

SOCIETAL IMPACT MID-TERM REPORT

DELIVERABLE 1.17

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TABLE OF CONTENTS

1. Introduction	3
1.1 Overview	3
1.2 Structure of the deliverable	4
2. Assessing Impacts on Society	5
2.1 Societal Impact Assessment (SIA)	5
2.2 Importance of the EU-HYBNET Network	9
2.3 Innovations for Security Practitioners' Gaps and Needs1	.2
2.4 Impacts from dissemination1	.9
3. Conclusion 2	1
3.1 Summary	1
3.2 Future Work	1
ANNEX I. GLOSSARY AND ACRONYMS	2

1. INTRODUCTION

1.1 OVERVIEW

According to the Empowering a Pan-European Network to Counter Hybrid Threats (EU-HYBNET) project's description of Action (DoA) (WP) 1 "Coordination and Project Management"/ Task (T) 1.2 "Project Management, Quality Control, Ethics and Risk Management" (lead by Laurea) is to deliver "Societal Impact mid-term report" deliverable (D)1.17 in the middle of the project execution (Project month (M)30/ October 2022). The D1.17 is connected to the WP1 that has specific objectives that are following:

- 1. To coordinate and manage the activities and quality control;
- 2. To ensure that legal and ethical aspects have been taken into account;
- 3. To run the different boards activities;
- 4. To identify, join, and increase the amount of European expert's actors to be involved with the EU-HYBNET network activities; and
- 5. To ensure sustainability of the EU-HYBNET activities and existence also after the project.

Even though none of the WP1 objectives are directly addressing societal impact, the topic is imbedded to all WP1 work strains and objectives. The same holds to EU-HYBNET objectives. In short D1.17 does not has clear project general objective to contribute but it is linked to them all. The project objectives are:

- OB1. To enrich the existing network countering hybrid threats and ensure long term sustainability
- OB2. To define common requirements that can fill knowledge gaps, deal with performance needs, and enhance capabilities of research, innovation and training endeavours concerning hybrid threats
- OB3. To monitor developments in research and innovation activities as applied to hybrid threats
- OB4. To indicate priorities for innovation uptake and industrialisation and to determine priorities for standardisation for empowering the Pan-European network to effectively counter hybrid threats
- *OB5.* To establish conditions for enhanced interaction with practitioners, industry and academia for meaningful dialogue and for increasing membership in the network
- OB6. To foster capacity building and knowledge exchange on countering hybrid threats
- OB7. To create a basis for establishing effective synergies with existing European, national and sub-national networks of practitioners and other actors countering hybrid threats

Generally speaking, D1.17 is to support and to provide an analysis of sustainability of the EU-HYBNET's activities from the societal impacts point of view and this is to benefit the whole project execution. The picture below describes the role of WP1 to support and to guide the whole project to gain tangible results, also from the societal impact perspective.

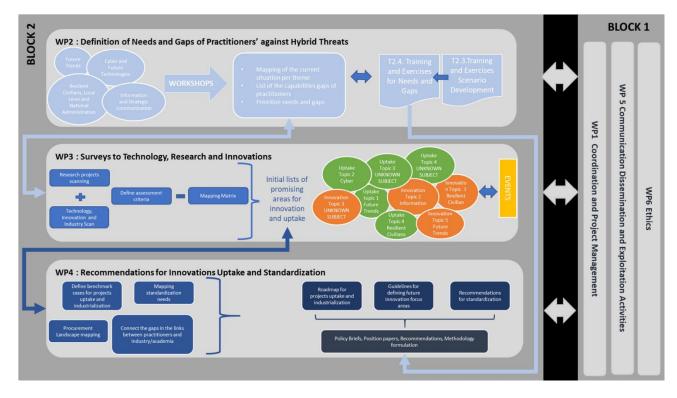


Figure 1 EU-HYBNET Structure of Work Packages and Main Activities

In general, D1.17 analyses EU-HYBNET's societal impact in the frames of ethically sustainable and societally acceptable proceeding. Secondly, since EU-HYBNET is a network project, and project's primary outcome is the network itself, D1.17 reports on the development of network and its involvement. Thirdly, societal impact and project outcome are much linked to the delivery of sound innovations to the project's stakeholders, and hence this is also studied in the D1.17. Moreover, the overall goal of D1.17 is to address EU-HYBNET's impacts on society (quality) and highlights that ethical aspects are not forgotten nor neglected. The key statement is that network involvement is the main impact, and the (positive) impacts will build sustainability beyond the lifespan of the actual project.

