

# Networking resources

Deliverable D6.1

08 July 2022



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 883285

The material presented and views expressed here are the responsibility of the author(s) only. The EU Commission takes no responsibility for any use made of the information set out.





# PANDEM-2

# **D6.1 Networking resources**

Document date: 08 July 2022 Document version: 2.0 Deliverable No: D6.1

Full Name	Short Name	Beneficiary Number	Role
NATIONAL UNIVERSITY OF IRELAND GALWAY	NUIG	1	Coordinator
FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	FRAUNHOFER	2	Beneficiary
UNIVERSITE CATHOLIQUE DE LOUVAIN	UCL	3	Beneficiary
PINTAIL LTD	PT	4	Beneficiary
FOLKHALSOMYNDIGHETEN	FOHM	5	Beneficiary
RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU	RIVM	6	Beneficiary
CARR COMMUNICATIONS LIMITED	CARR	7	Beneficiary
TERVEYDEN JA HYVINVOINNIN LAITOS	THL	8	Beneficiary
INSTITUTUL NATIONAL DE SANATATE PUBLICA	NIPH	9	Beneficiary
ROBERT KOCH-INSTITUT	RKI	10	Beneficiary
STICHTING KATHOLIEKE UNIVERSITEIT	RUNMC	11	Beneficiary
CLARISOFT TECHNOLOGIES ROM SRL	CLARISOFT	12	Beneficiary
OSTERREICHISCHES ROTES KREUZ	ORK	13	Beneficiary
EPICONCEPT	EPIC	14	Beneficiary
INSTITUTO NACIONAL DE EMERGÊNCIA MÉDICA	INEM	15	Beneficiary
TRILATERAL RESEARCH LTD	TRI	16	Beneficiary
ISTITUTO PER L'INTERSCAMBIO SCIENTIFICO	ISI	17	Beneficiary
ASSOCIAZIONE DELLA CROCE ROSSA ITALIANA	ITRC	18	Beneficiary
INSTITUTO NACIONAL DE SAUDE DR. RICARDO JORGE	INSA	19	Beneficiary

# **Version History**

Version number (date)	Details
1.0 (31.01.22)	Initial submission to EC
2.0 (08.07.22)	Updated deliverable based on recommendations from review report for Reporting Period 1
	- section 4.1, updated section 0 to section 4.3 and updated all hyperlinks
	-section 4.1.1, 4.1.2, added a description of the events with the dates of the meetings where the key stakeholders were contacted, by which partners and which partners were supporting these events.
	-section 4.2, added table 1 up to including table 3 to include meeting dates and concrete partners selected for attending these events
	-Appendix a: added clarification to the Appendix title to highlight these were a list of possible impactful high-profile events to attend which entered the partner survey. The final list as recommended by partners is provided in section 4.2
	-Appendices c and d: Colour coordinated these 2 appendices to highlight which stakeholders have already been contacted by RKI in year 1 and which stakeholders will be contacted by RKI in year 2.

# **D6.1 Networking resources**

# **Table of contents**

Α	bbreviatio	1S	4
1	Executiv	/e Summary	5
2	Introdu	ction & Background	6
	2.1 Doc	ument Outline and Purpose	6
	2.2 Add	ressing the PANDEM-2 Description of Action (DOA)	6
		nded Readership	
3	Approa	ch	7
•	• •	keholder Analysis	
	3.1.1	Group the stakeholders according to their field	7
	3.1.1.1	Main fields of work	8
	3.1.1.2	Role during a possible future pandemic	10
	3.1.1.3	Organisation type	11
	3.1.2	Rate identified key stakeholders for each stakeholder group	12
	3.1.3	Design and creation of a structured dashboard	13
	3.2 Ide	ntification of high-profile impactful events	13
	3.2.1	Survey to rank high-profile events	13
	3.3 Imp	act assessment of events/ Lessons learnt	14
4	Results		14
	4.1 Sta	ceholder Analysis	14
	4.1.1	Key stakeholders to promote the PANDEM-2 solutions	15
	4.1.2	Key stakeholders to test the PANDEM-2 solutions	17
	4.2 Ran	k events depending on their impact	18
	4.3 Att	endance of high-profile impactful events	19
	4.3.1	Joint Meeting for NFP for Preparedness and Response & for Threat Detection	19
	4.3.2	European Scientific Conference on Applied Infectious Disease Epidemiology	
	4.3.2.1		
5	Impact	& Conclusion	20
-	List of F	igures	22
_	Annend	ices	23

#### **Abbreviations**

D Deliverable

DOA Description of Action

DG ECHO Directorate-General for Civil Protection and Humanitarian Aid Operations

DG HOME Directorate-General Migration and Home Affairs
DG SANTE Directorate-General Health and Food Safety

ECDC European Centre for Disease Prevention and Control

EEA European Economic Area
EOC Emergency Operations Centre

ESCAIDE European Conference on Applied Infectious Disease Epidemiology

EU European Union

EWRS Early Warning and Response System

H2020 Horizon 2020 – The EU Framework Programme for Research and Innovation

IHR International Health Regulations

MS Member States
NFP National Focal Point

NGO Non-Governmental Organization

PANDEM Pandemic Risk and Emergency Management
PH-EOC Public Health Emergency Operations Centre

PoE Point of Entry

SME Small and Medium-sized Enterprises

WHO World Health Organization

WP Work Package

#### 1 Executive Summary

PANDEM-2 is a H2020 EU-funded project that focuses on the development of new solutions for efficient, EU-wide pandemic management. The goal of PANDEM-2 is to prepare Europe for future pandemics through innovations in training and to build capacity between EU member states responding to pandemics on a cross-border basis.

The project brings together experts in technology, research, public health, communications, and pandemic management from across the EU. They are collaborating to meet the core objectives of the project which are:

- To identify, map and integrate pandemic-related data from multiple sources into a coherent pandemic-management database
- To develop an extensible dashboard for pandemic preparedness training and response execution
- To develop effective predictive modelling and resource planning tools
- To ensure integration of data from participatory surveillance systems into the pandemic management database
- To create and deliver resources, innovations and training for pandemic communication
- To deliver capacity building and develop an operational strategy for cross border pandemic response
- To deliver long term value in the area of pandemic response beyond the lifetime of the project

The objective of Work Package (WP) 6 is to test, pilot and demonstrate the concepts and IT systems developed by the project in real settings and build a cross-sectoral network around their use. The goal of deliverable (D) 6.1 is to "build a cross-sectoral network following on from the PANDEM project's network of pandemic stakeholders in Europe". The deliverable is an output of Task 6.1 "Cross-sectoral networking with key stakeholders in pandemic management" and impacts directly on Task 6.3 "Demonstrations".

#### 2 Introduction & Background

#### 2.1 Document Outline and Purpose

The current deliverable (D6.1) is achieved by the following main actions:

- Performing a stakeholder analysis based on the stakeholder analysis results from the first PANDEM project phase
- Identifying outreach events with the highest impact on promoting the PANDEM-2 project

The main objectives of deliverable D6.1 are to promote the results of the PANDEM-2 project to all important stakeholders and to identify stakeholders to be invited to test the results of PANDEM-2 using different scenarios (Task 6.3 and D6.3).

#### 2.2 Addressing the PANDEM-2 Description of Action (DOA)

PANDEM-2 DOA requirements	Deliverable addressing DOA requirements
Task 6.1 Cross-sectoral networking with key	D6.1 Networking resources
stakeholders in pandemic management	

- The focus of this task is to build a cross-sectoral network following on from the PANDEM project's network of pandemic stakeholders in Europe.
- There are already well-established networks, associations and groupings of pandemic management actors e.g., the European Centre for Disease Prevention and Control (ECDC). This task will develop a proactive reference and networking group of such entities so that the results of the PANDEM-2 training programme can be promoted extensively and with high impact. Utilising the pre-existing communication pathways of established entities in each EU country/ region will help the PANDEM-2 brand to become synonymous with pandemic management. Having such active network partners will help with testing and validating the developed solutions. Potential partners will be identified by mapping their networks across their country/ the EU and then selecting target lead organisations on an international, national, and sub-national basis.
- This task will also identify a range of outreach events (Workshops, Conferences, Demonstrations, Seminars) that will ensure target audiences are given the opportunity to experience the PANDEM-2 results (e.g. <a href="https://ephconference.eu/Berlin-2022-290">https://ephconference.eu/Berlin-2022-290</a>, <a href="https://www.escaide.eu/en,https://www.escaide.eu/en,https://www.escaide.org/">https://ephconference.eu/Berlin-2022-290</a>, <a href="https://www.escaide.eu/en,https://g2h2.org/hub/meetings/">https://www.escaide.eu/en,https://dev.ghf2020.org/</a>, <a href="https://g2h2.org/hub/meetings/">https://g2h2.org/hub/meetings/</a>).
- Based on the list of targeted stakeholders and audiences identified in here, an exercise will be completed to identify the most impactful and high-profile events to attend.
- Bespoke and highly impactful communications collateral will be developed for use at each event based on Task 7.2 outputs.
- After each event an impact assessment will be completed to assess lessons learnt for future events. Results of these assessments and changes to planned approaches will be documented in the interim/final phase reports.

