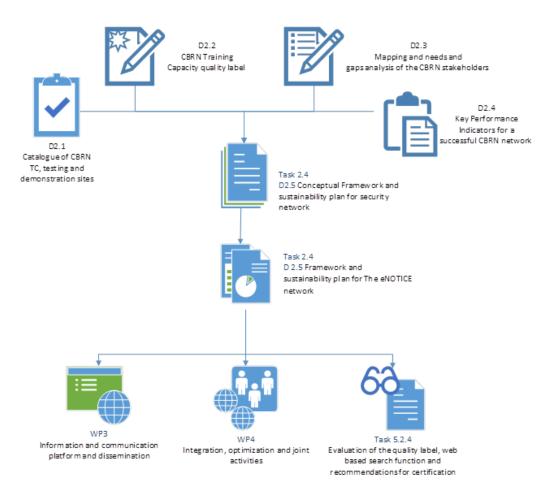


Figure 3 Description of Task 2.4 links with the other tasks (deliverables)

### 1.2. Methodological approach

The Methodological approach consists of two steps for the elaboration of the framework.

#### Theoretical coherence

A first methodological step consists of a theoretical, conceptual background and covers the criteria and parameters to take into account the development of a self-sustainable framework. The main source for this is D2.4, the report that identified key performance indicators for a successful network and thus covers the criteria and parameters to ensure self-sustainability. Successful and self-sustainability are considered as synonyms in this context. This information needs to be completed with requirements related to sustainability.

The result aimed at by this theoretical preparation is a mature framework that provides a structured approach to build a successful security network step by step, based on best practices from different sources, covering all relevant aspects. It will also provide an instrument for



regular assessments on the progress and evolution of the network, thus ensuring again a structured approach for continuous improvement.

#### eNOTICE vision and strategy

The second methodological step consists of elaborating a coherent vision on the eNOTICE network: its goal(s), scope, area of activities, types of activities, appropriate instruments, resources, etc. As input for the concretisation of the eNOTICE theoretical framework, the information of the following WP2 Deliverables will be used: 1) possible profile of the members from the Roster and Catalogue (D2.1), 2) needs and expectations from all security stakeholders (D2.3), 3) the Capacity label for the creation of visibility for the CBRN TC's (D2.2), etc. This information n will be completed with lessons learnt from the Joint Activities (T4.2), as well as with opportunities to encourage interactions provided by the web-based platform (WP3). A third source for this step are inputs provided by and discussions amongst the eNOTICE partners, such as a survey based on the D2.4 KPIs answered by the partners and discussed at the JA in Rome. Feedback loops on the draft deliverable and telco's ensured regular exchanges and discussions to ensure alignment and common understanding between the eNOTICE partners.

#### Continuous monitoring and improvement

The rationale behind the development of a sustainability plan is to create a living document and a procedure that can be iterated cyclically to ensure that, once evaluated, sustainable criteria are respected. Moreover, it is important to monitor and revise all the activities that have an impact on the self-sustainability of the network. In the following section, a template for the development of the plan is elaborated and can be used for continuous monitoring. For the duration of eNOTICE, continuous monitoring and improvement will be part of the project management and quality management (WP5). The approach should be then integrated in the management and quality monitoring of the CBRN TC network.



# Chapter 2

#### 2.1 Theoretical framework for a sustainable network

In the following paragraphs the building blocks for the theoretical framework will be explained, based on:

- 1) The KPIs for a successful security network, which have been elaborated in deliverable 2.4 of the eNOTICE project<sup>2</sup>. Where a "successful security network" should be intended as self-sustainable in the sense that the network has the inherent and long-term capacity to achieve its objectives.
- 2) The Criteria for sustainability: in order to strengthen the network's capacity to be successful in the long term, specific points of attention will be identified and integrated into the framework sustainability plan, which will include a periodic check integrated with a 'sustainability check', to ensure that the plan is updated and replies promptly to changes and needs of the users and it continues to be sustainable.

The work on the KPIs for a successful network provides, therefore, the ground of the theoretical framework, which has been elaborated to provide a tool to design a sustainability plan for security networks. A proposal of evaluation of the KPI according to the dimensions of sustainability is presented, together with a structure for the development of a strategic and action plan.

<sup>&</sup>lt;sup>2</sup> D2.4 Report on Key Performance Indicators for a successful CBRN network (2018). Available on line at: https://www.h2020-enotice.eu/documents/eNOTICE-WP2-VESTA-D2.4-Report%20on%20Key%20Performance%20Indicators%20for%20a%20successful%20CBRN%20network.pdf



#### 2.1.1 Generic KPI framework for a successful Network

As explained in detail in D2.4 (Report on KPIs), the network framework concerns aspects such as: mission and vision (objectives, scope, member profile, type of activities), leadership (added value and distinctive characteristics from/links and collaborations with other networks), management structure of the network (Management Board, Secretariat, Work groups, advisory group/forum), quality and security monitoring of the web-based platform, access rules and rights (full authorised vs registered users, etc.), cost efficiency, the degree of formality (informal vs formal) and (de) centralisation, etc.

Overview and short description of the KPI's for a successful (self-sustainable) network

#### WHY the network was established: Context & background

Is the network established as a policy or regulation based initiative, launched by public bodies, or as a spontaneous initiative from private actors to fill a gap?

#### WHAT is the network doing - Content

#### The network's mission: motivation and role

**Motivation of the members** – What need does the network fulfil? What is the added value for the members? **Role of the network** – what are the purposes and goals of the network, reflected in a clear mission and vision statement and how does the network differ from the activities of its members as well as from other networks.

#### The network's scope: areas and type of activities

The scope defines and delimitates the field(s) or discipline(s) covered by the network and the appropriate types of activities.

**Area of activities** - What is the area activities of the network (broad and general or specific and limited)? E.g. civil protection, emergency planning or response? Natural, manmade or intentional incidents?

**Type of activities** - What are the activities of the network? E.g. information and communication, sharing and dissemination of best practices, providing a forum for peers to meet, , elaboration of standards, of SOP's, of guidelines, templates etc.

#### WHO & WHERE – Membership

#### Member profile

Who are the members of the network? Monodisciplinary professionals (e.g. only fire fighters or police)? Regional and thematic professionals (e.g. natural risk in South Europe)? Closed to core members or open to other professionals? Different categories with different user and access rights? Free membership or not? Open for countries, organizations, individual experts? Etc.

#### Geographical scope

What is the geographical scope of the network, who is accepted as member? National? EU? Regional? International?

#### Leadership



How is leadership ensured? Has avoidance of elite-thinking been considered?

#### **HOW** the network is organized – Institutional aspects

What is the style of the network?

#### Informal vs formal character

Is this an informal network, with little or no rules or rules determined at ad hoc basis?

Is this a semi-formal network with a coordinating body and a secretariat, financially guaranteed and a minimum of rules and procedures on membership, participation in activities?

Is this a formal network, coordinated by an autonomous legal entity with a governance structure, work plan with deadlines and accountability, etc.?

#### Type of the network

Does the network mainly aim at exchange of information and communication between the members or is it a transactional network with project working and own developments?

#### Decision making and accountability

What is the governance structure of the network? Is there a governing or management board with decision making powers and accountability for the produced results, an Advisory Group, composed of stakeholders or experts and a Secretariat, which provides assistance and support?

#### HOW the network is organized- Network architecture and relations

Has the network a spontaneous or deliberately chosen structure of architecture?

**Density of the members relations -** *Do all members interact with all others or are does the network have levels, filters or selections?* 

**Centrality of the members relations -** *Is the network organized in a centralized way, top down or bottom up or a combination of both? Or are their intermediate levels, e.g. with working groups, ambassadors or contact points?* 

#### HOW and WHEN the network is organized - Sustainability

How is the structural capacity ensured to permanently respond to the needs and expectations of the members?

#### Quality management, incl. Continuous improvement & Result oriented approach

**Result oriented approach** — Does the network have a work plan with short term, middle and long term goals and expected results and a policy to make quick wins and long term successes visible?

**Continuous improvement** – *Does the network monitor the quality of activities and results?* 

#### Financial viability

What is the financial strategy for the network? How are financial resources ensured? Funding, membership fees, sponsorship, revenues generated by the networks own activities, etc.

#### **Supporting instruments**

Does the network have supporting instruments for information and communication such as publications, annual meetings, a web based platform and appropriate functionalities, etc.?

#### **Duration of the network and sustainability strategy**



When did the network start? What is the intended duration (fixed, indefinite)? Does the network have a sustainability strategy coherent with the duration?

# 2.1.2 Criteria to embed sustainability in the planning of a self-sustainable security network, basing on KPIs.

#### 2.1.2.1 Definition and models of Sustainability

According to the Task 2.4 description in the DoA, focused primarily on the self-sustainability of the network, sustainability is the capacity of the network as such, as well as its activities to survive the project duration. In this sense, self-sustainability can be considered as a synonym of successful, for which a previous Task 2.3 was dedicated, i.e. the search for criteria to ensure the existence as a minimum, preferable the success of a network.

Sustainability is nowadays also a commonly known concept, which emphasizes the anchoring of (economic) activities in the social and environmental context, with its own, specific points of attention for long term viable activities. It is this notion of sustainability that is clarified in the following paragraphs.

The broadly known definition of sustainability is that from the Brundtland Report of 1987: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."<sup>3</sup>

From the day of its publication, it has been plagued by controversy, since it is considered more inspirational than practical. Furthermore, it is not precise and measurable, so it is difficult to agree on what it means<sup>4</sup>.

In the multitude of definitions of sustainable development, the attention to interconnection of the environment, the economy, and society is constant. These are generally referred to as the three pillars of sustainable development.

The model of The Three Pillars of Sustainability<sup>5</sup> is one of the commonly accepted models. This model treats each of the three pillars as separate and equal entities.

By definition<sup>6</sup>:

<sup>3</sup>The definition of sustainable development is from Our Common Future, by the World Commission on Environment and Development, 1987, p. 43.

<sup>&</sup>lt;sup>4</sup> "Sustainable Development: From Brundtland to Rio 2012", prepared for consideration by the High Level Panel on Global Sustainability at its first meeting, 19 September 2010.

<sup>&</sup>lt;sup>5</sup> "The faulty three-legged stool model of sustainable development", by Dawe, N.K., & Ryan, K.L. (2003). Conservation Biology, 17(5), 1458-1460. doi: 10.1046/j.1523-1739.2003.02471. x

<sup>&</sup>lt;sup>6</sup> The Three-Leg Model of Sustainability from: "Orientation to Energy and Sustainability Policy", published by Pennsylvania State University.



- <u>Social sustainability</u> "generally refers to the consequences of a process to the social fabric of a community" (i.e., culture, justice, equity);
- <u>Environmental sustainability</u> "focuses on the health of the ecosystems that support both human and non-human life";
- <u>Economic sustainability</u> "focuses on the economic viability of a process, project, enterprise or community."

According to this model, if any pillar is less important (shorter) or missing the "roof" (sustainability) will be unstable (Figure 4).

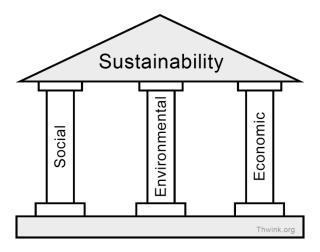


Figure 4 The three pillar architectural style image by Thwink.org.

However, this model has received much criticism for being a non-dynamic model, since it suggests that all three pillars must be addressed to achieve sustainable development, even if the weight and attention given to each pillar are often different, reflecting the orientation of an interest group<sup>7</sup>.

For this reason, other more complex models have been developed, in order to consider that the three dimensions of sustainable development are not qualitatively equal, but instead occupy different positions in a hierarchy<sup>8</sup>, for example the Venn diagrams.

<sup>&</sup>lt;sup>7</sup> Wironen, M. (2007). Sustainable development and modernity: Resolving tensions through communicative sustainability. (Master's thesis, Lund University). Retrieved from http://www.lumes.lu.se/database/alumni/05.07/thesis/Michael\_Wironen.pdf

<sup>&</sup>lt;sup>8</sup> Lehtonen, M. 2004. The environmental-social interface of sustainable development: capabilities, social capital, institutions. Ecological Economics, 49, 199-214. doi:10.1016/j.ecolecon.2004.03.019



In line with this critique of the three-legged sustainable model, Venn diagram allows to consider sustainability dimensions with different weight and relevance, furthermore showing the overlap between them it allows to highlight the conditions to obtain sustainability.

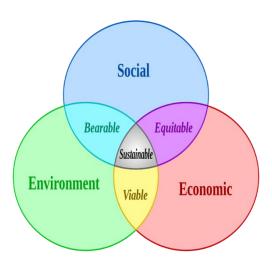


Figure 5 The Venn diagram style image by BRR Index (https://brridx.com/pages/sustainability)

This is also the model that is identified by Doualle *et al*<sup>9</sup>. when investigating sustainability assessment methods of Product-Service Systems (PSS *is defined as "product(s) and service(s) combined in a system to deliver required user functionality in a way that reduces the impact on the environment" by Goedkoop et al.<sup>10</sup> which will be discussed in detail in the following paragraphs.* 

So, this model turned out to be the most suitable for this study, since it focuses on verifying the sustainability of security network frameworks, that are activities that primarily have a social impact, being dedicated to improving the security of people, and subsequently responding to economic and environmental feasibility constraints.

To provide a further insight on the dimensions of sustainability and their connections, a definition by Vezzoli *et al.*<sup>11</sup>, is reported in the following paragraphs.

<sup>&</sup>lt;sup>9</sup> Doualle, B., *et al.* (2015). Investigating sustainability assessment methods of product-service systems. Procedia CIRP 30 (2015) 161 – 166.

<sup>&</sup>lt;sup>10</sup> Goedkoop M, Van Halen C, Te Riele H, Rommens P. Product Service Systems Ecological and Economic Basics. 1999 Marp. 118.

<sup>&</sup>lt;sup>11</sup> Vezzoli C, Kohtala C, Srinivasan A, Xin L, Fusakul M, Sateesh D, et al. Product-service system design for sustainability. Greenleaf Publishing; 2014.



The criteria developed by Vezzoli *et al.*, for the social, environmental and economic dimension of sustainability are wide and generic, so they basically can be applied to the design of a sustainable security network. However, the impact of each criteria on the sustainability plan will be greatly affected by the mission and the vision of the network itself and must be evaluated for each specific case study.

In the following section we have analysed the criteria and identified which one can be easily applied, require integration or can be discarded because out of the scope or too wide for the design of a sustainable security network.

#### 2.1.2.2 The environmental dimension - Planet

During the 1960s, in industrialized countries there was an increase in production system development and in its consumptions, it was quickly realized that this would not bring exclusively benefits.

The 1970s, were characterized by the discovery of environmental limits and by the understanding of the irreversible effects of the ongoing system of production and consumption on nature.

Considering the environmental effects, it is possible to see that these are based on impacts of exchanging substances between the production and consumption system and nature/the environment.

These effects can occur with:

- The extraction of substances from the environment: in this case the first harmful risk constitutes the exhaustion of resources, resulting into lack of resources for future generations.
- The emission of substances into the environment: several potential *effects* are linked to the impacts generated from the emission of substances, these can result in the issue of altering ecosystem balance. (e.i. global warming (impact) generates melting of polar ice-caps, rising seawater levels, desertification, migration of pathogens (effects))

From the understanding of the relations between the anthropogenic world and nature, two fundamental actions can be considered.

• Regarding the resource extraction from nature, these must be preserved, using fewer resources and preferably more renewable ones.



Concerning the emission of substances, the pollution (of resources) must be prevented,
 reducing emissions and increasing their biocompatibility.

These actions can be further elaborated into three related scenarios:

- I. biocompatibility scenario where the resource flows for the production of goods and services are compatible with the natural system: using renewable resources and disposing of biodegradable and biocompatible emissions and waste.
- II. **non-interference** scenario where resources are no longer drawn from nature but are rather recycled (if raw materials) or used in cascade (if energy resources).
- III. **de-materialising** scenario where resource flows would be quantitatively diminished in relation to a given social demand for needs and wants satisfaction.

