



SHARP

Strengthened International HeAlth
Regulations & Preparedness in the EU

JA SHARP

Final External Evaluation Report

D3.5

WP3 Evaluation of the Joint Action

Subcontractor:

**University of Thessaly, School of Health
Sciences, Faculty of Medicine,
Laboratory of Hygiene and Epidemiology,
Larissa, Greece**

September 2023

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**External Evaluation team - University of Thessaly, School of Health Sciences,
Faculty of Medicine, Laboratory of Hygiene and Epidemiology, Larissa,
Greece:**

Dimitra Kafetsouli

Elina Kostara

Barbara Mouchtouri

Christos Hadjichristodoulou

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1. Executive summary: overview and main findings

The current report is deliverable D3.5 from Work Package 3 (WP3), Evaluation of the action. It was conducted by the Laboratory of Hygiene and Epidemiology, University of Thessaly, Greece, subcontractors to WP3 leader-NPHO/EODY.

The purpose of the external evaluation is to ensure the objectiveness of the evaluation process, determine the relevance, effectiveness, outcome and impact of the Joint Action (JA), assess the completeness of the JA activities, examine whether the stated objectives and related indicators have been achieved and to provide proposals supporting the sustainability plan of the JA.

The methods used to conduct the external evaluation included review of the documents produced by the JA, the evaluation surveys (target groups representatives) conducted for events, interviews with WPs leaders/co leaders and Key Stakeholders' representatives and participation in selected meetings and events.

This report includes the findings and conclusions, their critical analysis and recommendations based on the findings as a response to the questions related to the external evaluation objectives.

The main challenges identified during the course of the JA are related to the public health demands of the COVID 19 pandemic and the lack of staff solely dedicated to the JA.

The JA was considered overall successful as the main objectives were met although the public health response to the COVID 19 pandemic has also contributed to that.

The recommendations based on the external evaluation findings include:

Initiatives are necessary on national/regional implementation and sustainability of the SHARP JA's deliverables and products from the participating partners, future projects to continue building on capacities already built by SHARP JA, increase external visibility of the results and deliverables of the JA as well as internal dissemination of the outcomes to policy makers at national level and sustain and reinforce clinicals and lab network. In future JAs, it would be recommended to dedicate more time for preparedness phase and define more clearly the content and the objectives. Also, it would be beneficial to explore viable solutions for the lack of public health staff to implement the JAs tasks, especially for small and low GNI countries.

2. Scope and objectives of final external evaluation

This report is deliverable D3.5 from Work Package 3 (WP3), Evaluation of the Joint Action (JA). It is conducted by the Laboratory of Hygiene and Epidemiology, University of Thessaly, Greece, subcontractors to WP3 leader -NPHO/EODY.

The period under evaluation in the current report is M25-M54 (April 2021- September 2023) of the SHARP joint action (JA) implementation.

The following objectives capture the purpose of the external evaluation which is to:

- Ensure the objectiveness in the evaluation process.
- Determine the relevance, effectiveness, outcome and impact of the JA activities results in relation to the pre-defined JA objectives.
- Assess the implementation of JA activities in terms of completeness.
- Examine whether the stated objectives and related indicators have been achieved, measuring the level of the target groups satisfaction through quantitative and qualitative methods.
- Provide proposals supporting the sustainability plan of the JA and possible expansion.

The final external evaluation report, D3.5, also assesses all domains including efficiency, utility, coherence, complementarity, coordination and additionality. Furthermore, it assesses impact and proposals to support the sustainability plan.

However, as the external evaluation is finalised in line with the conclusion of the Joint Action, it is quite likely that the real impact can be realised one or more years after the project ends.

This report includes the findings and conclusions as a response to the questions related to the objectives above.

The report is comprised of the following sections:

1. Executive summary: overview of main findings
2. Objectives of the SHARP external evaluation
3. Evaluation Methodology and Methods
4. Evaluation findings
5. Discussion: critical analysis of findings against evaluation questions
6. Recommendations based on evaluation findings.

3. Evaluation Methodology and Methods

3.1 Overview

The external evaluation process consists of two individual cycles:

- A: M26 (May 2021)- M32 (November 2021) (Midterm external evaluation)
- B: M36 (March 2023)-M54 (September 2023) (Final external evaluation)

Cycle (A) dates are according to amendment 3 of the JA agreement.

Cycle (B) dates are according to amendment 4 of the JA agreement.

Each cycle includes the following phases:

Phase 1: Desk phase

During this phase, the logic of the project was analysed. The objectives achieved in the revised period of the JA were examined. The dates of the final cycle of the external evaluation have been confirmed with WP3 leaders (EODY) and THL. The external evaluation timeline and the evaluation tools and plans were presented by WP3 during the 16th Steering Committee meeting on the 13th of February 2023.

Phase 2: Field phase

The work plan was implemented. Data relating to the qualitative and quantitative evaluation (Surveys) for actions during the revised period were collected and analysed. Interviews were conducted with representatives (leaders and/or co-leaders) from all Work Packages as well as key stakeholders' representatives (WHO, ECDC HaDEA). During the interviews a SWOT analysis was also performed. The deliverables were collected and reviewed. The milestones were discussed and evaluated in terms of completeness, and it was determined whether the relevant indicators were met.

Phase 3: Synthesis

The final external evaluation report (Deliverable 3.5) is prepared. It includes the findings and conclusions as a response to the questions asked, as well as an overall assessment of the project. It also includes recommendations on sustainability and points of consideration for future joint actions. A draft of the report has been agreed to be sent to the Steering committee of the JA by the beginning of M54 (September 2023). Any comments or recommendations from the Steering Committee will be included where applicable, after which, the report will be finalized and disseminated.

Phase 4: Dissemination and follow up

The finalized report will be disseminated to the relevant project stakeholders.

External evaluation deliverables and milestones

The external evaluation team was mobilized initially during M26 as per Milestone 11(MS11) of WP3.

The expected deliverables are:

- The interim external evaluation report (D3.4) that covers the first 24 months of the joint action (see Annex 3)
- The final external evaluation report (D3.5) that covers M25 to M54 of the joint action (current document).

3.2 Evaluation tools and resources

3.2.1 Review of Deliverables, Milestones and indicators

The deliverables and milestones for each WP, were assessed and evaluated in terms of completeness and compliance with the adjusted time schedule in the 4th amendment of the Grant Agreement. During the assessment, it was also determined whether the related indicators were met. The resources used to verify if milestones and deliverables of each WP were completed, included documents produced by the project: Work packages individual internal progress Reports, Meeting Minutes, Presentations, and the finalised deliverables.

WP	1	2	3	4	5	6	7	8	9	10
MS	4,5	-	11,12	14,15	17,19	20,21, 22,23	24,25, 26	27,28, 29	32,33, 34,35, 36	37,38 39,40
D	1.2	2.3,2.4, 2.5	3.2,3.3 3.4,3.5	4.2	5.2,5.3,5.4	6.2	7.1,7.2, 7.3	8.2, 8.3	9.2,9.3, 9.4	10.1,10.2 10.3

Table of expected deliverables and milestones for M25-M54 for each WP

List of deliverables:

- Deliverable 1.2: Final report
- Deliverable 2.3: Layman report
- Deliverable 2.4: A blueprint of dissemination
- Deliverable 2.5: Communication and dissemination report
- Deliverable 3.2: Midterm internal evaluation report
- Deliverable 3.3: Final internal evaluation report
- Deliverable 3.4: Midterm external evaluation report
- Deliverable 3.5: Final external evaluation report
- Deliverable 4.2: Sustainability report
- Deliverable 5.2: Reports on improving IHR implementation
- Deliverable 5.3: Report on international collaboration between authorities during crises
- Deliverable 5.4: Report on the use of exercises and AAR
- Deliverable 6.2: Report on lessons learned from Covid-19
- Deliverable 7.1: Report on assurance of high quality of diagnostic
- Deliverable 7.2: Report on modern molecular diagnostic methods
- Deliverable 7.3: Recommendations for risk management
- Deliverable 8.2: Final training report
- Deliverable 8.3: Basic and advanced training curricula
- Deliverable 9.2: Chemical laboratory response network - scoping report
- Deliverable 9.3: WP9 Final report
- Deliverable 9.4: Report on SOPs developed
- Deliverable 10.1: Report on existing facilities
- Deliverable 10.2: Feasibility study report
- Deliverable 10.3: Report on syndrome-based approach

List of Milestones:

- Milestone 4: Two Partnership Forums
- Milestone 5: Closing Conference
- Milestone 11: External evaluation mobilized
- Milestone 12: Presentation of the internal evaluation results
- Milestone 14: Report on selected priority outcomes

Milestone 15: Approval of sustainability plan
Milestone 17: Survey on international collaboration between authorities during crisis
Milestone 19: WP5 Workshop 3
Milestone 20: Lessons learned from Covid-19 evaluated
Milestone 21: All hazards e-learning tool launched
Milestone 22: WP6 workshops conducted
Milestone 23: Table-top exercises conducted
Milestone 24: Implementation of EQAEs
Milestone 25: Specific diagnostic tasks
Milestone 26: Program for self- evaluation of laboratory biosecurity
Milestone 27: Basic and advanced trainings conducted
Milestone 28: Online platform for training
Milestone 29: WP8 meetings
Milestone 32: WP9 Training and exercise materials
Milestone 33: Surveillance strategy report
Milestone 34: WP9 workshops
Milestone 35: Mechanisms for cross- border chemical health threat preparedness
Milestone 36: Training and exercises report
Milestone 37: Protocol for assessment of facilities
Milestone 38: Data collection on hospital preparedness
Milestone 39: Protocol for WP10 feasibility study
Milestone 40: Methodological framework for implementation of syndrome-based approach

3.2.2 Internal Evaluation questionnaires (target group representatives)

Pre, post or both evaluation surveys have been conducted for the following events during M25-M54 by WP3 and the results were shared with the External Evaluation team:

WP1:

- JA SHARP Workshop, 17th World Congress on Public Health: The future in a world of turmoil, 2-6 May 2023 Rome.
- SHARP JA Final Conference: 19th-20th of June 2023, Helsinki, Finland.
- Partners satisfaction survey of the JA as a whole, April 2023, online.

WP2:

- Partners survey on the work of WP2, Communication and Dissemination, April 2023, online

WP5:

- Workshop 3 on IHR core capacity strengthening and assessment, 19th-20th September 2022, Ljubljana, Slovenia.
- Workshop on International collaboration between authorities during crisis; Creating a template agreement for trans-country collaboration between authorities during crisis 27th- 28th February 2023, Lisbon, Portugal.

WP6:

- Hybrid expert meeting on lessons learned regarding multisectoral collaboration during the COVID 19 pandemic, September 2022, Malta.
- Workshop on Inter-Sectoral preparedness and response planning essentials, 20th-21st March 2023, Riga.