1.2 STRUCTURE OF THE DELIVERABLE

This document is structured the following way:

- In section 1: provides introduction to the D1.17 focus
- In section 2: describes the background of Societal Impact Assessment (SIA) and methodology used. In addition analysis is conducted, focusing on the three main ways on how EU-HYBNET impacts on society: (i) the societal impact of the EU-HYBNET network, (ii) innovations for security practitioners' gaps and needs and how this reflects societal impact, (iii) increasing knowledge as a key driver to societal impact
- In section 3: delivers conclusion of earlier chapters and insights for future

2. ASSESSING IMPACTS ON SOCIETY

2.1 SOCIETAL IMPACT ASSESSMENT (SIA)

For many decades there has been rarely any doubts that investment in research and development, including thus projects like EU-HYBNET, would have nothing but a positive impact. At the most positive extreme, some urged that *any* investment in science is inherently good for the society.¹ However, after corporates, especially those close to customers and authorities too, were affected with growing consumer and public demands for e.g., social responsibility, a change in the attitudes and mindsets begun to emerge.

Today, it is self -evident that all actions, despite the intentions (how good or evil), have repercussions. And many times, those are unforeseen and/or unintentional. The fact that action is followed by impact(s) seems so logical, that one might ask how this was ignored. However, impact assessment, such as *Regulatory Impact Assessment* (RIA) and *Environment Impact Assessment* (EIA), spread to all areas of business and government activities starting from the 1970s. Similar progress happened with all sorts of R&D activities. This report, D1.17, is an example of assessing outcomes of actions.

However, it is good to notice that D1.17 is not the only work that touches the societal impacts of EU-HYBNET. In fact, the societal impacts have been envisaged in the very beginning of the project planning. It is stated in the proposal that EU-HYBNET is going to contribute to a common, supported, and accepted expression of innovation and standardisation needs as well as toward a mutual understanding of the potential of identified innovative solutions for countering hybrid threats. Furthermore, it is stated in the proposal alike in the official project document that the project is aiming to find the most promising and potential innovations that answer to practitioners needs and can be recommended to the standardisations processes. Above examples highlight precisely that projects such as EU-HYBNET are by nature a one that aims to have an impact to the society.

D1.17 as "Societal Impact Mid-term Report" gives the opportunity to emphasis of the more philosophical questions on EU-HYBNET's impacts, and also think beforehand already about the final report and the methodology how to conduct the final results, once the projects' outcomes are more tangible. In general, the impact assessment should be a process that lives within the whole lifespan of project, and it is accomplished jointly with those participating in the project. This enables making changes when needed when new worries can be addressed etc.

Thus, D1.17 aims to focus on identifying, analysing, monitoring and managing the intended and unintended social consequences, risks and changed processes resulting from the project, whether they are from the project itself or from the tangible outcomes of the project, i.e., the network itself, not forgetting the future role of the network. Therefore, D1.17 is not only predicting impacts in a regulatory context as in *Regulatory Impact Assessment* (RIA) or concentrating on environment as in *Environment Impact Assessments (EIA)*. In short, D1.17 covers a much wider perspective, a one that fits a network project and CSA/ Coordination and Support Action project as EU-HYBNET is. However, it is good to notice that the focus will not include economic, legal or environmental impacts.

¹ Bush, V. (1945). Science: The endless frontier. [A report to President Truman outlining his proposal for postwar U.S. science and technology policy.] Washington, DC: United States Government Printing Office. Quoted from Bornmann, L. (2013), What is societal impact of research and how can it be assessed? A literature survey. Journal of American Society of Information Science Technology, 64: 217-233.

D1.17 clarifies how to assess impact of a project such as EU-HYBNET (CSA), and we lay down the principles to be follow in order to carry the final assessment, once we have a clear picture what the outcomes of EU-HYBNET have been.

Above said, assessing societal impacts is an active process of managing the social aspects of development: if and when impacts are identified, better decisions can be made regarding how the project should proceed, and how the outcomes and their use should be. Following this, mitigation measures can be implemented, to both minimise the harm, and maximise the benefits. Pivotal too, is the respect for human rights; they should underpin all actions.

The chosen process for analysing the EU-HYBNETs impacts is to provides guidance and information for the whole consortium on e.g., ethical issues (incl. research ethics) so that this stirs the participants of the project to think about the consequences and impacts their work might have. This is followed by the second phase that is to analyse the nature of the project more carefully and try to capture what are the impacts, how they could be discovered, measured etc. Finally, the third phase is a Societal Impact Review. This summarises the societal impact issues that have been raised in the previous phases and describe how they have might been addressed during the project, and how they should be addressed in the future

Typically, the contents of the social impacts touch on the following aspects of the society:

- 1. Way of life, fears and aspirations e.g. how people live and interact with each other, their perceptions about their safety and the safety of their communities, and future aspirations etc.
- 2. **Culture and community** e.g. shared beliefs, customs, values and languages, as well as the cohesion, stability and character of their communities etc.
- 3. **Political systems** e.g. participation in the decisions and processes that affect peoples' lives, the nature and functioning of democratic processes, and the resources available to support peoples' involvement in these etc.
- 4. **Environment** e.g. clean air, water, and other natural resources and access to them, as well as the level of exposure to pollutants and harmful substances and the adequacy of sanitation);
- 5. Health & well-being e.g. both physical and mental well-being etc.
- 6. **Personal and property rights** e.g. economic effects, civil rights and liberties including privacy, personal disadvantages etc.