#### 2.3 Intended Readership

D6.1 is a critical component to evaluate the projects results. All network building and outreach events will be built upon a proactive reference and networking group and contribute to the PANDEM-2 project. As such, this report is intended for PANDEM-2 project partners, reviewers and members of the project's Advisory Board. It should also be of interest to the European Commission H2020 project team, those involved in crisis management, pandemic response, Directorate-General Home (DG HOME) and research projects operating in the same domain as PANDEM-2.

#### 3 Approach

The focus of this deliverable is to build a cross-sectoral network following on from the PANDEM (Grant Agreement number: 652868) project's network of pandemic stakeholders in Europe. Within the previous PANDEM project a stakeholder analysis was carried out to identify and map key stakeholders involved directly or indirectly in pandemic risk and emergency management (available on the current PANDEM-2 website here: D3.1 Identification of key stakeholders; PANDEM). These identified key stakeholders reflect the roles involved in a potential spread of pandemic diseases across several countries to a global spread and their potential to effect global security and economy.

D6.1 takes the stakeholder analysis one step further, its aims are

- to identify already well-established networks, associations and groups of pandemic management actors in order to promote the results of the PANDEM-2 programme extensively and with high impact as well as
- to use the network for testing and validating the developed solutions.

The approach is to conduct a follow-up stakeholder analysis for building a cross-sectoral network of pandemic stakeholders in Europe. Stakeholder analyses have been developed as a tool for generating knowledge about actors in a pre-defined context and at different levels (e.g. ranging from global to local) [1]. According to Varvasovszky & Brugha [1], a stakeholder analysis is a useful tool for managing stakeholders and identifying opportunities to mobilise their support for a particular goal.

Furthermore, already well-established networks, associations and groupings of pandemic management actors e.g. the European Centre for Disease Prevention and Control (ECDC), have been used by the project coordinator and partners to introduce PANDEM-2 and its objectives.

#### 3.1 Stakeholder Analysis

The stakeholders involved in pandemic risk and emergency management form a wide and complex community. In the first phase of PANDEM the multiple and complex community of stakeholders was mapped. In the current deliverable, the taxonomy of PANDEM-2 stakeholders was defined in successive steps to identify their potential to promote and/or to test the solutions developed in PANDEM-2.

The basis of the stakeholder analysis are the results from the first PANDEM phase which is a list of relevant stakeholders. Since this list was created in 2014, the first step was to check whether it is still up to date which included two factors for each stakeholder: Is the stakeholder still working actively and if so, is the listed website still active. If necessary, the listed links to the websites were updated.

The next step was to invite PANDEM-2 partners contributing to this deliverable to add further stakeholders.

Following the collection of further stakeholders, the stakeholders were grouped (see 3.1.1) and rated in terms of their ability to contribute to the defined aims.

#### 3.1.1 Group the stakeholders according to their field

The goal of this task is to identify key stakeholders who can act as multiplicators to promote or test the results of PANDEM-2. Therefore, all identified stakeholders were clustered into different groups depending on

- their main field of work
- their role during a possible future pandemic
- their organisation type

The main fields of work are outlined in Figure 1.

#### 3.1.1.1 Main fields of work

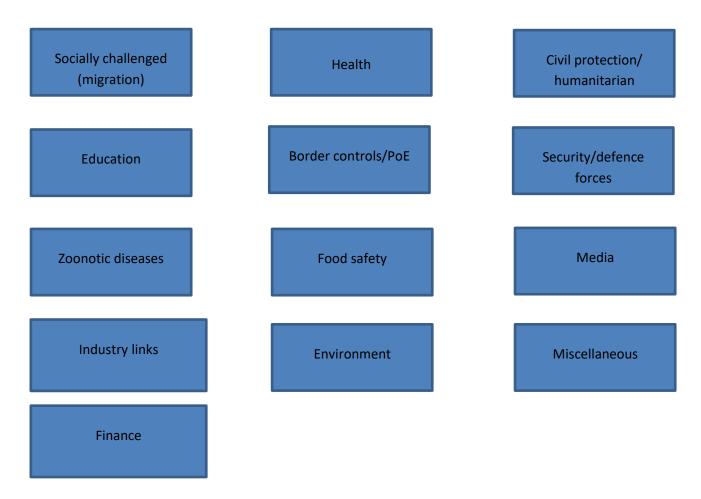


Figure 1. Identified fields of work for the stakeholder analysis

**Finance:** Financial partners can play an important role to ensure innovative projects in the field of pandemic simulation exercises and disease surveillance. With knowledge about the PANDEM-2 tools financial stakeholders could assess different projects concerning their feasibility and importance for the public health sector.

**Project Partners:** All organisations working in the PANDEM-2 project are listed as a "project partner". The project partners play a special role because of their insights and direct feedback into the project regardless of their technical field of expert knowledge.

**Border controls/Point of Entries (PoE)**: Persons crossing borders while being infectious were a matter of great concern during the COVID-19 pandemic [2]. This is why in PANDEM-2 the organisations working in the field of PoE are an important group of stakeholders during a pandemic.

**Socially challenged/migration:** Organisations working in the field of migration policy and research specifically support socially challenged countries. Many organisations working in this area belong to the non-governmental organisations (NGO) sector like the "Samaritans" or "Focus Ireland". The outcomes of this project can be of benefit for them as well.

**Health:** Health organisations work as first responders, coordinators during a pandemic (pandemic managers) or public health experts. They form one of the most important stakeholder groups for the PANDEM-2 goals. Therefore, they will form the largest group in the analysis.

**Civil Protection/Humanitarian:** NGOs or non-profit organisations working in the field of civil protection and humanitarian aspects have a huge demand for general communication tools being developed by the PANDEM-2 project. They usually act as first responders for a wide range of crisis situations. Therefore, they will benefit from the training material and exercises developed within the project.

**Education:** Educational institutions form another important stakeholder group for the PANDEM-2 project, because of the training material that will be produced during the project. These institutions can benefit from the designed training material to improve already existing courses for example on crisis communication or public health.

**University:** Universities are a subgroup of educational institutions since they combine the aspects of education with their interest in generating new research projects. Universities work independently in the field of education and research. They do not have a governmental role. Thus, they are designated to their own stakeholder group. The tools developed in PANDEM-2 can help universities to get a better understanding of roles and responsibilities of public health institutions in a crisis situation.

**Security /defence forces:** Organisations (especially governmental) working in the security or defence forces may support public health institutions to manage a pandemic situation. Therefore, they should be familiar with tools like the dashboard.

**Zoonotic diseases:** Organisations working in the field of zoonotic diseases form a special subgroup of the health sector as they have specific knowledge on diseases like yellow fever, Ebola virus disease and malaria. Due to the fact public health organisations also do research on zoonotic diseases, established links may already be in place between these two groups of stakeholders.

**Food safety:** Food safety organisations are another specialized subgroup of the health sector with a focus on foodborne diseases.

**Media:** Organisations working in the media sector like the press or social media influencers are very important stakeholders during a pandemic. They form the most important communication channel between public health institutions and the public. Thus, there is a whole Work Package (WP5) within the PANDEM-2 project designated to the field of communication. The media can function as a liaison between the scientific and public community, and hence it is important to explain all measures well.

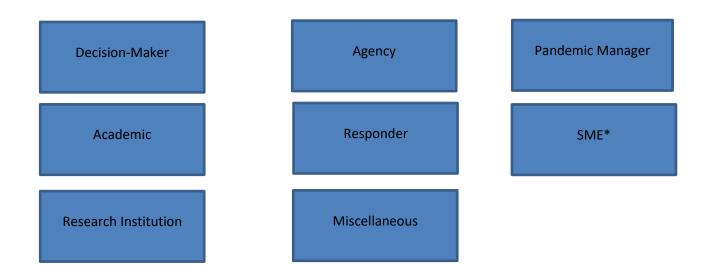
**Industry links:** Links to industry become very important during a pandemic when it comes to e.g., the production of medical countermeasures such as vaccines, medical devices or personal protection equipment.

