EPISOUTH PLUS STRATEGIC DOCUMENT

THE EPISOUTH PLUS PROJECT

COORDINATION OF EPIDEMIOLOGICAL SURVEILLANCE BETWEEN POINTS OF ENTRY AND THE NATIONAL HEALTH SYSTEM IN THE FRAMEWORK OF THE INTERNATIONAL HEALTH REGULATIONS 2005 IN THE EPISOUTH REGION

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THE EPISOUTH NETWORK

EPISOUTH PROJECT (2006-10)

On the occasion of the Year of the Mediterranean (2005), a number of countries that share the Mediterranean ecosystem and that have potentially common public health problems, agreed to develop the project “EpiSouth”, whose aim was to create a framework for collaboration on epidemiological issues in order to improve communicable diseases surveillance, communication and training in the Mediterranean region and South-East Europe.

EpiSouth started in October 2006 with the financial support of the EU DG-SANCO together with the Italian Ministry of Health (MoH). When it terminated in June 2010, it had established a network of 27 countries (9 EU and 17 non-EU countries plus 1 candidate to enlargement country). It was therefore the biggest inter-country collaborative effort in the Mediterranean region.

EPISOUTH PLUS PROJECT (2010-13)

This initial project was followed by a second project called “Episouth Plus”, from 15 October, 2010 to 14 January, 2014. Episouth Plus implied a shift of the network’s activities to a wider approach. Building on the knowledge of regional gaps and needs identified during the EpiSouth Project, the goal of the EpiSouth Plus Project was to contribute to the control of public health threats and other bio-security risks in the Mediterranean region and South-East Europe. The project aimed at enhancing and strengthening the preparedness to common health threats and bio-security risks at national and regional levels, in the countries of the EpiSouth Network, in the framework of the International Health Regulations (2005) (IHR) implementation.

The reinforcement of relations of trust in the region was instrumental in the scope of the project’s implementation, as the achievement of the objective required a solid framework of collaboration and information exchange among the 27 participating countries. For this purpose, Focal Points from each participating country were appointed and asked for active involvement and collaboration in the project’s activities.

The project was organized in seven Work Packages (WP), jointly co-led by EU and non-EU countries. In each WP, two WP co-leaders were guided by a WP Steering Team.

The Steering Committee constituted by all WP co-leaders, and the Project General Assembly constituted by all participants, were responsible for the general strategic decisions. Finally, an Advisory Board, constituted by representatives of the collaborating institutions and external experts, provided support for the revision of relevant documents and recommendations.

Apart from three transversal WPs (i.e., WP1-Coordination; WP2-Dissemination; WP3- Evaluation) the project’s activities were articulated in four WPs:
1) Establishment of a Mediterranean Regional Laboratories Network to facilitate common threats detection in the countries involved (WP4).

2) Promotion of common procedures in Generic Preparedness and Risk Management Plans among the countries involved (WP5).

3) Enhancement of Mediterranean Early Warning Systems (EWS) and cross-border Epidemic Intelligence allowing alerts and Epidemic Intelligence information sharing among EpiSouth countries and, development of interoperability with other European early warning platforms, especially EWRS, as forecasted by the current EU legislation (WP6).

4) Facilitation of IHR implementation through the production of a strategic document, with guidelines, based on specific assessments describing how national plans/legislations can interact with IHR requirements (WP7).
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CBRN</td>
<td>Chemical Biological and Radio-Nuclear</td>
</tr>
<tr>
<td>CHA</td>
<td>Competent Health Authority</td>
</tr>
<tr>
<td>ECDC</td>
<td>European Centre for Disease Control</td>
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<tr>
<td>ENSA</td>
<td>EpiSouth Plus National Situation Analysis</td>
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<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>HCDP/KEELPNO</td>
<td>Hellenic Center for Infectious Diseases Control</td>
</tr>
<tr>
<td>IHR</td>
<td>International Health Regulations (2005)</td>
</tr>
<tr>
<td>IPH</td>
<td>Institute of Public Health</td>
</tr>
<tr>
<td>ISS</td>
<td>Istituto Superiore di Sanità/ Italian Institute of Public Health</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NCIPD</td>
<td>National Centre of Infectious and Parasitic Diseases</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health System</td>
</tr>
<tr>
<td>NIPH/IVZ</td>
<td>National Institute of Public Health</td>
</tr>
<tr>
<td>PH</td>
<td>Public Health</td>
</tr>
<tr>
<td>PHEIC</td>
<td>Public Health Emergency of International Concern</td>
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<tr>
<td>PoE</td>
<td>Points of Entry</td>
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<tr>
<td>PRP</td>
<td>Preparedness and Response Plan</td>
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<tr>
<td>SOP</td>
<td>Standard Operating Procedures</td>
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<tr>
<td>SEEHN</td>
<td>South-eastern Europe Health Network</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<td>WP</td>
<td>Work package</td>
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1. AIM AND SCOPE OF THE EPISOUTH WP7 STRATEGIC DOCUMENT

The Work Package 7 (WP7 – Facilitating International Health Regulations\(^1\) implementation) of the EpiSouth Plus Project was co-led by the World Health Organization (WHO) and the Italian National Institute of Health (ISS).

Its steering team (ST) was composed by: Albania (IPH), Bulgaria (NCIPD), Cyprus (MoH), Greece (HCDP/KEELPNO), Israel (MoH), Jordan (MoH), Morocco (MoH), SEEHN, Slovenia (NIPH/IVZ), and Tunisia (MoH).