WP8:

- IHR Basic training, February to March 2022, online.
- Intra/after action review workshop, 8th of June 2022, online.
- National training exercise “ERMIS”, 17th of June 2022, Kalamata, Greece.
- Training on simulation exercises, 23rd of September 2022, online.
- SHARP JA study tour, 7th-8th November 2022, RKI, Germany.
- International Tabletop Exercise; Points of entry-Measures and contact tracing, 8th -9th December 2022, Athens, Greece.
- National training meeting on Points of Entry, March 2023, Alexandroupoli, Greece.
- National training meeting on Points of Entry, April 2023, Corfu, Greece.
- Meeting on Disaster recovery planning for Public Health professionals, 23rd - 24th of May 2023, Belgrade, Serbia.
- Workshop on Public Health surveillance- lessons learned from COVID 19, 6th -7th of July 2023. Lisbon, Portugal.
- SHARP Joint Action one-day seminar on the European Common Ship Sanitation Database – the digital tool for supporting International Health Regulations implementation at Points of Entry, 11th of September 2023, Athens, Greece.

WP9:

- Advanced workshop on chemical safety and chemical threats, 12th-13th October 2022, online.
- 1st Chemical workshop, 6th-7th of June 2022, online.

3.2.3 Interviews with all WP leaders/co leaders and Key stakeholders

Similar to Cycle A of the External evaluation, in depth online interviews have been organized and conducted with WP leads and co-leads representatives. All leads and co-leads were invited to participate, and all WPs were represented by at least 1 lead or co-lead. For Cycle B, representatives from key stakeholders have also been invited to interviews. At least one representative from WHOEurope, DG SANTE, ECDC and HaDEA was interviewed. All interviews took place between 28th of March to 5th of April 2023.

Prior to the arranged interview meetings, an invitation was disseminated (Annex 1), which also included the main topics of discussion during the interview and a SWOT analysis.

SWOT analysis is a strategic planning method used to evaluate the Strengths, Weaknesses/Limitations, Opportunities and Threats involved in a project.

3.2.4 Participation in selected meetings and events

The External Evaluation plans for Cycle B of the External evaluation process were presented by WP3 during the 16th Steering Committee meeting on the 13th of February 2023.

The External evaluation team has also attended, following an invitation by WP3, the International Tabletop Exercise; Points of entry-Measures and contact tracing, on the 8th -9th December 2022 in Athens, Greece.

The team has also attended and presented the preliminary findings of the external evaluation at the JA's Final Conference on the 19th to 20th of June 2023 in Helsinki, Finland.

3.2.5 Development of a tool to monitor results and outcomes.

The following tables were developed and updated in collaboration with the Internal Evaluation team:

Deliverables

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D1.2	Final report	WP1	1 - THL	Report	54	Expected to be completed	OCT/2023
D2.3	Layman report	WP2	24 - DH	Report	54	Expected to be completed	OCT/2023
D2.4	A blueprint of dissemination	WP2	24 - DH	Report	49	Completed	29/AUG/2023
D2.5	Communication and dissemination report	WP2	24 - DH	Report	52	Completed	SEP/2023
D3.2	Midterm internal evaluation reports	WP3	11 - EODY	Report	30	Completed	03/NOV/2022
D3.3	Final internal evaluation report	WP3	11 - EODY	Report	54	Completed	SEP/2023
D3.4	Midterm external evaluation report	WP3	11 - EODY	Report	32	Completed	14/JUN/2022
D3.5	Final external evaluation report	WP3	11 - EODY	Report	54	Completed	SEP/2023
D4.2	Sustainability Report	WP4	10 - MOH-FR	Report	52	Completed	01/SEPT/2023
D5.2	Reports on improving IHR implementation	WP5	23 - FOHM	Report	46	Completed	09/JUN//2023
D5.3	Report on international collaboration between authorities during crises	WP5	17 - HD	Report	50	Completed	07/JUN//2023
D5.4	Report on the use exercises and AAR	WP5	17 - HD	Report	43	Completed	30/DEC//2022
D6.2	Report on lessons learned from Covid-19	WP6	16-RIVM	Report	45	Completed	15/SEP/2023
D7.1	Report on assurance of high quality of diagnostic	WP7	2 - RKI	Report	50	Completed	SEP/2023
D7.2	Report on modern molecular diagnostic methods	WP7	3 - INMI	Report	50	Completed	SEP/2023

D7.3	Recommendations for risk management	WP7	23 - FOHM	Report	50	Completed	SEP/2023
D8.2	Final training report	WP8	20 - IPHS	Report	53	Completed	SEPT /2023
D8.3	Basic and advanced training curricula	WP8	20 - IPHS	Report	51	Completed	SEPT /2023
D9.2	Chemical laboratory response network - scoping report	WP9	17 - HD	Report	28	Completed	14/JUN/2022
D9.3	WP9 Final report	WP9	24 - DH	Report	52	Completed	SEP/2023
D9.4	Report on SOPs developed	WP9	24 - DH	Report	50	Completed	SEP/2023
D10.1	Report on existing facilities	WP10	22 - ISCIII	Report	49	Expected to be completed	SEPT /2023
D10.2	Feasibility study report	WP10	17 - HD	Report	50	Completed	13 SEPT/2023
D10.3	Report on syndrome-based approach	WP10	3 - INMI	Report	51	Expected to be completed	SEPT/ /2023

Milestones

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS4	Partnership Forums	WP1	1 - THL	31	Two Partnership forums will be organized:1 st in M12 and 2nd in M31	Achieved 10/JUN/2020 22-23/NOV/2021
MS5	Closing conference	WP1	1 - THL	51	Closing conference of the Joint action	Achieved 19-20/JUN/2023
MS12	Presentation of the internal evaluation results	WP3	11 - EODY	30	Presentation of the internal evaluation results at the meeting in M30	Achieved 30/OCT/2022
MS14	Report on selected priority outcomes	WP4	16 - RIVM	39	A report presenting the selected priority outcomes	Completed 01/NOV/2022
MS15	Approval of sustainability plan	WP4	10 - MOH-FR	52	Presentation of sustainability report at workshop 3 and final approval of the SHARP sustainability plan by the stakeholders	Completed 01/SEPT/2023

MS17	Survey on international collaboration between authorities during crisis	WP5	17 - HD	50	Survey on international collaboration between authorities during crisis completed and reported	Completed 01/JUN/2023 (D5.3)
MS19	WP5 Workshop 3	WP5	23 - FOHM	38	WP5 workshop 3 organized	Completed 20/SEP/2022
MS20	Lessons learned from Covid-19 evaluated	WP6	16 - RIVM	45	Report comparing the outcome of the lessons learned during the Covid-19 and the reality of the testing strategies and the role of the citizen during the Covid-19 pandemic.	Completed 15/SEP/2023
MS21	All hazards e-learning tool launched	WP6	16-RIVM	45	All hazards scenario based e-learning tool developed, tested and implemented, with focus on low GNI countries	No separate e-learning tool, content is part of table top exercise that can be adapted to national needs (MS23)
MS22	WP6 workshops conducted	WP6	16 - RIVM	48	Five workshops conducted: 1. to collect tools; 2. and 3. to clarify gaps and feasibility to develop a multisectoral preparedness and response plan for participating countries; 4. to translate plans into all-hazards approach; and 5. to collect best practices	Achieved 21-21/MAR/2023 (last workshop)
MS23	First pilot table-top exercises conducted	WP6	16 - RIVM	46	Country-specific all hazards multisectoral preparedness and response plans tested.	Completed 18/SEP/2023
MS24	Implementation of EQAEs	WP7	2 - RKI	46	First EQAE (M12), last EQAE (M46)	Completed 11/MAY/2022
MS25	Specific diagnostic tasks	WP7	3 - INMI	46	Implementation of specific diagnostic tasks (M36), completion (M46)	Completed 10/MAY/2023
MS26	Programme for self- evaluation of laboratory biorisk management	WP7	23 - FOHM	46	Development of a programme for supported self-evaluation of laboratory biosafety and biosecurity (M36), recommendations and on-site evaluation (M46)	Completed 01/FEB/2023

MS27	Basic and advanced trainings conducted	WP8	20 - IPHS	52	Two basic and three advanced workshops plus several laboratory workshops organized	Completed Last training, 11/SEP/23 Athens
MS28	Online platform for training	WP8	20 - IPHS	30	On-line platform for capacity building and advanced training developed	Completed 03/FEB/2023
MS29	WP8 meetings	WP8	20 - IPHS	42	Two WP8 meetings organized	Completed 04/OCT/2022
MS32	WP9 Training and exercise materials	WP9	24 - DH	30	Production of training and exercise materials	Completed 31/10/2022
MS33	Surveillance strategy report	WP9	24 - DH	28	Surveillance strategy report	Completed SEP/2023
MS34	WP9 workshops	WP9	24 - DH	34	Two workshops conducted	Completed 31/OCT/2022
MS35	Mechanisms for cross- border chemical health threat preparedness	WP9	24 - DH	51	Consolidate, refine and promote existing mechanisms for cross-border chemical health threat preparedness	Completed SEP/2023 (included in D9.3)
MS36	Training and exercises report	WP9	24 - DH	47	Training & exercises outcomes report	Completed 09/DEC/2022
MS37	Protocol for assessment of facilities	WP10	22 - ISCIII	46	Development of the protocol for the assessment of capacities and facilities	Completed 15/JUN/2023 (related to D10.1)
MS38	Data collection on hospital preparedness	WP10	2 - RKI	49	Collection of data on hospital preparedness and capacity in dealing with high-consequence infectious diseases in JA participating countries.	Related to D10.1
MS39	Protocol for WP10 feasibility study	WP10	17 - HD	48	Protocol for feasibility study for an expert clinical support service for HCID	Completed Date of submission to SC 28/AUG//2023
MS40	Methodological framework for implementation of syndrome-based approach	WP10	3 - INMI	51	Development of methodological framework for implementation of syndrome-based approach at emergency departments	Related to D10.3 SEP/2023

4. External Evaluation Findings

4.1 Milestones/Deliverables/Indicators

4.1.1 WP1: Coordination

Objectives: To coordinate the Joint Action through well-functioning management which includes timely reporting, budget control and support for successful implementation.

Expected deliverables:

Deliverable Number	Deliverable Title	WP Number	Lead beneficiary	Type	Due date	Status	Comments
D1.2	Final Report	WP1	1-THL	Report	54	Expected to be completed	OCT/2023

D1.2: An extensive Final Technical Report, encompassing M19-M54 has been drafted by the Finnish Institute for Health and Welfare (THL). It includes a detailed description of the activities carried out and an overview of the progress as well as project results compared to the objectives of the action in line with the structure of Annex 1 to the Grant Agreement.

Expected milestones:

Milestone number	Milestone Title	Lead Beneficiary	Due date	Means of verification	Status	Comments
MS4	Partnership Forums	1-THL	31	Two Partnership forums will be organised: 1 st in M12 and 2 nd M31	Achieved 10/JUN/2020 M15 and 22-23/NOV/2021	As scheduled
MS5	Final conference	1-THL	51	Closing conference of the Joint Action	Achieved 19-20/JUN/2023	As scheduled

Expected Milestones

MS4: The project includes four Partnership Forums: 1st Kick-off, 2nd Forum, 3rd Forum and the Closing conference as the 4th. This milestone refers to the 2nd and 3rd Partnership Forum. The 2nd Partnership Forum was organized as an online, half-day session on the 10th of June 2020 (M15). The 3rd Partnership Forum meeting was conducted online on the 22nd-23rd of November 2021 and it was attended by 68 participants. The General meeting was held during the first day and it was followed by the Administrative meeting on the 2nd day.