In order to start working on the themes mentioned above, i.e., possible the societal impact, there main questions need to be addressed.

- 1) What may be the negative impacts/ethically questionable issues on individuals or societies that one could foresee arising with the EU-HYBNET project?
- 2) How these challenges could be resolved and/or how the problems could be mitigated?
- 3) What could be the possible positive outcomes or impacts to individuals or societies of EU-HYBNET?

The answers to above were described already in the very early beginning of the project in the Annex A of the proposal. See Table1 below:

Challenge	Impact on	How to Mitigate/Eliminate
People may feel suspicious	The way of life	Proper communication on EU-
towards the EU-HYBNET	Culture and community	HYBNET project's idea, need
research. They may start to		and justification.
fear more and feel insecure.		

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People may be worried about their privacy because of the social media research as part of EU-HYBNET project.	Personal rights (privacy, data protection)	Full compliance with GDPR. Anonymization of the social media data, or at least pseudonymisation. Proper communication on the ethics and data protection in EU-HYBNET project, including the full respect for GDPR.
EU-HYBNET research dealing with hybrid treats and the resilience of societies and organizations against them may be interesting information for criminals planning hybrid attacks.	Way of Life Culture and community Political systems Environment Health and wellbeing Personal rights	Security safeguards are to be implemented in EU-HYBNET research and dissemination. Ethics Advisory Board will also be involved to consult this kind of issues.
Technology x (which has been identified as on solution for combatting hybrid treats) is not compliant with GDPR and LED.	Personal rights (Privacy and data protection)	Privacy and data protection features, including advanced privacy enhancing technologies are mandatory in the technologies for the innovation uptake.

As a response to the worries envisaged in the preparation phase of the project, next are presented the responses. See Table2. below:

How to Mitigate/ Eliminate	What has been done/to be done
Proper communication on EU-HYBNET project's	The reasons and motives behind EU-HYBNET
idea, need and justification.	have been clearly stated, e.g., on the webpage
	https://euhybnet.eu/about/
	The project has been ambitious, prolific, and open in dissemination activities stressing mutual trust between society and governance.
	Clearly announce and/or display all expectations
Full compliance with GDPR. Anonymization of	A Privacy Impact Assessment has been done,
the social media data, or at least	and no personal data will be used. This has been
pseudonymisation.	also communicated.
Proper communication on the ethics and data protection in EU-HYBNET project, including the	Demonstrate data privacy and protection as a
full respect for GDPR	priority.
	Full compliance with GDPR.
Security safeguards are to be implemented in	Ethics Advisory Board has had an active role,
EU-HYBNET research and dissemination. Ethics	reoccurring meetings, consultancy etc.

Advisory Board will also be involved to consult this kind of issues.	Creation of ethical guidelines and monitoring of their use.
Privacy and data protection features, including	See above, i.e., a Privacy Impact Assessment has
advanced privacy enhancing technologies are	been done, and no personal data will be used.
mandatory in the technologies for the	This has been also communicated.
innovation uptake.	Full compliance with GDPR.

Above is however merely a good starting point, describing more of the principles to follow when pursuing the objectives of EU-HYBNET.

Therefore, in this mid-term report, a methodology for a full impact assessment is presented. As stated already before, Research, Development and Innovation (RDI) activities may have both unintended and unanticipated consequences. These consequences can be either positive or negative. Furthermore, societal impacts can originate from the actual activities of the EU-HYBNET and from the network itself. Therefore, the Societal Impact Assessment (SIA) in this project will concentrate both to EU-HYBNET's own activities, as well as to the identified solutions for combatting hybrid threats e.g. outcomes of other research activities that this project does not create but deals with. For this reason, EU-HYBNET will utilise a method originally created in the ASSERT project (see http://assert-project.eu/). This includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned research and innovation activities. However, it must be noted that we cannot fully follow, nor is it meaningful to, the process created in ASSERT, because in EU-HYBNET there are no tangible products to be created, no artefacts to assess.

The way forward is to set up two questionnaires (using EU-Survey tool) to the whole consortium to be sent out on the third part of our five-year project. This is because, toward the end of the project, the outcomes are more tangible, and therefore questions can be asked with a stronger certitude. With the questionnaire, answers to three separate questions are sought: first, what kind of ethical or other challenges the respondents might envisage during the project and after it has finished e.g. with its end-solutions. The second questions would be on the mitigation techniques to avoid the above-mentioned ethical challenges. The third questions is be on positive impacts that the project might have. Based on the responses of the first questionnaire, a follow up will be done after the analysis of the first questions is completed with more specific inquiries on the societal impacts. This questionnaire too will be done with the EU-Survey tool and will be circulated among the network.

Following the presentation of the SIA and its current status, this report moves to the other set of impacts on society, first being the network itself.

