



EU-HYBNET

TRAINING AND EXERCISES LESSONS LEARNED REPORT

Deliverable 2.24

Lead Author: Hybrid CoE

Deliverable classification: Public (PU)



This project has received funding from the European Union's Horizon 2020 – Research and Innovation Framework Programme, H2020-SU-SEC-2019, under grant agreement No. 883054

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Deliverable number:	2.24	
Version:	1.0	
Delivery date:	28/2/2023	
Dissemination level:	Public	
Classification level:	Public	
Status:	Ready	
Nature:	Report	
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DOCUMENT CONTROL

Version	Date	Authors	Changes
V0.1	9.11.2022	Maxime Lebrun	First draft
V0.2	24.11.2022	Monica Cardarilli	Review for editing
V0.3	25.11.2022	Jari Räsänen	Comments for editing
V0.4	28.11.2022	Maxime Lebrun	Methodology added, text editing
V0.5	16.1.2023	Edmundas Piesarskas	Comments for editing
V0.6	17.1.2023	Hanne Dumur-Laanila	Text editing, structure of the deliverable added
V0.61	18.1.2023	Päivi Mattila	Comments for editing
V0.7	13.2.2023	Hanne Dumur-Laanila	Text editing
V0.8	7.2.2023	Hanne Dumur-Laanila	Text editing
V0.9	15.2.2023	Hanne Dumur-Laanila	Text editing, bibliography and acronyms chapters added
V0.91	20.2.2023	Edmundas Piesarskas	Comments for editing
V0.92	20.2.2023	Päivi Mattila	Comments for editing
V0.93	28.2.2023	Hanne Dumur-Laanila	Final editing
V1.0	28.2.2023	Päivi Mattila	Final Review and submission of the document to the EC

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1. INTRODUCTION

1.1 OVERVIEW

This Training and Exercise Lessons Learned report concerns the results of the exercise organized as part of the project Pan-European Network to Counter Hybrid Threats (EU-HYBNET). The exercise is part of the project's Work Package (WP) number 2, *Gaps and needs of European actors against hybrid threats*. The work in this WP starts with the mapping of and analysis of most crucial gaps and needs, continues in producing of research articles on these, and ends in scenario writing and scenario-based exercise. The lessons drawn from this exercise will be used by the WP number 3, *Surveys to technology, research and innovations*, and the WP number 4, *Recommendations for innovations uptake and standardization*, in support to defining the innovation potential, needs for standardization and recommendations for uptake.

The purpose of the exercise was to contribute to enhancing the knowledge and performance of European actors against hybrid threats. The chosen game format for this project cycle was a Disruptive Technology Assessment Game (DTAG), also used in the 1st EU-HYBNET Training event in 2021. The DTAG is a seminar type wargame, used to assess potential innovations and their impact on the operating environment, in this instance a hybrid campaign. The DTAG essentially allows to employ innovations, or so-called **Ideas of Systems** (IoSs) to address problems contained in the gameplay. The ideas of systems are ideas of a varying degree of abstraction which could contribute to reducing European societies' vulnerability to hybrid threats. Together, those ideas of systems are meant as indicators of what could be done throughout policies aimed at addressing the challenges of hybrid threats across the domains of the conceptual model. While EU-HYBNET aims at highlighting new ideas of systems, an essential part of the added value of the project is to spot and link those applications and systems already in use which would provide a benefit in addressing the challenges of hybrid threats.

1.2 EXERCISES AND EU-HYBNET PROJECT

The exercise is product of task (T) number 2.4 *Training and exercises for needs and solutions for gaps*. Goal of this task, according to the Description of Action (DoA) of the project, is to enhance knowledge and performance of European Actors against hybrid threats and to test promising innovations. T2.4 describes:

T2.4 Training and Exercises for Needs and Solutions for Gaps (M6-M51)