MS5: Final Conference: The Final conference of the Joint Action was conducted as a hybrid event on the 19th-20th of June 2023 in Helsinki, Finland. A feedback survey of the event was conducted by WP3. The overall event was considered successful, both in terms of organization and content. Most of the participants rated as likely or very likely to use SHARP JA's outcomes in their work.

In addition, WP1 has also organized the following meetings and events:

- 3rd Advisory Board and 9th Steering Committee Meeting was conducted online May 5, 2021, 39 participants.
- 4th Advisory Board Meeting May 6, 2022, Hybrid: FOHM, Stockholm, 34 participants
- 10th Steering Committee Meeting- June 23, 2021, was conducted online, 29 people attending the meeting.
- 11th Steering Committee Meeting -September 27, 2021 was conducted online, 30 participants
- 12th Steering Committee (SC) Meeting February 14, 2022 was conducted online, 35 participants.
- 13th Steering Committee Meeting May 6, 2022, Hybrid: FOHM, Stockholm, 34 participants
- 14th Steering Committee Meeting (Administrative issues) June 2, 2022, was conducted online, 27 participants.
- 15th Steering Committee Meeting September 22, 2022, was conducted online, 28 participants.
- 16th Steering Committee Meeting February 13, 2023 was conducted online, 34 participants.
- 17th Steering Committee Meeting September 18, 2023, was conducted online, 22 participants.
- Lunch Symposium: at the 15th European Public Health Conference, 11 November 2022, Berlin, Germany.
- 17th World Congress on Public Health: The future in a world of turmoil, 2-6 May 2023 Rome- JA SHARP Workshop: WP3 conducted an evaluation survey of the workshop (Annex 2)

A partners satisfaction survey of the JA was conducted by WP3 (Annex 2).

4.1.2 WP2: Communication and dissemination

Objectives: To achieve efficient and effective visibility, awareness and acceptance of the project to internal and external stakeholders.

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D2.3	Layman report	WP2	24 - DH	Report	54	Completed	OCT/2023
D2.4	A blueprint of dissemination	WP2	24 - DH	Report	49	Completed	29/AUG/2023
D2.5	Communication and dissemination report	WP2	24 - DH	Report	52	Completed	SEP/2023

D2.3: Layman report:

D2.4: A blueprint of dissemination:

D2.5: Communication and dissemination report:

WP3 conducted an online survey in April 2023 amongst SHARP JA partners to gather qualitative indicators -views and attitudes - on the work of WP2 Communication and Dissemination (Annex 2)

4.1.3 WP3: Evaluation of the action

Objectives: To perform a systematic and objective assessment of the relevance, efficiency, effectiveness, impact, economic and financial viability, as well as sustainability of the project in the context of its objectives.

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D3.2	Midterm internal evaluation report	WP3	11 - EODY	Report	30	Completed	03/NOV/2023
D3.3	Final internal evaluation report	WP3	11 - EODY	Report	54	Completed	SEP/2023
D3.4	Midterm external evaluation report	WP3	11 - EODY	Report	32	Completed	04/JUN//2022
D3.5	Final external evaluation report	WP3	11 - EODY	Report	54	Completed	SEP/2023

D3.2 Midterm internal evaluation report: A report evaluating the first 24 months of the JA.

D3.3 Final internal report: Final evaluation report includes the comprehensive assessment to what extent the aims and objectives are met.

A summary review of all activities conducted. The report examines the project's achievements, vis-a-vis the original planning.

D3.4 Midterm external evaluation report: External evaluation of the initial 24 months of the JA

D3.5 Final external evaluation report: the present document.

Expected milestones:

Milestone number	Milestone title	WP number	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS12	Presentation of the internal evaluation results	WP3	11 - EODY	30	Presentation of the internal evaluation results at the meeting in M30	Achieved: 30/OCT/2022 WP8 meeting, Lisbon

MS12: The midterm internal evaluation results were presented on the 30th of October 2022 in Lisbon.

4.1.4 WP4: Integration in National Policies and Sustainability

Objectives: The specific objective of this WP is to integrate best practices on IHR and preparedness in national policies and improve cooperation mechanisms between EU Member states.

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D4.2	Sustainability Report	WP4	10 - MOH-FR	Report	52	Completed	Draft presented at final conference and completed on 1 Sept 2023

D4.2 Sustainability report: A report identifying 10 key outcomes of SHARP JA and recommendation on their sustainability and level of implementation.

Expected milestones:

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS14	Report on selected priority outcomes	WP4	16 - RIVM	39	A report presenting the selected priority outcomes	Completed 01/NOV/2022
MS15	Approval of sustainability plan	WP4	10 - MOH-FR	52	Presentation of sustainability report at workshop 3 and final approval of the SHARP sustainability plan by the stakeholders	Draft presented in final conference and final completed in 01/SEPT/2023

MS14: A report on the priority outcomes identified and the methods used for their selection.

MS15: Presentation of the sustainability report. The results were presented at the Final conference in Helsinki, 19th-20th June 2023.

Process Indicator(s)	Target	Progress
Priority outcomes and recommendations of the JA are selected	Minimum 3 priority outcomes and recommendations are selected and reported (M39)	Completed: 01/NOV/2022 Report on selected priority outcomes was done in November 2022 and completed (with outcomes selected from WP 10) in February 2023. The report selects more than 3 priority outcomes.
Output Indicator(s)	Target	
SHARP sustainability plan is developed	One generic sustainability plan is presented to the Steering Committee and Advisory Board for validation (M52)	Draft presented in final conference 20/JUN/2023 Completed in 01/SEPT/2023
Outcome/Impact Indicator(s)	Target	
Evidence-based best outcomes and recommendations on IHR implementation are integrated into EU/national /regional policies and mechanisms	Minimum 2 priority outcomes and recommendations are integrated into national policies (M54)	3 priority outcomes have been selected to be integrated into national/EU policies during JA period: WP5: cross-border collaboration; policy brief on cross-border collaboration to be presented to TWG working on Union Preparedness plan WP7: EMERGE laboratory network- a pilot plan has been elaborated WP8: CB material to be integrated into existing ECDC and WHO training programmes

4.1.5 WP5: IHR core capacity strengthening and assessment

Objectives: Specific objective of the work package is to improve core capacity in EU Member States as required by IHR and Decision 1082/2013/ EU.

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D5.2	Reports on improving IHR implementation	WP5	23 - FOHM	Report	46	5 reports including a strengths and gaps analysis and a comprehensive final report completed	09/JUN/2023
D5.3	Report on international collaboration between authorities during crises	WP5	17 - HD	Report	50	Completed	07/JUN/2023
D5.4	Report on the use exercises and AAR	WP5	17 - HD	Report	43	Completed	30/DEC//2022

D5.2 IHR core capacity strengthening and assessment: The final report concluded that participants' understanding on how to proceed to strengthen preparedness increased as well as strengthening of select core capacities in earnest occurred during SHARP JA. An additional four reports were written during the JA which included a baseline gaps analysis and three workshop reports which informed and are included in the final report.

D5.3 Collaboration between authorities during crisis: A report summarising the work on international collaboration between authorities during crisis in WP5 and suggest a template agreement of intention for cross-border multisectoral support between neighbouring countries or countries who are able to assist bilaterally.

D5.4 Assessing public health preparedness and response in the EU; A review of EU level Simulation Exercises and After Action Review: A report on assessment and recommendations based on 17 simulation exercises conducted at the EU level and 2 intra action reviews.

Expected milestones:

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS17	Survey on international collaboration between authorities during crisis	WP5	17 - HD	50	Survey on international collaboration between authorities during crisis completed and reported	Completed 01/JUN/2023 (D5.3)
MS19	WP5 Workshop 3	WP5	23 - FOHM	38	WP5 workshop 3 organized	Completed 20/SEP/2022, Ljubljana

MS17: WP5 organised a workshop on International collaboration between authorities during crisis; Creating a template agreement for trans-country collaboration between authorities during crisis. WP3 conducted pre event and post event surveys (see Annex 2)

MS19: Workshop 3 on IHR core capacity strengthening and assessment. The workshop was conducted on the 19th-20th September 2022 in Ljubljana, Slovenia.

Evaluation post-survey was conducted by WP3 (see Annex 2)

Process Indicator(s)	Target	Progress
Analysis of common gaps in IHR implementation in countries that have conducted a JEE and selection of gaps to address in workshops.	One agreed work plan including selected challenges agreed with participating countries,	Completed. Background paper presented in WP5 partner meeting, 14/OOCT/2019 (M6) in Helsinki
International workshops focused on low-GNI countries Annual workshops jointly aimed to assist both countries that have conducted a JEE and those that have not. One part introducing and preparing for JEE and one part working on identified gaps after JEE.	3 workshops (with up to 12 low GNI countries participating) by month 42	Completed WS1: 29-30/ JAN/2020 WS2: 22/MAR/2021 WS3: 19-20/SEP/2022 (WS2 ONLINE, WS3: 6 low GNI countries)
International workshop on cross border collaboration open for all member states	1 workshop (up to 50 participants) by M47	Completed 27/28/FEB/2023
Feasibility of using information from national and international exercises and after-action reviews in assessing state of public health preparedness in the EU: study protocol adopted	1 feasibility study performed by M44	Completed 28/DEC/2022 (Subsequent analysis occurring examining AARs from COVID 19)

Output Indicator(s)	Target	Progress
Number of countries participating in training in the JEE process	5 countries out of 15 low GNI countries	The topic of JEEs achieved for 2 Workshops: 1 st and 3 rd . (Very few JEEs during pandemic)
Reports from the workshops (1.on external evaluation processes; 2. on strengthening of IHR core capacities and 3. on international collaboration between authorities during crisis)	3 workshop reports by M48	Completed MAR/2020 NOV/2021 JAN/2023
Report on the feasibility study of using information from national and international exercises and after-action reviews in assessing state of public health preparedness in the EU	1 feasibility report by M46	Completed 28/DEC/2022
Outcome/Impact Indicator(s)	Target	Progress
Participating countries have increased their knowledge of the JEE process and best practices for preparing and performing a JEE as measured by pre and post workshop evaluations. Participating countries have greater understanding and are in a better position to reduce weaknesses in selected core capacities and have developed a draft action plan how to address the specified gaps.	5 countries 5 draft action plans (1 per country addressing three challenges)	Workshop 1 (See Workshop report where a panel discussed experience in JEE) Workshop 3 (Discussion about JEE updated tool as a way forward after the Joint Action and presentation by WHO). One Health Security conference (OCT 2019, Helsinki) selected countries shared their experience conducting a JEE. The Benchmark tool for prompting IHR Core Capacity strategic activities developed in 2020 was not used by the partner countries due to COVID 19 pandemic demands. Instead, Task 5.1 is examining core capacities strengthening in COVID 19 response.
Key challenges and possible solutions in national and international collaboration between government authorities and relevant national authorities, European Commission (DG ECHO, DG SANTE) and WHO identified.	Gaps identified and development of policy recommendations	Ongoing
Better use of data from exercises and AAR to assess status of preparedness in the EU More comprehensive picture of challenges in health preparedness in EU	Input to report on the state of preparedness in the EU under Decision 1082/2013/EU	Completed 28/DEC/2022 Presentations to European Commission as well as a presentation during the SHARP Lunch symposium at the 15 th EUPHA Conference. An addendum is underway (completed in September 2023) examining the implementation of IAR:s and AAR:s on the topic of COVID-19 and the extend to implementation of recommendations or possible implementation barriers.