The transition towards sustainable development should be comprised of a mix of these scenarios depending on the various conditions in different contexts.

For the environmental dimension, a set of criteria have been developed for a generic PSS design from Vezzoli et al. (reported in table 1).

Here, in the right column of table 1, the evaluation of which of these criteria can be adopted for the case of security network is provided. On the base of the necessary integrations and adaptations listed, a set of dedicated criteria have been developed (table 4) for the purpose of the definition of a framework for a sustainable security network.

Table 1 Adaptability evaluation of the Environmental dimension criteria for PSS to the Sustainable Security Network framework

Environmental dimension criteria		
PSS design (Vezzoli et al.)	Relevance for Security Network	
Life optimization:	Adapted 📀	
A product with a long lifespan, with	The original criterion is designed for	
otherwise similar functions to one with short	products, but can be adapted to services. For	
lifespan, will generally secure a lesser impact	example, the services offered by a network to	
on the environment. The product with a	its users.	
shorter life span will generate waste and will	A well-designed service will be durable or	
entail further impact due to the need to	easily modifiable and will have less impact in	
replace it.	terms of cost and energy consumption.	
Reduction in transport/distribution	Included 🗸	
The transportation/distribution reduction is	The criterion is designed for products,	
connected to a well-designed system	processes and services and can be included as	
stakeholders' interactions that leads to a	it is.	
reduced amount of transportation and	For example, considering security networks,	
packaging.	it can refer to the ability to avoid unnecessary	



#### **Reduction in resources**

The criterion "reduction of resources" denotes that the stakeholders' interactions of a system have been designed to reduce the resources (energy, materials, etc..) used by all products and services of the system.

# Waste Minimisation/Valorisation resources

The "Waste minimisation/valorisation" refers to the design for system stakeholders' interactions to increase the total amount of the system's recycling, energy recovery and reduce the total amount of the waste produced.

#### Conservation/biocompatibility

This criterion entails the design for system stakeholders' interactions that improves the overall amount of the system's resource conservation or renewability.

#### Non-toxicity

Reduction of toxic emissions involves the design for system stakeholders' interactions that reduce or avoid the gross total of toxicity and harmfulness among the resources utilised or emitted by the system.

movement of people through the use of IT instruments such as tele conferences.

#### Included

The criterion is designed for products, processes and services and can be applied asis in the context of the security network. For instance, through the use of Serious Gaming and Virtual Reality when applicable.

#### Included 🔮

The criterion is designed for products, processes and services and can be applied as-is in the context of the security network.

#### Adapted 🕏

The criterion is designed for products, processes and services and can be included as it is to security network. For example, considering a security network providing web-based services, the criterion could be referred to the energy procurement from renewable sources.

#### Adapted 🕏

The original criterion is designed for products, but can be adapted to services. For example, the services offered by a security network to its users.

The adoption of non -toxic simulant agents for training activities, could represents an example how CBRN TCs can be compliant with this criterion.

#### 2.1.2.3 The socio-ethical dimension - People

Considering the socio-ethical sustainability is necessary to take into account the so-called *equity principle* (UN 1992), this principle establishes that every person, in a fair distribution of resources, has a right to the same *environmental space*, i.e. to the same availability of global natural resources or better, to the same level of satisfaction that can be gained from these in different ways.

If the theme of sustainable consumption crosses that of socio-ethical sustainability, the implications and responsibilities extend to different issues such as the principles and rules of



democracy, human rights and freedom; the achievement of peace and security; the reduction of poverty and injustice; improved access to information, training and employment; and respect for cultural diversity, regional identity and natural biodiversity (UN 2002).

For the social-ethical dimension, a set of criteria have been developed for a generic PSS design from Vezzoli et al. (reported in table 2). Here, in the right column of table 2, the evaluation of which of these criteria can be adopted for the case of security network is provided. On the base of the necessary integrations and adaptations listed, a set of dedicated criteria have been developed (table 4) for the purpose of the definition of a framework for a sustainable security network.

Table 2 Adaptability evaluation of the Social-ethical dimension criteria for PSS to the Sustainable Security Network framework

Social-ethical criteria		
PSS design (Vezzoli et al.)	Relevance for Security Network	
Improvement of employment/working	Included 🕏	
conditions	The criterion can be included as-is in the	
Improvement of employment/working	context of the security network. In fact, the	
conditions relates with a system designed to	improvement of the general level of security	
promote and enhance job security, health and	cannot be achieved if in the first place there	
safety at work, adequate working hours, fair	is an improvement in operator security. So,	
wages, and conditions enhancing the	the action of each security network must	
satisfaction, motivation and participation of	always include the security of the operatives	
the employees.		
Justice and equity on the part of	Included 🕏	
stakeholders	The criterion is designed for products,	
Equity and justice in relation to stakeholders	services and can be applied as-is in the	
refers to design promoting and enhancing fair	context of the security network.	
and just relations: within the partnerships,		
upstream, downstream and in the community		
where the offer takes place. Equal and just		
relations affecting the community where the		
offer takes place and equity and justice with		
local institutions/agencies.		
Enabling of responsible, sustainable	Discarded	
consumption	The criterion is designed for products and	
This criterion enable responsible and	could be hardly adapted to processes and	
sustainable consumption entails a design	services in the context of the security	
promoting and enhancing responsible and	network.	
sustainable client or final user choices or		
behavior.		



Fostering and integration of the weak and marginalised "Favoring and integrating the weaker and marginalised" criterion entails with system design that favours (in order to integrate) people such as children, the elderly, the differently abled, the unemployed, the illiterate or any other minority or marginalised social group.	Included The criterion is designed for products, processes and services and can be included as it is to security network. Referring to this type of network, an example of application of this criterion could be the development of procedures dedicated to emergency assistance for disadvantaged or disabled people.
Improvement of social cohesion This criterion denotes a system design that facilitate social integration: in neighbourhoods, between generations, between genders and between different cultures.	Adapted The original criterion can be adapted to the specific context of security networks, referring to the different actors that are part of the security community (experts, policy makers, technology provides, etc., people).
Reinforcement/valorising of local resources Empowering/enhancing local resources denotes a design promoting and favouring systems that regenerate and empower local economies.	Included The criterion is designed for products, processes and services and can be applied as-is in the context of the security network.
	Integrated Raise the security level of citizens <sup>12</sup> Integrated Increase resilience of society <sup>13</sup>

#### 2.1.2.4 The economic dimension - Profit

Referring to the three dimensions of sustainability model (represented through the Venn diagram), the economic sustainability is obtained by uniquely verifying the economic feasibility of an environmentally and socio-ethically sustainable service.

Three main strategies could be drawn regarding this dimension:

• The **internalisation of costs**, embedding in the cost of the resource all direct and indirect costs<sup>14</sup>, in order to encourage the minimisation of environmental impacts.

Report%20on%20Key%20Performance%20Indicators%20for%20a%20successful%20CBRN%20network.pdf

Action Plan to enhance preparedness against chemical, biological, radiological and nuclear security risks Brussels, 18.10.2017 COM(2017) 610 final http://encircle-cbrn.eu/wp-content/uploads/2017/04/CELEX\_52017DC0610\_EN\_TXT.pdf

<sup>&</sup>lt;sup>12</sup> eNOTICE D2.4 – Report on Key Performance Indicators for a successful CBRN Network. Available on line at: https://www.h2020-enotice.eu/documents/eNOTICE-WP2-VESTA-D2.4-

<sup>&</sup>lt;sup>14</sup> Nowadays, in industrialised countries many natural resources have low costs which do not correspond to the cost of their actual use. To give an example, the erosion, the loss in biodiversity and other negative effects connected to the removal of wood from tropical forests, are not taken into account in the purchasing price but are a cost for society.



- The **transitions towards sustainable solutions**, i.e. transitions regarding interconnection, globalisation and localisation, information, services, etc. (for example exploiting the dematerialisation potential of new ICT and e-mail systems with respect to the traditional postal system.)
- The **promotion and enhancement of promising economic model**s even if they are currently with niche market value (such as Distributed Economies).

For the economic dimension, a set of criteria have been developed for a generic PSS design from Vezzoli et al. (reported in table 3). Here, in the right column of table 3, the evaluation of which of these criteria can be adopted for the case of security network is provided. On the base of the necessary integrations and adaptations listed, a set of dedicated criteria have been developed (table 4) for the purpose of the definition of a framework for a sustainable security network.

Table 3 Economic dimension criteria for PSS and for Sustainable Security Network framework

Economic criteria		
PSS design (Vezzoli et al.)	Relevance for Security Network	
Market position and competitiveness Market Positioning regards to the ability to set up the image or identity of a brand or product. Competitiveness regards the capacity to influence consumer perception regarding a brand or product relative to competitors. objective of market positioning is that consumers perceive it in a certain way.	Adapted The part of the original criterion concerning "market positioning" can be adapted to the specific context of security networks, since every profit or non-profit activity benefits from a good positioning and brand awareness. Otherwise, the part relating to competitiveness that is closely linked to profit activities cannot be applied.	
Profitability/added value for business Profitability determines whether a business stays in business.	Included The criterion can be included as-is in the context of the security network. In fact, for activities that do not receive public funding, this criterion is relevant whether it is considering profit activities or a non-profit activity, because it concerns the self-sustainability of the activity.	
Added value for clients Adding value regards the capability to makes a product or a service more appealing to customers.  Long-term business development Business development entails tasks and processes to develop and implement long-	Included ♥  The criterion is designed for products, processes and services and can be applied as-is in the context of the security network.  Included ♥  The original criterion can be adapted to the specific context of security networks, referring to self-sustainability rather than business.	



term growth opportunities within and between organizations <sup>15</sup>	
Partnership/cooperation	Included ♥ The criterion is designed for products,
	processes and services and can be applied as-is in the context of the security network, whether it is considering profit activities or a non-profit activity.
Macro-economic effect	Discarded
"Macro-economic effects" regards the	This criterion is discarded, in fact, however
activities and measures capable to produce	large the effects of a security network may
consequences variables like	be, it is unlikely that they will have
unemployment, gross domestic product	macroeconomic effects.
(GDP) and inflation.	

Once identified what criteria have to be considered when designing a sustainable security network, it can now be described more in detail (table 4), what issues are addressed by each criteria.

Table 4 Sustainability criteria for a sustainable security network

Set of sustainability criteria for a sustainable security network	
People	
1. Improvement of employment/working	Improvement of employment/working
conditions	conditions relates with a network designed to promote and enhance job security, <b>health and</b>
	safety at work, adequate working hours, fair
	wages, and conditions enhancing the
	satisfaction, motivation and participation of the
	employees (or members of the network).
2. Justice and equity on the part of	Equity and justice in relation to a network
stakeholders	stakeholders refers to design promoting and
stakenolders	enhancing fair and just relations: within the
	partnerships, upstream, downstream and in the
	community where the offer takes place.

<sup>&</sup>lt;sup>15</sup> Compare: Houterman, Joyce; Blok, Vincent; Omta, Onno (2014). "Venture capital financing of technoentrepreneurial start-ups: drivers and barriers for investments in research-based spin-offs in the Dutch medical life sciences industry". In Therin, Francois. Handbook of Research on Techno-Entrepreneurship: How Technology and Entrepreneurship are Shaping the Development of Industries and Companies. Elgar reference collection (2 ed.). Edward Elgar Publishing. p. 169. ISBN 9781781951828. Retrieved 2015-07-23. <--Business development (BD) involves all activities t??? \* developing products and technologies so that they can be commercialized, building relationships with potential partners



3.	Fostering and integration of the weak	"Favoring and integrating the weaker and marginalised" criterion entails with a network
	and marginalised	design that favors (in order to integrate) people such as children, the elderly, the differently
		abled, the unemployed, the illiterate or any other
		minority or marginalised social group. Referring
		to this type of network, an example of
		application of this criterion could be the
		development of procedures dedicated to
		emergency assistance for disadvantaged or
		disabled people.
4.	Improvement of security community	This criterion denotes a network design that
	cohesion	facilitate security community members (experts,
		policy makers, technology provides, etc.,
_	D: 6 (/ 1 :: 6 1 1	people) cohesion and cooperation.
٥.	Reinforcement/valorising of local	Empowering/enhancing local resources denotes
	resources	a design promoting and favouring systems that regenerate and empower local economies.
6	Raise the security level of citizens	This criterion relates to the possibility to
0.	Raise the security level of effizens	increase security through the network favouring
		better preparedness of the responders, and the
		development of better tools and equipment to
		prevent and face a security threat.
7.	Increase resilience of the population	This criterion refers to the broader action of
		building a more resilient society by enhancing
		preparedness and response in the framework of
		security.
	anet	
1.	Life optimization	A network with a long lifespan, with otherwise
		similar functions to one with short lifespan, will
		generally secure a lower impact on the
		environment. A well-designed service will be durable or easily modifiable and will have less
		impact in terms of cost and energy consumption.
2.	Reduction in transport/distribution	The transportation/distribution reduction is
	F-11-1 2/20170 4/1011	connected to a well-designed network
		stakeholders' interactions, which leads to avoid
		unnecessary movement of people through the
		use of IT instruments such as tele conferences.
3.	Reduction in resources	The criterion "reduction of resources" denotes
		that the stakeholders' interactions of a network
		have been designed to reduce the resources
		(energy, materials, etc.) used by all services and
<u> </u>	***	activities of the network.
4.	Waste minimisation/valorisation of	The "Waste minimisation/valorisation" refers to
	resources	the design for network stakeholders'
		interactions and activities to increase the total
		amount of the network's recycling, energy



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#### 2.2 Sustainability planning approach

The concept of sustainability is also closely linked to the time parameter, so it is worth mentioning a further definition that underlines this relation, Sustainability is "the conscious and proactive use of methods that do not harm people, planet or profit while also leaving a positive impact. The processes used to achieve sustainability must be reliable, replicable and measurable; outcomes must be confirmable, especially by outside scrutiny. Sustainability covers all three times frame: rectifying past mistakes; reducing or eliminating current problems; building legacies for future generations. It is a human-driven process"<sup>16</sup>.

A sustainability plan is a roadmap for achieving long-term goals and documents strategies to continue successful programs, activities, and partnerships.

Having a written formal strategy that network members can follow has been found to be very important for networks' survival once initial funding has run out.<sup>17</sup>

One interesting example of sustainability planning applied to networks, that provides general rules to achieve the goal of self-sustainability, can be found looking at the work performed by the CDC, the U.S. Center for Disease Control and Prevention, in the framework of the Health Community Movement, which can be seen as a network of networks.<sup>18</sup>

Here, generic principles and practical guidelines for the development of a sustainability plan are provided.

A good communication strategy is key to sustainability. Therefore, one **suggestion** when preparing the sustainability plan, is to create either (1) a full version of the document, and (2) a brief executive summary, or overview, to share with outside parties (community stakeholders, decision makers...) <sup>19</sup>.

The summary should provide in just a few pages, a snapshot of:

(a) the state-of-the-art of the sustainability-planning process,

<sup>&</sup>lt;sup>16</sup> Cecilia Wandiga: "Defining Sustainability: A Process and Strategy Focus" October 2013. Available on line at: https://www.sustainablebrands.com/news\_and\_views/communications/defining-sustainability-process-strategy-focus

<sup>&</sup>lt;sup>17</sup> Importance of Sustainability Planning for Networks and Coalitions, Rural Health Information Hub. Available on line at: https://www.ruralhealthinfo.org/toolkits/networks/6/importance-of-sustainability

A sustainability planning guide for healthy Communities, Center for Disease Control and Prevention. Available on line at: https://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/pdf/sustainability\_guide.pdf University of Kansas, Work Group for Community Health and Development. (2010b). Understanding non-profit status and tax exemption. In Managing finances. Available on line at: http://ctb.ku.edu/en/tablecontents/section\_1308.htm



- (b) which are the goals set and how the community can help reaching them,
- (c) what is needed from potential funders and collaborators in order to achieve the sustainability goals.

