



Proceeding Paper

# EU HEALTHY GATEWAYS Joint Action—Contributions to European Public Health Preparedness and Response at Points of Entry <sup>†</sup>

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Abstract: The joint action EU HEALTHY GATEWAYS (EUHG) aimed to support cooperation and coordinated action of MS to improve their preparedness and response capacities at PoE, for preventing and combating cross-border health threats from the transport sector. The aim of this study is to present how EUHG supported strengthening of core public health capacities at ports during routine operations and the COVID-19 pandemic. Methods used included surveys, literature reviews, in(tra)action reviews, focus and expert working groups, site visits, exercises, inspection grading system methodology. In addition, the EU Common Ship Sanitation Database (EUSIS) was used as a tool to collect information on health conditions on board and to share information about public health events. EUHG network established the EUPOENET and implemented the European passenger ship inspections programme implementation where 558 inspectors in the EU SIS recorded 33,184 Ship Sanitation Certificates, followed up >80 public health events via the port communication form out of which 22 were COVID-19 related, and recorded > 4600 hygienic deficiencies. EUHG developed a web-based, searchable catalogue of best practices, SOPs for mosquito surveillance and control, a model MoU describing cooperation among authorities at ports, a tool was produced for development/assessment of contingency plans (ports), a tool serving group-based discussions about what defines risk at port level. EUHG conducted training courses and European level multi-sectorial TTE. The EUHG network of experts supported EU's COVID-19 response by developing 16 technical guidance documents, provided >40 expert consultations and conducted three site visits and short seminars, two national level IAR and a European level meeting using IAR methodology and produced over five scientific publications. The JA's network contribution to the pandemic has been globally



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acknowledged, recognized and demonstrated, with the network immediately activated to support EC and MS requests, and transport restart operations in 2020–2021.

**Keywords:** points of entry; health; port; disease; cross border health threats; preparedness; transport; travel; COVID-19; SARS-CoV-2

#### 1. Introduction

The Joint Action (JA) entitled EU HEALTHY GATEWAYS (EUHG): "Preparedness and action at Point of Entry (PoE) (ports, airports, ground crossings)" united 38 authorities (including Ministries of Health and Transport, national public health institutes, universities) from 29 countries and the Taiwan Centers for Disease Control. Initially planned for three years (2018–2021) and extended until April 2022, EUHG aimed to support cooperation and coordinated action of MS to improve their preparedness and response capacities at PoE, for preventing and combating cross-border health threats from the transport sector. With the emergence of COVID-19 in January 2020, EUHG switched from operating in inter-epidemic mode to emergency mode and continued operating in emergency mode until its completion. EUSIS as a tool to collect information on health conditions on board and to share information about public health events. Our aim is to present how EUHG strengthened core public health capacities at ports during routine operations and the COVID-19 pandemic.

### 2. Materials and Methods

Surveys for best practices identification, literature reviews and in(tra)-action reviews were conducted. Over 10 focus and expert working groups were formulated to support development of preparedness and response guidance documents, Standard Operating Procedures (SOPs) and model Memorandum of Understandings (MoUs) and tools for ports supporting contingency planning and risk profiling. Site visits were conducted to facilitate situation analysis and exchange of visits between countries were conducted to exchange knowledge, experience and skills. The European Point of Entry Network (EUPOENET) was established with experts assigned by EU MS. Table-top exercises were conducted to test guidance documents and template documents and suggested TTE scenarios were developed to support the conduct of TTEs at national level. Training needs assessment surveys for infectious disease management at major European PoE and reviews of highly effective education and training interventions for infectious disease control, with emphasis on cross-border settings, were conducted to support the development of training materials for online and face-to-face training courses. An inspection grading system methodology was developed, pilot-tested (2018), and applied as of 2019, for inspections conducted against the European Manual for Hygiene Standards and Communicable Diseases Surveillance system. The EU Common Ship Sanitation Database (EUSIS) was used as a tool to collect information on health conditions on board and to share information about public health events.