4.1.6 WP6: Preparedness and Response planning

Objectives: The specific objective of WP6 is to support EU MS and JA partner countries in developing operational inter-sectoral preparedness and response plans for serious cross-border health threats with an integrated all hazards approach

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D6.2	Report on lessons learned from Covid-19	WP6	16-RIVM	Report	45	Completed	15/SEP/2023

D6.2: The report consists of two studies conducted within the JA SHARP context. The studies drew on the experiences by European citizens and experts during the COVID-19 pandemic and put forwards conclusions which can serve as guidance for actors responsible for national and/or subnational public health emergency preparedness and response.

Expected milestones:

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS20	Lessons learned from Covid-19 evaluated	WP6	16 - RIVM	45	Report comparing the outcome of the lessons learned during the Covid-19 and the reality of the testing strategies and the role of the citizen during the Covid-19 pandemic.	Completed (D6.2)
MS21	All hazards e-learning tool launched	WP6	16-RIVM	45	All hazards scenario based e-learning tool developed, tested and implemented, with focus on low GNI countries	Completed

MS22	WP6 workshops conducted	WP6	16 - RIVM	48	Five workshops conducted: 1. to collect tools; 2. and 3. to clarify gaps and feasibility to develop a multisectoral preparedness and response plan for participating countries; 4. to translate plans into all-hazards approach; and 5. to collect best practices	Completed All workshops conducted. Last workshop 20/21 MAR/2023 In Riga, Latvia
MS23	First pilot table-top exercises conducted	WP6	16 - RIVM	46	Country-specific all hazards multisectoral preparedness and response plans tested.	Completed 18/SEP/2023

MS21: No separate e-learning tool, content is part of table top exercise that can be adapted to national needs (MS23).

MS22: Hybrid expert meeting on lessons learned regarding multisectoral collaboration during the COVID 19 pandemic took place in Malta in September 2022. Pre and post event evaluation was conducted (see Annex 2).

Last workshop, Inter-Sectoral preparedness and response planning essentials organised in Riga on the 20th-21st March 2023. WP3 conducted pre and post event surveys (see Annex 2).

Process Indicator(s)	Target	Progress
Consultations <ol style="list-style-type: none"> Achieving consensus among countries on the core elements of a multisectoral Preparedness & Response plan decision making process: the example of COVID-19 and testing strategies understanding the citizen's role in multisectoral collaboration during the COVID-19 protocol development all hazard e-learnings and tabletop exercises 	Four consultations by M45	Completed <ol style="list-style-type: none"> Ongoing discussion with Malta for organising expert consultation in M30 Decision making process: COVID 19 and testing strategies: 11 interviews with 12 participants from 6 countries. Completed M24 Understanding the citizen's role in multisectoral collaboration: Focus groups in M25 Protocol TTX: July 2023

<p>Workshops (cooperation with WP8)</p> <ol style="list-style-type: none"> on multisectoral collaboration on lessons learned from COVID-19 development of e-learning and tabletop exercise translation of outcomes of WP6 into best practices and guidelines for continuous (improvement of) multisectoral collaboration in (all hazard) (cross border) threats 	<p>Four workshops by M48</p>	<p>1st Workshop on multisectoral collaboration completed (M13) 2nd Expert meeting in Malta, SEP/2022 3rd Consultation during steering committee meeting, FEB/2023 4th Workshop on implementation of WP outcomes in Riga, MAR/2023</p>
<p>E-learning and tabletop exercises developed and/or piloted (in cooperation with WP7, WP9 and WP10), evaluated and disseminated</p>	<p>At least 1 e-learning tool and/or 2 tabletop exercise by M46</p>	<p>Tabletop exercise piloted in the Netherlands. All materials (scenario, script and stakeholder analysis) available for implementation in other countries. Can be adapted to national needs. No separate e-learning tool, content is part of table top exercise.</p>
<p>Output Indicator(s)</p>	<p>Target</p>	<p>Progress</p>
<p>Literature reviews</p> <ol style="list-style-type: none"> Review of literature on international and/or national tools and planning instruments for preparedness and response focused on multisectoral integration for the following sectors: public health laboratory services, clinical and chemical sectors Review of selected recent threats with emphasis on preparedness and response methods used, success and fail factors. 	<p>2 reviews by month 33</p>	<p>1st review completed and submitted JAN/2022 (M22) 2nd review JAN/2023</p>
<p>Checklist For e-learning and tabletop exercise development.</p>	<p>Checklist by month 46</p>	
<p>Databases on core elements of multi-sectoral collaboration during Public Health Emergencies</p>	<p>Database by month 46</p>	<p>No specific database. Information integrated in 1st deliverable</p>
<p>Protocols</p> <ol style="list-style-type: none"> literature review on international and/or national tools and instruments for Preparedness and Response with a focus on multi-sectoral collaboration decision making process: the example of test strategies in COVID-19 understanding the citizen's role in multisectoral collaboration in COVID-19 	<p>Three protocols by month 19</p>	<p>3 protocols completed 2021 2022 2022</p>
<p>Catalogues and guidelines</p> <ol style="list-style-type: none"> Catalogue of best practices on integrated multisectoral preparedness and response plan implementation Guidelines of best practices on integrated multisectoral preparedness and response plan implementation 	<p>Both by month 49</p>	<p>Results recorded and shared</p>

Outcome/Impact Indicator(s)	Target	Progress
JA partners actively participated and know what barriers may hamper implementation of the integrated preparedness and response cycle, and steps needed to achieve implementation	100% of the JA partners	JA partners actively participated.
Member States participated in lessons learned on COVID-19 and/or participated in at least one e-learning and tabletop protocol development and/or exercise	80% of Member States	MS participated in discussions on lessons learned COVID 19. TTX can be organised by member states, based on protocol developed and tested in the Netherlands.
JA partners consulted and/or actively participated in the development of best practices guidelines on integrated multisectoral preparedness and response plan implementation and know how to use them	100% of the JA partners	Completed MAR/2023

4.1.7 WP7: Laboratory preparedness and responsiveness

Objectives: Strengthened laboratory preparedness and responsiveness to detect highly pathogenic infectious agents of Risk Group 3 (RG3) bacteria / Risk Group 4 (RG4) viruses with quality assured methods in laboratories of MS and SHARP JA partner countries and evaluating new diagnostic approaches and improving biosafety procedures.

Specific objectives 1. To ensure the application of best practices and quality assured methods in detection and analyses of highly pathogenic infectious agents in laboratories of SHARP JA partner countries. 2. To improve and consolidate the biorisk management in laboratories of SHARP JA partner countries dedicated to the diagnostics of highly pathogenic infectious agents.

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D7.1	Report on assurance of high quality of diagnostic	WP7	2 - RKI	Report	50	Completed	SEP/2023
D7.2	Report on modern molecular diagnostic methods	WP7	3 - INMI	Report	50	Completed	SEP/2023
D7.3	Recommendations for risk management	WP7	23 - FOHM	Report	50	Completed	SEP/2023

Expected milestones:

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS24	Implementation of EQAEs	WP7	2 - RKI	46	First EQAE (M12), last EQAE (M46)	Completed 11/MAY/2022
MS25	Specific diagnostic tasks	WP7	3 - INMI	46	Implementation of specific diagnostic tasks (M36), completion (M46)	Completed 10/MAY/2023
MS26	Programme for self- evaluation of laboratory biorisk management	WP7	23 - FOHM	46	Development of a programme for supported self- evaluation of laboratory biosafety and biosecurity (M36), recommendations and on-site evaluation	Completed 01/FEB/2023

MS24: The 3rd round of bacterial and viral EQAE started on the 25th of April 2022. 27 WP7 partners laboratories have successfully participated.

MS25: Specific diagnostic tests. Related to D7.2

Process Indicator(s)	Target	Progress
Number of rounds of EQAEs for viral and bacterial specimens reaching a majority of partners	3 rounds of EQAE, reaching at least 25 laboratories, M50	Completed MAY/2022
Number of participants assessing and implementing basic and advanced diagnostic approaches	At least 20 laboratories will be interested to participate	Completed MAY/2023
Output Indicator(s)	Target	Progress
Detailed report on EQAEs	3 reports, Mo 20, 36, and 50	Completed AUG/2020 SEP/2021 SEP/2021
Report on assessment / evaluation of diagnostic capabilities and approaches, integration of these data sets with WP6	2 reports, Mo 18 and 50	Completed MAY/2023 JUL/2023

Outcome/Impact Indicator(s)	Target	Progress
Quality assurance of diagnostic methods has been improved by refinement of single steps in the diagnostic approaches, by improving validation procedures of previously adopted methods, introduction of new methods of consolidation of existing high-quality standards	1 report indicating that at least 5 laboratories have improved diagnostic methods and the other participants have maintained and consolidated their high diagnostic quality, Mo 50	Completed OCT/2022
Laboratories have defined best diagnostic practices which will be assessed together with WP6	1 report, Mo 50	Completed MAY/2023

Process Indicator(s)	Target	Progress
Number of participants working on consolidation and improvement of laboratory biorisk management especially with lower resources	At least 20 laboratories confirmed, M42	Completed APR/2022 Several laboratories confirmed participation

Number and quality of sample inactivation methods defined for handling under lower level of biosafety containment	At least 2 methods have been evaluated for risk group 3 bacteria and risk group 4 viruses, Mo 42	Partially completed DEC/2020
Output Indicator(s)	Target	Progress
Number of laboratories that have applied the revised and newly developed biorisk management recommendations	At least 5 reports by partners on implementation of the biorisk management recommendations, M50	Completed
Compendium of best practice on sample inactivation procedures considering applicability and effectiveness of procedures and reagents	2 compendiums, one each for bacteria and for viruses reports, M50	Completed for viruses
Outcome/Impact Indicator(s)	Target	Progress
The biorisk management of RG3 and RG4 agents has been improved by an extended risk assessment and introduction of new/additional biosafety/biosecurity measures	1 report indicating that at least 5 laboratories have introduced new measures for biorisk management and others have maintained/consolidated the high standard of biorisk management; M50	Completed for extended risk assessment. Report for new “GBM-EL Tool” completed
The biorisk for handling of risk group 3 bacteria and risk group 4 viruses has been reduced by appropriate and harmonized inactivation procedures for handling under BSL2-conditions, offer of these procedures to clinical laboratories associated with High Containment Units for patients’ care (collaboration with WP10)	1 report; M50	Completed for viruses

4.1.8 WP8: Training and local exercises, exchange of working practices

Objectives: The specific objective of the WP8 is strengthening IHR implementation for serious cross-border health threats in the JA partner countries through cross-sectoral basic and advanced training.