2.2 IMPORTANCE OF THE EU-HYBNET NETWORK

Canadian philosopher Marshall McLuhan has stated in his book "Understanding Media: The Extensions of Man" (1964) that "The medium is the message". He argued that the communication medium itself, not the messages it carries, should be the primary focus of study. He also showed that artifacts such as media affect any society by their characteristics, or content.

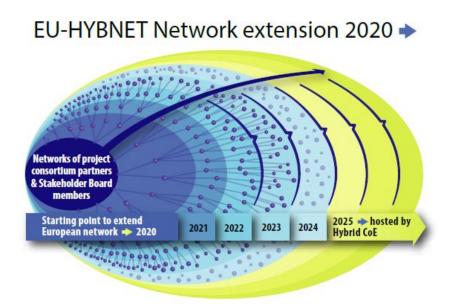
Following this analogy, in a network project as EU-HYBNET, the network itself is the most important and obvious impact on society. The evaluation of the network has been described in detail in EU-HYBNET deliverables D1.7 "Definition of the eligibility criteria for new actors", D1.8 "EU-HYBNET Network Sustainability Plan", D1.19 "List of actors to the extended EU-HYBNET Network", D1.20 "List of actors to the extended EU-HYBNET Network". Therefore, the key elements of the EU-HYBNET network in the context of the societal impact assessment will be highlighted below.

Simply put, the network is the most important single tangible outcome of the EU-HYBNET project, therefore it is *the* impact to the society too. All the activities are done in the network and through the network. The societal impact of EU-HYBNET materialise – becomes alive – during the interaction between individuals meeting each other's and interacting, for example, in the different events of EU-HYBNET: training and exercise events, innovation and standardisation workshops, annual workshops and other events. Here below is an example of the activities of the EU-HYBNET in which the members have met (a screenshot from the webpage, <u>https://euhybnet.eu/events/</u>, accessed on 15th of October 2022):

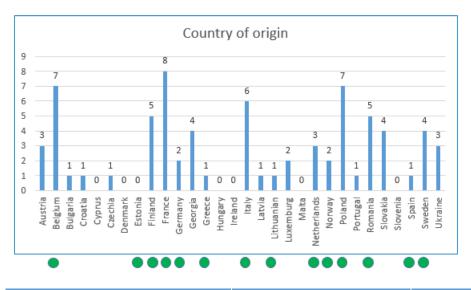
29 SEPTEMBER Wykolas Romeris University	15 SEPTEMBER Universität der Bundeswehr München	15 JUNE Babyton Hotel Dwn Haag
THURSDAY	THURSDAY	WEDNESDAY
EU-HYBNET 2nd Training & Exercise Event assatione 20 Sep 2022 Lessi Time: 1200 - 1700 Didlauklo SS, Vilnius, Lithuania	EU-HYBNET workshop "Reacting to hybrid threats: Ethical compliance of the riposte/counter-attack innovations" at CRITIS2022 & online Least Date: 15 Sep 2022 Werner-Helsenberg-Weg 39, BS577,	EU-HYBNET Innovation Standardisation Workshop #ISW Level Date 13 Jan 2022 Level Time: 08:00 - 12:15 The Hague, Netherlands
14 JUNE addylar Hotel Den Haug TUESDAY	06 APRIL Universitä Cattolica del Sacro Cuore WEDNESDAY	OS APRIL Università Cattolica del Sacro Cuore TUESDAY
EU-HYBNET 2nd Innovation and Knowledge Exchange Workshop #IKEW acai Date: % Jun 2022 Least Time: 10:00 - 18:00 he Hague, Notherlands:	EU-HYBNET 2nd Annual Workshop #AW • Lecal Date: 08 Apr 2022 Lecal Time: 10:00 - 15:30 Rome	EU-HYBNET 2nd Future Trends Workshop #FTW – Democracies on the edge? Local Date: 05Apr 2022 Local Time: 1000 - 17500 Rome
VIEW DETAILS	VIEW DETAILS	
4 - 16 DECEMBER	04 OCTOBER	07 - 29 SEPTEMBER
TUESDAY	MONDAY	TUESDAY
EU-HYBNET participates in the 'Responding to hybrid threats in the Mediterranean and Black Sea region'	EU-HYBNET "Defined Innovations to Hybrid Threats" Event #EDIHT • Least Delic 09 Oct 2021 Least Trime (10:30 - 12:00	EU-HYBNET 2nd Gaps and Needs Event • Local Dete: 07 - 29 Sep 2021 Local Time: 09200 - 18200
Workshop 🔍 Local Date: 14 - 16 Dec 2021 Local Time: 14:00 - 17:00		VIEW DETAILS

The picture above illustrates the scope of the activities, but more so, that it is the network that matters: everything on EU-HYBNET intertwined with the network.