**Environment:** Environmental circumstances like climate change or population density form important drivers for the spread of different diseases [3]. This is why the input from organisations working on environmental topics are of high value for the public health agencies to provide for instance information on climatic factors affecting the spread of a disease.

**Miscellaneous:** In this category all possible stakeholders are listed who do not fit into any of the other categories.

#### 3.1.1.2 Role during a possible future pandemic

Based on our analysis, a subsequent categorisation was made based on the roles of these institutes in future pandemics. These are summarised in Figure 2.



<sup>\*</sup> SME = small and medium-sized enterprises

Figure 2. Identified roles for the stakeholder analysis

**Academic:** Academic institutions can use the PANDEM-2 training material to further develop their existing courses on epidemiological topics regarding pandemic management.

**Agency:** Most agencies are either governmental organisation or are working as independent multinational organisation on specific topics. They have a high impact on their field of focus. Thus, agencies working in public health are important stakeholders for the project.

**Pandemic Manager:** A critical target audience for PANDEM-2 are pandemic managers across Europe, including national public health agencies, the World Health Organisation (WHO), the European Centre for Disease Prevention and Control (ECDC), the European Directorate-Generals for Migration and for D6.1 Networking resources

Home Affairs (DG HOME), Health and Food Safety (DG SANTE), European Civil Protection and Humanitarian Aid Operations (DG ECHO) as well as several other EU-level entities. There are six national public health agencies as consortium partners in the project (FOHM, RIVM, RKI, NIPH, RKI, INSA); the WHO and ECDC are part of the project's Advisory Board. In the first PANDEM project the cooperation with national public health agencies was crucial since they are key end users who are advising the technical team in terms of the PANDEM-2 database and dashboard development.

**Research Institution:** Research institutions can use the PANDEM-2 tools and data for different research questions. Furthermore, the provided training material can be used to elaborate the different public health systems and performance in each country.

**Responder:** The PANDEM-2 project benefits from healthcare experts as part of the consortium. The first responders are important end users for the IT-solutions developed in PANDEM-2 (RUNMC, ORK, ITRC, INEM). The American Red Cross and the Irish Defence Forces are part of our advisory board, who are key players in the frontline response to national emergencies including pandemics.

**Small and medium enterprises (SME):** Small and medium enterprises will link the work of PANDEM-2 into industry at a national/local level. Therefore, they are not primary users of the PANDEM-2 tools but secondary in terms of planning of resources like vaccines or medical masks.

**Decision-Maker:** Decision-makers have the most political influence during a pandemic and thus decide which actions need to be taken. Therefore, the PANDEM-2 tools will be a great benefit for them.

**Miscellaneous:** Each stakeholder who did not fit into one of the roles above has been assigned to this category.

#### 3.1.1.3 Organisation type

The organisations, classified by type, are outlined in Figure 3.

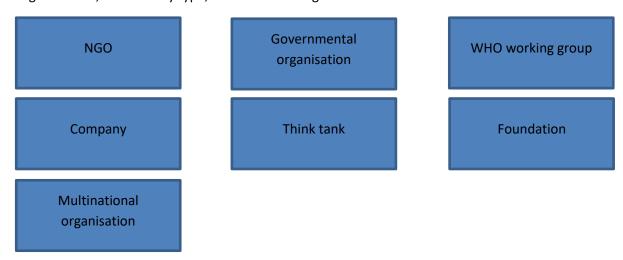


Figure 3. Identified organization types for the stakeholder analysis

**NGO:** Non-Governmental Organisations are the backbone of crisis management especially in developing countries. As they are neither bound to the governmental nor the business sector, they may play a special role for the public during a crisis.

**Governmental organisation:** Another key audience is the government. It is important to make the government aware of the threat posed by pandemics and the importance of preparedness. Particularly the investment in resources and personnel capacity is crucial to be prepared and respond to a pandemic. Encouraging governments to invest in pandemic preparedness is a challenge as there are always other demands for funding. Government decision-makers will be reached primarily by pandemic managers. PANDEM-2 can provide tools for resource planning as well as management, for simulation and for generating evidence of the consequences of being prepared (or not).

**WHO working groups:** WHO working groups are neither NGOs nor Governmental Organizations. They examine/observe pandemic situations from a global perspective. Therefore, they form their own category within the stakeholder analysis.

**Company:** Companies belong to private industry and are not bound to governmental input and strategies. They depend on the economic situations in order to create the best benefit.

**Think Tank:** Think Tanks have a big influence on the formation of public opinions and are hence an important stakeholder in terms of crisis communication.

**Foundations:** Foundations play an important role in supporting new and innovative projects. They interact with a wide number of different organisations. Thus, they are an important multiplier to make the tools and training material developed in PANDEM-2 known to other organisations working in the field of public health.

**Multinational organisations:** Multinational organisations have a significant interest in standards to exchange information between different states. One of the main goals of PANDEM-2 is to develop tools to simplify the information exchange between different countries. Therefore, input and exchange of experiences from multinational organisation will have an important impact on the project.

The process was to assign each stakeholder to just one group. The group that matches best the main field of the stakeholder was chosen as described in section 3.1.2. This kept the list of stakeholders as clean, simple and transparent as possible.

#### 3.1.2 Rate identified key stakeholders for each stakeholder group

The analysis was conducted by the RKI team composed of one epidemiologist and one software developer to cover the thematic bridge this project is aiming to span. To provide a more objective perspective the RKI team worked with a supervisor as well as presented and discussed interim conclusions and proposed next steps with all the project partners involved.

Since the list of relevant stakeholders of the first phase of PANDEM focused on a broader aim, the list was adapted and shortened according to the aim of the current stakeholder analysis. The questions for this selection process were:

- Which stakeholders are potential end-users of the planned dashboard?
- Which stakeholders have the network and contacts to promote PANDEM-2 and its solutions?

The resulting interim solution was discussed with the supervisor, the analysis team as well as the project partners and adjusted as necessary. Afterwards, the stakeholders were analysed according to the following guiding questions.

Regarding the aim to test and validate PANDEM-2 and its solutions:

- Which stakeholder would benefit in their preparedness & response from the PANDEM-2 tools?
- Which stakeholder would use the PANDEM-2 tools for their preparedness & response?

Regarding the aim to promote PANDEM-2 and its solutions:

- Which stakeholder could promote the dashboard and its training?
- Which stakeholder could promote the communication tools/strategies?
- Which stakeholder could promote the training provided by PANDEM-2 (e.g. roles and functions in the PH-EOC)?

The analysis team and the supervisor classified per question the ability of the stakeholders to contribute to the defined aims as follows:

0 = no or little abilities to contribute to the relevant aim

1 = some or many abilities to contribute to the relevant aim

The scores were inserted into the stakeholder list and summed up per aim. The stakeholders were ranked based on their scores. Some of the stakeholders did not receive any scores. These stakeholders were removed from the analysis.

This resulted in the identification of a cross-sectoral network for both aims of our stakeholder analysis.

#### 3.1.3 Design and creation of a structured dashboard

A WP6 dashboard was designed and created for a structured overview of the active network partners. Screenshots of the dashboard are included in the Results section (4.1 Stakeholder Analysis). Here, the active network partners were grouped according to their characteristics for all evaluated attributes as well as for their scoring dependant on their ability to promote or test the dashboard.

#### 3.2 Identification of high-profile impactful events

This task identified high-profile impactful events to attend. These were defined as outreach events (e.g., conferences, meetings, seminars, workshops) where target audiences could get acquainted with PANDEM-2 objectives and outcomes. The main targeted stakeholders and audiences were the national public health institutes and first responders of EU member states.

Therefore, all project partner public health institutes and first responders were invited to add any event they experienced as high-profile impactful events to the list (see Appendix A for the complete list).

#### 3.2.1 Survey to rank high-profile events

In the next step an online survey was conducted with all public health institutes and first responders involved in PANDEM-2. They were asked to indicate on a 3-point scale (meets the definition, partially meets the definition, does not meet the definition) to which extent each event meets the definition of impactful high-profile events. These were defined as outreach events (e.g., conferences, meetings, seminars, workshops) that will ensure target audiences (i.e., public health agencies, first responders) are given the opportunity to get acquainted with PANDEM-2 objectives and outcomes. (see Appendix B for the survey).