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D8.2	Final training report	WP8	20 - IPHS	Report	53	Completed	SEP/2023
D8.3	Basic and advanced training curricula	WP8	20 - IPHS	Report	51	Completed	SEP/2023

D8.1: A report on training needs has been produced. The report aims to improve the capacity of professionals regarding IHR implementation and preparedness for serious cross-border health threats in the Member states and JA partner countries.

Expected milestones:

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS27	Basic and advanced trainings conducted	WP8	20 - IPHS	52	Two basic and three advanced workshops plus several laboratory workshops organized	Completed SEP/2023
MS28	Online platform for training	WP8	20 - IPHS	30	On-line platform for capacity building and advanced training developed	Completed 03/FEB/2023
MS29	WP8 meetings	WP8	20 - IPHS	42	Two WP8 meetings organized	Completed 04/OCT/2022

MS27: IHR Basic Online training was conducted in February to March 2022. The training included 5 modules: 1. Introduction to IHR, IHR core capacities and functions 2. Detection, assessment and communication under the IHR (2005) 3. Intersectoral collaboration and coordination 4. Risk communication 5. IHR monitoring and evaluation framework. WP3 conducted a survey evaluation of the training (see Annex 2).

Intra/after action review workshop: conducted on line on the 8th of June 2022. Evaluation survey conducted (see Annex 2)

National training exercise “ERMIS” organised in Kalamata, Greece on the 17th of June 2022.

Evaluation survey conducted (see Annex 2)

Training on simulation exercises: Organised online on the 23rd of September 2022. Evaluation survey conducted (see Annex 2)

SHARP JA study tour: Organised in RKI, Germany on the 7th-8th November 2022. Evaluation survey was conducted (see Annex 2)

International Table Top Exercise; Points of entry-Measures and contact tracing: Organised in Athens in the 8th -9th December 2022. Hot and cold debriefing questionnaires was conducted by WP3 (see Annex 2)

National training meeting on Points of Entry: Organised in Alexandroupoli, Greece in March 2023 (see Annex 2)

National training meeting on Points of Entry: Organised in Corfu, Greece in April 2023.

Evaluation surveys have been conducted for both events (see Annex 2)

Meeting on Disaster recovery planning for Public Health professionals: Organised in Belgrade on the 23rd and 24th of May 2023. Pre and post event evaluation survey was conducted by WP3 (see Annex 2)

Workshop on Public Health surveillance - lessons learned from COVID 19: Organised in Lisbon on the 6th -7th of July 2023. Pre and post event evaluation survey was conducted by WP3 (see Annex 2)

SHARP Joint Action one-day seminar on the European Common Ship Sanitation Database – the digital tool for supporting International Health Regulations implementation at Points of Entry: Organised by the National Organization of Public Health, Greece (EODY) and the University of Thessaly in Athens, Greece on the 11th of September 2023. WP3 conducted the evaluation survey for the event (see Annex 2)

MS29: WP8 meeting organised in Lisbon, 3rd-4th October 2022.

Process Indicator(s)	Target	Progress
International training and meetings organized	10 workshops/ training (2X IHR basic and 4 X advanced including chemicaltrainings, 2X field exercises, 2 X laboratory and), 2meetings	4 IHR Basic 2 Chemical 2 TTX 2 IAR/AAR WS 1 Intro to SimEx 1 WS on PH surveillance (6,7JUL/23) SHARP Joint Action one-day seminar on the European Common Ship Sanitation Database (11/SEP/23)
Assessment of the cross-sectoral training needs performed	1 by M21	Achieved See D8.1
Output Indicator(s)	Target	Progress

Report on assessment of the cross-sectoral training needs across countries	Training needs of (at least) 15 low GNI countries	Completed 22/FEB/2022 14 Participants, 7 low GNI
Training materials for WP8 developed	by M52	SEP/2023
Report on the trainings provided	by M53	Completed SEP/2023
Outcome/Impact Indicator(s)	Target	Progress
IHR implementers across countries will achieve improvement of the knowledge in the area of prevention, preparedness, detection and response to cross-border threats to health;	10% increase (based on the pre- and post-training test results of training participants)	

4.1.9 WP9: Chemical safety and chemical threats

Objectives: The specific objective of WP9 is to improve the implementation of IHR chemical core capacities, strengthening preparedness and response to cross-border chemical health threats within MSs and across the EU

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D9.2	Chemical laboratory response network - scoping report	WP9	17 - HD	Report	28	Completed	25/APR/2022 14/JUN/2022
D9.3	WP9 Final report	WP9	24 - DH	Report	52	Completed	SEP/2023
D9.4	Report on SOPs developed	WP9	24 - DH	Report	50	Completed	SEP/2023

D9.2 The report provides information on the desirability to establish a chemical laboratory analysis network.

Expected Milestones:

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS32	WP9 Training and exercise materials	WP9	24 - DH	30	Production of training and exercise materials	Completed 31/OCT/2022
MS33	Surveillance strategy report	WP9	24 - DH	28	Surveillance strategy report	Completed SEP/2023

MS34	WP9 workshops	WP9	24 - DH	34	Two workshops conducted	Completed 31/OCT/2022 1st 6-7 June 2022 2nd 12-13 Oct 2022
MS35	Mechanisms for cross- border chemical health threat preparedness	WP9	24 - DH	51	Consolidate, refine and promote existing mechanisms for cross-border chemical health threat preparedness	Completed-SEP 2023. To be included to D9.3 A list of useful mechanisms and resources was collated and used in preparing the WP9 outputs
MS36	Training and exercises report	WP9	24 - DH	47	Training & exercises outcomes report	Completed 09/DEC/2022

1st Chemical workshop: Delivered online on the 6th-7th of June 2022. Evaluation surveys for days 1 and 2 were conducted (see Annex 2)

Advanced workshop on chemical safety and chemical threats: Organised online on the 12th-13th October 2022. Pre and post event evaluation conducted by WP3 (see Annex 2)

Process Indicator(s)	Target	Progress
Gap analysis of country IHR chemical capacity implementation - Consult with relevant organisations, EC, MS authorities and external stakeholders to determine current capacities with respect to chemical incident response. - Review of existing health protection mechanisms in the area of cross-border chemical incidents and lessons learnt from previous incidents.	All MSs invited to undertake gap analysis by month 5	Completed MAY/2021
EU-level workshops organised - Consultations and meetings throughout the project to engage with project partner and relevant stakeholders/authorities to develop material that is used in workshops.	2 workshops (with 1-2 representatives from each MS e.g. 60-80) by M42	Completed 31/OCT/2022
Training materials, guidance documents and SOPs to be produced - Agreement at the project level of guidance documents and resources tested during workshops and exercises.	Training materials (including slides, case studies and exercise scenarios), guidance documents and SOPs to be distributed amongst all JA partner countries by M49	Completed 24/NOV/2022

Output Indicator(s)	Output Indicator(s)	Output Indicator(s)
<ul style="list-style-type: none"> - Reports detailing progress on: achieving gap-analysis of chemical capacity implementation; surveillance strategy for EUMSs; outcomes of the workshops and exercise, to be disseminated by the end of the Joint Action. - Training materials on improving preparedness to cross-border chemical health threats will be developed (reports, toolkit), tested in the workshops and disseminated by the end of the action. - Guidance and SOPs on improving implementation of IHR core capacities (such as surveillance and reporting of chemical events) based on the country's assessment of IHR capacities. 	<p>3 reports (to be delivered M12, M24, M48).</p> <p>A set of lectures (4-8), case studies (3-5) and questions and activities to promote discussion among participants (to be delivered M46).</p> <p>SOP compendium (to be delivered M50).</p>	<p>Completed Gap Analysis Report: 22/MAR/2022 Surveillance Strategy Report: Training and Exercise Report: 09/DEC/2022</p> <p>Completed 31/OCT/2022</p> <p>Completed Submitted SEP/2023</p>

Outcome/Impact Indicator(s)	Target	Progress
Improved implementation of IHR chemical core capacities within EU MSs and partner countries, to support the timely detection of and effective response to potential chemical health risks/events. In particular, those partner countries who identified the need to strengthen capacity to respond to chemical events.	At least 70% of the MSs to have utilized the advice documents provided by WP9 in their planning, preparedness, risk assessment and response to chemical events	Document completed and submitted SEP/2023 WP9 outputs and training materials are available to all EU MS. However, it is difficult to confirm if they are being utilised in-country
Workshop attendees have improved their knowledge of chemical hazards and IHR core capacity requirements for chemical events	By 60% according to pre and post questionnaires	Completed: OCT/2022 All participants improved their knowledge

4.1.10 WP10: Case management and infection prevention and control preparedness

Objectives: The specific objective of this WP is to improve clinical and biorisk management, hospital preparedness and response to high-consequence infectious diseases (HCID).

This WP aims to strengthen IHR, through the enhancement of preparedness and response within Europe to possible cross-border health threats due to the HCID, and to assure cooperation, communication, and exchange of information among clinicians and public health officers.

Expected deliverables:

Deliverable Number	Deliverable Title	WP number	Lead beneficiary	Type	Due Date	Status	Comments
D10.1	Report on existing facilities	WP10	22 - ISCIII	Report	49	Expected to be completed	SEP/2023
D10.2	Feasibility study report	WP10	17 - HD	Report	50	Completed	Submitted to SC 02/AUG/2023
D10.3	Report on syndrome-based approach	WP10	3 - INMI	Report	51	Expected to be completed	SEP/2023

Expected Milestones:

Milestone number	Milestone title	WP number ⁹	Lead beneficiary	Due Date (in months)	Means of verification	Status
MS37	Protocol for assessment of facilities	WP10	22 - ISCIII	46	Development of the protocol for the assessment of capacities and facilities	Questionnaire sent out 15/FEB/2023 Completed 15/JUN/2023 (Related to D10.1)
MS38	Data collection on hospital preparedness	WP10	2 - RKI	49	Collection of data on hospital preparedness and capacity in dealing with high-consequence infectious diseases in JA participating countries.	Questionnaire completed and uploaded online. Related to D10.1
MS39	Protocol for WP10 feasibility study	WP10	17 - HD	48	Protocol for feasibility study for an expert clinical support service for HCID	Completed Submitted to SC 28/AUG/2023
MS40	Methodological framework for implementation of syndrome-based approach	WP10	3 - INMI	51	Development of methodological framework for implementation of syndrome-based approach at emergency departments	Completed SEP/2023 Related to D10.3