The starting point of the network was naturally the consortium and its members, and enriching it is the main objective of the project. The goal was to first identify potential members of the network that have demonstrated expertise for knowledge and measures to counter hybrid threats, and then encourage them to join the network and engage in its activities. The target has been that at least 30 new members to join the EU-HYBNET network yearly. This process is pictured in the illustration below.



The success of the network extension and present network members are presented by sectors and countries in the tables below. The tables describe situation on 15/10/2022. Green dots signify that from the named country also a consortium partner is part of the network:



Category	Number	Country
Practitioner	21	13
NGO	16	12
Academic/RTO	26	15

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D1.17 Societal Impact mid-term report

Industry/ SME	18	8
New network members - In total	81	23
Network members with consortium partners – In total	106	24

The activities to broaden the network, including reaching out to relevant entities in Member States (MS) and additional participants from industry and SMEs, and practitioner organizations are a constant and ongoing activity. For example, the EU-HYBNET Network Manager (Laurea) conducts a monthly analysis of EU-HYBNET network members, what EU Ms are presented and how the network members are presented in various pan-European stakeholder groups: security practitioners, industry & SMEs, academia, NGOs. The project also actively promotes possibilities for new members to join the EU-HYBNET Network. E.g. c. 20 Italian SMEs were invited to join to both EU-HYBNET "Future Trends Workshops" and "Annual Workshop" on 5-6/4/2022 in Rome& on-line, and Dutch SMEs&industry and security practitioners were widely invited to join EU-HYBNET "Innovation Knowledge Exchange Workshop" and "Innovation Standardization Workshop" on 14/6/2022 in Hague&on-line.

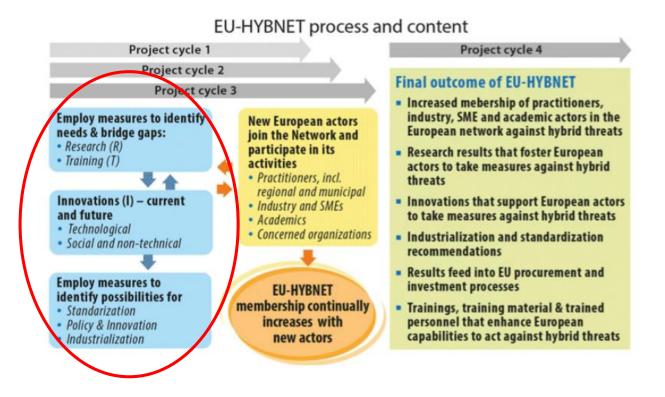
EU-HYBNET will continue to engage with relevant EC funded Security and Network of Practitioners (NoP) projects, as well as reach out to industry (SMEs included), e.g., with a tailored EU-HYBNET brochure, specific "industry workshops" for practitioners and innovation providers to meet and foster ongoing dialogue. Therefore, the network will continue to progress and EU-HYBNET will have a even grater impact. One example of above is the EU-HYBNET workshop "Reacting to hybrid threats: Ethical compliance of the riposte/counter-attack innovations" at CRITIS22 conference, that was organised in 15th of September 2022.

The next set of impacts of our project can be described under the topic of *Innovations for Security Practitioners' Gaps & Needs*.

2.3 INNOVATIONS FOR SECURITY PRACTITIONERS' GAPS AND NEEDS

Above was presented the main mechanisms and outcome through which EU-HYBNET impacts society: the network.

However, the project has more direct impacts too. As one of the objectives of EU-HYBNET was to "define common requirements that can fill knowledge gaps, deal with performance needs, and enhance capabilities of research, innovation and training endeavours concerning hybrid threats", these too can be seen as impacts to the society. Here below is presented the EU-HYBNET process and content:

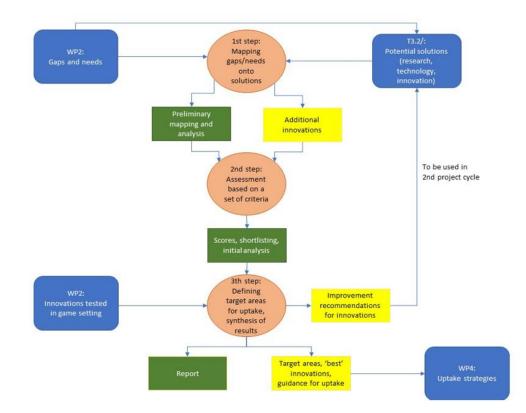


The EU-HYBNET main working lines that are relevant to the D1.17, are highlighted with a red circle in the picture. The three main working lines are: (i) goal to identify the gaps and needs of pan-European security practitioners and other relevant actors to counter hybrid threat; (ii) mapping of promising innovations and measures to the gaps and needs, (iii) identify measures for innovation uptake and standardisation, also if plausible to the industrialization. The EU-HYBNET's gained results to the above mentioned three main EU-HYBNET working lines are reported in every six months in the "Six Month Action Reports" to the EC in details and according to the following titles (so-called "Three Lines of Action"):

- 1) Monitoring of research and innovation projects with a view to recommending the uptake or the industrialization of results
- 2) Common requirements as regards innovations that could fill in gaps and needs
- 3) Priorities as regards of increasing of knowledge and performance requiring standardization

Because the Six Month Action reports deliver thorough analysis of the findings it is seen that the reports and the reporting itself is making the impact during the project: first to the commission, and from there to the society.