(A template for the elaboration of the executive summary for the sustainability planning of eNOTICE is provided Annex 2 to the eNOTICE sustainability plan based on the KPI for a successful network.)

Another important source of reference can be found in the document "The Dynamics of Sustainability, A primer for Rural Health Organizations"<sup>20</sup> by the U.S. Department of Health and Human Services Health Resources and Services Administration.

From this report, four categories of dynamics appear to be essential to sustainability, (also in line with what has been found in D2.4 for the security networks):

- The **WHO** dynamic is related primarily to leadership style, mindset, influence, and relationships and involves selecting the partners that are necessary to let the program initiative succeed. In this regard, collaborators ideally represent the operative agencies and organizations, have leverage to effect the change(s) needed, and are in a position to make commitments of time and resources to implement and sustain the efforts of the consortium or network over time.
- The **WHAT** dynamic is related to the relevance, practicality and value of the program and the impact of program selection and design on sustainability. The relative "favorability" of this influence is determined by the extent to which programs or activities are aligned with any or all of the following factors: (i) community need, (ii) the partners' ability to address the need over the long term, (iii) the real or perceived value created by the program or services.
- The **WHY** dynamic, i.e. the motivation of working together, represents one of the elements that affects sustainability the most and therefore has a major long-term impact. A vision may be short- or long-term, broadly or narrowly defined, held by one organization or leader or shared among partners, be nebulous or clearly articulated. All of these characteristics appear to influence outcomes at the community level, including the extent to which programs and coalitions are sustained.
- The **HOW** dynamic refers to the ways in which a plan is put into action, including the strategies employed, the capacity built, and the documentation and communication of

<sup>&</sup>lt;sup>20</sup> The Dynamics of Sustainbility, A primer for Rural Health Organizations, U.S. Department of Health and Human Services Health Resources and Services Administration. (2012). Available on line at: https://www.ruralhealthinfo.org/assets/1211-4984/dynamics-of-sustainability.pdf



impact and value. An important concept related to the "how" dynamic is "beginning with the end in mind," which helps build programs into or as a part of existing infrastructure or organizations. The logic and desire to build upon assets in the system helps minimize short-term costs and anticipate the need for sustaining resources, for personnel and overhead.

This WHO, WHAT, WHERE and HOW approach was also taken into account for the elaboration of the D2.4 KPI-based framework and is still visible in the final KPI-list.

These dynamics should be kept into consideration (and adapted to each different case study) when elaborating the sustainability plan of an initiative, being it the establishment of a community or a network.

If the scope of a security network, whose creation has been funded by the EU or by other entities, is to survive after the termination of the project (long-term perspective), a strategy for self-sustainability must be elaborated during the project and, possibly, it should be tested and re-evaluated for the duration of the grant, to be able to apply corrective measures to guarantee self-sustainability before it is too late.

The D2.4 KPI-based framework is an empirical and referenced proof of what can make a security network standing on its own legs. The next step is thinking and planning in a sustainable way, which means to take a step back to have a broader vision and be able to consider each action under the filtered light of sustainability, i.e., considering the impact that each decision will have on people, profit and planet. As a matter of fact, it is now widely accepted that the sustainability criteria (based on the impact on people, profit and planet), can be equally applied to the production of a product, as well as to the provision of a service, and to both of them. The Product services systems (PSS) provide a promising opportunity for industries and service providers to design and develop prosper solutions to fulfil consumer needs embedding an eco-friendly approach. By shifting from traditional offer, comprised of physical products, to an integrated solution of product and services, it is assumed that PSS may reduce the environmental impact and provide benefits for the PSS provider and the consumer in economic and social ways.

As described in the previous paragraph, the sustainability criteria developed for the PSS were used as the basis for obtaining a set of criteria that takes into account the specific characteristics of the security networks.



So, eventually, providing a service in a sustainable way, by checking PSS criteria, implies that a given functionality is delivered to the customer<sup>21</sup> in a way that reduces the impact on the environment and has a positive impact on society<sup>22</sup>. In the same way the sustainability criteria for sustainability network are used in order to produce an environmental impact reduction and provide benefits for the security network members in economic and social ways.

This may require additional effort at the beginning of the process but is also the best way to create a network that is fully integrated at the social, economic and environmental level. In the long term, this will be a key to guarantee sustainability to the security network.

Besides, a clear understanding of the impact of the network on people, profit and planet, will help the network to take better decisions when monitoring its status and planning new actions, and to have a more valuable and effective communication towards its members and its stakeholders, providing, for instance, further elements to push new members to join, and new opportunities for incomes, which are essential to self-sustainability of the security network.

# 2.3 Defining the framework and design a sustainable successful security network.

Several guidelines and templates are available to develop sustainability plans for networks and communities<sup>23</sup>,<sup>24</sup>, regardless of the fact that they are applied to specific case studies, they all share a common approach that is mainly constituted by:

- 1) Pre-planning steps and acquisition of background information
- 2) Define the framework, what is crucial for the sustainability of the specific item (in this case it will be a security network).
- 3) Write down an implementation plan composed of specific actions to be completed with a detailed description of what and how something should be done, when, and by who.
- 4) Plan checks of the implementation plan, which must be evaluated and refined periodically according to the results of specific (measurable) indicators.

<sup>&</sup>lt;sup>21</sup> In the framework of a sustainable security network, which can be either a profit or no-profit oriented initiative, reference should be made to members or participants instead of customers

<sup>&</sup>lt;sup>22</sup> Goedkoop M, Van Halen C, Te Riele H, Rommens P. Product Service Systems Ecological and Economic Basics. 1999 Mar p. 118.

<sup>&</sup>lt;sup>23</sup> Strengthening Non-profit. Available at: <a href="http://www.strengtheningnonprofits.org/">http://www.strengtheningnonprofits.org/</a>

<sup>&</sup>lt;sup>24</sup> A sustainability planning guide for healthy Communities, Center for Disease Control and Prevention. Available on line at: https://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/pdf/sustainability\_guide.pdf



The US National Resource Center, for instance, developed on-line step by step guides and resources for non-profit capacity building, including sustainability plans as a support tool for those interested in expanding the capacity of non-profit services, in the framework of the Compassion Capital Fund (CCF) grantees between 2002 and 2010<sup>25</sup>.

According to these guidelines, building a sustainability plan requires the completion of five steps (Figure 6).

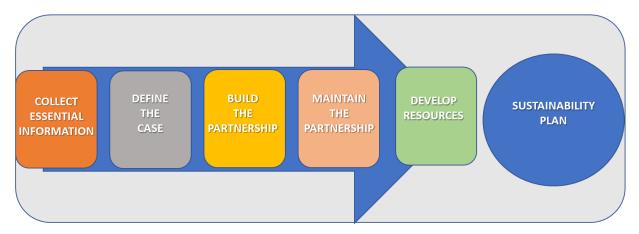


Figure 6 The five steps to create a sustainability plan for non-profit organizations

#### 1) Collect essential information

This is the preliminary step, which has to be accomplished when starting the process of creating a sustainability plan. Here, background information, needs and gaps are assessed.

The following aspects should be addressed at this stage:

- a. Define the main purpose of the organization (network), its mission and its vision;
- b. Identify the community needs and how the network responds to those needs;
- c. How is the organization positioned in relation to the community that it plans to serve;
- d. How many and what kinds of people, with what skills, are needed to run programs and services?

<sup>&</sup>lt;sup>25</sup> Strengthening Non-profit. Available at: <a href="http://www.strengtheningnonprofits.org/">http://www.strengtheningnonprofits.org/</a>



e. What organizations should the organization partner with directly in order to maximize the impact on the community?

#### 2) Define the case

This is a step-by-step process that requires to:

- a. Identify and define the problems addressed by the organization;
- b. Explain the purpose and a solution to the problem;
- c. Share the vision for the future of the organization and its activities;
- d. Define the support needed to accomplish the vision, and ask for and encourage that support.

#### 3) Build the partnership

Partnership is quite always a necessity, especially in the non-profit environment; key to sustainability is the possibility to:

- a. Partner with organizations that are compatible and will enhance the service offered;
- b. Have compatible mission and vision;
- c. Benefit from the partnership with the organization that is being developed;
- d. Outline key benefits for the partners;
- e. Develop strategic alliances with corporations and business.

#### 4) Maintain the partnership

A partnership can be:

- a. Transactional need based; originally formed to bring about a direct material gain for each member;
- b. Complementary fully independent, but share compatible missions and may have the same "clientele", and use each other partner as referral source;
- c. Collaborative partners work together on a wide scale, integrating one another daily.

It is essential to keep the partnership alive and dynamic; the scope of the partnership should evolve in response to organizational and environmental changes. Events like annual get-together can foster a sense of commitment and mutual identity.



#### 5) Develop resources

The following actions usually support the sustainability of a non-profit organization:

- a. Look for in-kind contributions;
- b. Recruit volunteers to cut staffing costs;
- c. Identify/develop donors with common interest;
- d. Seek grants to increase awareness on opportunities;
- e. Develop earned income strategies;
- f. Planned giving arrangements for long-term security;
- g. If necessary, implement endowment campaign.

This is a very useful, but generic approach. Below we propose a revised version of the 5-steps scheme (figure 7), adapted to the needs of the development of a security network.

Starting from the KPIs for a security network, which allow a guided collection of information to perform the background information (Step 1) and define the case (Step 2), then it is possible to define the initial version of the network conceptual framework, as presented in the following sections.

Subsequently, (referring to the revised 5-steps scheme), steps 3) "Build the partnership" and 5) "Develop resources" are carried out in parallel instead of in sequence. This choice has been made considering that both these crucial steps start from the "case definition" and their execution can benefit of their simultaneous development, since aspects regarding the partnership can influence the resource identification and *vice-versa*.

Thus, a sustainability plan can be defined, giving substance through "actions" to the KPIs included in the network conceptual framework, identifying the actions able to guarantee the self-sustainability of the network but also producing social and environmental benefits



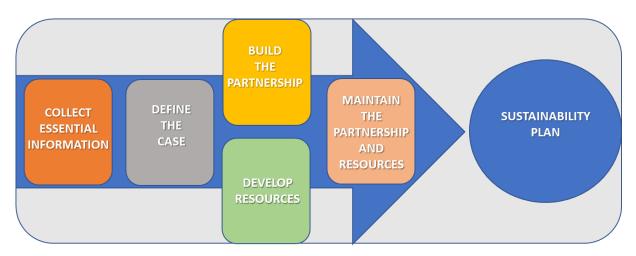


Figure 7 The five steps to create a sustainability plan for security network

# 2.4 Use of the KPIs to design the framework for a sustainable security network.

The KPIs from D2.4 represent the outcome of a comparative analysis of the elements that supported other networks to build a coherent vision and follow up on their progress, So, it is paramount to keep in full consideration all those elements when building a plan for the sustainability of security networks.

As explained in detail in D2.4, the network framework concerns aspects such as: mission and vision (objectives, scope, member profile, type of activities), leadership (added value and distinctive characteristics from/links and collaborations with other networks), management structure of the network (Management Board, Secretariat, Work groups, advisory group/forum), quality and security monitoring of the web-based platform, access rules and rights (full authorised vs registered users, etc.)), cost efficiency, the degree of formality (informal vs formal) and (de) centralisation, etc.

With this regard, the identification of the KPIs provides the framework that defines the case, which is a key phase of the design of a sustainability plan. In turn, this must be translated into concrete actions with an implementation plan, and recurrently verified through a check phase. To ensure a holistic approach that links the KPIs to a sustainability plan that considers Social (People), Economic (Profit), and Environmental (Planet) aspects, an approach for the design of a sustainability plan proposed by Doualle *et al.* is presented and integrated here.



Doualle *et al.* propose an approach that is based on the PSS design steps identified by Cavalieri *et al.*<sup>26</sup>), which are adapted from Doualle *et al.* and presented below in **table 5**:

Table 5 List of PSS design steps for the life cycle of a product-service system (In bold, the steps where sustainability can be integrated according to Doualle et al.)

PSS design steps <sup>21</sup>			
1 Requirement generation	Preliminary phases where an analysis of the		
2 Requirement identification	requirements of the PSS are defined taking		
3 Requirement analysis	into consideration the customer demands,		
	opportunities, value of the PSS.		
4 Concept generation and evaluation	Phases that include the creation of the		
(strategic level)	concept of the PSS, the definition of the PSS		
5 Concept development and	structure, the development of the use-case,		
evaluation	the identification of subsystems and their		
6 Embodiment design and evaluation	integration		
7 Detailed design	Phases that lead to the system design include		
8 Test	development and implementation of PSS		
9 Final design	design, realisation planning.		

Of these nine steps, phases from 1-3, can be seen as the acquisition of background information and the definition of the customers and their needs (which can be seen as the users of the security network, as well), whereas, steps 7-9 represent the last steps that defines in detail the product-service system (the level is that of the action/implementation plan) and here it can be too difficult to integrate the sustainability approach in the design of a sustainable PSS. Is therefore recommended by Doualle *et al.*, to address sustainability in steps 4, 5, and, 6 where we propose a correspondence between the steps identified by Cavalieri *et al.* and the framework for a sustainable security network (**table 6**).

<sup>&</sup>lt;sup>26</sup> Cavalieri S, Pezzotta G. Product–Service Systems Engineering: State of the art and research challenges. Comput Ind. 2012 May;63(4):278–88.



Table 6 Comparison between the 9 steps of the PSS design and the steps for a Sustainable Security Network design

PSS design steps	Sustainable Security Network design		
1 Requirement generation	Information gathering on KPIs such as		
2 Requirement identification	possible mission (including expected added		
3 Requirement analysis	value), scope (areas and type of activities),		
	member profile, activities, etc.		
4 Concept generation and evaluation	Choices and decisions from possible to		
(strategic level)	desired mission, scope, members, etc		
5 Concept development and	ensuring a coherent vision. The sustainability		
evaluation	check can be helpful in the process from possible to desired and decided.		
6 Embodiment design and evaluation			
7 Detailed design	Development of a realization/action plan to		
8 Test	be tested and evaluated <sup>27</sup>		
9 Final design			

Concerning a security network, we can consider steps 1, 2, 3 completed and expressed through the KPIs. Based on the integration of the previous sources (Doualle *et al.*, Cavalieri *et al.*, Vezzoli *et al.*,) and the KPIs, the following is a proposal of a framework for the design of a sustainable security network.

Furthermore, a scheme for the development of a realization/action plan will be integrated from the good example of the community sustainability plan of the Hamlet of Fort McPherson<sup>28</sup>.

# 2.5 Integrated methodology for the development of a framework and sustainability plan for security networks

The study on the KPIs provides all the inputs that are needed to elaborate a framework for a successful security network, that needs to be translated into objectives to be reached through specific actions (which must take into account the three aspects of sustainability), and should

<sup>&</sup>lt;sup>27</sup> Concerning the framework for a sustainable security network, and differently from what described by Doualle *et al.* it can be useful, at this stage, not to conclude the process with a final design, but to consider this step as the last point before a continuous improvement cycle.

<sup>&</sup>lt;sup>28</sup> Integrated Community Sustainability Plan for the Hamlet of Fort McPherson – 2010 to 2014 (2010). Available on line at: http://www.fortmcpherson.ca/documents/Fort%20McPherson%20ICSP%20FINAL%20lckd.pdf



provide measurable outcomes that can be used to monitor the status (quality) of the network, in order to:

- Be able to implement corrective measures to ensure the success and sustainability of the network,
- Put in place a sound communication strategy based on measurable indicators provides motivations to members stay in the network and provides further motivations for potential new network members.