Process Indicator(s)	Target	Progress
<p>Four workshops organised:</p> <ul style="list-style-type: none"> - Workshop 10.1 – Presentation of the Map (Mapping and assessing the existing facilities and country clinical preparedness); Definition of methodology and recommendation for assessment - Workshop 10.2 – Dissemination and discussion of the assessment results - Workshop 10.3 – Identification of the list of HCID, case definition of each HCID; systematic identification of major disease drivers and threats; evaluation of validated severity scores (involving all SHARP partners) - Workshop 10.4 – Dissemination and discussion of the obtained results from the Task 4. 	<p>4 workshops</p> <p>(minimum one participant for each country of the JA by M50)</p>	<p>1st workshop conducted in Frankfurt (WP partner meeting) M22. No other workshop organised</p>
Map and survey of clinical capacities, including high isolation clinical units available	Map covering at least 80% existing units	Survey released: Report SEPT/2023
Assessment of clinical and bio-risk management capacities, including high isolation clinical units	90% of countries assessed by M49	Online assessment 15/JUL/2023 Report by 10/AUG/2023
Methodological framework for implementation of syndrome-based approach at emergency department	Draft report shared by M48	10/AUG//2023
Output Indicator(s)	Target	Progress
Map (existing hospital preparedness for HCID, including high isolation clinical facilities)	1 Map including 20 countries	
Feasibility study for an expert clinical support service for high-consequence infectious diseases	1 report by M50	Final documents shared with SC: 02/AUG//2023
Methodological framework for implementation of syndrome-based approach at emergency department	Final report disseminated by M51	Final document shared by end of M54
Outcome/Impact Indicator(s)	Target	Progress
Increase in assessed and improved hospitals with isolation facilities	50% of partner countries assessed	
Participating hospitals have utilized the JA guidance on bio-risk management	80% of participating hospitals	

4.2 Internal Evaluation surveys

WP3 conducted internal evaluation surveys for all the events organised during the JA as well as an overall JA partners' satisfaction survey and a partners' survey on the work of WP2, communication and dissemination. Through the evaluation questionnaires, quantitative and qualitative information were collected. The overall satisfaction from the events was rated high by the majority of the participants. This included events' organisation and preparation, material provided and content. Plenary discussions and networking have been rated higher during face-to-face events compared to the ones conducted online.

Full internal evaluation surveys' results can be found in Annex 2.

WP1:

JA partners satisfaction survey:

The survey was conducted online. The questionnaire was disseminated to all project partner institutions' leaders, to assess the effectiveness of the project management in a scale from 1 to 5 (5 being the best).

46 participants responded to the survey. Overall, the participants' scoring was high indicating a high level of satisfaction.

For question 1: *To what extent has JA SHARP management been achieved in coordinating, monitoring activities in a range of domains:*

The participants responses ranged from 4.41 (for creating an environment where different opinions can be said) to 3.89 (for adherence to the time schedule of the Grant Agreement of the project)

For question 2: *To what extent has JA SHARP management been achieved in ensuring the delivery of project results in different domains:*

The participants' responses ranged from 4.41 (for managing financial resources) to 3.78 (for motivating the people involved).

For question 3: *To what extent has the JA SHARP managed to contribute to the improvement of response capacities to the Low GNI countries:*

The participants' responses ranged from 3.84 (for training) to 3.67 (for crisis communication).

For question 4: *To what extent is the JA SHARP effective in promoting to stakeholders its objectives, activities and results:*

The participants' scored 3.89 for the objectives and 3.84 for the activities and results.

For question 5: *To what extent did WPs demonstrate leadership and professional commitment:*

The participants gave WP7 the highest score (4.24), followed by WP1 and WP5 (4.17), WP8 (4.15), WP6 (4.10), WP2 (4.03), WP3 (3.95), WP9 (3.92), WP4 (3.85) and WP10 (3.65).

For question 6: *To what extent did JA SHARP partners demonstrate a commitment that promotes the effective and qualitative implementation of the project:*

The participants scored WP7 (4.12), WP1 and WP5 (4.07), WP8 (4.05), WP2 (4.00), WP6 (3.95), WP3 (3.93), WP4 (3.90), WP9 (3.80), WP10 (3.75).

For question 7: *How much did the COVID-19 pandemic affect your job in relation with the implementation of the project:*

The participants responded with an average score of 4.11 (5 being the most).

SHARP JA Final Conference survey

The survey was conducted online and 50 participants responded. The Final conference was considered successful with an overall score of 4.60 (5 being the highest).

JA SHARP Workshop, 17th World Congress on Public Health:

7 participants responded to the online questionnaire and they all agreed or strongly agreed that during the workshop they had the opportunity to learn about SHARP JA activities.

WP2:

Partners survey on the work of WP2, Communication and Dissemination:

35 participants responded to an online questionnaire disseminated to all partners, to gather qualitative indicators-views and attitudes- on the work of WP2.

The participants rated at 4.09 (5 being the best) their satisfaction with the quality of the communications produced, 4.00 on whether the communication support services from WP2 met their expectations and 4.12 their satisfaction on the speed of the WP2 response to their communication needs.

Satisfaction from the campaign plans provided for activities/deliverables was rated at 3.95 and 4.03 was the score on whether the communication objectives were generally met.

The ease on finding what they were looking for on the SHARP JA's website was rated at 3.88.

The most preferred channel used to reach audience was email newsletters (3.79) and the least favourite one was social media channels (3.19).

80% of the participants were able to use or partially use their own organisation's social media and dissemination channels/networks for project-related news throughout the duration of the action.

WP5:

Workshop 3 on IHR core capacity strengthening and assessment:

18 participants responded to the online questionnaire.

The workshop was considered highly successful in different domains, ranging from 4.94 (5 being the best) for planning and organization to 4.71 for break out sessions and plenary discussions.

Workshop on International collaboration between authorities during crisis; Creating a template agreement for trans-country collaboration between authorities during crisis:

Pre-survey:

13 participants responded to the online questionnaire on expectations of different aspects of the workshop and the rating ranged from 4.23 for useful information/discussions between experts to 3.54 for gaining knowledge in what is needed for a cross border expert clinical consultation service.

Post survey:

28 participants responded to the questionnaire on whether their expectations from different aspects of the workshop were met. Rating ranged from 4.21 for useful information/discussions between experts to 3.57 for knowledge about a practical template agreement.

WP6:

Hybrid expert meeting on lessons learned regarding multisectoral collaboration during the COVID 19 pandemic:

Pre-survey:

20 participants responded to the online questionnaire and rated 3.94 (5 being very good) the information prior to the event and 3.89 the communication regarding the expectations for the event.

Post-survey:

16 participants responded to the online questionnaire and considered the event as successful in different domains, rating 4.88 planning and organization to 4.31 the quality of the group discussions during the meeting.

Workshop on Inter-Sectoral preparedness and response planning essentials:

Pre-survey

27 participants responded to the questionnaire. The communication prior the event was rated 4.00 (5 being very good).

Post-survey

15 participants responded to the questionnaire. The event was rated very high in different domains ranging from 4.60 (5 being the best) for communication during the meeting to 3.93 for coverage of meeting expectations.

WP8:

IHR (2005) 2nd Basic Online Training:

20 participants responded to the online questionnaire. The 5 modules attendance ranged from 90% for detection, assessment and communication under the IHR (2005) to 70% for WHO Monitoring and Evaluation Framework.

Intra/after action review workshop:

20 participants responded to the online questionnaire. Overall, the participants rated their satisfaction with the workshop at 89% and 64.71% plan to implement the concept.

Training on simulation exercises:

10 participants responded to the online questionnaire. 70% plan to participate in the development, implementation or evaluation of a simulation exercise in their country/institution in the near future and the overall satisfaction with the workshop was rated at 77%.

National training exercise "ERMIS"

SHARP JA study tour

International Tabletop Exercise; Points of entry-Measures and contact tracing

National training meeting on Points of Entry, March 2023

National training meeting on Points of Entry, April 2023

*Meeting on Disaster recovery planning for Public Health professionals
Workshop on Public Health surveillance - lessons learned from COVID 19*

SHARP Joint Action one-day seminar on the European Common Ship Sanitation Database – the digital tool for supporting International Health Regulations implementation at Points of Entry.

Over 100 professionals involved in management of public health events and IHR Ship Sanitation Certificates for the maritime transport sector benefited from the session.

All events were considered highly successful in terms of organisation and in meeting their objectives by the participants responding to the questionnaires.

WP9:

Advanced workshop on chemical safety and chemical threats:

57 participants responded to the online questionnaire. The participants rated different domains of the workshop and the average rating ranged from 2.56 (1 being strongly agree) for content relevance to participants to 2.44 for slides being easy to understand.

1st Chemical workshop:

2 days workshop conducted in June 2022: 14 participants responded to the questionnaire on the 1st day of the workshop and 3 participants responded on the 2nd day. The workshop was rated high in relevance and content.

4.3 Interviews with all WP leaders/co leaders and Key stakeholders results

Twenty WP representatives were interviewed in total, and all work packages were represented by at least 1 lead or co-lead. WHO Europe, ECDC, DG SANTE and HaDEA, were also represented by at least one participant with a total of 5 interviewees. All interviews took place between the 28th of March and the 5th of April 2023. The discussion agenda was included in the original invitation letter to all participants (Annex 1).

	WP1	WP2	WP4	WP5	WP6	WP7	WP8	WP9	WP10
Date of interview	30/MAR/23	28/MAR/23	28/MAR/23	28/MAR/23	30/MAR/23	29/MAR/23	31/MAR/23	30/MAR/23	30/MAR/23
Number of representatives	2	2	3	2	4	3	2	1	1

	WHO Europe	ECDC	HaDEA	DG SANTE
Date of interview	05/APR/23	05/APR/23	31/MAR/23	31/MAR/23
Number of representatives	1	2	1	1

The summary of the interviewees' responses is presented below under each point of discussion:

4.3.1 What are the challenges/issues/difficulties faced during the implementation of the JA after M24?

a) WP leaders and co leaders

COVID 19 related:

- Limited staff availability, both in terms of time and Human Resources capacity, has been identified as a challenge as most of the people involved in SHARP JA were heavily involved in their national organisations responding to the COVID 19 pandemic.
- The travel restrictions imposed had a direct consequence on all the training and workshops organised.
- Some of the activities had to be significantly delayed until the restrictions were lifted.
- Many activities had to be modified to take place online due to travel restrictions. This created new challenges in terms of organisation and planning.
- The content of workshops and other deliverables, had to be adapted to the COVID-19 pandemic demands leading to changes to the original work plan and material.
- Travel restrictions had also created difficulties in transport, especially for sensitive samples which specifically affected the tasks of WP7.
- During the COVID 19 pandemic, institutions faced the challenge of dealing with response and preparedness at the same time.