## 3. Results

The EUPOENET development, including a registry of > 180 public health experts at PoE from European countries, facilitates rapid communication and notification for cross-border health threats at PoE and exchange of knowledge, information and good practices among experts in public health, competent authorities and other stakeholders. Experts in public health and PoE can be drawn from the network to provide training and ad hoc advice. The network is available for use now and in the post-COVID-19 era for routine operations and during future public health emergencies.

EUHG implemented a European passenger ship inspections programme using a target factor and audits where 31 countries and 12 ports participated. Since 2019, 57 passenger

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ships were graded with "A" grade and 16 with Grades B, C or D. Overall, the 558 inspectors in the EU SIS recorded 33,184 Ship Sanitation Certificates, followed up > 80 public health events via the port communication form out of which 22 were COVID-19 related, and recorded > 4600 hygienic deficiencies.

Consortium members identified and compiled best practices implemented at their designated ports into a web-based, searchable catalogue and developed SOPs for mosquito surveillance and control. A model MoU was produced describing cooperation among authorities at ports that must be involved in response to public health events. A European level 3-day face-to-face training course on public health preparedness and response at ports and on ships was conducted where 15 facilitators trained 35 participants from 19 EUMS and 9 from non-European countries. Training resources developed were used in eight national-level courses.

A tool was produced for development/assessment of contingency plans (ports) consisting of: (i) template of generic public health emergency contingency plan (PHECP) for designated ports; (ii) Cruise Restart Process Map (CRPM)—outlines path, process and procedures to be followed by port/local authorities for cruise ships to be able to safely visit the port; (iii) explanatory notes on CRPM and (iv) template of adapted COVID-19-specific PHECP for ports.

EUHG designed and conducted a European level multi-sectorial TTE where 63 observers and 30 players from 5 EUMS and 2 shipping companies tested the guidelines for inter-country communication and information flow in public health outbreak investigations on ships. The exercise identified lack of clear international communication, as channels were not always clear and depended on local/national conditions.

A tool serving group-based discussions about what defines risk at port level was developed targeting professionals involved in preparedness and response to infectious diseases at ports.

The EUHG agile network of experts supported EU's COVID-19 response by rapidly developing 16 technical guidance documents out of which 11 were applicable to the maritime sector. Advice documents were widely used (>50,000 downloads and referenced by EC, WHO and industry). The maritime transport industry adopted and promoted the EUHG advice documents with CLIA Europe and MedCruise organizing wide-reaching webinars (500 participants, 30 European and 25 non-European countries). The network provided > 40 expert consultations and conducted three site visits and short seminars to ports of non-EU MS where (i) experiences, practices and lessons learned during the pandemic were exchanged and (ii) existing port protocols, procedures and plans in relation to European guidance and EUHG advice documents were reviewed. Over five scientific publications have been produced exploring the experiences, challenges, and needs of European PoE and lessons learned from managing the COVID-19 outbreak. A PoE interview study conducted in 2020 interviewed 24 national and local professionals from PoE from 11 countries and identified experiences on preparedness actions, response operations and best practices from the COVID-19 pandemic. EUHG partners conducted two national level IAR focused on COVID-19 public health response at ports and a European level meeting using IAR methodology to update EUHG COVID-19 advice.

## 4. Discussion and Conclusions

Past public health events and the current COVID-19 pandemic have shown the critical role PoE play in the cross-border spread of disease. Given the unprecedented challenges faced by public health authorities and the transport sector in responding to COVID-19, the importance of common protocols, procedures and coordinated action by MS to improve their preparedness and response capacities at PoE has been highlighted. EUHG represents over a decade of work, that has brought together a diverse European network of experts specialized in transport public health. The JA's network contribution to the pandemic has been globally acknowledged, recognized and been demonstrated, with the network immediately activated to support EC and MS requests, and transport restart operations

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in 2020–2021. The JA's focus on exchange of knowledge and experiences, promoting and facilitating the uptake of best practices, and the multiplier effects of training and exercise activities have supported the integration of activities into national frameworks. Experiences, lessons learned and infrastructure developed must form the foundation of best practices and be exploited to improve preparedness and response capacities at POE for future public health events. The EUHG General Assembly agreed it is essential that activities and results are implemented, operated and maintained in both the short-term, and over the long-term and determined a roadmap for continuation of EUHG activities.

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