In order to integrate sustainability in the framework of a security network, here we propose to introduce a "sustainability check" (table 7), based on the sustainability criteria adapted for security network) that will help focus the attention on sustainable aspects, defining the goals of the "concept generation" and the "concept development" phases of a security network.

## 2.6 How the sustainability check works

The sustainability check allows to verify if and in which way, decisions regarding the definition of the security network have an impact on the three dimensions of sustainability (PPP).

The sustainability check allows to identify, for each of the choices made in the three phases of Concept generation, concept development and embodiment design, the specific sustainability criterion impacted (sustainability criteria presented in table 4) and in what way this happens.

It has to be underlined that having an impact on all the criteria is not a goal of the sustainability check, In fact, there are no mandatory criteria; the sustainability check measures the level of sustainability of the network and the activities that characterize it, so it goes from zero sustainability, with 0 impacted criteria, to a high level of sustainability Maximum if all the criteria they are impacted.



#### Table 7 Sustainability Check template

After having answered the question on whether and how a given KPI have an impact on one or more of these criteria (1), the second step is to identify potential issues that may cause a negative impact on these criteria (2). The last step (3) is the elaboration of guiding principles to ensure that the plan is developed in a sustainable way.

SUSTAINABILITY CHECK					
People Criteria for the social-ethical dimension: 1. Improvement of employment/working conditions 2. Justice and equity on the part of stakeholders 3. Fostering and integration of the weak and marginalised 4. Improvement of security community cohesion 5. Reinforcement/valorising of local resources 6. Raise the security level of citizens 7. Increase resilience of Society		Explain how the presented decisions impact on the flagged sustainability criteria.			
Profit Criteria for the economic dimension: 1. Market position 2. Profitability/added value for businesses 3. Added value for members 4. Long-term business development 5. Partnership/cooperation		Explain how the presented decisions impact on the flagged sustainability criteria.			
Planet Criteria for the environmental dimension: 1. Life optimisation 2. Reduction in transport/distribution 3. Reduction in resources 4. Waste minimisation/valorisation of resources 5. Resource Renewability 6. Non-toxicity		Explain how the presented decisions impact on the flagged sustainability criteria.			



CONCEPTUAL FRAMEWORK FOR A SUSTAINABLE SECURITY NETWORK Strategic vision board								
	CONCEPT GENERATION	ON						
I. WHY the network was established:	Context & background							
Is the network established as a policy or regulation to fill a gap?	Is the network established as a policy or regulation based initiative, launched by public bodies, or as a spontaneous initiative from private actors to fill a gap?							
II. WHAT is the network doing - Conto	ent							
a. The network's mission: motivation and								
<b>Motivation of the members</b> – What need	does the network fulfil? What is the	added value for the memb	pers?					
<b>Role of the network</b> – What are the purpo	oses and goals of the network, reflec	cted in a clear mission and	l vision statem	ent and how does the				
network differ from the activities of its me								
b. The network's scope: areas and type of	activities*							
The scope defines and delimitates the field	(s) or discipline(s) covered by the n	etwork and the appropria	e types of acti	ivities.				
Area of activities - What is the area activ	ities of the network (broad and gene	eral or specific and limited	)? e.g. civil pi	rotection, emergency				
planning or response? Natural, manmade				·				
<b>Type of activities -</b> What are the activities		nd communication, sharin	g and dissemi	nation of best				
practices, providing a forum for peers to n	· ·			v				
* For a more comprehensive list of options please refer t			for a successfu	l CBRN network				
(2018)", paragraph 3.2.2. Available on line at: https://ww		ntml						
<u>Input from (list the sources of information for the</u>	Input from (list the sources of information for the Concept generation):							
		T	T					
1.(e.g. Work program)	2.(e.g. national, international Policy)	3.(e.g. previous actions)	4. ()					
SUSTAINA	ABILITY CHECK		Performed	☐ Not performed				
If not performed explain why (and if it will be performed at a later stage, after which decision/action):								



SUSTAINABILITY CHECK					
People		Explain how the presented decisions impact on the flagged sustainability			
Criteria for the social-ethical dimension:		criteria.			
1. Improvement of employment/working conditions					
2. Justice and equity on the part of stakeholders					
3. Fostering and integration of the weak and marginalised					
4. Improvement of security community cohesion					
5. Reinforcement/valorising of local resources					
6. Raise the security level of citizens					
7. Increase resilience of Society					
Profit		Explain how the presented decisions impact on the flagged sustainability			
Criteria for the economic dimension:		criteria.			
1. Market position					
2. Profitability/added value for businesses					
3. Added value for members					
4. Long-term business development					
5. Partnership/cooperation					
Planet		Explain how the presented decisions impact on the flagged sustainability			
Criteria for the environmental dimension:		criteria.			
1. Life optimisation					
2. Reduction in transport/distribution					
3. Reduction in resources					
4. Waste minimisation/valorisation of resources					
5. Resource Renewability					
6. Non-toxicity					



	CONCEPT DEVELOPMENT					
III. WHO & WHERE – Membership	III. WHO & WHERE – Membership					
a. Member profile*						
Who are the members of the network? Monodiscip	linary professionals (e.g. only fire	fighters or police)? Regio	onal and thema	tic professionals (e.g.		
natural risk in South Europe)? Closed to core men	nbers or open to other professiona	ls? Different categories w	rith different us	er and access rights?		
Free membership or not? Open for countries, orgo	unizations, individual experts? etc.					
b. Geographical scope*						
What is the geographical scope of the network, wh	o is accepted as member? Nationa	l? EU? Regional? Interna	ational?			
c. Leadership*						
How is leadership ensured? Has avoidance of elite	e-thinking been considered?					
* For a more comprehensive list of options please refer to		Key Performance Indicators	s for a successful	CBRN network (2018)",		
paragraph 3.2.2. Available on line at: https://www.h2020	-enotice.eu/static/publications.html					
<u>Input from (list the sources of information for the Concept generation)</u> :						
1.(e.g. Work program) 2.(e.g. national, international Policy) 3.(e.g. previous actions) 4. ()						
Trong trong programs	<u> </u>	<u> </u>				
SUSTAINA	SUSTAINABILITY CHECK   Performed Not performed					
If not performed explain why (and if it will be performed at a later stage, after which decision/action):						



IV	HOW the network is organized – Institutional aspects
a.	Informal vs formal character*
	Is this an informal network, with little or no rules or rules determined at ad hoc basis? Is this a semi-formal network with a coordinating
	body and a secretariat, financially guaranteed and a minimum of rules and procedures on membership, participation in activities? Ils th
	a formal network, coordinated by an autonomous legal entity with a governance structure, work plan with deadlines and accountabilit
	etc.?
b.	Type of the network*
	Does the network mainly aim at exchange of information and communication between the members or is it a transactional network with
	project working and own developments?
c.	Decision making and accountability*
	What is the governance structure of the network? Is there a governing or management board with decision making powers and accountability
	for the produced results, an Advisory Group, composed of stakeholders or experts and a Secretariat, which provides assistance and support
	nore comprehensive list of options please refer to eNOTICE deliverable D2.4 "Report on Key Performance Indicators for a successful CBRN network (2018) ph 3.2.2. Available on line at: https://www.h2020-enotice.eu/static/publications.html
Input f	om (list the sources of information for the Concept Development):
<u>1.(e.</u>	. Work program) 2.(e.g. national, international Policy) 3.(e.g. previous actions) 4. ()
	SUSTAINABILITY CHECK  Performed Not performed
If not j	erformed explain why (and if it will be performed at a later stage, after which decision/action):



V. HOW the network is organized- Network	work architecture and relations					
Density of the members relations*						
Do all members interact with all others or are doe	es the network have levels, filters or	selections?				
Centrality of the members' relations*						
Is the network organized in a centralized way, top	down or bottom up or a combination	on of both? Or are thei	ir intermediate lev	els, e.g. with working		
groups, ambassadors or contact points?						
* For a more comprehensive list of options please refer to paragraph 3.2.2. Available on line at: https://www.h2020	<u>-</u>	Key Performance Indica	tors for a successful	CBRN network (2018)",		
Input from (list the sources of information for the Concept Development):						
1.(e.g. Work program) 2.(e.g. national, international Policy) 3.(e.g. previous actions) 4. ()						
SUSTAINABILITY CHECK  Performed Not performed						
If not performed explain why (and if it will be performed at a later stage, after which decision/action):						

# VI. HOW and WHEN the network is organized - Sustainability a. Quality management, incl. Continuous improvement & Result oriented approach



	Result oriented approach*
	Does the network have a work plan with short term, middle and long-term goals and expected results and a policy to make quick wins and
	long-term successes visible?
b.	Supporting instruments*
	Does the network have supporting instruments for information and communication such as publications, annual meetings, a web based
	platform and appropriate functionalities, etc.?
c.	Financial viability*
	What is the financial strategy for the network? How are financial resources ensured? Funding, membership fees, sponsorship, revenues
	generated by the network own activities, etc.
d.	Duration of the network and sustainability strategy*
	When did the network start? What is the intended duration (fixed, indefinite)? Does the network have a sustainability strategy coherent with
	the duration?
	more comprehensive list of options please refer to eNOTICE deliverable D2.4 "Report on Key Performance Indicators for a successful CBRN network (2018)", eaph 3.2.2. Available on line at: https://www.h2020-enotice.eu/static/publications.html
Input	from (list the sources of information for the Concept Generation):
<u>1.(e</u>	.g. Work program) 2.(e.g. national, international Policy) 3.(e.g. previous actions) 4. ()
	SUSTAINABILITY CHECK  Performed Not performed
If not	performed explain why (and if it will be performed at a later stage, after which decision/action):



# 2.7 Sustainability plan - Strategy Details

The sustainability plan template below, is intended as an operational tool, positioned at a lower hierarchy level, with respect to the conceptual framework, that allows, for each KPI as primarily defined in the network conceptual framework, to identify specific actions (strategy details) to start building the network and to keep it alive and sustainable.

For each KPI that defines the framework of a successful security network, decisions have to be discussed and agreed, and be translated into short, medium, or long-term strategies.

The strategies are defined by a *time frame*, that indicates the duration of the strategy; *budget* related to that strategy; *performance measure*, that allows to set measurable indicators to evaluate the effectiveness of the strategy and be able to perform a check and implement corrective actions on the strategy itself or at the higher hierarchical level; finally, the *target* i.e. on what target group the strategy has an impact on.

Choices and decisions that led to the definition of the strategies, need to be turned into concrete actions which are defined by: the people responsible to conduct them (*who*), with a given practical approach (*how*), in a provided time frame (*when*), identifying the relevance of the action with respect to the objective of the KPI (*why*) and with an estimate of the economic request for that action (*cost*).

Below, the generic scheme of the template, that has to be linked with each single KPI defining the security network framework. An extensive example of the application of such template is provided in Chapter 4 where the eNOTICE sustainability plan is developed.



Strateg	y details on: (indicate her	e the reference to the speci	fic KPI from the conceptual	framework)					
(To tur KPIs, t Dependence	List of proposals to be discussed To turn KPIs into concrete actions, the members of the network, that have decision making will have to formulate proposals referred to the different KPIs, this space provides. Depending on the phase of the development of the network, and on the specific KPI, proposals will concern more strategic or operational aspects.)  Proposal A Proposal B								
(for ed	Decisions on the proposal  (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Taken  To be discussed								
Propo	Proposal A  - Decision A.1  - Decision n								
Strateg	y on decision A.1								
For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A.1									
	Time Frame Budget Capital Budget - operating Performance Measure Target								
	Indicative time frame			Set measu	ırable criteria	Which	entity	is	
				accordingly	y	targeted			
Strateg	y details on strategy A.1	1	1	•					

For e	For each strategy define the details to implement it at the practical level.							
	WHO HOW WHEN WHY				COST			
	Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the			
	part of the process	will be conducted	activity	with respect to the	action			
				objective				



# **Chapter 3**

In this chapter the conceptual framework developed and presented in chapter 2, is applied to the case study of eNOTICE network, to elaborate a vision and to develop an implementation plan.

# 3.1 Sustainability dimensions for eNOTICE

In this paragraph the three dimensions of sustainability (PPP – People, Planet, Profit), presented in the first chapter, will be developed for the specific case of the eNOTICE network.

This work aims to facilitate the next phase of defining the conceptual sustainable framework of the network, through:

- 1. A clarification on the hierarchy among the three dimensions;
- 2. The definition of the field of actions and possible strategies to ensure the sustainability of the network in the three dimensions.

#### Hieararchy

Regarding point 1, as previously mentioned by definition security networks are activities that primarily have a social impact, since they are dedicated to improving the security of people. This does not mean that the Planet and Profit dimensions can be neglected but will be dealt with in a functional way to achieve the overall goals of the network, which are predominantly social.

With regard to point 2, this will be addressed in detail in the following paragraphs.

#### 3.1.1. eNOTICE Social dimension of sustainability

With regards to the social sustainability of eNOTICE, considering the CBRN TCs network role and purpose: "strengthen European preparedness, resilience and incident response to CBRN attacks and emerging threats", it is fully in line with what was expressed in the previous paragraph "The socioethical dimension (People)" and it is also obvious the positive impact that eNOTICE aspires to have on the community well-being and in the achievement of security.

Thus, the project's social sustainability will be achieved, if eNOTICE network will continue over time, to pursue its objectives (taking into consideration the connected ethical issues).

This could be more developed as the expected impact and outcome of the network is inherently social through community building in order to avoid silo thinking (academics versus practitioners versus industry), common initiatives that will enhance common understanding – supported by the visibility of the TC on the website, more easily to be found by other stakeholders and supported by the possibility to join a practical training or exercise – ultimately the goal is better preparedness of first eNOTICE D2.5 – Framework and Sustainability plan for the European CBRN Training Centres network



responders, the development of needs-driven innovative tools, and by consequence a safer, securer and more resilient society.

In order to carry out an accurate and constant monitoring of the social dimension of sustainability, each of the qualifying aspects of the network (expressed through the KPIs included in the conceptual framework) will be verified according to the 7 social sustainability criteria for security network indicated in table 4, chapter 2.

#### 3.1.2. eNOTICE Environmental dimension of sustainability

Considering the environmental dimension, it is possible to observe the eNOTICE network, as it has been outlined, being oriented to the realization of a virtual service (dematerialization scenario) and to the organization of Joint Activities can lower the footprint if based on the constant optimization of resources (this is a valid principle also from the point of view of economic sustainability) and if in the organization of the JAs the principles of green procurement, this is to choose environmentally friendly goods, services and works is at least considered, preferably decided. (The basic principles of green procurement are provided in Annex 1).

The ultimate goal of all eNOTICE activities is better preparedness, which by definition also includes more efficient first response in order to limit the damaging impact of CBRN events, including the reduction of environmental impact.

Moreover, one of the activities considered for Joint Activities is simulation and serious gaming, as a tool to be considered as a complement or replacement of field and table top exercises, thus reducing the environmental impact of substances used in real case situations (no water to extinguish fire, no substances to neutralize agents, etc.)

Furthermore, this pursuit of eNOTICE project/network objectives can bring itself environmental advantages in terms of:

- Diffusion at European level of advanced techniques for the mitigation of CBRN risks and improvement of decontamination efficiency.
- Optimization of movement of transfers of the end users looking for a training center, with a consequent reduction of polluting emissions.

In order to carry out an accurate and constant monitoring of the environmental dimension of sustainability, each of the qualifying aspects of the network (expressed through the KPIs included in the conceptual framework) will be verified according to the 6 environmental sustainability criteria for security network indicated in table 4, chapter 2.



#### 3.1.3. eNOTICE Economic dimension of sustainability

Regarding the economic sustainability of the network is, by definition it represented by "its ability to support a defined level of social and environmentally sustainable services indefinitely".

More precisely, the challenge will be to make sure that the network evolves towards a self-sustainable network by the end of the project (2022), guaranteeing services of interest to the CBRNe community. In order to carry out an accurate and constant monitoring of the economic dimension of sustainability, each of the qualifying aspects of the network (expressed through the KPIs included in the conceptual framework) will be verified according to the 5 economic criteria for security network indicated in table 4, chapter 2.