Other:

- The energy crisis increased the cost of transportation.
- Significant turnover of people involved in SHARP projects placed a challenge for collaboration between WPs, especially the ones sharing tasks.
- The post COVID 19 pandemic public health demands are still intense.
- The delays and subsequent extensions have increased the workload towards the end of the JA placing an additional challenge for all WPs, especially the horizontal ones.
- Staff involved in SHARP are not solely dedicated to the JA as they are involved in their national public health organisations or other projects as well.
- The large size of SHARP JA (10 WPs and a significant number of partners and affiliated entities) placed a challenge on coordination as administrative demands were equally significant.
- Large size of SHARP JA places a challenge on communication amongst partners.
- The level of engagement has not been the same amongst partners, placing a challenge on collaboration amongst partners and coherence.
- The objectives of the JA were considered to not be SMART (**S**pecific, **M**easurable, **A**chievable, **R**esult oriented, **T**ime bound) enough, the scope of the project was too wide and some tasks were complicated.
- Not enough involvement and endorsement from Key Stakeholders.
- It was a challenge for low GNI countries to participate in actions due to limited resources.

b) Key stakeholders

- Limited staff time availability as they are not solely dedicated to SHARP JA.
- Not clearly enough defined outputs.
- Not the same level of engagement amongst partners, placing a challenge on collaboration and coherence.
- Changes in infrastructure caused by a significant turnover of people involved in SHARP projects placing a challenge on collaboration.
- New regulation triggered by the COVID 19 pandemic-IHR revision and new EU legislation. The original work plan of the project was based on previous versions of IHR and EU legislation.
- More effort should be made in order to identify already existing material to avoid duplicates.
- Limited time availability as institutions and colleagues involved in public health demands after COVID 19 pandemic.
- Some institutions took their own path and did not collaborate with other WPs.
- Not sufficient links between WPs placing a challenge in coherence.
- SHARP JA's structural challenge (too large), many WPs and subsequently harder to manage.
- The project design meant some WPs are more independent than others.

4.3.2.

a) In your opinion, to what extent SHARP JA has achieved its main overall objectives?

b) To what extent have your WP specific objectives been met? (for WP leaders and co leaders only)

Despite the delays, most of the WPs interviewees believe that they have succeeded in achieving their own objectives or are confident that they will be met by the end of the JA. The WP affected the most by the COVID 19 pandemic demands is WP10 and consequently the original tasks had to be adjusted. Most of the delays have been justified by staff unavailability due to the COVID 19 pandemic demands and increased workload due to many actions and events postponed towards the end of the project.

All interviewees agree or strongly agree that the main general objectives of the SHARP JA have been met or are confident that they will be met by the end of the JA.

A few participants mentioned that although there is a noticeable improvement in IHR implementation, it is not possible to differentiate the contribution of the JA' activities on this improvement, versus the contribution of the actions taken towards the COVID 19 pandemic response.

4.3.3 Recommendations/proposals on sustainability

a) WP leaders and co leaders

- Training material platform (always need to train new staff). A repository of tabletop exercises, workshops and online training e-learning material and presentations should be easily accessible as there is always training demands.
- Investing in Multisectoral collaboration. This has been identified as a key point during the JA.
- WP7 lab network sustainability was identified by almost all interviewees.
- Chemical threat network.
- Surveillance strategy report.
- Intranational collaboration agreements.
- SimEx observations.
- National level sustainability should be in line with the deliverables developed at EU level.

b) Key stakeholders

- WP7 laboratory network.
- Training activities and webinars (on national level as well).
- Repository of Tabletop exercises, workshops and online training e-learning material and presentations.
- Template for intercountry collaboration during crisis.
- Chemical threats network.
- Actions to keep the network build during the JA “alive”.
- Bring results and products derived from the JA to national level.

4.3.4 SWOT analysis

STRENGTHS

a) WP leaders and co leaders

- WP7 laboratory network was not only maintained but also strengthened during SHARP JA.
- IHR has strengthened through the JA's actions and tasks.
- The commitment and personal motivation demonstrated by several WP leaders and coleaders have been significant strengths in achieving the JAs objectives.
- SHARP JA increased understanding of preparedness and gaining knowledge (especially low GNI countries) towards that.
- The generous budget was also identified as a strength.
- The JA involved many EU countries as well as European countries outside the EU, creating a wider European network.
- SHARP has promoted unity and improved efficiency.
- Increased cooperation between EU member states as well as cooperation on a national/regional level.
- Involvement of institutions with responsibility on national level on that subject was considered a significant strength, especially towards sustainability.
- The relevance SHARP's theme, particularly in the context of the COVID-19 pandemic, has emphasized the critical importance of collaborative efforts in health security both for the relevant authorities as well as the general public.
- Engagement of countries on technical level (technical WPs) like laboratories and hospitals.
- Almost all interviewees identified the Network and Personal relationships built as a strength.
- Network for exchanging solutions, experiences, best practises not only for SHARP JA activities but also during the COVID 19 pandemic response.

b) Key stakeholders

- Bringing together all EU and associated countries in a wider European network.
- SHARP JA is a unique and dedicated action in advancing the work on legislation.
- The network built during SHARP activities has been identified as a key strength, leading to sharing of experiences, triggering thought process and understanding as well as generating ideas.
- Countries key focal points exposure to international level and expanding their professional network.
- Workshops and other activities and the connections made during that process.
- Addressing key issues for preparedness.
- Lessons learned from pandemic fed back into products.
- Collaboration of amount and diversity of institutes.
- Budget.
- Timing (COVID 19 pandemic) as it made the JAs objectives relevant and lessons learned from the pandemic were fed back into SHARP's products.
- THL leadership and administrative support was considered a significant strength especially due to the adaptation and changes required due to the COVID 19 pandemic circumstances.

WEAKNESSES

a) *WP leaders and co leader*

- The scope was considered too wide and the objectives not SMART enough by several interviewees.
- The size of the JA was considered large, with a big number of WPs, partners and affiliated entities.
- COVID fatigue from public health authorities as well as general public, was considered a significant weakness by most interviewees.
- The large size of the JA led to not cohesive working action.
- Short planning phase: more face-to-face meetings with WP leaders to finalise objectives and meet each other and more communication between partners, would be desired at the planning phase of the JA.
- Lack of sufficient preparation (leading to duplicates). Some interviewees pointed out that a number of the JA's products have already been available.
- Large number of countries in each WP led to misunderstanding in terms of responsibilities and coordination. That became more significant during the COVID 19 pandemic.
- Lack of scientific guidance giving direction of SHARP vision and also focus on each country's needs.
- Insufficient communication between sectors and partners (engagement of countries on policy level -political engagement).
- The discussion on sustainability did not start early enough in the JA. That would facilitate uptake.
- Not many activities to get WPs integrated and linked.
- The decision-making process was considered complex and lacking flexibility.
- Objectives were changing, due to different public health priorities.
- Not same level of interest/engagement from all members.
- It has been difficult to involve everyone on a practical level due to the large size of the JA.
- Insufficient involvement of other sectors (e.g. animals)
- Lack of sufficient time to complete actions and tasks towards the end due to delays.
- Lack of dedicated staff involved in SHARP, as they are also involved in other projects (including national COVID 19 response).
- Staff shortage and personnel turnover (especially in low GNI countries).

b) *Key stakeholders*

- Competing priorities for people involved in SHARP JA as they are also involved in other projects (including their national COVID 19 pandemic response).
- Change in infrastructure-Staff turnover.
- IHR revision and changes in EU regulation on serious cross-border threats to health.
- Work has already been done and tools already developed which led to duplications.
- Not enough interaction and links between WPs (better defined outputs would improve links)

OPPORTUNITIES

a) *WP leaders and co leaders*

- SHARP JA and its timing with the COVID 19 pandemic, provided a unique opportunity to promote preparedness planning as everyone now understands and appreciates its value.
- An opportunity for Chemical network incorporation in each country as it is not always under Public Health institutes.
- SHARP JA provided an excellent opportunity to strengthen working relationship between institutions on a personal level.
- The diversity of SHARP gave the opportunity for network building amongst institutions that do not often meet in their scope of work.
- Identify subjects that need more exploration/support.
- Continue with good rapport (exchange practises, experiences).
- IHR and EU regulation revision.
- Laboratory network (WP7) sustainability and expansion.
- Training on IHR and reporting.
- Improvement of Laboratory and clinical network collaboration.
- Increased public awareness, especially now that everyone understands the importance of preparedness. Despite COVID 19 fatigue, a large portion of the public are worried about another pandemic.
- To incorporate/apply preparedness on a national/regional level as public health institutes appreciate that preparedness is less costly than response.
- New projects could be developed to build on the capacities already built by SHARP.
- SHARP JA has been a great opportunity for one big network that talks the same language about IHR.

b) *Key Stakeholders*

- Network built during the SHARP JA, gave an excellent opportunity for new ideas and maintaining conversation.
- Ideas for further initiatives from partners (e.g., WP8 training platform and network maintenance)
- Use the products and outputs directly in COVID 19 response and, vice versa, feed the lessons learned from the pandemic back to the JA's products.
- New funding opportunities.
- Exposure to training and facilitation.
- Knowledge gained from SHARP could support EU regulation preparedness working group (especially in what is manageable from each country).
- Provide input in IHR review and analysis of how the IHR legislation reflects.
- Analysis of national settings and share information with other partners.

THREATS

a) *WP leaders and co leaders*

- Lack of permanent funding solution for WP7 lab network is a direct threat to the lab network sustainability.
- SHARP message getting lost and not reaching the right people (decision making power) especially due to COVID fatigue and as people are moving on to new JAs.
- Lack of time from decision makers for SHARP JA.
- Other priorities in health sector after the COVID 19 pandemic era.
- COVID fatigue leading to no political commitment.
- Training and mapping of gaps not performed early enough in JA.
- Limited resources.
- Inadequate engagement from partners.
- Lack of stakeholders involvement leading to lack of support for implementation.
- Extensive use of video conferences due to the COVID 19 pandemic restrictions was a threat to gaining adequate attention and network building.
- Delays led to accumulation of activities towards the end of the JA leading to harder communication and not enough time to attend activities.
- Sustainability plan narrowed down to certain set of organisations.
- Lack of building relationships with professional associations.
- Not enough public health capacities to implement the outcomes.

b) *Key Stakeholders*

- Lack of internal dissemination.
- Countries not fully aware of their own power and not making connections between organisations and policy makers on a national/regional level.
- IHR review was identified as threat to deliverables already produced.
- COVID 19 post pandemic strain on Public Health due to increased demands.
- Lack of general public involvement.

5. Discussion: critical analysis of findings against evaluation questions

The general objective of the SHARP Joint Action is to strengthen IHR implementation and preparedness, support capacity building and contribute to a high level of protection of health and security in the EU Member States in line with the EU health security framework. This is reflected through two overall objectives:

1. To support the implementation of Decision 1082/2013/EU on serious cross-border threats to health
2. To strengthen the resilience and response capacities of health systems, and to ensure coherence and interoperability for preparedness and response planning to health threats at national, EU and regional level.

Through the Joint Action, the member and partner states and the Union's common ability to prevent, detect and respond to biological outbreaks, chemical contamination and environmental and unknown threats to human health is expected to be strengthened.

It consists of 10 Work Packages covering core Public Health capacities according to the IHR (2005). All Work Packages are described in detail in part A, Annex 1 of the Grant Agreement.