T2.4 will arrange and deliver training and exercises (knowledge exchange event) in the project (M12, M29, M46) according to the WP2 cycles and to the gaps and needs defined critical to cover (T2.1-T2.2) in order to enhance European actors' capacity, knowledge and competence on measures against hybrid threats. The training and exercises focus on the four project core themes based on the scenarios created in T2.3. The method of the training or exercise in T2.4 will be lecture format including gamification (there is also possibility for webinars). Furthermore, T2.4 will analyse training and exercise programmes at different EU MSs and organisations in order to avoid delivery of overlapping scenarios and training and delivery of overlapping training material. The goal in T2.4 is to deliver training and exercises to participants (c.30-40 persons) with various background (mainly practitioners, industry and academic actors) to gain new knowledge and skills to enhance their measures against hybrid threats.

In T2.4 also possible innovations to enhance European actors' measures against hybrid threats will be tested in order to provide information for WP3 and WP4 to define the innovations potential, needs for standardisation and to compile recommendations of innovations uptake (incl. industrialisation). This information will be part of the Lessons Learned (LL) document provided in T2.4 (M14, M31, M48). T2.4 will evaluate the training or exercise (knowledge exchange event) events and the scenario used. Besides events on site, part of the training will be delivered in a lecture format (M17, M34, M51) that can be shared for the EU-HYBNET extended network members and also to be utilized in next WP2 cycles and in all of its tasks (T2.1-2.4) if seen necessary and supportive in the next cycles and progress of the project. Eventually the goal in T2.4 is to enhance knowledge and performance of European actors against hybrid

threats; increase the number of members in the European network against hybrid threats; more efficient use of investments made across Europe in demonstration, testing, and training facilities. T2.4 contributes strongly to the GM-01 call medium term impact no: 3.

In addition, T2.4 provides an arena to test innovations selected by EU-HYBNET WP3 T3.1, T3.2 and T3.3 to the identified gaps and needs. It contributes to the expected medium-term impact of the project (to take more efficient use of investments made across Europe in training facilities) by testing the innovations identified in the project cycle (specifically in task 3.1, *Definition of target areas for improvement and innovations*).

The lessons learned report will first and foremost support defining of the innovative solutions that can be fed to the EC procurement process. This is a key performance indicator under project objective 2, which is 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. Towards this objective, the lessons learned report may also support defining future focus areas for research articles under the four core themes.

1.3. STRUCTURE OF THE DELIVERABLE

This deliverable includes the following chapters:

- **Section 1:** Introduces the exercise, structure of the deliverable, and the methodology used to assess the event.
- **Section 2:** Describes the lessons identified regarding the training objectives; target audience and participants; scenario and situation; innovations and solutions assessed.
- **Section 3:** Provides conclusions drawn from the assessment.
- **Section 4:** Offers food for thought for future work.

1.4. METHODOLOGY

The present Lessons Learned Report Deliverable (D2.24) constitutes a reflection on the purpose and scope of the kind of training events EU-HYBNET could hold with a view to ensuring the relevance of the project to European priorities as well as readability to external audiences to the project. This deliverable has considered in particular the relevant training event report D2.21, "Training and exercises delivery on up-to-date topics" and D1.21 "1st Training and Exercises Lessons Learned", notes, feedback from event participants and network members. As the project is at half-way, the chosen methodology also applies a critical look at the event to understand ways in which it could be even better. The cyclical nature of the EU-HYBNET project implies a possibility to identify things that work and others that work less optimally for revision. It is important that a sound and transparent lessons learned process be possible in this project to transparently improve working methods. The analysis and suggestions presented are meant as a starting point to steer debate and to continue the discussion on improvements for future events.

1 st cycle feedback	2 nd cycle feedback
Desire to arrange the training on site instead of running it online.	It is recommended to the EU-HYBNET network to include more practitioners into future discussions and to make sure that a focus on creating added value to them is maintained.
Limiting the complexity of both the Scenario and the Vignettes.	Balancing of the scenario presenting the complexity and making it simple to understand, interpret and apply should be considered for the up-coming cycle.
Consider that innovation providers are invited to introduce their solutions and to demonstrate innovations value and role in the Hybrid Threats landscape in the next EU-HYBNET training event.	It is worth to consider that innovation providers are invited to introduce their solutions in more details or even providing the possibility to have hands-on training.