The sharing of resources, the attention to alternative methods for training and training (simulation, serious game) as well as the optimization of the preparation and execution of field exercises, represent constant focus of the project and of the future network. In this way the activities of the network contribute to a better allocation of resources and through efficient working methods to a reduction of costs.

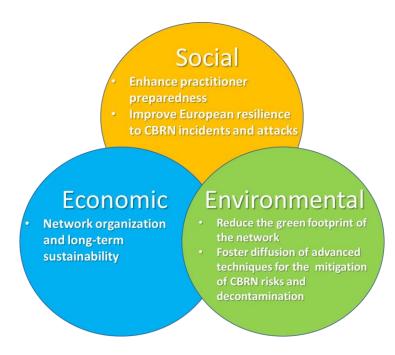


Figure 8 eNOTICE economic dimension of sustainability



# 3.2. eNOTICE conceptual framework and sustainability plan

The elaboration of the sustainability plan through the network conceptual framework, will allow during the next 4 years to make sound and coherent decisions in the first place and afterwards to monitor, change and improve the characterizing aspects of the network, determined on the base of the information gathered in previous tasks, on the reference context and on network actors, through the recognition of similar networks, best practices, lesson learnt and the discussion with the project partners. These aspects, organized following the conceptual framework for sustainable network, will serve as starting point to the development of a dynamic sustainability plan that will be tailored on eNOTICE as the project goes on and collects information and feedbacks from the actors and the activities that build the framework of the network.

# 3.2.1. Correlation between findings of WP2 and development of sustainability plans for noprofit organization

Figure 9 shows the correlation between the activities conducted so far in eNOTICE, and the integrated approach for non-profit organization sustainability planning, and the correlation between these two elements.

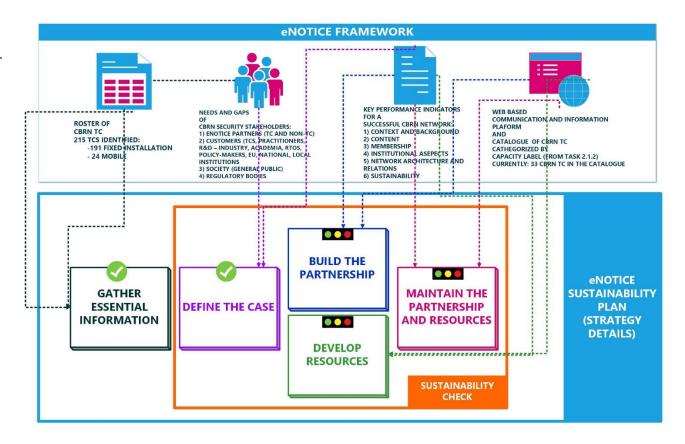


Figure 9 Integration of findings from WP2 tasks and actions for the definition of a sustainability plan for non-profit organization.



The actions marked with a traffic light represent the aspects that requires the evaluation of possible actions to be tested and evaluated during the project by the eNOTICE Consortium, to propose a strategy for the long-term sustainability of the network.

The mapping activities and the creation of a Roster of CBRN TC (which also provides preliminary indications on the growth potential of the network) as well as the creation of a Catalogue of CBRN TC (deliverable D2.1), contributed to **gather essential information** for the creation of the network conceptual framework.

The eNOTICE conceptual framework elaboration coincident with the "Case Definition" phase, was performed through the use of KPIs (deliverable D2.4) and further complemented by the analysis of needs and gaps of CBRN stakeholders (deliverable D 2.3), that helped to identify future network members and their expectation for eNOTICE which further supported the identified mission, vision and goals of the project,

The use of specific capacity label for the CBRN TC and of a web search function (developed in deliverable D 2.2), is a first step toward a clear, effective, communication strategy that aims at boosting the visibility of CBRN TC towards the stakeholders. In particular, this will affect the creation and maintenance of partnership.

Part of the communication strategy is also the implementation of a web-based Communication and Information platform for which, a sustainability plan should consider its economic sustainability as well as the rules of engagement with the members of the network willing to use the platform either as CBRN TC or as practitioner, RDI or other stakeholders. In fact, the web platform has an impact on the **development of resources** as it can create a space for sponsorships from industries and a tool to share information on the success of the network that can have an impact on the ability of the network to access funding opportunities.

eNOTICE has also defined a customized methodology for the project quality monitoring that, having been tailored on a security networking project, can be furtherly fine-tuned, in order to reply to the **adaptability** needs of a medium/long term sustainable CBRN TC network.

Starting from now, a proposal of long-term vision and sustainability plan must be elaborated taking into account that a continuous update and revision of the sustainability plan must be performed. Therefore, after having evaluated the correspondence of the conceptual framework for sustainable security network, to the elements that allow the sustainability of non-profit organization as reviewed for security network (Figure 7), this work takes this legacy and presents examples and proposals of concrete actions that the members of the eNOTICE consortium have to evaluate, put in place, and



periodically revise, in order to use the remaining four years of the project, to create a sound, effective sustainability plan for a CBRN TC network.



# 3.3. eNOTICE Conceptual Framework for a sustainable security network

#### **eNOTICE CONCEPTUAL FRAMEWORK FOR A SUSTAINABLE SECURITY NETWORK**

#### **CONCEPT GENERATION**

#### I. WHY the network was established: Context & background

The establishment of a European network of CBRN Training Centres is one of the objectives of the eNOTICE project, a Horizon2020, GM-SEC21c project.

The General Matters – GM projects are introduced in the H2020 Work program since 2016, in order to dedicate funding to the creation of practitioners' networks.

The underlying objective of the European Commission for the GM calls is to strengthen the capacity of practitioners to be more structurally involved in H2020 research projects, in order to increase the needs-driven development of innovative tools and technologies and to increase the uptake of research results by first responders.

The key idea behind the eNOTICE project is the specific role CBRN, and by extension all multidisciplinary, training centres can play because of their intermediary position between practitioners and other security stakeholders.

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report	D5.2 – progress report	

#### II. WHAT is the network doing – Content

a. The network's mission: motivation and role

Motivation of the members and role of the network



<u>The network's goal</u> is to build a bridge between practitioners and researchers, developers and industry in order to enhance CBRN preparedness through a better uptake of innovative solutions for first responders, because of needs-driven developments<sup>29</sup>.

This will be done by

- 1) creating more visibility for the CBRN Training Centres TCs and
- 2) by promoting their activities and unique characteristics, which are: the thematic expertise for CBRN risks and their infrastructure for field and table top exercises, simulation and serious gaming, which can be used for the identification of end user requirements, for technical testing, validation and demonstration of final research results.

<u>The motivation</u> for CBRN TCs to join the network is the visibility of their organization and promotion of their activities, provided by the network, as well as access to relevant best practices.

The motivation for other security stakeholders to join the network is the access to practitioners, relevant exercises for testing through the CBRN TCs and relevant best practices.

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report	D5.2 – progress report	

# b. The network's scope: areas and type of activities

#### Area of activities and type of activities

The primary area of activities is the area of CBRN risks, and by extension all natural, accidental and intentional risks, that require mono- or multidisciplinary interventions of first responders. These are: fire fighters, police, medical services, military and other specialized forces.

The main activities of the network are:

- Creating **visibility** for the Centres by making information on their capabilities (thematic expertise and infrastructure or facilities) available on the eNOTICE website;

<sup>&</sup>lt;sup>29</sup> eNOTICE Description of Action



- Easy access for security stakeholders to find a CBRN TC, through a search function on the website, supported by a Capacity label;
- Promotion of the activities of the CBRN Training Centres by displaying their calendar of activities on the eNOTICE website;
- Promotion of so-called **Joint Activities**, these are table tops, field exercises, simulations and serious gaming, organized by the CBRN Training Centre as part of their annual program of practical training from practitioners, opened up for participation of national, EU or industrial research projects for the identification of end user needs, technical testing, validation and demonstration.
- Exchange, sharing and development of best practices, such as Guidelines, Templates and Checklists for the organization of table tops, field exercises, simulations and serious gaming, either as a stand-alone activity or as a joint activity; recommendations to optimize investments by pooling and sharing resources; etc.

#### Sources:

H2020 program	DoA	Context and mandatory lines of action in the GM- SEC21 call	1 1
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report	D5.2 – progress report	

# SUSTAINABILITY CHECK Performed Not performed

*If not performed explain why (and if it will be performed at a later stage, after which decision/action):* 



SUSTAINABILITY CHECK					
People		Explain how the presented decisions impact on the flagged sustainability criteria.			
Criteria for the social-ethical dimension:					
1. Improvement of employment/working conditions		The network aims to promote and facilitate the access of practioners to training activities			
2. Justice and equity on the part of stakeholders					
3. Fostering and integration of the weak and marginalised					
4. Improvement of security community cohesion		The network promotes the interaction of components from the CBRNe community.			
5. Reinforcement/valorising of local resources		eNOTICE network can help national TCs to become known at European level and beyond			
6. Raise the security level of citizens		By promoting practitioner training, you have safer citizens			
7. Increase resilience of Society		The network activity will produce a general increase in the resilience of the company			
Profit		Explain how the presented decisions impact on the flagged sustainability criteria.			
Criteria for the economic dimension:					
1. Market position		the network offers new services avoiding overlaps with existing networks			
2. Profitability/added value for businesses					
3. Added value for members		Amongst the network goals are: CBRN TC visibility increase and a capacity label			
4. Long-term business development		eNOTICE provides for the constant performance of quality management and sustainability assessment activities			
5. Partnership/cooperation		In constructing the network, great importance is given to the establishment of partnerships			
		and cooperation with organizations, European projects and networks			
Planet		Explain how the presented decisions impact on the flagged sustainability criteria.			
Criteria for the environmental dimension:					
1. Life optimisation		The online platform of the network is designed to be durable and expandable			
2. Reduction in transport/distribution		The physical transfers of persons are limited to JA, it makes extensive use of telematic tools, such as TELCO.			
3. Reduction in resources		eNOTICE promotes the use of TTX, serious gaming, other simulated training activities			
4. Waste minimisation/valorisation of resources					
5. Resource Renewability					
6. Non-toxicity					



#### CONCEPT DEVELOPMENT

## III. WHO & WHERE – Membership

#### a. Member profile

The **core members** of the network are the **CBRN TCs** – both eNOTICE consortium members and TCs external to the consortium.

The 'supporting' network members are all other security stakeholders. They can be subdivided in the following categories<sup>30</sup>:

- **Policy makers and regulators** regional, national, EU authorities, agencies members of European, intergovernmental and/or governmental regulatory agencies that ensure compliance with laws, regulations, established rules, and also individuals who set the plan pursued by a European, intergovernmental and/or governmental institution level, having the authority to set the policy framework of an organization
- **Practitioners and technology operators** these are practitioners of all disciplines fire brigades, rescue teams, police forces, medical services, civil protection, security and defence experts, logistic services deployed for incident management, competent authorities, information and communication experts, specialized services (water management, hazmat, etc.) they all benefit from trainings organized at TCs, thus they are an integral part of the eNOTICE network
- **Technology suppliers**, **research development and innovation providers** These are representatives of research and development organisations, large industry, small and medium enterprises (SMEs), academia, research institutes, research units linked to ministries or agencies, etc. all those who design and develop technologies used by practitioners and operators in their everyday work

CBRN TC become a member of the network if they fill in an extensive questionnaire with information on their capabilities (thematic expertise) and facilities (infrastructure). They need to express their consent to be visible on the eNOTICE website explicitly.

Future decisions to take on membership: how to associate them to the activities, different access rights to the information on the web-based platform, etc.

Further decisions considering the long-term perspective will be taken through the sustainability plan.

<sup>&</sup>lt;sup>30</sup> eNOTICE Deliverable 2.3 - Mapping and needs and gaps analysis of the CBRN stakeholders, April 2018 eNOTICE D2.5 - Framework and Sustainability plan for the European CBRN Training Centre network January 2019



#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

#### b. Geographical scope

The initial geographical scope of the network was EU member states and associated countries<sup>29</sup>.

Thanks to a partnership with DG DEVCO, the scope will be extended to CBRN TCs and security stakeholders in third countries<sup>31</sup>.

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

# c. Leadership

During the project (2017-2022), the leadership of the network is ensured through the composition of the eNOTICE consortium partners, who represent all future member profiles, except for policy makers and industry: civil and military first responders and civil and military TCs and universities.

Further decision considering the long-term perspective will be taken through the sustainability plan

## Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21	Discussion among partners
		call	

<sup>&</sup>lt;sup>31</sup> eNOTICE Deliverable 2.1 - Catalogue of CBRN TC, testing and demonstration sites, May 2018 eNOTICE D2.5 – Framework and Sustainability plan for the European CBRN Training Centre network January 2019





D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key pe	rformance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1		
SUSTAINA	BILITY CHECK		Performed	☐ Not performed



SUSTAINABILITY CHECK					
People		Explain how the presented decisions impact on the flagged sustainability criteria.			
Criteria for the social-ethical dimension:					
1. Improvement of employment/working conditions					
2. Justice and equity on the part of stakeholders					
3. Fostering and integration of the weak and marginalised					
4. Improvement of security community cohesion		The network members are all the security community stakeholders			
5. Reinforcement/valorising of local resources					
6. Raise the security level of citizens					
7. Increase resilience of Society					
Profit		Explain how the presented decisions impact on the flagged sustainability criteria.			
Criteria for the economic dimension:					
1. Market position					
2. Profitability/added value for businesses					
3. Added value for members					
4. Long-term business development		The network leadership is ensured through a directive board composed, all future member			
		profiles, except for policy makers and industry.			
5. Partnership/cooperation		Thanks to a partnership with DG DEVCO, the scope will be extended to CBRN TCs and			
		security stakeholders in third countries			
Planet		Explain how the presented decisions impact on the flagged sustainability criteria.			
Criteria for the environmental dimension:	_				
1. Life optimisation					
2. Reduction in transport/distribution		The web platform of the network, with its "search function" can suggest to the practitioners,			
		the correct TCs according to their needs and the closest ones, this will produce a reduction			
		of practitioner transfers.			
3. Reduction in resources					
4. Waste minimisation/valorisation of resources					
5. Resource Renewability					
6. Non-toxicity					



# IV. HOW the network is organized – Institutional aspects

#### a. Informal vs formal character

The network starts as a semi-formal network because it can benefit from the governance structures, rules and procedures and financial resources of the eNOTICE project during the first 5 years.

Further decision considering the long-term perspective will be taken through the sustainability plan

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines	Discussion among partners
		of action in the GM-SEC21	
		call	
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

#### b. Type of the network

The network is mainly an information and communication network with a few transactional activities, such as the elaboration of a Capacity label (see below) and the elaboration of best practices. This will be done for the organization of table tops, field exercises, simulations and serious gaming, as well as for optimization of investments, through pooling and sharing of resources.

For this transactional activity, the required expertise, rules and procedures (assigned partners, clear objective, financial resources) are guaranteed during the duration of the project<sup>32</sup>.

Further decisions considering the long-term perspective will be taken through the sustainability plan

<sup>32</sup> https://www.h2020-enotice.eu/static/project.html#part\_framework



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H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

## c. Decision making and accountability

The network benefits from the governance structure of the eNOTICE project during the first five years, with a cascading responsibility of the project coordinator, technical coordinator, work package leaders, task leaders and contributing partners.

Further decisions considering the long-term perspective will be taken through the sustainability plan.

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

### SUSTAINABILITY CHECK

☐ Performed ☐ Not perform
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If not performed explain why (and if it will be performed at a later stage, after which decision/action): The aspects considered have yet to be defined with a long-term perspective



# V. HOW the network is organized- Network architecture and relations

#### a. Density of the members relations + Centrality of the members relations

The eNOTICE network approach to innovation is practitioners' needs-driven and industry, research and development-pushed, integrated with national and EU policy (bottom-up). The dialogue and networking between all the stakeholders are facilitated by means of:

- Practical numerous joint exercises, organised by the project partners-training centres, open to invited research projects, policy-makers and all interested stakeholders.
- Discussion on the network website platform.