#### 3.3 Impact assessment of events/ Lessons learnt

After each event an impact assessment was carried out to assess lessons learnt for future events. A mixed methodology was applied since events were diverse. For workshops, web seminars, e.g., the National Focal Point (NFP) for Preparedness and Response & for Threat Detection meeting, and similar event formats, a generic feedback approach was applied. Regarding the NFP meeting for example its impact is higher since the public health institutes of all EU member states participate. After the meeting the RKI was contacted by other public health institutes who were interested to participate in our planned simulation exercises. Additionally, events with larger numbers of attendees, e.g., ESCAIDE conference, were evaluated by using the conference evaluation report and social media analysis by our partner CARR (please see section 4.3 for the results). CARR developed meaningful communication collateral that were applied at the ESCAIDE conference.

#### 4 Results

A network of cross-sectoral pandemic stakeholders which either promote the PANDEM-2 project and its solutions and/or are potential end-users of the PANDEM-2 solutions were identified. The complete stakeholder list and the characteristics of the stakeholders is provided in a linked document (please use the following link to see the full list of stakeholders <u>LINK</u>).

Furthermore, high-profile events were identified and ranked by their impact based on the response of the target audience. To build on already well-established networks, associations, and groups of pandemic management actors, two well-established high-profile events were attended to promote PANDEM-2 and its solutions (see section 4.3). After other high-profile events have been identified, this process will continue. So that the PANDEM-2 project becomes known to the target audience with as high an impact as possible.

#### 4.1 Stakeholder Analysis

The stakeholder analysis started with a list of 299 relevant stakeholders identified in the first phase of the PANDEM project. After first checking which stakeholders were still working actively, 42 stakeholders were identified as being inactive and excluded. The next step was to invite the partners working on this deliverable to add further stakeholders especially from their country. This step added 74 new stakeholders to the analysis. In addition, all 19 project partners were included as stakeholders. In the end, the list of active cross-sectoral network partners included 350 stakeholders which is available as a full list in a separate document (link to list of active stakeholders).

After assigning all listed stakeholders to different groups depending on their main field of work, their role during a possible future pandemic and their organisations type, they were rated in terms of their ability to contribute to the defined aims.

The final scores of the stakeholders to promote PANDEM-2 and its solutions and/or to help with testing and validating the developed solutions had a range of 0 to 3:

- 0 = no ability
- 1 = some ability
- 2 = medium ability
- 3 = high ability

The stakeholders were ranked by their total scores for promoting and/or testing the PANDEM-2 solutions. The complete list of active cross-sectoral network partners is provided in a document which you can access by this <u>link</u>.

The dashboard shows the types of stakeholders as well as e.g. their main field of work or organisation types, which have been identified in the stakeholder analysis to promote the PANDEM-2 tools or to participate in testing the tools. Through the stratification options, the different information on the stakeholders can be displayed on the dashboard. (see Figure 4. Structured dashboard of the active network partners).

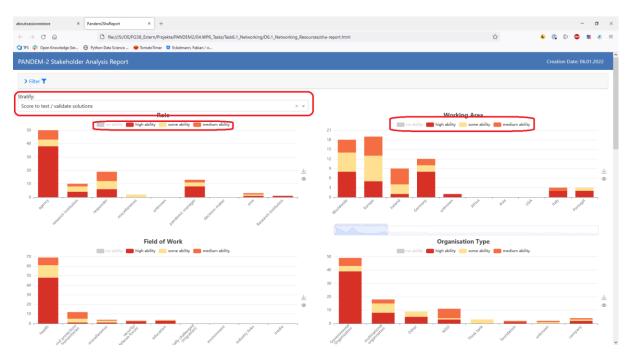


Figure 4. Structured dashboard of the active network partners

The results were structured by the two aims of the stakeholder analysis and the different groups introduced in the dashboard depending on their main working area, their role during a possible future pandemic and their organisation type.

#### 4.1.1 Key stakeholders to promote the PANDEM-2 solutions

The stakeholder analysis identified already well-established networks, associations and groups of pandemic management actors in order to promote the solutions of the PANDEM-2 project extensively and with high impact. In total, the project identified 98 active cross-sectoral network partners to promote the solutions of the PANDEM-2 project. Out of these, 58 cross-sectoral network partners have significant ability to promote PANDEM-2 and its solutions. In Figure 5 the identified key stakeholders to promote the PANDEM-2 project and its solutions are shown by their type of organization.

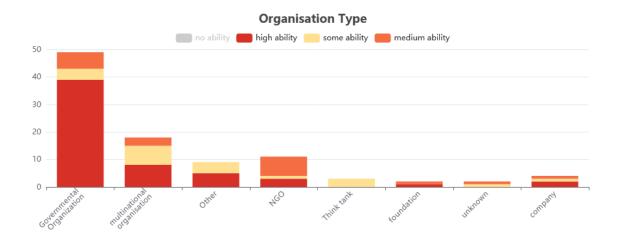


Figure 5. Identified key stakeholders to promote PANDEM-2 solutions stratified by organisation type.

This (whole) group is composed of governmental health organisations, project partners, point of entries, civil protection/humanitarian organisations and security/defence forces. Their roles during possible future pandemics are governmental responders, first-responder, pandemic managers and/or research institutes.

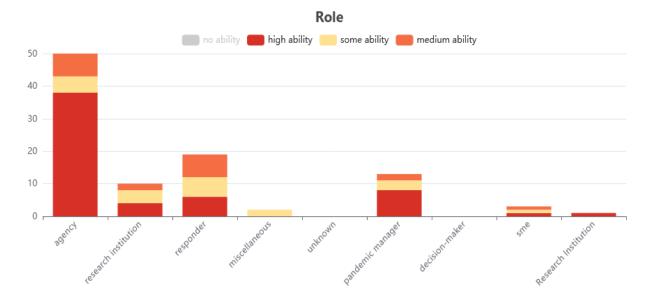


Figure 6. Identified key stakeholders to promote PANDEM-2 solutions stratified by their role during a possible future pandemic.

These active cross-sectoral network partners are working on different levels which are ranging from sub-national level to worldwide. The majority of the network partners are already connected in well-established networks, associations and groupings of pandemic management actors, e.g., the networks of National Focal Points for Preparedness and Response & National Focal Points for Threat Detection, EWRS and IHR at the ECDC (NFP Meeting for Preparedness and Response) and the ESCAIDE conference. These meetings were already included in the list of identified outreach events and also successfully attended to promote PANDEM-2. The RKI had asked the ECDC if the project could be presented at the NFP Meeting for Preparedness and Response. On 22 April 2021, three PANDEM-2 project partners

(namely NUIG, EPIC, RKI) attended the NFP Meeting for Preparedness and Response at ECDC's invitation and presented the planned PANDEM-2 solutions to public health authorities of all 27 EU Member States, ECDC and the WHO. Furthermore, the project was promoted at the ESCAIDE conference on 16-19 November 2021 through an online information stand, which was created and conducted by the following partners: RKI, CARR, NUIG, FINT, EPIC, CLARISOFT. The ESCAIDE is one of the most important conferences on applied infectious disease epidemiology, mainly for epidemiologists, veterinarians, microbiologists and clinicians. In 2022, PANDEM-2 also plans to participate in ESCAIDE 2022 with 3 proposed submissions from the project. If accepted, the RKI will contact all key stakeholders from the list in Appendix C and invite them to view the contributions. As this year's ESCAIDE is organised in a hybrid way and there is no registration fee, stakeholder participation is flexible. A detailed list of the key stakeholders identified to promote PANDEM-2 and its solutions is available in Appendix C. The stakeholders to be contacted are coloured in red and those already contacted are in blue in the list in Appendix C.