The work process in the promising innovation mapping to the identified gaps and needs in order to deliver the final results and findings is following:



As stated, the outcomes are well presented in the EU-HYBNET deliverables (e.g. Six Month Action Reports D1.2, 1.3, 1.4, 1.5, 1.10). Therefore, it is futile to rewrite all what is in them. Rather, from societal impacts point-of-view, it is more pertinent to present the process on how EU-HYBNET comes to its conclusions in each of its project working cycle (M1-17/cycle I; M18-34/ cycle II; M35-51/ cycle III; M52-60/cycle IV).

First, the project identified in Task (T)2.1 "Needs and Gaps Analysis in Knowledge and Performance" (lead HybridCoE) and T2.2" Research to Support Increase of Knowledge and Performance" (lead JRC) practitioners' and other relevant actors' (industry, SMEs, academia, NGOS) gaps and needs, vulnerabilities to counter hybrid threats. Then, the work was deepened into deeper analysis, and T2.1 and T2.2 delivered on a long and a short list of gaps and needs in EU-HYBNET deliverables: D2.1, 2.9, 2.6, 2.10. In the named deliverables the most important pan-European practitioners' and other relevant actors' gaps and needs to counter hybrid threats were listed. This fundamental work was followed by rigorous monitoring and mapping activities of technological and nontechnological/human-science based innovations, solutions from existing research and innovation (R&I) projects and other possible sources or providers (e.g. industry, academia) to cover the identified gaps and needs and with a goal of recommending the uptake or the industrialization of results. This work has taken place in WP3, especially in T3.2 "Technology and Innovations Watch" (lead Satways), T3.3 "Ongoing Research Projects Initiatives Watch" (lead L3CE), and T3.1. "Definition of Target Areas for Improvements and Innovations" (lead TNO). Eventually in WP4 "Recommendations for Innovations Uptake and Standardization" / T4.1 "Mapping on the EU Procurement Landscape", T4.2 "Strategy for Innovation uptake and industrialization" and T4.3 "Recommendations for Standardization" has focused on the most promising innovation uptake measure by solving EU procurement landscape, strategy for the most promising innovations uptake, and the standardization landscape for the innovations. Eventually T4.4 "Policy Briefs, Position Paper, Recommendations on Uptake of Innovations and

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Dissemination level : PU *Knowledge*" has provided Policy Briefs to public on the key findings and measure recommended by the EU-HYBNET in order to improve pan-European response to counter hybrid threats.

The whole flow of work provides the core for the expected contribution to the EC and reporting according to the Three Lines of Action while also other EU-HYBNET Work Packages and Tasks have strong input to the named reporting.

For example, the pan-European security practitioners' and other relevant actors' gaps and needs, threats to counter Hybrid Threats have been following (Findings from the 1st project working cycle):

CORE T	HEME	Threats
		1.1 Trend: Official strategic communication losing power
	TURE TRENDS OF BRID THREATS	1.2 Trend: Big data as a new power source
		1.3 Trend: increasing strategic dependency of critical services
		2.1 GAME CHANGERS: QUANTUM AS A DISRUPTIVE TECHNOLOGY
	2. CYBER AND FUTURE TECHNOLOGIES	2.2 HYPER CONNECTIVITY AS AN IMPACT MULTIPLIER OF CYBER
		2.3 THE INDIVIDUAL AS A DIGITAL ENTITY
3. RESILIENT CIVILIANS, LOCAL LEVEL AND		3.1 DISTRUST AND STRESS IN POLITICAL DECISION-MAKING
		3.2 RELIANCE ON CRITICAL SERVICES AND TECHNOLOGICAL SYSTEMS
ADI	ADMINISTRATION	3.3 GLOBALIZATION VS. LOCALISATION
	ORMATION	4.1 GOING VIRAL
	AND STRATEGIC COMMUNICATIONS	4.2 DIGITAL MONOPOLIES AND MASSIFICATION OF DATA
		4.3 DETERIORATION OF THE QUALITY OF CONTENT

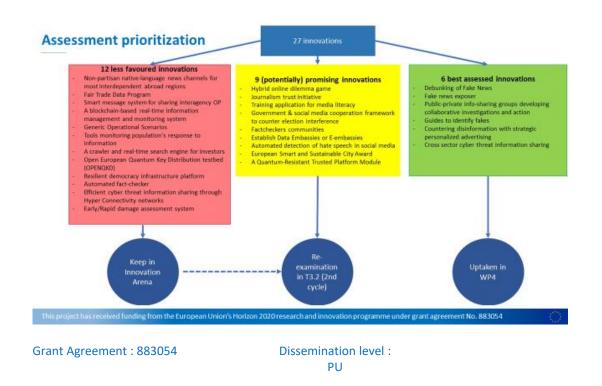
And, the gaps identified during the 2nd cycle:

CORE THEME		PRIMARY CONTEXT, Threats
1. FUTURE TRENDS OF	1.1	Geopolitical heavyweight of domestic policy

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	HYBRID THREATS	1.2	Digital escalation and AI-based exploitation
	THREATS	1.3	Rise of populism
	CYBER AND FUTURE TECHNOLOGIES	2.1	Space interference and counterspace weapons
2.		2.2	Offensive cyber capabilities
		2.3	Disruptive innovation
	RESILIENT CIVILIANS, LOCAL LEVEL AND ADMINISTRATION	3.1	Exploitation of existing political cleavages
3.		3.2	Exploitation of critical infrastructure weaknesses and economic dependencies
		3.3	Exploitation or investment in companies by foreign actors
	INFORMATION AND STRATEGIC COMMUNICATIONS	4.1	Information manipulation with the aim of destabilization
4.		4.2	Foreign interference in key information institutions
		4.3	Promoted ideological extremism and violence

Following the identification of the gaps and needs, the innovations are mapped and presented to practitioners and other relevant actors as "most promising innovations", "less favoured innovations", "potential and promising innovations", and "best assessed innovations". For example, during the first project cycle (M1—M17) they were as in the illustration below:



		Project four core themes					
Innovations		Resilient civilians, local level and administration	Cyber and Future Technologies	Information and Strategic Communication	Future Trends and Hybrid Threats.		
1.	Public-private information-sharing groups developing collaborative investigations and collective action		x	X			
2.	Debunking of fake news	х		X			
3.	Training application for media literacy	Х		X	X		
4.	Guides to identify fakes	Х		X	X		

Then after, in our example, the first cycle (M1-17), four innovations were selected to further analysis and strategy development:

The selection of these four innovations was backed after a thorough analyse in internal consortium workshops. Furthermore, "Public-private information-sharing groups developing collaborative investigations and collective action", "Debunking of fake news" and "Guides to identify fake news" were selected in the EU-HYBNET training event by stakeholders as most promising innovations to be tested during the training (April 2021). Noteworthy is that not all were pure technology innovations, as "Training application for media literacy" was something that exhibits both technical and non-technical features.

After the selection of the most promising innovations the creation of strategy for innovation uptake and industrialization could began. In this a following Canvas method was used (see picture below).

The innovation	The solution details	The solution details		The resources		The uptake environment	
Describe the solution, i.e., the instantiation of the innovation to be considered	Functional and technical description	اللي ال	Required development resources	X	Competition and market		
Added value proposition	Operational description		Required operating support system	¢°°	Funding and organization of uptake and industrialization efforts	- `\$ -	
Stakeholders	Road mapping	° S	CAPEX & OPEX		Barriers		

The last but not least type of outcomes following the process are related to standardisation. The first cycle produced the following six *focus areas* when prioritizing knowledge and performance that require standardisation:

- 1. Big data
 - Defining a set of regulation for using big data in political campaigning
 - To consider new business models for data aggregation where the individual is the owner and trader of his data
 - Formation of a unified or all-encompassing strategy on new categorising technologies
 - Updates to personal information protection regulations in the EU
 - Ethical standards to the use of big data and use of material collected and analysed
- 2. Critical Goods and Commodities
 - Monitoring of the influence of the national FDI in the sector of critical goods and services
 - Public-private partnerships as a way of securing the provision of strategic stocks and supplies
 - Definitions and best practices based on data aggregates as a critical commodity
- 3. Cyber Security
 - Unified cyber strategy for technological development taking place in the field of cyber and future technologies
 - EU vision and approach to reach coherent cyber security measures in the context of rapidly developing technological environment
 - EU vision and approach on interoperability across platforms in the context of Hyperconnectivity
 - Standards to quantum computing engaging in a symbiotic relationship with classical and legacy systems

- Standards to deepfakes in the context of 'synthetic media'
- 4. Fake News and Disinformation
 - Support to media pluralism
 - Standards for good journalism
 - Countering the mass of fake news
 - Increasing awareness of fact checkers and their findings pan-European wide in EU MSs by citizens, media actors and governments
- 5. Resilient civilians
 - Increasing media literacy
 - increasing societal resilience against fake news
 - Increasing knowledge of competences and measure at a local level to counter disinformation
 - Providing assistance to marginalized parts of society
- 6. Strategic Communication
 - Reinventing the practice of public outreach
 - Standards of communication between national governments and local authorities
 - Establishing official and well-known communication platforms
 - Preparing simplified blueprints of political communication with the general public

These and new results were then addressed in the Innovation Standardization Workshop (IKEW, 15/6/2022 in Hague) by a larger audience, and the focus is to ensure that the knowledge, performance and innovation areas prioritised and recommended for standardisation in the context of hybrid threats, will remain to be acknowledged in existing EU policies.