In order to guarantee the maximum interaction among all the stakeholders does not require any exchange of confidential information, as such information is not considered essential for networking purposes. Besides, considering the CBRN TCs members of the network, these are encouraged to provide only the information that they are willing to share with other stakeholders. When they identify any most interesting contacts for collaboration, then they can work together directly and share any kind of information by concluding, e.g. non-disclosure agreements, or under any other mechanism acceptable for the particular organisations."

On the other hand, the network should maintain the possibility to follow a top-down approach, taking initiatives at the network level, this can ensure continuous activities in periods of low activity of the members.

Further decisions considering the long-term perspective will be taken through the sustainability plan.

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

#### SUSTAINABILITY CHECK

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**■** Not performed

If not performed explain why (and if it will be performed at a later stage, after which decision/action):



SUSTAINABILITY CHECK					
People Criteria for the social-ethical dimension: 1. Improvement of employment/working conditions 2. Justice and equity on the part of stakeholders 3. Fostering and integration of the weak and marginalised 4. Improvement of security community cohesion 5. Reinforcement/valorising of local resources 6. Raise the security level of citizens		Explain how the presented decisions impact on the flagged sustainability criteria.  The practical joint exercises, organised by the project partners-training centres, open to invited research projects, policy-makers and all interested stakeholders.  The eNOTICE approach to innovation is practitioners' needs-driven. Practitioners equipped with tools designed for their needs are more effective, for the benefit of citizens'			
7. Increase resilience of Society  Profit Criteria for the economic dimension:	<u> </u>	Explain how the presented decisions impact on the flagged sustainability criteria.			
<ol> <li>Market position</li> <li>Profitability/added value for businesses</li> <li>Added value for members</li> <li>Long-term business development</li> <li>Partnership/cooperation</li> </ol>					
Planet Criteria for the environmental dimension:  1. Life optimisation 2. Reduction in transport/distribution 3. Reduction in resources 4. Waste minimisation/valorisation of resources 5. Resource Renewability 6. Non-toxicity		Explain how the presented decisions impact on the flagged sustainability criteria.			



#### **EMBODIEMENT DESIGN**

#### VI. HOW and WHEN the network is organized – Sustainability

a. Quality management, incl. Continuous improvement & Result oriented approach

Result oriented approach and continuous improvement

The network benefits from the methodological approach of the eNOTICE project during the first five years, with a clear work plan with assigned responsibilities for the partners in work packages and tasks, clear deadlines and milestones, interim reports and review meetings with the Project Officer and external experts, and an eNOTICE quality monitoring methodology, developed within and for the project. Moreover, the eNOTICE project has a WP5, mainly dedicated to tasks for continuous improvement.

Legal, security and ethical aspects are taken care of in a specific Task (4.4).

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report	D5.2 – progress report 1	

#### **b.** Supporting instruments

During the project, three supporting instruments are developed in order to facilitate the achievement of the objectives:

- 1) a web-based platform,
- 2) a Capacity label,
- 3) Guidelines for the organization of Joint Activities.



#### Web-based platform at www.h2020-enotice.eu

The main supporting instrument for the Network of CBRN TCs is a web-based platform, called eNOTICE Community Centre. Once complete in M24, the platform will support the visibility of the CBRN TCs, the promotion of their activities, and will facilitate the search for stakeholders to find a suitable CBRN TC, as a partner in future research projects or for the ad hoc participation in table tops, field exercises, simulations and serious gaming. In addition, the web-based platform will support practitioners with tools for communication and information exchange.

The exact architecture of the web-based platform will be described in D3.8 (August 2019) with preliminary results being available in D3.6 (June 2018).

- 4° dissemination activities
- 5° presentation at conferences

Further decisions considering the long-term perspective will be taken through the sustainability plan.

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

# c. Financial viability

The start of the project is ensured through the financial resources of the eNOTICE project, which has a budget of  $3\,500\,000$ € for the period September 2017 – August 2022.

#### Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	



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d. Duration of the network and sustainability strateg	d.	Duration	of the	network a	nd sustain	ability	strategy
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The network is gradually built since 1 September 2017, the start of the eNOTICE project. Human and financial resources are ensured during the whole duration of the project, which ends 31 August 2022.

Further decision considering the long-term perspective will be taken through the sustainability plan

# Sources:

H2020 program	eNOTICE Description of Action	Context and mandatory lines of action in the GM-SEC21 call	Discussion among partners
D2.1 – Catalogue of CBRN TC	D2.2 – capacity label	D2.3 – needs and gaps	D2.4 – Key performance indicators
D3.6 – information and communication platform report	D4.2 – joint activities planning report 1	D5.2 – progress report 1	

#### SUSTAINABILITY CHECK

**☐** Performed

**☐** Not performed

*If not performed explain why (and if it will be performed at a later stage, after which decision/action):* 



SUSTAINABILITY CHECK			
People		Explain how the presented decisions impact on the flagged sustainability criteria.	
Criteria for the social-ethical dimension:			
1. Improvement of employment/working conditions			
2. Justice and equity on the part of stakeholders			
3. Fostering and integration of the weak and marginalised			
4. Improvement of security community cohesion		The web-based platform will support practitioners with tools for communication and	
		information exchange	
5. Reinforcement/valorising of local resources			
6. Raise the security level of citizens			
7. Increase resilience of Society			
Profit		Explain how the presented decisions impact on the flagged sustainability criteria.	
Criteria for the economic dimension:			
1. Market position			
2. Profitability/added value for businesses			
3. Added value for members		Amongst the network goals are CBRN TC capacity label and Guidelines for the	
		organization of Joint Activities	
4. Long-term business development		eNOTICE provides for the constant performance of self-sustainability assessment	
		activities (WP5)	
5. Partnership/cooperation			
Planet		Explain how the presented decisions impact on the flagged sustainability criteria.	
Criteria for the environmental dimension:			
1. Life optimisation			
2. Reduction in transport/distribution		The web platform of the network, with its "search function" can suggest to the	
		practitioners, the correct TCs according to their needs and the closest ones, this will	
		produce a reduction of practitioner transfers.	
3. Reduction in resources			
4. Waste minimisation/valorisation of resources			
5. Resource Renewability			
6. Non-toxicity			



# **Chapter 4**

# 4 eNOTICE Sustainability plan - Strategy Details

For each goal, define short, medium, long term strategies to accomplish it.

eNOTICE started as an EU founded project in September 2017 and will terminate in 2020 one of its main objectives is to establish a training center network that is able to stand on its own legs after the termination of the project and the grant.

Being in its early stage, it is not possible to define right now how the network will look like at the end of the project.

In the following section, in light purple boxes, some proposals for the network have been formulated in order to start to think of a possible starting strategy for eNOTICE, which will be further elaborated during the next years.



Strategy details on: Context and Background: Strategy details		
The relevance of the eNOTICE objectives is constantly monitored through the quality monitor	ring instrument d	eveloped in WP5 of
eNOTICE.		
Currently, the eNOTICE objectives are still considered up to date		
Any proposal to integrate them has been already provided.		
If, for any reason that is not predictable at the moment, there will be a lack of relevance of the e	NOTICE objectiv	es, proposals will be
formulated to address this issue.		
Collected opinion on the proposal A:		
Decisions on the proposal		
(for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)	☐ Taken	<b>◯</b> To be discussed
Proposal A		

# Strategy on decision A

Decision A.1

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted



#### Strategy details on strategy A For each strategy define the details to implement it at the practical level. HOW WHEN WHY COST **WHO** Relevance of the action Estimated cost for the Who is involved in this How the strategic action Una tantum or periodical part of the process will be conducted activity with respect to the action objective

List of proposals to be discussed					
Proposal A: new additional network					
List of new additional network activiti	es:				
- Information.					
- Recommendations for t	he research agenda.				
- Recommendations for s	<u>e</u>				
- Review of ongoing RD	I.				
- Online database with R&D information.					
<ul> <li>Technology watch.</li> </ul>					
Collected opinion on the proposal A:					
Campus Vesta doesn't agree with the	opportunity to include the new activiti	les:			
- Information.	ha maaanah aaanda				
- Recommendations for the research agenda.					
- Recommendations for standardisation.					
- Review of ongoing RDI. Online detabase with P&D information					
- Online database with R&D information.					



(for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)

# Proposal A

- Decision A:

Decisions on proposal A have to be discussed among the Consortium partners

# The strategy will be defined as decisions are taken

# Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is targete
			accordingly	

# Strategy details on strategy A

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



# Strategy details on: Member profile Strategy details: Strategy details

#### List of proposals to be discussed

#### Proposal A: Procedure to become member of the network

eNOTICE members (TCs and other stakeholders) will be authenticated site users<sup>33</sup>.

**A.1** In order to log in and have the access to some specific contents and activities (upload, visualize and download documents, information and material available on the website, and to participate in communities and discussion forums) the person has to be registered as a member to the ECC. To become an authenticated site user a registration procedure accessible from the eNOTICE website is required. The subscription form should contain the name, username, email address and password of the person requesting a platform account. In addition to personal details, information on the organization should be provided. The candidate member becomes an active authenticated user after the request has been checked and validated.

The type of services to which an authenticated site user has access to, depends on which areas the user is a member of. VERY important + to have this already developed here

There can be areas for different user groups and organisations: per TC, for practitioners, RDI providers, ...

- Not authenticated (synonym of registered) site users, are provided access to:
  - all the basic information regarding the eNOTICE project and network.
  - a brief description of the JA's and other public activities mentioned in the calendar
  - all publicly published documents (deliverables)
  - View public news on the eNOTICE activities
- Authorized TC are granted access to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the Catalog of Training Centers on the network's website.
  - Visualise and download all documents, information and material available on the website, and to participate in communities and discussion development of guidelines, best practices.
  - Access contacts of other authorized users.
  - Display their **calendar of activities** on the eNOTICE website.
  - Be able to host and promote a Joint activity.
  - Obtain the eNOTICE capacity label (only for TCs).
  - Be included in the network mailing list and receive the newsletter.

<sup>&</sup>lt;sup>33</sup> Cf. DM-TRAINET



- Authorized Policy makers and regulatory members are granted access to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the network mailing list and receive the newsletter.
  - Visualise and download all documents, information and material available on the website, and to participate in communities and discussion development of guidelines, best practices.
  - Request participation in joint activities.
- Authorised Practitioners and technology providers members give the opportunity to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the network mailing list and receive the newsletter.
  - Visualise and download all documents, information and material available on the website, and to participate in communities and discussion development of guidelines, best practices.
- Authorised Technology suppliers, research and innovation provider members gives the opportunity to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the network mailing list and receive the newsletter.
  - Visualise and download all documents, information and material available on the website, and to participate in communities and discussion development of guidelines, best practices.
  - Request participation in joint activities.

**A.2** Considering the *long-term sustainability* of the project, one of the possible scenarios envisaged considers the possibility of self-sustaining the structure of the network and its services. With this in mind, it would make sense to ask for a fee for some of the network's services, linking them to specific memberships. In this case there is an additional classification criterion for the membership, which will be applied within the authenticated site users (*basic members*, *supporting members*).

Membership classification depending on the **stakeholder typology** and on **fee payment** 

- Not authenticated site users gives the opportunity to:
  - Get all the basic information regarding the eNOTICE project and network.
  - Obtain a brief description of the JA and of member activities calendar
  - Consult an abstract of the project documents.
- TC membership gives the opportunity to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the Catalog of Training Centers on the network's website.
  - Visualise and download all documents, information and material available on the website. (supporting member only)
  - Participate in communities and discussion development of guidelines, best practices.



- Display their **calendar of activities** on the eNOTICE website.
- Obtain the eNOTICE capacity label.
- Give the availability to host a Joint activity. (supporting member only)
- Be included in the network mailing list and receive the newsletter.
- Policy makers and regulator membership gives the opportunity to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the network mailing list and receive the newsletter.
  - Visualise and download all documents, information and material available on the website. (supporting member only)
  - Participate in communities and discussion development of guidelines, best practices.
  - Request participation in joint activities.
- Practitioners and technology operator membership gives the opportunity to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the network mailing list and receive the newsletter.
  - Visualise and download all documents, information and material available on the website. (supporting member only)
  - Participate in communities and discussion development of guidelines, best practices.
- **Technology suppliers**, **research and innovation provider membership** gives the opportunity to:
  - Consult all the information available for "Not authenticated site users".
  - Be included in the network mailing list and receive the newsletter.
  - Visualise and download all documents, information and material available on the website.
  - Participate in communities and discussion development of guidelines, best practices. (*supporting member only*)
  - Request participation in joint activities.
  - Contribute to: "Recommendations for the research agenda", "Review of ongoing RDI", "Online database with R&D information", "Technology watch".
- **Technology suppliers, Industry, SME sponsorship** gives the opportunity to:
  - Buy advertisement spaces (banners) in the eNOTICE website.
  - Sponsor JA, covering the costs linked to the organization of these activities.

Representability of the members profile, goal and areas and type of activity should be the defining criteria for the composition of the group

Collected opinion on the proposal A.1:

UPB regarding:



- *eNOTICE membership:* "When the platform is fully operational, the registration is open for everyone. Access to specific areas (e.g. TC-specific,) can be granted by area administrators (e.g. TC responsible persons). All logged-in users can access the general area. And only persons can register themselves, not organisations or TCs."
- *The Document sharing:* "its implementation is not ready yet. Especially the fine-grained granting of rights is challenging" *UCL regarding user authentication procedure:* Who will be in charge to check and validate the membership request must be decided

Collected opinion on the proposal A.2:

UPB regarding the possibility to have "supporting members": "Also needs to be elaborated if technically possible"

#### **Decisions on the proposal**

(for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)

☐ Taken

**☒** To be discussed

Proposal A

Decision A.1

Decisions on proposal A have to be discussed among the Consortium partners

Decision A.2
 Decisions on proposal A have to be discussed among the Consortium partners

#### The strategy will be defined as decisions are taken

#### Strategy on decision A.1

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A.1

Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted



# Strategy details on strategy A.1

For each strategy define the details to implement it at the practical level.

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	

# Strategy on decision A.2

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A.1

Time Frame	<b>Budget Capital</b>	Budget - operating	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

# Strategy details on strategy A.2

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



Strategy details on: Geographical scope: Strategy details				
List of proposals to be discussed				
Proposal A: Geographical scope of the eNOTICE network				
We could make a differentiation between members and geographical area of the activities – to me that would be more efficient esp. in the first				
years of the network: Members: no geographical limitation				
Calendar of activities: limited to EU and associated countries. (Don't aim to big from the start, rathe	er stay confined n	ow and if it is a success		
then expand).	·			
Collected opinion on the proposal A:				
$\overline{UCL}$ suggests the approach used in ENCIRCLE project, to taking practitioners from anywhere, but te	echnology provide	ers only strictly from the		
EU				
Decisions on the proposal				
(for each proposal formulated, reach a consensus or postpone the decision at a later stage when	☐ Taken	<b>◯</b> To be discussed		
appropriate)				
Proposal A - Decision A				
Decisions on proposal A have to be discussed among the Consortium partners				
The strategy will be defined as decisions are taken Strategy on decision A				
For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target				
Strategy on decision A.1	isine muncuror un	a a arger		



Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

# Strategy details on strategy A

For each strategy define the details to implement it at the practical level.

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	

### Strategy details on: Leadership: Strategy details

#### List of proposals to be discussed

#### Proposal A: Leadership

The theme of leadership is a key issue, both for the proper functioning of the network during the project period, and in the subsequent phase for its long-term sustainability.