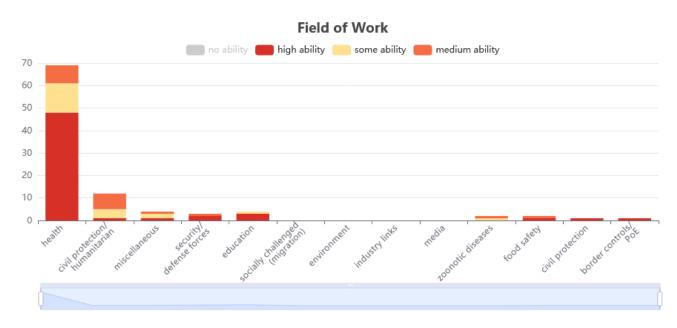


Figure 7. Identified key stakeholders to promote PANDEM-2 solutions stratified by their field of work

#### 4.1.2 Key stakeholders to test the PANDEM-2 solutions

The second aim of this stakeholder analysis was to identify active network partners which will help with testing and validating the developed PANDEM-2 solutions. Overall, 45 active network partners were identified which have the ability to support this aim. The majority of these are national public agencies, which are grouped under the working area health. Moreover, this network group included also partners working in the area of civil protection/ humanitarian support (first responders) border control/PoE and education. In Figure 8 the key stakeholders which were identified to test the PANDEM-2 solutions are shown stratified by their field of work. Among the project partners, six national public health institutes of EU member states (i.e., Finland, Sweden, the Netherlands, Romania, Portugal and Germany) were identified which intend to participate in the demonstrations of the PANDEM-2 solutions. A detailed list of the key stakeholders to test the PANDEM-2 solutions is available in Appendix D. A selection of 13 key stakeholders were invited by RKI to the table top exercise (TTX) on 22-23 June 2022, which was conducted in Berlin at the RKI. These invited key stakeholders are coloured

blue in the list in Appendix D. This TTX used the communication tools created in PANDEM-2. Due to the COVID-19 infection prevention measures at the RKI no additional stakeholders could attend the same TTX. Before the FX, which according to the DoA will take place in M22, there will be a training session for the participants. The RKI will invite the participants and other interested key stakeholders to this training which will provide a feedback opportunity for the key stakeholders. The stakeholders to be invited are coloured in red in the list in Appendix D. The training will be conducted on completion of the dashboard.

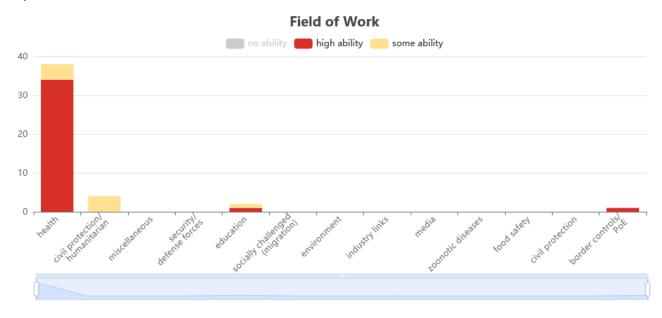


Figure 8. Identified key stakeholder to test the PANDM-2 solutions stratified by their field of work.

#### 4.2 Rank events depending on their impact

The survey to identify high-profile events resulted in a ranked list according to the experienced or assumed impact by the target audience. All participants of the survey named the three following events as the most impactful high-profile events and hence suitable for promoting the project (table 1). The upcoming meeting dates (if already announced) are included as well as the partners selected to attend these events. The detailed results of the survey are available in Appendix B.

Table 1. Events ranked as the most impactful high-profile events

Event name	Meeting dates	Attending Partners
European Scientific Conference	16-19 November 2021 (online)	RKI, CARR, NUIG, FINT, EPIC,
on Applied Infectious Disease		CLARISOFT
Epidemiology (ESCAIDE)		
European Scientific Conference	23-25 November 2022 (hybrid)	RKI, FINT, NUIG, RIVM, RUNMC,
on Applied Infectious Disease		EPIC
Epidemiology (ESCAIDE)		
European Society of Clinical	14-17 September 2022 (face-to-	UCL (decision still pending)
Microbiology and Infectious	face)	
Diseases (ESCMID)		
International Conference on	7-10 Aug 2022 (face to face in	No partner is available to attend
Emerging Infectious Diseases	Georgia, USA)	
(ICEID)		

Further middle-ranked high-profile events were (table 2):

Table 2. Middle-ranked high-profile events

Event name	Meeting date	Attending Partners
Epidemics8 - International	30 November–3 December	NUIG
Conference on infectious	2021, online	
Disease Dynamics		
European Public Health	9-12 November 2022	RKI (as member of the PREPARE
Conference 2022 (EUPHA)		cluster)

In addition, two possible high-profile events were named in the suggestion section of the survey by the participants (table 3):

Table 3. Possible high-profile events

Event name	Meeting date	Partner selected to attend
Meetings of EU projects on pandemic		
preparedness:		
Scientific Stakeholders' Dialogue (PHIRI)	18 February 2022	RKI
International Meeting on Emerging	4-6 November 2021	No partner was available to
Diseases and Surveillance (IMED)		attend

#### 4.3 Attendance of high-profile impactful events

#### 4.3.1 Joint Meeting for NFP for Preparedness and Response & for Threat Detection

To build on already well-established networks, associations and groupings of pandemic management actors e.g. the European Centre for Disease Prevention and Control (ECDC), the project coordinator and two partners introduced the PANDEM-2 project at the monthly web seminar of the Joint Meeting for National Focal Points for Preparedness and Response & National Focal Points for Threat Detection, EWRS and IHR at the ECDC on 22 April 2021. Representatives from European Union (EU) and European Economic Area (EEA) public health authorities, ECDC and other international organisations met in Stockholm to discuss a range of current topics relevant for effective preparedness and response to infectious diseases outbreaks and for strengthening collaboration. Due to the current pandemic the meeting was online. This NFP meeting included the members of the Early Warning and Response System (EWRS) which are the competent public health authorities of the EU/EEA Member States, as well as the WHO regarding the International Health Regulations (IHR). Public health authorities of all EU Member States and the WHO participate in these meetings. Therefore, the target audience was introduced to the PANDEM-2 project. The three project partners presented the PANDEM-2 project in detail over 30 minutes. After the meeting, the RKI was contacted by other public health authorities expressing interest in participating in the planned simulation exercises.

#### 4.3.2 European Scientific Conference on Applied Infectious Disease Epidemiology

The target audience of the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) are epidemiologists, veterinarians, microbiologists, clinicians, public health professionals, communication specialists, modellers, statisticians, social scientists and policy makers. PANDEM-2

partners applied to the conference at a very early stage of the project. The brand dissemination and communication strategy and its products were used to introduce PANDEM-2 to participants of the ESCAIDE. In November 2021, PANDEM-2 participated in ESCAIDE by hosting an online information stand. Figure 9 is a screenshot of the PANDEM-2 online information stand at the ESCAIDE conference. This online information stand was designed in close cooperation with CARR, supported by all WP leaders and the project coordination team.

#### 4.3.2.1 Impact assessment of the ESCAIDE conference

As an impact assessment we used the ESCAIDE's evaluation report and CARR's analysis of the PANDEM-2 website. According to the ESCAIDE's evaluation report, the stand of PANDEM-2 had the third highest number of unique visitors of all 12 stands [4]. On top of that, CARR identified 59% more visitors to the PANDEM-2 website during November than in October 2021, which could be attributed in part as an impact of the event. The full ESCAIDE evaluation report is available by the following link: <a href="https://www.escaide.eu/sites/default/files/documents/ESCAIDE">https://www.escaide.eu/sites/default/files/documents/ESCAIDE</a> 2021 Evaluation report web.pdf

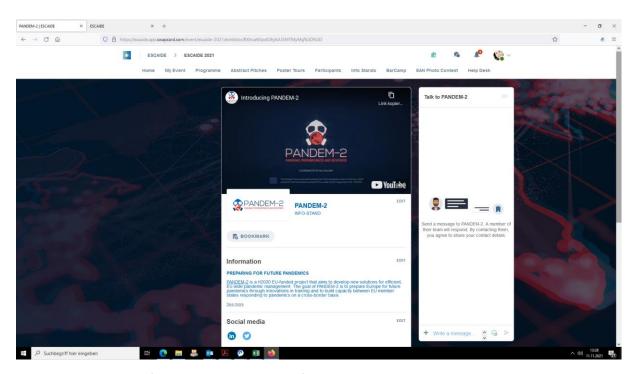


Figure 9. Screenshot of the PANDEM-2 online information stand at the ESCAIDE

#### 5 Impact & Conclusion

This report describes the process of building a cross-sectoral network following the PANDEM project's network of pandemic stakeholders in Europe. These results contribute to progress inf promoting the PANDEM-2 project and outputs . Moreover, the results provide PANDEM-2 with a list of active cross-sectoral network partners who can test and validate the solutions that are developed. As a next step, these network partners will be invited to participate in the two planned demonstrations. The table top exercise was run from 22 to 23 June 2022 at the RKI. The functional exercise is scheduled for October 2022. The results will feed into the WP6 deliverable on these demonstrations (D6.4) in which the key stakeholders will pilot the IT systems, test their interoperability with other established IT systems in

the real setting of a public health emergency operations centre (PH-EOC) and demonstrate its value for planning and response.