The partnership of SHARP JA consists of 26 Associated Partners, 35 Affiliated Entities and 10 Collaborating Partners. In total, 30 countries (21 EU members, and 9 European neighbour countries) participate in the Joint Action.

The main purpose of the external evaluation and its subsequent report is to ensure objectiveness in the evaluation process as it is conducted by an independent team subcontracted by WP3, Evaluation of the action. This document (D3.5), provides an overview of the JA during M25-M54 of the project and includes the findings, conclusions and recommendations for sustainability of the JA. It follows the interim external evaluation report, D3.4 (see Annex 3), which provided an overview of the first 24 months of the project and included recommendations for improvement in some aspects of the JA. The interim external evaluation, also acted as a checking point through midterm and supported the final external evaluation.

The recommendations proposed at the midterm phase of the external evaluation for the remaining of the JA and the subsequent actions were:

Recommendation 1: *Support and understanding of needs for WPs affected by the pandemic.*

Actions implemented by the project, supporting the recommendation:

- Two amendments (3rd and 4th) for non-cost extension of the action (first one year, then 6 months), extended timelines of deliverables and milestones.
- Assistance in changing Disease X scenario into Lessons learned from Covid-19 (WP6) – was included in an amendment.
- Sequencing of SARS-Cov-2 included into WP7 Laboratory preparedness and responsiveness.
- Training/workshop topics – e. g. risk communication on vaccination, IAR/AAR workshop (WP8)
- “syndrome based” approach for clinical management of high-consequence infectious diseases (WP10) – Task 10.4 amended
- Providing HR support to WP affected mostly by the pandemic (WP10)

Recommendation 2: *Regular meetings between WPs with a similar scope of work with topics decided each time depending on their needs.*

Actions implemented by the project supporting the recommendation:

- WP1 had a liaison contact person assigned to each work package. Additionally, WP1 organised several meetings with other WPs and repeatedly guided WPs to organise meetings between them.
- Planning and implementation of activities discussed between WPs and timed to complement the topics (ie: Risk Communication IHR strengthening WP5 workshop was complemented by formal training in Risk Communication in WP8).

Recommendation 3: *Emphasis on the importance of implementing sustainability at an early stage. More time and meetings with WP representatives to understand and decide the best sustainability plans and tools.*

Actions implemented by the project supporting the recommendation:

- Several meetings and discussions during WP activities, concerning sustainability.
- Discussions at Steering Committee meetings with WP4, ECDC and DG SANTE

Recommendation 4: *More usage of the SHARP website as a means of communication and source of information. Record deliverables downloads and users mapping.*

Actions implemented by the project supporting the recommendation:

- SHARP website functionality improvements were instituted in March 2022.
- During the Partners survey on the work of WP2, Communication and Dissemination, in April 2023, the participants rated their satisfaction with the quality of the communications produced as 4.09 (5 being the best).

Recommendation 5: *Newsletters on a regular basis*

Actions implemented by the project supporting the recommendation:

- Newsletters have been issued regularly by WP2. WP leaders have also contributed to the content:
 - 20 December 2021 [SHARP Joint Action internal newsletter](#)
 - 21 June 2022 SHARP Joint Action newsletter
 - February 2023 [SHARP Joint Action Newsletter](#)
 - 23 July 2023 [SHARP Joint Action Final Conference Round-up](#)

Recommendation 6: *Forums with common topics of concern*

Actions implemented by the project supporting the recommendation:

- Several meetings on financial issues and reasons for amendments for the whole consortium organised.
- Advisory Board members have been supportive and have provided guidance in topics of concern.

Recommendation 7: *Further involvement and support on technical/scientific level of coordination*

Actions implemented by the project supporting the recommendation:

- The technical level coordination (e. g. administrative and financial guidance) has been very strong during the whole duration of the JA.
- THL tried to improve the scientific support/coordination despite challenges faced due to the workload of the subject matter experts dealing with the COVID 19 pandemic response.

Recommendation 8: *A meeting about SHARP vision and targets and how it has changed due to the pandemic, so everyone has a clear overview of the SHARP journey.*

Actions implemented by the project supporting the recommendation:

- SHARP objectives were discussed and refreshed at the combined Steering Committee and Advisory Board meeting in May 2022. All WP leaders and several representatives from ECDC, DG SANTE, WHO EURO, HEALTHY GATEWAYS and TERROR JA were present.
- Work Packages revisited analyses and gained input from partners to determine actual and acute needs for IHR strengthening during the course of the JA which coincided with the pandemic response.

The relevance of SHARP JA is explained in detail in section 2.4 Part B, Annex 1 of the Grant Agreement. Through the Joint Action, the member and partner states and the Union's common ability to prevent, detect and respond to biological outbreaks, chemical contamination and environmental and unknown threats to human health is expected to be strengthened. The unprecedented circumstances during the COVID-19 pandemic, are the best example of the JA's relevance and purpose.

The circumstances and restrictions imposed due to the COVID 19 pandemic, were the main cause of challenges up to M24. It appears though that the COVID 19 pandemic has continued to raise challenges after M24 as well as after the official ending of COVID-19 as a Public Health emergency of International Concern (PHEIC), as the Public Health demands have increased significantly in different health sector domains in partner countries and in the EU/EEA as a whole.

Public health personnel unavailability has been one of main challenges during the duration of the JA. The lack of time and/or dedicated staff to the JA has been noticeable even prior to the pandemic and it was exacerbated during the increased demands of the COVID 19 pandemic national responses.

The lack of public health staff is even more prominent in small countries and countries with low GNI.

The subsequent delays were alleviated by the 3rd and 4th amendments and THL demonstrated significant management and coordination skills by navigating the project through unprecedented circumstances. However, the delay of activities subsequently increased the workload towards the end of the JA, especially for horizontal WPs, and hindered participation by the partners to events and activities. Also, some tasks had to take place in parallel due to the short time remaining in the Joint Action.

Despite the challenges raised, the COVID 19 pandemic provided the opportunity to increase awareness and raise the importance of SHARP's objectives. It was also an opportunity for the JA's

products to be tested in real scenarios and be adapted by the lessons learned from the pandemic response. As well, the pandemic prompted strengthening in IHR implementation in countries however, the extent of strengthening is not possible at this stage. Also, it would be a complex evaluation exercise to determine to what extent IHR strengthening is attributed to SHARP JA actions or to the response to the COVID 19 pandemic itself.

The size of SHARP JA has been also identified as a source of challenges particularly on a coordination and management level. Not all partners demonstrated the same level of engagement primarily due to their national public health demands. However, a longer preparatory phase, establishing more SMART objectives and clearer tasks would have been desired by several partners. Moreover, a number of partners, mentioned that an earlier conversation on sustainability could probably facilitate the uptake of the deliverables.

Despite the challenges raised, the deliverables and milestones have successfully been completed and the specific indicators have mostly been achieved. The internal evaluation demonstrated that the workshops, TTE and training organised was considered highly successful, relevant, and improved the level of expertise amongst the participants. All training materials and presentations were rated highly and despite the organisational challenges (converting face-to-face to online) the level of satisfaction was high. Plenary discussions and networking were compromised due to remote attendance.

The JA's original planning was considered very ambitious with a challenging collection of ideas. It also involved many entities with different expertise and scope of work and also different skillsets. Some work packages had very clear targets and tasks or the WP leaders had already been involved in previous Joint actions and consequently, it was easier to function independently without external guidance. However, some work packages felt that there was a need for guidance and scientific intervention and support especially because of the fluidity caused by the pandemic. However, it has become apparent that SHARP JA provided an excellent opportunity for a European network to be built amongst experts from different background and Public Health institutes, speaking a common language about preparedness and IHR.

The main threat for the SHARP JA's products is COVID 19 fatigue and losing the message. Although, policy making authorities and the general public, currently, want to move away from conversations surrounding the pandemic, it has become more apparent than ever to everyone how important preparedness and it's functionality is and its value socially, financially and ultimately for public health. This strengthening of preparedness should be maintained by continuous implementation of SHARP JA's deliverables on a national/regional level. For this purpose, the platforms that have been developed, including products and materials produced by the JA's activities, should be maintained and be easily accessible by national public health authorities.

SHARP JA has been unique in bringing together a wide range of institutions and public health domains, and despite the unprecedented challenges presented, it is considered successful in

achieving its objectives. It is important to ensure that the JA's products are being utilised and the connections made during the project are kept "alive".

6. Recommendations based on external evaluation findings.

In view of the findings above, recommendations from the External Evaluation include:

- Participating partners in the JA should take initiatives on national/regional implementation and sustainability of the SHARP JA's deliverables and products (e.g. platform for training material, TTE).
- The results and deliverables of the JA should be further communicated not only to the key stakeholders but also to the wider public health community (increase external visibility).
- Future projects to continue building on capacities already built by SHARP JA, including further involvement of other sectors (e.g., animals, environment).
- Internal dissemination of products and outcomes to policy makers at national level including financial component (preparedness is less costly than response).
- Sustaining/reinforce clinical and lab network (technical packages).
- In future JAs dedicate more time for preparedness phase to define more clearly the content and the objectives of the JA.
- Explore viable solutions for the lack of public health staff to implement the JAs tasks especially for small and low GNI countries.

ANNEX 1

Invitation Letter to WP leaders and co-leaders for External Evaluation Interviews



FIN INTERVIEW
INVITATION_WP.pdf

Invitation Letter to key stakeholders for External Evaluation Interviews



FIN INTERVIEW
INVITATION.pdf

ANNEX 2

WP1



WP1_17th WORLD
CONGRESS ON PH_Da



WP1_FINAL
CONFERENCE-FEEDB



WP1_PARTNERS
SATISFACTION SURV

WP2



WP2 INTERNAL
EVALUATION_Data_All

WP5



WP5_WORKSHOP
3_Data_All_221010.p



WP5_CREATING A
TEMPLATE AGREEME



WP5_CREATING A
TEMPLATE AGREEME

WP6



WP6_EXPERT
MEETING MALTA-PO



WP6_EXPERT
MEETING MALTA-PR



WP6_RIGA POST
SURVEY_Data_All_230:



WP6_RIGA
PRE-SURVEY_Data_All

WP8



WP8_ATHENS TTE
COLD EVALUATION



WP8_ATHENS TTE
HOT EVALUATION



WP8_IAR_AAR_Data_A
II_220713 .pdf



WP8_IHR BASIC
TRAINING 2_Data_All



WP8_SIMULATION
EXERCISE_Data_All_22



WP8_STUDY
TOUR_Data_All_22120



WP8_TRAINING
MEETING AMTH 2023



WP8_TRAINING
MEETING CORFU 202



WP8_DISASTER
RECOVERY PLANNIN



WP8_DISASTER
RECOVERY PLANNIN



WP3 NATIONAL
EXERCISE ERMIS Dat



WP8_WORKSHOP
ON PUBLIC HEALTH

WP9



WP9_2ND
CHEMICAL WORKSH



WP9_CHEMICAL
WORKSHOP JUNE 20



WP9_CHEMICAL
WORKSHOP JUNE 20

ANNEX 3



SHARP EX EV
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