As one can see from the above, EU-HYBNET's impact on society from its research and other type activities, although research is not in the primary focus of our project, through the iterative process of EU-HYBNET. This is of course, a testimony of good networking too. Next will be presented the impact through dissemination activities.

2.4 IMPACTS FROM DISSEMINATION

Again, similarly to what was said about assessing the previous activities impacts on society, there are available more specific and thorough reports on dissemination and communication activities of this project (D5.1, 5.2, 5.3). However, since they may miss the societal impact aspects, few words on that are needed here too.

One aim of the dissemination activities is to increase knowledge of hybrid threats and response(s) to hybrid threats of policymakers and politicians, not forgetting the industry and general public. This has obvious impacts on society. Here below is a short analysis of the different audiences of EU-HYBNET, and how they are engaged with the project:

Audience 1: Practitioners interested in the uptake of security research and innovation in relation to the fight against hybrid threats. EU-HYBNET partners will engage practitioners throughout the project timeframe by inviting relevant stakeholders to events and workshops, by proposing that they take part in different initiatives and ask for their feedback on how EU-HYBNET's solutions can support enhanced resilience to hybrid threats.

Audience 2: Industry including SMEs. All consortium members will engage industry players with interests in hybrid threats and work constructively with its wide network (security industry, suppliers of security solutions). This network will be invited to attend events and workshops of EU-HYBNET and will receive all supportive documents needed to actively participate in key activities.

Audience 3: Policy makers. Through policyoriented partners, policy and decision makers will be approached. The EU-HYBNET consortium will identify and get in contact with targeted personnel and invite these actors to project events and workshops. The relevant files under discussion will also be identified and their development monitored by the consortium.

Audience 4: Scientific community. EU-HYBNET results and updates will be delivered to relevant EU and with academia, universities, research communities and institutes, as well as the private sector.

Audience 5: General public. Individuals interested can follow EU-HYBNET activities online via webpage, social media (Twitter) etc. and learn about hybrid threats and how they are tackled.

The outcome of the interaction between EU-HYBNET and these audiences can lead to more resilient societies, enhancements in innovations, new policies and initiatives, even legislation, standardisations etc. The full details on e.g., how these audiences have been reach can be found in the deliverables on dissemination. However, a prime example are the policy briefs that EU-HYBNET has produced and shares on EU-HYBNET webpage - picture below:

Policy Briefs



EU-HYBNET Policy Brief No1.-Information and strategic communications -June 2021

.pdf

EU-HYBNET Policy Brief No2.-Countering Hybrid Threats: Areas for Improvement and Developing Innovations – December 2021



EU-HYBNET Policy Brief No3.-Information Manipulation and Interference – February 2022

3. CONCLUSION

3.1 SUMMARY

In this document we have described the different areas of impacts that the EU-HYBNET has on society: Societal Impact Assessment. The actual impact assessment needs to be done closer to the end of the project when all the tangible outcomes can be better analysed.

In short this document has provided the following:

- We provided the background and methodology of the SIA
- We highlighted the most important and somewhat tangible outcome of this project: the network
- We explained how the obtained process produces impacts to the society
- We stressed that dissemination, especially different attempts to influence policies and politics may have an impact on societies.

It is worthy highlighting two things. First, more detailed reports on the network and dissemination and other projects activities have been delivered, this report is not replacing them. On the contrary, this report owns to them but wants to emphasis the impact element. Secondly, this document is the mid-term report, and a final report will be conducted at the end of this project (M60/April 2025). By then we will have a much clearer view of what EU-HYBNET has accomplished, especially since the 4th cycle has ended, and thus we can better assess the impacts on society too.

3.2 FUTURE WORK

Since this is the mid-term report, it is obvious that the work continues toward the final report on EU-HYBNET's societal impacts. Next concrete actions are developing the online questionnaires for the Societal Impact Assessment, and then work toward the final report. The questionnaire will be prepared using EU-Survey tool. Firstly, the use is recommended by the EC, and secondly, the survey can be easily sent via email to the participants, and it is secure. Even more pertinent is that the analysis tools of the EU-survey tool are suitable for the SIA. Once the questionnaire is ready, it will be sent to the respondents. The recipients are the whole consortium, including all stakeholders and other who have participated in EU-HYBNET events. The results from the questionnaire and full-scale analysis of the EU-HYBNET societal impact will be presented in the final report.

ANNEX I. GLOSSARY AND ACRONYMS		
Term	Definition / Description	
DoA	Description of Action	
EU	European Union	
EU MS	European Union Member State	
EC	European Commission	
EU-HYBNET	Empowering a Pan-European Network to Counter Hybrid Threats	
GDPR	General Data Protection Regulation	
WP	Work Package	
MS	Milestone	
WP	Work Package	
Т	Task	