The PANDEM-2 project has identified impactful high-profile events to promote the project and its solutions efficiently. The identified upcoming events will be attended by members of the consortium. While there are challenges due to the COVID-19 pandemic, the PANDEM-2 project has had successful engagement with key stakeholders that are our target audience for example (1) the NFP meeting with all public health authorities of the EU/EEA Member States and the WHO; (2) participation of ECDC, the WHO, the American Red Cross and the Irish Defence Forces at our Month 9 plenary meeting, (3) the successful participation of PANDEM-2 project at the ESCAIDE conference, and participation of ECDC, WHO and the Irish Defence Forces in the Month 18 plenary meeting and table top exercise in the RKI. Follow up discussions with ECDC after the Month 18 plenary have led to a proposal to hold an onsite meeting at ECDC in Stockholm in October 2022 to discuss the surveillance and preparedness and response components of the PANDEM-2 project. Participation by NUIG, CLAR, EPIC, UCL and RKI are planned at this one day meeting. The engagement with ECDC and WHO will strengthen over the coming months as we move from pandemic to an endemic phase of COVID-19 and the work of these organisations focus on preparedness for future threats.

## References

- 1. Varvasovszky, Z. and R. Brugha, *A stakeholder analysis*. Health Policy Plan, 2000. **15**(3): p. 338-45.
- 2. Markus, I., et al., *COVID-19: cross-border contact tracing in Germany, February to April 2020.* Euro Surveill, 2021. **26**(10).
- 3. Wu, T., et al., Economic growth, urbanization, globalization, and the risks of emerging infectious diseases in China: A review. Ambio, 2017. **46**: p. 18 29.
- European Centre for Disease Prevention and Control (ECDC). ESCAIDE 2021: Evaluation Report. 2021 [cited 2021 14/12/2021]; Available from: https://www.escaide.eu/sites/default/files/documents/ESCAIDE\_2021\_Evaluation\_report\_web.pdf.

## **List of Figures**

Figure 1. Identified fields of work for the stakeholder analysis	8
Figure 2. Identified roles for the stakeholder analysis	10
Figure 3. Identified organization types for the stakeholder analysis	11
Figure 4. Structured dashboard of the active network partners	15
Figure 5. Identified key stakeholders to promote PANDEM-2 solutions stratified by organisation	n type.
	16
Figure 6. Identified key stakeholders to promote PANDEM-2 solutions stratified by their role decided by their	uring a
possible future pandemic.	16
Figure 7. Identified key stakeholders to promote PANDEM-2 solutions stratified by their field of	f work
	17
Figure 8. Identified key stakeholder to test the PANDM-2 solutions stratified by working area.	18
Figure 9. Screenshot of the PANDEM-2 online information stand at the ESCAIDE	20

#### **Appendices**

a. Complete list of possible impactful high-profile events to attend which entered the survey

#### Identification of impactful high-profile events to attend

#### **Events listed in DOA:**

- > 15th European Public Health Conference 2022 (EUPHA), Berlin, Germany, 9-12 November 2022
  - https://ephconference.eu/Berlin-2022-290
- European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), 16-19
   November 2021
  - https://www.escaide.eu/en
- European Society of Clinical Microbiology and Infectious Diseases (ESCMID) https://www.escmid.org/
- Geneva Health Forum (ghf), 3-5 May 2022 https://dev.ghf2020.org/
- Geneva Global Health Hub (G2H2), no upcoming meetings listed https://g2h2.org/hub/meetings/

#### Events mentioned by PANDEM-2 partners:

- World Congress of Epidemiology, 3 6 September 2021
   World Congress of Epidemiology 2021 (delegateconnect.co)
- Global Conference on Health and Climate Change, 9 November 2021 https://www.who.int/news-room/events/detail/2021/11/06/default-calendar/2021-global-conference-on-health-and-climate-change
- Epidemics8 International Conference on infectious Disease Dynamics, 30 November 3
   December 2021
  - $\frac{https://www.elsevier.com/events/conferences/international-conference-on-infectious-disease-dynamics}{\\$

#### Additions by RKI:

- Meeting of ECDC National Focal Points (NFPs) for Preparedness, Response and Threat Detection (22 April 2021)
  - PANDEM-2 presented by Maire Connolly (NUIG), Ute Rexroth (RKI), Alexis Sentis (EPIC) at ECDC Meeting (online)
- International Conference on Emerging Infectious Diseases, 6-9 March 2022 https://www.cdc.gov/iceid/index.html
- WHO global conference on communicating science during health emergencies, 7-25 June
   2021
  - https://www.who.int/news-room/events/detail/2021/06/07/default-calendar/who-global-conference-on-communicating-science-during-health-emergencies
- The International Meeting on Emerging Diseases and Surveillance (International Society for Infectious Diseases), 4 – 6 November 2021 <a href="https://imed.isid.org/">https://imed.isid.org/</a>

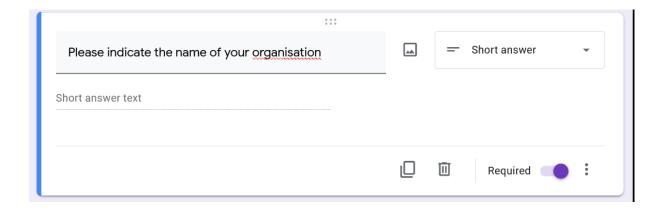
## b. Survey to rank high-profile events

# Identification of impactful high-profile events to attend

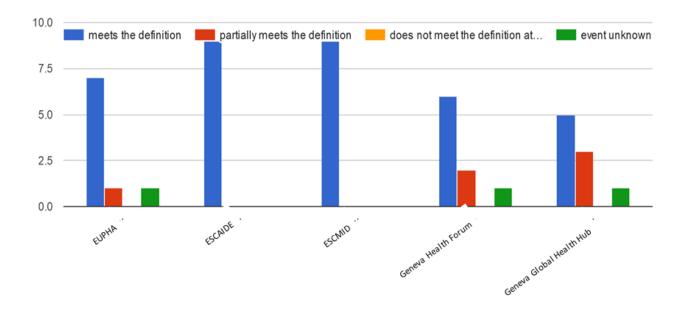
For our deliverable D6.1 we need to identify impactful high-profile events to attend. These are defined as outreach events (e.g. conferences, meetings, seminars, workshops) that will ensure target audiences (i.e. public health agencies, first responders) are given the opportunity to get acquainted with PANDEM-2 objectives and outcomes. We have already identified the events listed below. Please indicate on this 3-point scale how much each event meets the definition of impactful high-profile events.

To keep the storage of personal data to a minimum we only ask you to input the name of your <u>organisation</u>, so we can get back to you if there are any questions. We really need your feedback on the list of identified events but nevertheless you are not obligated to fill out the survey and we will delete your answers if you ask us to.

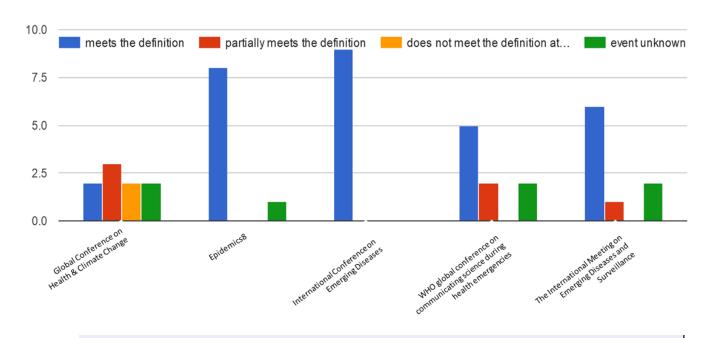
Thank you very much for your support!



Events named in DoA: Please indicate how much each event meets the definition of impactful high-profile events.



Events listed by PANDEM-2 partners: Please indicate how much each event meets the definition of impactful high-profile events.



Do you have additional comments to the listed meetings?

3 responses

Please send a copy to odette.popovici@insp.gov.ro

No

No additional comments.. the list looks excellent.

Do you know of any other impactful high-profile events? Please list them here.  $\label{eq:profile}$ 

2 responses

https://imed.isid.org/registration/ (I think this is the ProMED community)

Is the EC also not organizing meetings for funded projects on pandemic preparedness. It is important that we stay closely connected to what the other projects are developing.