Demonstrate an architecture that would define the place individual innovations held within a larger picture.	Participants were lacking explicit descriptions of the innovations in order effectively understand the innovation's potential and its future uptake possibilities. This was improved by having 3 innovations presented live and having methodology of innovations in use presentation. But this still leaves too much space for very high-level discussions.
Inclusion of competent Moderators into the training process should be continued.	

Table 1. Feedback from 1st and 2nd events.

2. LESSONS IDENTIFIED

This Deliverable identifies a series of lessons by assessing the observed practice in the 2nd training event with consideration to the objectives laid out in the Description of Action (DoA). Lessons are identified per the following four categories: objectives of the event, target audience and participants, scenario and situation, innovation solution possibilities. In addition, the assessment conducted in this report recognizes the improvements already made between the 1st and 2nd cycle and the suggested recommendations for the up-coming cycle.

2.1. TRAINING EVENT OBJECTIVES

2.1.1. DESCRIPTION OF ACTION

The objectives of the training events in EU HYBNET are encapsulated within project objective 6.4. to “empower European practitioners, industry, SME and academic actors’ capacity to counter hybrid threats by offering relevant trainings and materials”. Other relevant objectives are OB 2. KPI 2.2. to “define innovations that can overcome the identified gaps and needs in certain focus areas in order to enhance practitioners (priority), industry, SME and academic actors’ capabilities”; OB 7. 7.1 “to share information on EU-HYBNET activities and training possibilities among European stakeholders”.

The task description mentions providing lectures and gamification formats but also testing possible innovations through training events. On one hand the DoA makes it about delivering ready results to external participants and about being one of the evaluating steps of the innovation solution possibilities. This is done in particular by providing a testing ground to explore the feasibility of the main findings of the EU-HYBNET project so that the reflections of the training participants can constitute a steppingstone in assessing the potential for innovation solution possibilities.

2.1.2. ASSESSMENT

The 1st and 2nd cycle events have been conducted in a gamification format and by offering lectures aside. According to the feedback after the 1st cycle event, a hybrid format event was arranged in the 2nd cycle, which offered the possibility to participate online. Both events have gathered consortium and network members from various backgrounds.

In terms of the event format, it might be good idea to consider whether a scenario play is always the best way to learn. The objective 6.4. allows also training in a lecture format, and this type of learning method could be desirable, especially when the participants are representing a variety of backgrounds with different approaches of understanding the concept of *hybrid threats*. The diverse background of network and consortium members is also what enriches the network, but practitioners, government officials and academics etc. are more likely to approach the concept of *hybrid threats* from divergent perspectives and this will also affect the training objectives. From that perspective, some consideration could be given to the possible challenges to reach the underlying pedagogical or educational objectives of the training events which in general vary from gaining new knowledge to for example learning new skills. Learning outcomes are much linked to the very idea what learners should know, produce, or do.

As a food for thought, in the future trainings could be more explorative and less assersive, as the matter of the project is not amenable to overly detailed discussions, or it is not possible to train especially new skills. The objectives of training events, as laid out in the Description of Action, do offer flexibility to choose from different methods, especially given the small number of resources planned for the completion of this activity. This suggestion could also respond to the feedback as regards of adding more value for practitioners.

Therefore, one lesson identified here is to better define what could be the best way to offer training in order to bring clarity to the way in which this even would fulfil objective 6.4. The scenario created within task 2.3. was meant to provide a conversational context for participants to explore the feasibility of some of the innovations identified within WP3 and their suitability to solving the problems at hand in the scenario. Overall, the Description of Action should not be interpreted in a too strict manner but with a certain amount of flexibility. For example, a choice could be made to make T2.4 a knowledge delivery event via lecturing or a proper innovations assessment event, or a reasonable compromise between the two options. On the other hand, the event seemed to raise lot of discussions that can be also relevant to future project activities.