Regardless of the character and the organizational structure that will be chosen to manage the network beyond the duration of the project (an aspect that will be addressed below), the decision to have a leading group (currently the eNOTICE consortium partners) that well represent the composition of network members, remains valid.

The current composition of eNOTICE represent a starting point for the composition of the leading group as it includes CBRN TC, practitioners and Academia.

Representability of the members profile, goal and areas and type of activity should be the defining criteria for the composition of the group.

# Decisions on the proposal

(for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)

☐ Taken

**☒** To be discussed



# Proposal A

- Decision A

Decisions on proposal A have to be discussed among the Consortium partners

## The strategy will be defined as decisions are taken

### Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	<b>Budget Capital</b>	Budget - operating	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

# Strategy details on strategy A

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



# Strategy details on: Informal vs formal character: Strategy details

#### List of proposals to be discussed

#### Proposal A: Establishment of the network as a formal character

After the project end, the network character should change from semi-formal to formal, in order to continue pursuing its objectives and activities. An autonomous legal entity must be established, with its governance structure, capable to coordinate the network.

# Proposal for the long-term character of the network

Taking into account the current network overall goals, general objectives, activities and target groups involved (assuming to maintain them beyond the duration of the project), a recognition of all the possible legal entity has been performed (private company, foundation, association). Given the work done and the effort provided by the project partners and the skills they will have developed during the project, they (or part of them) should be the founders of the new legal entity.

But when we refer to the "project partners" we are considering a very wide range of organizations (public and private), for some of which it is not possible to set up a profit-making company, for this reason, two types of social economy enterprises have been considered: association and foundations.

Furthermore, non-profit making organisations and civil society organisations are a natural target group eligible for a vast part of EU funding<sup>34</sup>.

# The main characteristics of **associations** are<sup>35</sup>:

- Voluntary and open membership.
- Non-profitability<sup>36</sup>.
- Equal voting rights resolutions carried by majority.
- Membership fees no capital contribution.
- Autonomy and Independence.
- Service providers, voluntary work, and advocacy/representation.
- Important providers of health care, care for the elderly and children, and social services.

<sup>&</sup>lt;sup>34</sup>https://www.welcomeurope.com/european-subsidies-beneficiary-Non+profits+organisations.html

<sup>&</sup>lt;sup>35</sup> https://ec.europa.eu/growth/sectors/social-economy/associations-foundations\_en

<sup>&</sup>lt;sup>36</sup>1. Organizations cannot be established for the purpose of profit generation.

<sup>2.</sup> Organizations may perform activities that generate profit only if such activity is related to the goals determined by the statute.

<sup>3.</sup> If the operations of the organizations generate profit, such profit has to be used for achieving the goals determined by the statute.

<sup>4.</sup> The generated profit referred to in paragraph (3) cannot be distributed among the founders, members, members, members, members, employees or any other person related there to.



#### The main characteristics of **foundations** are that:

- They are run by appointed trustees.
- Their capital is supplied through donations and gifts.
- They may finance and undertake research.
- They may support international, national, and local projects.
- They may provide grants to meet the needs of individuals.
- They may fund voluntary work, healthcare, and elderly care.

\_

However, considering that foundation is a body mostly constituted by a single person who allocates a certain sum or a patrimony for the attainment of a defined purpose and unlike the associations, there is not the presence of a group of associates, this second type of non-profit organization can be discarded.

### *Collected opinion on the proposal A:*

#### Campus Vesta regarding the opportunity to establish an autonomous legal entity:

The network entity should be able to evolve towards a complete informal network. The added value of the network should be sufficient to ensure to attract funding. "We live in a network society. Formal organisations are not the organisations of the future even for public sector goals"

Suggestion to look at the DM TRAINET report to see the evaluation of an informal versus semi-formal versus formal network." A formal network knows a lot of burdens that slow down its working. There are enough legal bodies dealing with public safety and security and CBRN Let this be a voluntary association of like minded organisations and individuals that can move, act, decide, organise more freely because of less stringent rules and procedures."

To start from - as mentioned before, two or three options should be considered and followed up - See DM Trainet what the differences are between informal and formal or a semi type in between

5 T T T T T T T T T T T T T T T T T T T				
Informal	Semi	Formal		
Purely voluntary association	1 hosting organisation	Legal entity		
No legal responsibility and accountability	1 organisation responsible and accountable	Full responsibility and accountability		
	for a defined set of activities (financial,)			
Working processes and methods/rules and	Working processes and methods/rules and	Working processes and methods/rules and		
procedures	procedures	procedures		
Management structure – See in detail below	Management structure – See in detail below	Management structure – see in detail below		



Financial means - See in detail below	Financial means - See in detail below	Financial means - Sec	e in detail below		
<b>Decisions on the proposal</b> (for each proposal formulated, reach a consens appropriate)	sus or postpone the decision at a later stage whe	en Taken	☑ To be discussed		
Proposal A  - Decision A  Decisions on proposal A have to be discussed among the Consortium partners					

### Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	Budget Capital	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

# Strategy details on strategy A

For each strategy define the details to implement it at the practical level.

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	

**Strategy details on:** Type of the network: Strategy details



#### List of proposals to be discussed

#### Proposal A: Increase the number of transactional activities of the eNOTICE information network

The network is mainly an information and communication network with a few transactional activities, such as the elaboration of a Capacity label (see below) and the elaboration of best practices. This will be done for the organization of table top, field exercises, simulations and serious gaming, as well as for optimization of investments, through pooling and sharing of resources. For this transactional activity, the required expertise, rules and procedures (assigned partners, clear objective, and financial resources) are guaranteed during the duration of the project<sup>37</sup>. As previously underlined, the eNOTICE network is mainly an information and communication network, with a reduced number of transactional activities, the choice of the network type has been done to successfully reach the general objectives of the project.

Therefore, strong modifications of the of network type risk to compromise the achievement of its objectives.

A reasonable long-term strategy, following the approach to used enlarging the number of "motivations to join the project" will not provide for a change in the type of network, but an increase in the number of transactional activities, compatibly with the current areas of activity of the network.

These new activities (previous proposal) added to the current ones could increase the reasons to use the eNOTICE network and to pay for its services.

#### Collected opinion on the proposal A:

Campus Vesta: suggests considering Information & communication activities as a priority and only a few transactional activities until there is sufficient maturity in the network to expand to others, new ones. It is preferable to stick to a few activities — organised by the project for now where GRADUALLY more network members are included (members that are not eNOTICE partners), so that by the end of the project, the network is working autonomously only supported by the project and no longer completely depending on the project.

# Decisions on the proposal (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate) ☐ Taken ☐ To be discussed

#### Proposal A

- Decision A

Decisions on proposal A have to be discussed among the Consortium partners

<sup>&</sup>lt;sup>37</sup> https://www.h2020-enotice.eu/static/project.html#part framework



# Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

# Strategy details on strategy A

For each strategy define the details to implement it at the practical level.

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	

Strategy details on: Decision making and accountability: Strategy details



#### List of proposals to be discussed

#### Proposal A: long-term governance structure of the eNOTICE network

After the project end, if the network character (as proposed) will change from semi-formal to formal, the autonomous legal entity that will be founded to coordinate the network will have to cover the functions and roles present in the governance structure of the eNOTICE project.

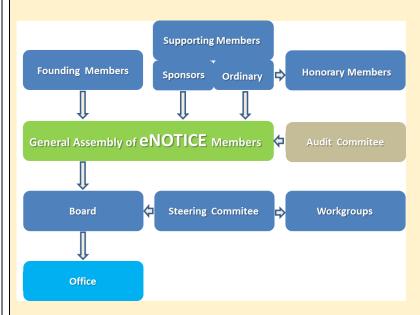


Figure 10 eNOTICE association organizational structure hypothesis

Considering the association as possible legal entity for the long-term network activity, has been hypothesized an organizational structure (Figure 14). eNOTICE association should comprise natural persons: **basic members** and **honorary members**, and **corporate bodies** that may become ordinary supporting members or sponsors.

#### eNOTICE authorities shall include:

- the General Assembly of eNOTICE Members,
- the Board,
- the Audit Committee.



#### General Assembly of eNOTICE Members is the supreme authority of eNOTICE.

Some of the possible competences of the General Assembly of eNOTICE Members could be:

- a) Adopting directions of the eNOTICE activities and the budget for a calendar year;
- b) Approving Board's reports on activities;
- c) Granting the Board vote of approval;
- d) Approving the financial report (the balance sheet and the profit and loss statement);
- e) Allocating financial surplus and the way of covering losses;
- f) Appointing and dismissing the Board and the Audit Committee and specifying the number of its members, and, if necessary, supplementing the composition of the Board and the Audit Committee;
- g) Electing the President of the Board; Other.....

**The Board** should manage activities of eNOTICE in the periods between the General Assemblies of eNOTICE Members. Works of the Board are managed by the President or, during his absence, by one of the Vice-presidents.

Some of the possible competences of the Board could be:

- a) Carrying out resolutions of the General Assembly of eNOTICE Members;
- b) Representing eNOTICE towards third parties;
- c) Supervision over developing positions/opinions of eNOTICE;
- d) Establishing, jointly with the eNOTICE Steering Committee, current priorities in the eNOTICE activities;
- e) Preparing annual and post term reports on the eNOTICE activities;
- f) Managing the eNOTICE assets and funds;
- g) Issuing internal regulations and rules concerning the eNOTICE activities, unless such fall within the competence of the General Assembly of eNOTICE Members or other body appointed in the Statutes;

  Other......

# The Audit Committee should be the eNOTICE controlling body.

The possible competences of the Audit Committee should include:

- a) Conducting periodical controls of eNOTICE and its authorities' activities and developing post control conclusions;
- b) Conducting controls of eNOTICE financial economy and compliance thereof with the Statutes and resolutions of the General Assembly of eNOTICE Members;
- c) Submitting a report from the execution of the financial plan for the previous year to the General Assembly of eNOTICE Members and consulting the motion for the vote of approval for the Board.



Other				
the Steering Committee should be an advisory body of the Board				
The competences of the Steering Committee include:				
a) Initiative in developing proposals concerning designation of directions of the eNOTICE activities; consulting directions of the				
eNOTICE activities presented by the Board;				
b) Approval and agreement with the Board of periodical Board work plans – upon the Board's request or upon own initiative;				
c) Developing positions and proposals of solutions within thematic groups;				
d) Consulting applications for admission of ordinary members, ordinary supporting members, sponsoring members and subsidiary				
supporting members;				
Other				
The Office should be a subsidiary body of the Board. The Office works are managed by the Director, who could be a Board Member as well.				
The scope of the Director's obligations includes inter alia:				
a) Developing proposals of addressed, notices, positions on behalf of eNOTICE for consultation with the Board;				
b) Developing tasks plan and budget for the subsequent year for approval by the Board;				
c) Organizing works of the Board, the Steering Committee and the General Assembly of Members;				
d) Applying to the Board for modifications to eNOTICE structure;				
e) Applying to the Board for adoption of a certain action strategy;				
f) Applying to the Board for the use of potential budget reserves.				
Other				
Collected opinion on the proposal A:				
Campus Vesta confirms to disagree on a network with formal structure, preferring to see eNOTICE network informal and using the project to				
set up such a network that is run by some leading organizations and individuals (who should not necessarily be the current eNOTICE				
partners).				
Suggestion as best option the smaller and low-cost structure of an informal network as proposed in DM Trainet ("where you can find a				
management structure and all other aspects completely elaborated").				
Decisions on the proposal				
(for each proposal formulated, reach a consensus or postpone the decision at a later stage when $\square$ Taken $\square$ To be discussed				
appropriate)				
Proposal A				
- Decision A				



# Decisions on proposal A have to be discussed among the Consortium partners

### The strategy will be defined as decisions are taken

# Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	Budget Capital	Budget - operating	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

## Strategy details on strategy A

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



### Strategy details on: Density of the members relations: Strategy details

#### List of proposals to be discussed

#### Proposal A: Additional activity thought to foster practitioner interaction

The network could propose the establishment of thematic working groups to deepen specific topics, currently, this type of activities is not included in the ones envisaged by the project but following the right strategy can be relatively inexpensive and bring great benefits.

	The wife is a fight state of the state of th
Working group (WG) topic	
identification	other stakeholders.
Components of the working group	Representatives of all the network target groups interested to the specific thematic, <b>involved</b>
	on a voluntary basis.
Involvement and participation to	All the activities of the working group can be carried out remotely, the coordination and
the working group	
	updating meetings can be telco. Working group meetings can take place during JAs, if the
	WG topic pertaining to the JA specification.
Management:	At the kick-off of the working group a group manager is identified among the group
	participants.
	A representative of eNOTICE partners, should monitor the group respect the established
	deadlines.
Working group output:	A final document (best practices, guidelines, scientific paper, etc), available for the network
	<b>members</b> (free of charge during the five year of the project).

#### Collected opinion on the proposal A:

**CoE:** "To foresee the possibility for the establishment of WGs as such and the description of the working methods sound reasonable but should be executed case by case. I'm not quite sure how this will work for research activities but for guidelines or best practice it will certainly work.

*Campus Vesta:* "This could be an example where you let the initiative grow from/by the members as a way to experiment with a purely informal structure. If the members are convinced of the benefits, then they will organise themselves spontaneously. A formal organisation will not create added value here.

I would not go for a network that is top down driven but top down steered. The difference being that steering provides support but leaves the initiative entirely to the members".



"Whatever results from the network's activities. (Higher elaboration of best practices should be mentioned as an activity, identification of policy recommendations could be mentioned as an activity. Moreover, these could also be related to work groups within the network composed to members that are particularly interested in these topics and see the added value of doing so in a European context together with peers and supporting stakeholders with a different profile.) This exercise allows to connect different parts of the framework/several KPI to make the network strategy coherent:

Activity: elaboration of GP - supporting instrument: dissemination at the website - contributing members/governance aspect: working group GP.

### **Decisions on the proposal**

(for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)

**Taken** 

 $\boxtimes$  To be discussed

# Proposal A

- Decision A

Decisions on proposal A have to be discussed among the Consortium partners

# The strategy will be defined as decisions are taken

#### Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

#### Strategy details on strategy A

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



Strategy details on: Quality management: Strategy details		
List of proposals to be discussed		
Proposal A: Long-term quality management approach  The quality management methodological approach proposed and implemented in the eNOTICE proj years of the project. All the information collected, the lesson learnt approach will be useful to un eNOTICE quality monitoring methodology, in order to design an updated version, with a long-term proposition of the methodology will refer to the (internal) control and management steer and support the network after the end of the project.  The methodological approach and its framework can be used, other criteria will need to be monitored all the KPI's that frame the network.  Collected opinion on the proposal A:  CoE: "By whom will it be tested, by one of the bodies or will this task be outsourced to get an independent of the proposal A:"	nderstand gaps and perspective. bodies, present in ed related to goals	d strength points of the the new entity that will
<b>Decisions on the proposal</b> (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)	☐ Taken	<b>◯</b> To be discussed
Proposal A  - Decision A  Decisions on proposal A have to be discussed among the Consortium partners		



# Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A.1

Time Frame	<b>Budget Capital</b>	Budget - operating	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

# Strategy details on strategy A

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



List of proposals to be discussed The eNOTICE network supporting instruments are constantly monitored in order to guarantee to the network the best capabilities to pursue its objectives.  Currently, the eNOTICE supporting instruments are consided up to date Any proposal to integrate them has been provided.  If, for any reason that is not predictable at the moment, there will be a lack of effectiveness of the eNOTICE supporting instruments, proposals will be formulated to address this issue.  Proposal A:  Collected opinion on the proposal A:  Decisions on the proposal  (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Proposal A  Decisions on proposal A have to be discussed among the Consortium partners	Strategy details on: Supporting instruments: Strategy details					
Currently, the eNOTICE supporting instruments are consided up to date  Any proposal to integrate them has been provided.  If, for any reason that is not predictable at the moment, there will be a lack of effectiveness of the eNOTICE supporting instruments, proposals will be formulated to address this issue.  Proposal A:  Collected opinion on the proposal A:  Decisions on the proposal  (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Taken  To be discussed  Proposal A  Decision A.1		to the network th	e best capabilities to			
Any proposal to integrate them has been provided.  If, for any reason that is not predictable at the moment, there will be a lack of effectiveness of the eNOTICE supporting instruments, proposals will be formulated to address this issue.  Proposal A:  Collected opinion on the proposal A:  Decisions on the proposal  (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Taken  To be discussed  Proposal A  Decision A.1	oursue its objectives.					
If, for any reason that is not predictable at the moment, there will be a lack of effectiveness of the eNOTICE supporting instruments, proposals will be formulated to address this issue.  Proposal A:  Collected opinion on the proposal A:  Decisions on the proposal (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Proposal A  Decision A.1	Currently, the eNOTICE supporting instruments are consided up to date					
proposals will be formulated to address this issue.  Proposal A:  Collected opinion on the proposal A:  Decisions on the proposal (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Proposal A  Decision A.1  Taken  □ Taken	Any proposal to integrate them has been provided.					
Proposal A:  Collected opinion on the proposal A:  Decisions on the proposal (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Proposal A  Decision A.1	If, for any reason that is not predictable at the moment, there will be a lack of effectiveness of the	eNOTICE suppor	ting instruments,			
Collected opinion on the proposal A:  Decisions on the proposal (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Proposal A  - Decision A.1	proposals will be formulated to address this issue.					
Decisions on the proposal (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Proposal A  - Decision A.1	Proposal A:					
(for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)  Proposal A  - Decision A.1	Collected opinion on the proposal A:					
Proposal A - Decision A.1	(for each proposal formulated, reach a consensus or postpone the decision at a later stage when	☐ Taken	☑ To be discussed			
	Proposal A - Decision A.1					



# Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

#### Strategy details on strategy A

For each strategy define the details to implement it at the practical level.