# c. Identified key stakeholders to promote the PANDEM-2 solutions (n=98)

number	field of work	role	active	type	organisation type	name
					Governmental	
1	health	research institution	yes	organisation	Organization	Associations of Schools of Public Health in the EU Region
	civil					
	protection/humanitar					
2	ian	responder	yes	organisation	NGO	Associazione Della Croce Rossa Italiana
	security/defence				Governmental	
3	forces	responder	yes	organisation	Organization	Bundeswehr (German Military)
4	miscellaneous	sme	yes	organisation	company	Carr Communication ( C.C.I.C.C. Limited)
					Governmental	
5	health	agency	yes	organisation	Organization	Centre for Disease Prevention and Control (Latvia)
					Governmental	
6	health	agency	yes	organisation	Organization	Centre of Health Security and Communicable Disease Prevention (Iceland)
	civil					
	protection/humanitar				Governmental	
7	ian	responder	yes	organisation	Organization	Civil Protection Ireland
8	miscellaneous	sme	yes	organisation	company	Clarisoft Technologies Rom
9	health	agency	yes	organisation	NGO	Connecting Organizations for Regional Disease Surveillance
	security/defence				multinational	
10	forces	responder	yes	organisation	organisation	Crisis Management and Disaster Response
					Governmental	
11	health	agency	yes	organisation	Organization	Croatian National Institute of Public Health
					Governmental	
12	health	agency	yes	organisation	Organization	Danish Health and Medicines Authority
	civil					
	protection/humanitar					
13	ian	responder	yes	organisation	NGO	Deutsches Rotes Kreuz
				sub		
				organisation	Governmental	
14	food safety	agency	yes	al	Organization	DG SANTE - DG for Health and Food Safety
					Governmental	
15	health	agency	yes	organisation	Organization	Directorate General of Health (Portugal)

					Governmental	
16	health	agency	yes	organisation	Organization	Directorate of Medical and Public Health Services (Cyprus)
17	health	responder	yes	network	Other	DIVI - Intensiv Care Registry
					multinational	
18	health	research institution	yes	organisation	organisation	Emerging and Dangerous Pathogens Laboratory Network
	civil					
	protection/humanitar					
19	ian	pandemic manager	yes	organisation	NGO	Epicentre
20	miscellaneous	sme	yes	organisation	company	Epiconcept
					multinational	
21	health	pandemic manager	yes	organisation	organisation	European Centre for Disease Prevention and Control
	civil			sub	Governmental	
22	protection/humanitar ian	agency	yes	organisation al	Organization	European Civil Protection and Humanitarian Aid Operations
22	lali	agency	yes	sub	Organization	European Civil Frotection and Humanitanian Aid Operations
				organisation	Governmental	
23	health	pandemic manager	yes	al	Organization	European Disease Surveillance Networks
				sub		
				organisation	multinational	
24	health	pandemic manager	yes	al	organisation	European Disease Surveillance Platform
					multinational	
25	health	agency	yes	organisation	organisation	European Emerging and Vector-borne Diseases Network
26	1 11				multinational · .·	5 5 1 100 1 5 17 10 1
26	health	responder	yes	organisation	organisation	European Food- and Waterborne Diseases and Zoonoses Network
27	food safety	agency	yes	organisation	NGO	European Food Safety Authority
28	health	research institution	yes	network	None	European Influenza Surveillance Network
29	health	research institution	yes	organisation	Other	European Programme for Intervention Epidemiology Training
30	health	agency	yes	organisation	NGO	European Public Health Alliance
					multinational	
31	health	agency	yes	organisation	organisation	European Public Health Association
					multinational	
32	health	agency	yes	organisation	organisation	European Regional and Local Health Authorities
22	minaellanceur				Governmental	Furnam Union
33	miscellaneous	agency	yes	organisation	Organization	European Union

	security/defence				Governmental	
34	forces	agency	yes	organisation	Organization	Federal Ministry of Defence
					Governmental	
35	health	agency	yes	organisation	Organization	Federal Ministry of Health (Germany)
					Governmental	
36	health	agency	yes	organisation	Organization	Federal Ministry of Health (Austria)
					Governmental	
37	health	responder	yes	network	Organization	Federal Public Health Agencies
38	education	Research Institution	yes	organisation	company	Frauenhofer Institut; Public Technology & Innovation Planning (TIP Unit)
39	health	responder	yes	network	Other	German Hospital Federation (Deutsche Krankenhausgesellschaft)
40	health	research institution	yes	organisation	Other	Global Biodefense
	civil			sub		
	protection/humanitar			organisation	multinational	
41	ian	responder	yes	al	organisation	Global Influenza Surveillance and Response System
					Governmental	
42	border controls/PoE	pandemic manager	yes	organisation	Organization	Hamburg Port Health Center
					Governmental	
43	health	agency	yes	organisation	Organization	Health Board (Estonia)
	1. 1.1				Governmental	
44	health	agency	yes	organisation	Organization	Health Directorate (Luxembourg)
				sub · .·		
45	h a a likh			organisation	Governmental	Haalib Duabastian Cumusillanaa Cantus
45	health	agency	yes	al	Organization	Health Protection Surveillance Centre
46	health	agancy	VOC	organisation	Governmental Organization	Health Protection Surveillance Centre (Ireland)
		agency	yes			
47	health	responder	yes	network	None	Healthcare-associated Infections Network
	1. 1.1				Governmental	
48	health	agency	yes	organisation	Organization	Hellenic Centre for Disease Control and Prevention (Greece)
49	health	miscellaneous	yes	organisation	Think tank	InfluenzaNet
	civil					
	protection/humanitar					
50	ian	research institution	yes	organisation	NGO	Innovative Support to Emergencies Diseases and Disasters
					Governmental	
51	health	agency	yes	organisation	Organization	Institute for Public Health Surveillance (France)

					C	
<b>5</b> 2	1 11				Governmental	
52	health	agency	yes	organisation	Organization	Instituto de Salud Carlos III
					Governmental	Instituto Nacional De Emergência Médica
53	health	responder	yes	organisation	Organization	The National Institute of Medical Emergency
					Governmental	
54	health	agency	yes	organisation	Organization	Instituto Nacional De Saude Dr. Ricardo Jorge
					Governmental	
55	health	agency	yes	organisation	Organization	Institutul National De Sanatate Publica (Public Health Institute Romania)
					multinational	
56	health	agency	yes	organisation	organisation	International Association of National Public Health Institutes
57	health	agency	yes	organisation	NGO	International Federation of Red Cross and Red Crescent Societies
	civil protection/					
58	humanitarian	responder	yes	network	NGO	International Red Cross and Red Crescent Movement
		·		sub		
				organisation	Governmental	
59	health	pandemic manager	yes	al	Organization	Irish epidemiological advisory group
60	health	responder	yes	organisation	foundation	Irish Red Cross
61	education	research institution	yes	organisation	foundation	Istituto Per L'interscambio Scientifico
					Governmental	
62	health	agency	yes	organisation	Organization	Ministry of Health (Italy)
					Governmental	
63	health	agency	yes	organisation	Organization	Ministry of Health (Lithuania)
					Governmental	
64	health	agency	yes	organisation	Organization	Ministry of Health, Social Services and Equality (Spanien)
					Governmental	
65	health	responder	yes	organisation	Organization	National Ambulance Service
					Governmental	
66	health	agency	yes	organisation	Organization	National Center for Epidemiology Albert (Hungary)
					Governmental	
67	health	agency	yes	organisation	Organization	National Centre of Infectious and Parasitic Diseases (Bulgaria)
					Governmental	
68	health	agency	yes	organisation	Organization	Terveyden Ja Hyvinvoinnin Laitos (Public Health Institute Finland)
					Governmental	RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU (Public Health
69	health	agency	yes	organisation	Organization	Agency Netherlands)
			•			