2.2. TARGET AUDIENCE AND PARTICIPANTS

2.2.1. DESCRIPTION OF ACTION

The DoA T2.4 description mentions the provision of training to participants (approximately 30-40 persons) to gain new knowledge on issues and best practices. However according to Objective 6. KPI 6.4 every training event should have at min. 60 participants on site and via webinar for others. The DoA does not imply that the training event is especially for the Consortium but can also be destined to external stakeholders and newer network members in the context of network extension. The aim of the training event is not to gather the whole consortium as it supposed to reflect the findings of the project itself in a lecture format including interactivity. The DoA provides some additional clarity regarding target audience which could help assessing the objectives of the training event and therefore recalibrate participation.

2.2.2. ASSESSMENT

The second training event was organised in a hybrid format. Total of 66 participants registered to the event and 44 participants attended. The OB 6 KPI 6.4. was not met but as also notified in D2.21 report, the reasons for not attending the event can be multiple such as changes in the schedule etc. and this is often challenging to overcome when organising events.

The overall feedback was very positive, but some of the participants had troubles understanding the scenario play. Clarifying the objectives of the training event and the scenario work would also help to gain a better understanding of which target audience to prioritize: auditors for a lecture and game format; or assessors type of audience, knowing that the training event is also an innovations assessment event.

It is difficult to hold both a lecture format and a credible innovations assessment in one event. With this reflection, it could be useful to choose very early on and in line with the refinement of the training objectives definition, the target group of participants between consortium partners, network members, external stakeholders, organization, association of professionals, etc. and adjust the training needs and scope according to this. This would not just simplify the work carried out by partners responsible of organizing the event, but also offer tailored information to participants.

2.3. SCENARIO AND SITUATION

2.3.1. DESCRIPTION OF ACTION

One of the DoA WP 2 objectives is to facilitate the knowledge transfer on present and future cases through dedicated training, exercises, and lectures that are seen likely to enhance European stakeholders' measures against hybrid threats and to provide material that supports to consider their possible uptake.

Additionally, the DoA T2.3 text prescribes that the scenario will focus on innovations to fill gaps and needs identified in T2.2. On the other hand, the T2.3. command that the scenario and training event will be about testing possible innovations. T2.4. on the contrary is not mandating nor restricting the scope of the training event.

2.3.2. ASSESSMENT

Although the scenario was simplified for the 2nd cycle event and there was positive feedback from the participants, the recommendations for improvements described in D2.21. shows that some participants are still struggling with the complexity of the scenario play. It was suggested in the feedback and further addressed in the conclusions of D2.21 to make it simpler so that in the up-coming cycle it would be easier to interpret and play. According to feedback, the complexity of hybrid threats presented via vignettes was challenging to achieve. Designing a scenario that has adequate amount of real-life incidents and meet also the identified innovations could be considered in the future.

Pursuing this reflection, it is suggested that in the future, if not offering a lecture format training, the scenario and situation presented should be as concise and rigorous as possible and to present enough dilemmas relevant to the landscape of hybrid threats. This would reflect better the idea of facilitating knowledge transfer on present and future cases. Positively, a significant time was taken to present the scenario, and this was well acknowledged by the participants.

Further, to be able to simplify the scenario play, it is suggested that the four core themes of the project are not taken as rigid categories along which to structure the substance of some deliverables, and in this case of the scenario. When the DoA prescribes that “T2.3 will take into account all four core themes and hence targets combinations of activities in countering hybrid threats” it does not mean that the scenario should necessarily be separated into four rigid blocks especially if the objective is to create a scenario play that reflects the real-life events. The idea here is that the real-life incidents do not follow rigid themes, some of them are more important, more complex, and harder to counter than others. The prescription of the T2.3 is more indicative than imperative, in order to make sure that the scenario reflects combinations of activities and is enabling participants to connect the dots of the situation. Dividing the scenario into parts while associating innovations to respective parts could be reconsidered to improve readability and narrative flow.