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	

# Strategy details on: Financial viability: Strategy details

#### List of proposals to be discussed

#### Proposal A:

A long-term financial strategy can be the foundation of a non-profit organization (an association), capable of maintaining the network structure unaltered.

The new legal entity should involve the project partners, having the same target group of the network during the project.

Considering the association as a possible legal entity, we have to bare in mind that association may perform activities that generate profit only if such activity is related to the goals determined by the statute. And if the operations of the organizations generate profit, such profit has to be used for achieving the goals determined by the statute.

Typical funds and assets of associations or networks are:



1. The funds and assets of Association "XX" consist of se:		
- Joining fee,		
- Membership fees,		
- Grants and donations,		
- Heritages and bequests,		
- Profits from the statutory and business activity,		
- Public donations,		
- Revenues acquired from sources other than listed above.		
- eNOTICE activities		
- Sponsorships		
- Income from publication of best practices		
2. A membership fee is paid on a one-off basis in advance for 12 months.		
The fee shall be subject to a proportional refund in a member is excluded from "XX" for reasons la	aid down in	for the period after the
deletion.		
In addition, association with other non-profit making organisations are a natural target group eligible	for a vast part of	EU funding.
	-	
Collected opinion on the proposal A.		
Collected opinion on the proposal A:	ia vyillina ta thaa	t' the metryeals and son
Campus Vesta suggests having an informal network and a Secretariat, with a legal organisation that	is willing to nos	t the network and can
receive and spend money		
D		
Decisions on the proposal		
(for each proposal formulated, reach a consensus or postpone the decision at a later stage when	☐ Taken	<b>☐</b> To be discussed
appropriate)		
Proposal A		
- Decision A.1		
Decisions on proposal A have to be discussed among the Consortium partners		

<sup>38</sup> http://psew.pl/en/



# Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Time Frame	<b>Budget Capital</b>	<b>Budget - operating</b>	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted

# Strategy details on strategy A

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



		European Cammission
Strategy details on: Duration of the network and sustainability strategy		
List of proposals to be discussed		
Proposal A: A proposal for the sustainability strategy has been formulated in the present deliverable, together wi make follow concrete action to this strategy. This represents the starting point of the discussion probring to the final definition of a sustainability strategy.  Collected opinion on the proposal A:		*
<b>Decisions on the proposal</b> (for each proposal formulated, reach a consensus or postpone the decision at a later stage when appropriate)	☐ Taken	<b>⊠</b> To be discussed
Proposal A		
- Decision A.1		

# Strategy on decision A

For each decision, define a strategy within a specific time frame, allocated budget, a performance measure indicator and a target Strategy on decision A

Decisions on proposal A have to be discussed among the Consortium partners

Time Frame	Budget Capital	Budget - operating	Performance Measure	Target
Indicative time frame			Set measurable criteria	Which entity is
			accordingly	targeted



# Strategy details on strategy A

WHO	HOW	WHEN	WHY	COST
Who is involved in this	How the strategic action	Una tantum or periodical	Relevance of the action	Estimated cost for the
part of the process	will be conducted	activity	with respect to the	action
			objective	



# **Chapter 5**

#### **Conclusions**

The goal of D2.5 was to provide a conceptual framework and a sustainability plan for a successful self-sustainable security network and to apply the developed methodological approach to the eNOTICE project.

The starting point for the elaboration of the framework was the outcome of eNOTICE project D2.4, where a comparative analysis of security networks provided a list of Key Performance Indicator that defined the lowest common denominator of successful networks.

Sustainability is a human driven process, and long-term sustainability relies on the ability to plan taking into consideration that each action taken will have an impact on the social, economic and environmental dimension.

The idea of sustainability is historically linked to production of goods, however, in a society that is highly interlinked and reliant on communication, and where the distinction between physical world and virtual world is gradually fading, current trends expanded this concept to the provision of services as well.

A security network is something that relates more to the provision of a service, although its main goal can be other than profit. The biggest challenge in this work was, therefore, to review existing and well-established methodologies to define plans for sustainability of products and services to the definition of sustainability plan for security networks.

The literature review performed for the elaboration of this work integrated sources that are related to product and services supplying (PSS), as well as from sustainability plans elaborated, with a broader perspective, for entire communities of people.

In chapter 2, this work presents a comparative analysis and adaptation of the criteria that allow to assess the sustainability of a product or a service in the three domains (social, environmental, economic). The criteria have been rethought under the light of the potential impact of a security network on these domains and are part of a "sustainability check" process elaborated in this deliverable that allows to elaborate the framework of a security network, while reflecting on the impact of the choices made to elaborate it on people, profit and planet, and orientating further decision making processes to elaborate a sustainability plan.



Basing on the elaborated framework, the second part of the templates elaborated in D2.5 allows to elaborate a sustainability plan that clearly defines concrete actions to perform, taking into consideration time, resources to allocate and measurable indicators that should be used to evaluate the effectiveness of the actions, as well as to put in place a communications strategy that shows concrete results of the network to further motivate its members and attract new members to join.

The conceptual framework and sustainability template have been applied here to the eNOTICE case

The conceptual framework and sustainability template have been applied here to the eNOTICE case study, to start elaborating a strategy for the self-sustainability of the CBRN TC network once the EU grant will be over.

# Way forward

A sustainability plan is a living document that needs to be reviewed over time, to keep into consideration new strengths and opportunities as well as threats and weaknesses and ensure that the network is constantly replying to the needs of its members, with a sustainable approach.

This is the reason why the eNOTICE framework and sustainability plan presented here has to be considered as starting point to smoothen the decision-making process that should transform the eNOTICE project into a self-sustainable CBRN TC network after the termination of the grant. To this extent, a number of proposals have been formulated here and will be discussed among the eNOTICE partners, in the years to come, as part of WP5 on project management and quality monitoring.



#### **ANNEX 1 – Green Procurement**

#### The environmental dimension: Green Procurement

Environmental issues such as climate change, air pollution, resource depletion, waste disposal, etc. are caused by mass production, mass consumption, mass disposal type of economic activities, etc. It is not possible, today, to think about any kind of activity, not taking into consideration its impact on the environment (even if it is very small).

Therefore, when thinking about the sustainability of a process, product, service, it is necessary to strive to reduce the environmental load in all sectors, encouraging the shift of demand to eco-friendly goods, etc. in the procurement practice of organizations as well.

The international community emphasizes the importance of sustainable consumption and production (SCP). The 2030 Agenda for Sustainable Development<sup>39</sup>, along with the Sustainable Development Goals (SDGs), was adopted at the United Nations Sustainable Development Summit in September 2015, and the assurance of the SCP was appointed as one of the Goals.

The importance of green procurement is recognized again as a way to build a sustainable society.

Green procurement (GP) is defined as a practice whereby purchasers seek to procure goods, services and works with a reduced environmental impact throughout their life cycle with consideration of their necessity, from suppliers who make constant efforts to be environmentally conscious. GP is a voluntary instrument, which means that purchasers can determine the extent to which they implement it.

By making consumer behavior environmentally conscious, green procurement can encourage suppliers to develop products with low environmental loads and convert the entire economic activities to more eco-minded ones.

Organizations, adopting specific strategies on the subject of environmental, social and economic Sustainability, define *policy of Green Procurement* in order to minimize any impact

<sup>&</sup>lt;sup>39</sup> http://www.un.org/sustainabledevelopment/development-agenda/ eNOTICE D2.5 – Framework and Sustainability plan for the European CBRN Training Centre network January 2019



on the environment directly attributable to the organization and to its suppliers, in the light of continuous improvement and alignment with best practice in the sector.

This also applies to organizations that manage information and communication networks, just to give some examples Facebook<sup>40</sup> and Telecom<sup>41</sup> adopted policy of green procurement. Since January 2010, the European Commission has published on its website<sup>42</sup> a series of examples of the implementation of GP, these examples shall illustrate how European public authorities have successfully launched 'green' tenders and provide guidance for others who wish to do the same.

# Green Procurement Policy: basic concepts<sup>43</sup>

The basic policy of Green Procurement describes the following three concepts for promoting procurement of goods and services that contribute to reducing environmental loads. These goods and services are called "eco-friendly goods, etc.":

1. Select goods and services from always environmentally conscious suppliers

Purchasers should consider the environmental loads of products besides the products' price and quality. Not only environmental loads of the products, but also environmental management and information disclosure by manufacturers, distributors, etc. should be kept in mind when procuring eco-friendly goods.

2. Consider the life-cycle of goods and services

Selecting goods, services, etc, it is necessary to consider reducing the environmental loads of the entire life cycle, extending from resource extraction to disposal. Organizations are encouraged to avoid single-use disposable items, and purchase products:

- With improved recyclability, high recycled content, reduced packing and greater durability;
- ii. with greater energy efficiency;
- iii. utilizing clean technology and/or clean fuels;

<sup>&</sup>lt;sup>40</sup> https://sustainability.fb.com/our-footprint/

<sup>&</sup>lt;sup>41</sup>https://www.telecomitalia.com/content/dam/telecomitalia/documents/Sostenibilita/en/Policies\_ENG/policy-green-procurement-eng.pdf

<sup>42</sup> http://ec.europa.eu/environment/gpp/case\_group\_en.htm

<sup>&</sup>lt;sup>43</sup> "Act on Promoting Green Procurement" (April 1, 2001), Environment and Economy Division, Environmental Policy Bureau, Japanese Ministry of the Environment.



- iv. which result in reduced water consumption;
- v. which emit fewer irritating or toxic substances during installation or use; or
- vi. which result in smaller production of toxic substances, or of less toxic substance, upon disposal.

#### 3. Reducing is n.1 priority

Total procurement volume should not increase. The reduction of the procurement volume should be firstly considered.

#### <u>Implementation Process of Green Procurement</u>

To obtain the permanent implementation of green procurement, it is necessary for an organization to go through the three stages of "drawing up procurement policy," "implementation," and "analyzing achievements and planning improvements".

#### a) Drawing up procurement policy:

It is advisable for organizations to reach internal consensus when introducing green procurement and a participatory development of the procurement policy can play an important role in doing so. Organizations need to consider the roles and collaboration of the relevant sections involved in procurement and evaluation systems, etc., prior to the introduction.

#### b) Implementation of green procurement:

Organizations should clarify the way to verify products' conformity to evaluation criteria and collect the product information of specific target items in advance for the smooth implementation of green procurement. In order to obtain the permanent implementation of green procurement it is essential for the organizations to keep all employees motivated to improve their knowledge and skills. The development of a dedicated guidebook and staff training are also necessary as a measure against delay of green procurement implementation.

#### c) Analyzing achievements and planning improvements:

The process must include a system for monitoring, reporting, and compiling data, this is necessary for the organization to analyze its results in green procurement. Developing the procedure of achievement analysis the organization must bare in mind that the staff



will not be overloaded with jobs, by limiting periods in data compilation or using existing systems.

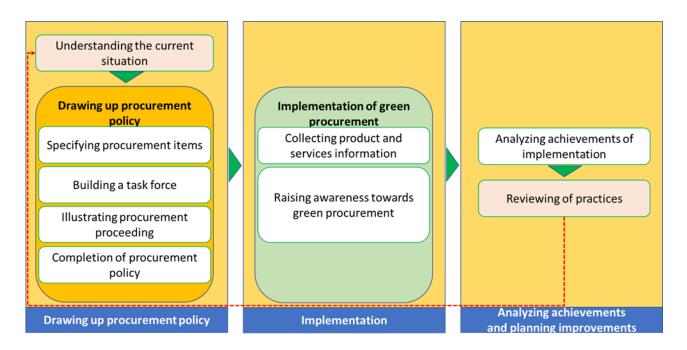


Figure 11 extract from the "Green Procurement Guidance for Local Governments" (2015, Japanese Ministry of the Environment).



# **ANNEX 2 – Executive Summary**

#### **Executive Summary for Partners**

A one page executive summary including information on:

- The history and background of the project (when it started, in reply to what call for proposal)
- e NOTICE

- Details about the call's objectives
- Who is involved in the project
- A brief description of what the grant allowed to do in the framework of the project (or, if the project is still ongoing, what is the state of the art).
- What are the further and forthcoming steps/initiatives
- What are the elements needed to accomplish the next steps/initiatives
- To whom are these needs addressed, who has to be involved to take these steps

Provide some bullet points enlightening (if possible through measurable indicators) which are the objectives reached by the project:

(for example):

- Number of participants to the security network
- Number of new members of the network over time
- Increase of the geographical coverage of the network
- Number and kind of new activities lunched by the members of the network (thanks to the project)
- Number of project proposals arisen from the activities of the network during the project
- Etc...

#### **Summary on the strategy details**

eNOTICE strategy for sustainability (timeframe e.g. 2017-2021)

Latest decisions and related strategies

#### **Next deadlines**



# ANNEX 3 – Provisional yearly costs for the CBRN TC network

#### Provisional costs for operating the platform

A preliminary estimate by UPB, the Consortium member which is developing the platform for the net costs of the management and maintenance (without developing new features) of the ECC is:

Item	Cost (EUR)
Platform server	2.500,00
Personnel costs*	55.000,00
Total	57.500,00

<sup>\*8</sup>MM/Year + 25% indirect costs

#### Provisional secretariat costs

For provisional staffing costs, reference is made to Eurostat statistics on Median gross hourly labour costs<sup>44</sup>. The cost is for one personnel unit.

Item	Cost (EUR)
Personnel costs*	47.000,00
Total	47.000,00

<sup>\*8</sup>MM/Year + 25% indirect costs

#### Provisional costs for meetings of the governing board

These costs are provided basing on the eNOTICE' estimated budget.

Item	Cost (EUR)
General assembly meeting	5.000,00 (each)
Board meeting	5.000,00 (each)

#### Total estimated cost for one year of activities

The total estimated cost for year of activity, is a conservative estimate of the budget needed to run the activity for one year.

Total estimated cost per year	114.000,00

<sup>&</sup>lt;sup>44</sup> Hourly labor costs statistics by Eurostat (2017). Available on line at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Hourly\_labour\_costs