					Governmental	
70	health	agoney	VOC	organisation	Organization	National Institute of Public Health - National Institute of Hygiene (Poland)
70	Health	agency	yes	Organisation	Governmental	National institute of Fublic Health - National institute of Hygiene (Foland)
71	المام ما المام ما					Nickional Inskituto of Dublic Hoolkh (Cooch Donublic)
71	health	agency	yes	organisation	Organization	National Institute of Public Health (Czech Republic)
					Governmental	
72	health	agency	yes	organisation	Organization	National Institute of Public Health (Slovenia)
73	education	research institution	yes	organisation	Other	National University of Ireland Galway
					Governmental	
74	health	agency	yes	organisation	Organization	Norwegian Institute of Public Health
	civil protection/					
75	humanitarian	responder	yes	organisation	NGO	Oesterreichisches Rotes Kreuz
				sub		
				organisation		
76	zoonotic diseases	research institution	yes	al	Other	One Health idea e.g., veterinary labs
77	health	pandemic manager	yes	network	Think tank	One Health Initiative
				not		
78	health	miscellaneous	yes	applicable	Think tank	Other H2020 projects, i.e., MOOD, PHIRI, EMERGE
			,	sub		
	civil protection/			organisation	multinational	
79	humanitarian	pandemic manager	yes	al	organisation	Pandemic Influenza preparedness Framework
			,			Permanent Working Group of Competence and Treatment Centres for
80	health	responder	yes	network	Other	High Consequence Infectious Diseases
			, 00		Governmental	The transfer of the state of th
81	health	agency	yes	organisation	Organization	Principality of Liechtenstein
	civil protection/	-0241	,	2.84541011	multinational	
82	humanitarian	responder	yes	network	organisation	Program for Monitoring Emerging Diseases
02	namamamam	responder	yes		Governmental	Tropican for monitoring Energing processes
83	health	pandemic manager	yes	organisation	Organization	Folkhalsomyndigheten (Public Health Agency of Sweden)
		pariacinio managei	,	- Barnoacion	Governmental	. Similar of the control of the cont
84	health	agency	yes	organisation	Organization	Public Health Authority of the Slovak Republic
	. i cuitii	350101	,	O Barnoacion	multinational	. 42.10 . 1. Galiati / Mattion (g. 1) and Global Mepublic
85	health	pandemic manager	yes	network	organisation	Public Health Emergency Operations Centre Network
0.5	nearth	pariacillic manager	ycs	TICTIVOTE	Governmental	Table Health Effector Operations centre Network
					GOVERNICITAL	
86	health	agency	yes	organisation	Organization	Public Health England (Colindale)

					Governmental			
87	health	agency	yes	organisation	Organization	Robert Koch Institute		
					Governmental			
88	health	agency	yes	organisation	Organization	Scientific Institute of Public Health (Belgium)		
	security/defence				Governmental			
89	forces	responder	yes	organisation	Organization	Irish Defence Forces		
90	health	responder	yes	organisation	Other	Stichting Katholieke Universiteit		
					multinational			
91	health	pandemic manager	yes	organisation	organisation	Strategic Health Operations Centre		
					Governmental			
92	health	agency	yes	organisation	Organization	Superintendence of Public Health (Malta)		
					multinational	Surveillance of animal disease by the World Organisation for Animal		
93	zoonotic diseases	agency	yes	organisation	organisation	Health		
					Governmental			
94	civil protection	agency	yes	organisation	Organization	The Federal Office of Civil Protection and Disaster Assistance		
95	education	research institution	yes	organisation	Other	Universite Catholique De Louvain		
					multinational			
96	health	agency	yes	organisation	organisation	WHO Hub for Pandemic and Epidemic Intelligence		
				working				
97	health	pandemic manager	yes	group	NGO	WHO's Communicable Disease Working Group on Emergencies		
					multinational			
98	health	agency	yes	organisation	organisation	World Health Organization		
Note B	Note Plue coloured - already contacted; red coloured - will be contacted							

Note. Blue coloured = already contacted; red coloured = will be contacted.

# d. Identified key stakeholders to test the PANDEM-2 solutions (n=45)

number	field of work	role	active	type	organisation type	Name
						Associazione Della Croce
1	civil protection/humanitarian	responder	yes	organisation	NGO	Rossa Italiana
						Centre for Disease
						Prevention and Control
2	health	agency	yes	organisation	Governmental Organization	(Latvia)
						Centre of Health
						Security and
						Communicable Disease
3	health	agency	yes	organisation	Governmental Organization	Prevention (Iceland)
						Croatian National
						Institute of Public
4	health	agency	yes	organisation	Governmental Organization	Health
						Danish Health and
5	health	agency	yes	organisation	Governmental Organization	Medicines Authority
6	civil protection/humanitarian	responder	yes	organisation	NGO	Deutsches Rotes Kreuz
						Directorate General of
7	health	agency	yes	organisation	Governmental Organization	Health (Portugal)
						Directorate of Medical
						and Public Health
8	health	agency	yes	organisation	Governmental Organization	Services (Cyprus)
						European Centre for
						Disease Prevention and
9	health	pandemic manager	yes	organisation	multinational organisation	Control
						Federal Ministry of
10	health	agency	yes	organisation	Governmental Organization	Health (Germany)
						Federal Ministry of
11	health	agency	yes	organisation	Governmental Organization	Health (Austria)
						Hamburg Port Health
12	border controls/PoE	pandemic manager	yes	organisation	Governmental Organization	Center
13	health	agency	yes	organisation	Governmental Organization	Health Board (Estonia)
						Health Directorate
14	health	agency	yes	organisation	Governmental Organization	(Luxembourg)

						Health Protection
						Surveillance Centre
15	health	agency	yes	organisation	Governmental Organization	(Ireland)
						Hellenic Centre for
						Disease Control and
16	health	agency	yes	organisation	Governmental Organization	Prevention (Greece)
						Institute for Public
						Health Surveillance
17	health	agency	yes	organisation	Governmental Organization	(France)
						Instituto Nacional De
						Emergência Médica
						The National Institute of
18	health	responder	yes	organisation	Governmental Organization	Medical Emergency
						Institutul National De
						Sanatate Publica (Public
						Health Institute
19	health	agency	yes	organisation	Governmental Organization	Romania)
						International Federation
						of Red Cross and Red
20	health	agency	yes	organisation	NGO	Crescent Societies
						International Red Cross
						and Red Crescent
21	civil protection/humanitarian	responder	yes	network	NGO	Movement
22	health	responder	yes	organisation	foundation	Irish Red Cross
						Istituto Per
						L'interscambio
23	education	research institution	yes	organisation	foundation	Scientifico
24	health	agency	yes	organisation	Governmental Organization	Ministry of Health (Italy)
						Ministry of Health
25	health	agency	yes	organisation	Governmental Organization	(Lithuania)
						Ministry of Health,
						Social Services and
26	health	agency	yes	organisation	Governmental Organization	Equality (Spanien)
				·		

27	health	aganay	No.	organisation	Covernmental Organization	National Center for Epidemiology Albert
27	nearth	agency	yes	organisation	Governmental Organization	(Hungary)
						National Centre of
						Infectious and Parasitic
28	health	agency	yes	organisation	Governmental Organization	Diseases (Bulgaria)
						Terveyden Ja
						Hyvinvoinnin Laitos
						(Public Health Institute
29	health	agency	yes	organisation	Governmental Organization	Finland)
						RIJKSINSTITUUT VOOR
						VOLKSGEZONDHEID EN
						MILIEU (Public Health
30	health	agency	yes	organisation	Governmental Organization	Agency Netherlands)
						National Institute of
						Public Health - National
						Institute of Hygiene
31	health	agency	yes	organisation	Governmental Organization	(Poland)
						National Institute of
						Public Health (Czech
32	health	agency	yes	organisation	Governmental Organization	Republic)
						National Institute of
33	health	agency	yes	organisation	Governmental Organization	Public Health (Slovenia)
						Norwegian Institute of
34	health	agency	yes	organisation	Governmental Organization	Public Health
						Oesterreichisches Rotes
35	civil protection/humanitarian	responder	yes	organisation	NGO	Kreuz
						Principality of
36	health	agency	yes	organisation	Governmental Organization	Liechtenstein
						Folkhalsomyndigheten
						(Public Health Agency of
37	health	pandemic manager	yes	organisation	Governmental Organization	Sweden)
		<u>,                                      </u>	·	, in the second	-	Public Health Authority
38	health	agency	yes	organisation	Governmental Organization	of the Slovak Republic
			·			Public Health England
39	health	agency	yes	organisation	Governmental Organization	(Colindale)
		5 - 7	1	- 0	2 11 2 01 11 71	(

40	health	agency	yes	organisation	Governmental Organization	Robert Koch Institute
						Scientific Institute of
41	health	agency	yes	organisation	Governmental Organization	Public Health (Belgium)
						Stichting Katholieke
42	health	responder	yes	organisation	Other	Universiteit
						Superintendence of
43	health	agency	yes	organisation	Governmental Organization	Public Health (Malta)
						Universite Catholique
44	education	research institution	yes	organisation	Other	De Louvain
						World Health
45	health	agency	yes	organisation	multinational organisation	Organization

Note. Red coloured = will be invited to test; blue coloured = already invited to test.