2.4. INNOVATIONS AND SOLUTIONS ASSESSED

2.4.1. DESCRIPTION OF ACTION

T2.3. mentions that the scenario will include elements to test innovations. It also provides an impact to be measured while not defining what is the relevant impact. It was interpreted for this training event that different parts of the scenario should be considered against a pre-selected set of innovations.

2.4.2. ASSESSMENT

One of the key findings in D2.21 (2nd cycle event) was related to innovations selected for the event. The feedback from participants noted that although improvements were made since the 1st cycle event, some groups had difficulties of assessing their importance to counter real-life hybrid threats. In other words, there seemed to be a significant gap between the proposed innovation concepts and practical side of how to counter hybrid threats.

Assigning innovations to parts of the scenario which was divided into the core themes seemed to lead to discrepancies. When designing scenario play, identified innovations could either be considered against more

adequate and realistic situations and be clearly defined themselves (the list at present mixes research projects, broad ideas, concepts, and sometimes technical solutions).

Assessing innovations substantially, more than what the training event report has already done is challenging in the present conditions: the innovations do not match to their specifically assigned vignettes, and for that reason it is hard to argue for their relevance. As an example, the four vignettes assigned to the future trends core theme do not reflect the idea or the definition of *future trend*: “discussions on independence during the national elections process”, “irregular migrant flows”, “air bombing attack”, creation of “migrant area” as they remain single and separate incidents instead of long-term developments e.g., possible future trends. Responding to the situations depicted in those four vignettes, a series of innovations were prioritized as test cases against the four vignettes: “OSINT search”, DDS-Alpha, “multi source”, etc. In situations, where the vignette does not match the qualificative of “future trends” and hence their attachment to it, can be questioned in terms of relevance. The prioritised innovations are manifestly out of topic consideration the situation reflected in the vignettes.

But this impossibility does not amount to a value judgement on their overall applicability. For example, one innovation prioritised in the resilient civilians’ core theme refers to a scrawler for foreign direct investment screening associated to criminal financial activity. Thus, the vignettes of the core theme do not call for the relevance of such idea, neither in substance nor level of details.

3. CONCLUSIONS

This Lessons Learned report has assessed the 2nd cycle event with the aim of providing suggestions for the upcoming cycle but also recognizing the improved work carried out since the 1st event by already simplifying the scenario play and clarifying the type of situation, inviting innovation providers to demonstrate the added value, and organizing the events both on site and online.

In the future, it is suggested to:

- Have a clear understanding of the objectives and nature of the event at the onset: training event, lecture event, innovations assessment event.
- Define the target audience very clearly: is it a consortium and network event, is it an event destined for outside stakeholders, etc. This will impact to the nature of event, mentioned above.
- Clarify the type of situation in the scenario, its relations with regard to the core themes, the utility of dividing the scenario into several parts, and what are the elements needed to test innovations within that scenario.
- Match the level of the scenario to the level of innovations / ideas of systems is essential.

4. FUTURE WORK

Future work will focus on learning the lessons identified above and drawing the necessary conclusions for the next cycles of the project. The lessons identified in this report result from a clear-eyed assessment of the consistency and internal validity of the WP2 articulation to the project objectives. It is important to use projects such as EU-HYBNET to explore more efficient and forward-looking ways of identifying progress areas as this can also be of use to other research and network of practitioner projects.

5. BIBLIOGRAPHY

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ANNEX I. GLOSSARY AND ACRONYMS

Table 1. Acronyms used in the report.

Term	Definition / Description
DoA	Description of Action
DTAG	Disruptive Technology Assessment Game
EC	European Commission
EU	European Union
EU-HYBNET	Pan-European Network to Counter Hybrid Threats
H2020, Horizon2020	European Commission Horizon 2020 Project Funding Program
Hybrid CoE	European Center of Excellence for Countering Hybrid Threats
IoS	Ideas of Systems
Laurea	Laurea University of Applied Sciences
L3CE	Lietuvos Kibernetiniu Nusikaltimu Kompetenciju ir Tyrimu Centras
OB	Project objective
T	Task
WP	Work Package