During the first year of activities, WP7 analysed the level of implementation of International Health Regulations (IHR) in the Mediterranean Region and identified coordination of surveillance between ports, airports and ground crossings – hereby called Points of Entry (PoE)- and national health systems (NHS) as a priority among Mediterranean countries for IHR implementation.

Following this, a study called EpiSouth Plus National Situation Analysis (ENSA) was performed in four countries of the network chosen on the basis of their experience in the coordination of human health surveillance between PoE and NHS, their demographic and geo-political characteristics and their willingness to be part of the study.

This strategic document focuses on the coordination of epidemiological surveillance between PoE and NHS in the framework of IHR, in the EpiSouth region. It builds on the researches conducted throughout the duration of the EpiSouth Plus project and summarizes, from a Mediterranean regional perspective, available evidence on IHR implementation and the findings of the ENSA.

Looking at the recurring strengths and challenges in coordinating surveillance between PoE and NHS in Mediterranean countries, this document presents strategic lines that have been successfully adopted in specific national contexts and that might be beneficial to other countries in the region.

Additionally this document is a proof of concept of how regional networks can collaborate with WHO in facilitating IHR implementation through focused analysis, the sharing of national experiences and the promotion of awareness building activities.
2. EVIDENCE OF THE PROBLEM TO BE ADDRESSED

2.1. IMPLEMENTATION OF IHR AT GLOBAL LEVEL

With the coming into force of the IHR on June 15, 2007, all WHO States Parties were required to assess and acquire capacities for surveillance and response.

IHR related capacities are defined as follows:

- **Main core capacities**: legislation policy, coordination, surveillance, response, preparedness, risk communication, human resources and laboratory capacity.
- **Capacity for points of entry**
- **Capacities for IHR-relevant hazards**: zoonotic events, food-safety events, chemical events and radiation emergencies.

These capacities are required to detect, assess, notify and report events, and to respond to public health risks and emergencies of national and international concern.

Although the deadline for States Parties to establish the core capacities for surveillance and response and at designated Points of Entry with the support of WHO was 15 June 2012, only 42 of the 195 States Parties have indicated that they do not need an extension of this deadline to meet the goal².

Scientific literature exploring the level of implementation of IHR in general and of each capacity in particular is scarce. Among 103 articles published globally between 2005 and 2011, most explored IHR-related capacities were surveillance, coordination and laboratory services. The least explored were risk communication, chemical and radio-nuclear detection and control. Surveillance was the only capacity for which most dedicated articles stated that implementation was generally on track in relation to IHR requirements while the weakest capacities were coordination, human resources, laboratory, points of entry, and zoonosis³. In accordance with Article 54 of the IHR and the resolution adopted during the sixty-first World Health Assembly (WHA) in 2008, States Parties and WHO are required to report to the WHA on progress made in implementing the Regulations. For this purpose, WHO developed a monitoring framework that assesses, through a questionnaire, the level of implementation of the Regulations for each required capacity⁴.

Globally⁵, in 2011, States Parties had made most progress in achieving the following core capacities: surveillance, response and laboratory services. In each of these areas, more than 72% of the required attributes⁶ had been achieved. Progress in strengthening human resources and preparedness had been slower (less than 60% of the required attributes achieved). Regarding IHR-related hazards, the scores were higher for capacities related to zoonotic and food safety events than

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¹ In 2011, 161 States Parties completed the questionnaire (83% of the 194 Parties).
² “The attribute score is the proportion or percentage of attributes (a set of elements or functions that reflect the level of performance or achievement of an indicator) that have been attained in levels 1 and 2 and is a measure of overall achievement in reaching the targets for 2012”. Source WHO/HSE/GCR/2012.
those related to chemical and radiological events. Attributes required at PoE were globally less developed (51% required attributes achieved)\(^5\).

Scientific literature specifically addressing gaps in capacities at PoE highlights problems in the elaboration of response plans and in CBRN (chemical-biological-radio-nuclear) control not only in emergency situations, but also on a routine basis. Lack of permanent health authorities on site are also reported as a major concern. Additional challenges are due to the lack of multi-sector collaboration and communications among different stakeholders at PoE. All this translates in low sensitivity in event detection and the need to improve response capacity\(^3\).

A number of expert-meetings have reported a lack of coordination between NHS and authorities at PoE who receive or generate information on health events concerning travellers and conveyances. These meetings include: the EpiSouth Plus project WP7 sub-regional meeting, Rome, Italy, July 2011; the WHO 2nd informal consultation meeting on WHO technical advice for management of public health events on board ships, Lyon, France, April 2012; the Inter-country meeting on strengthening surveillance and response capacities under the IHR, Beirut, Lebanon, March 2012 and the WHO organized expert consultation meeting on coordination between points of entry and national surveillance systems, Lyon, France, July 2012\(^6\).

2.2. IMPLEMENTATION OF IHR IN THE MEDITERRANEAN

In order to assess the level of IHR implementation in the Mediterranean, the questionnaires of the WHO monitoring framework filled in 2010 by EpiSouth countries were analysed separately in an aggregated fashion.

Several IHR related capacities have been implemented in most of the EpiSouth countries examined\(^7\): legislative frameworks for the implementation of IHR have been established; coordination on events that may constitute a public health emergency of international concern (PHEIC) has been implemented; surveillance functions exist in a large proportion of countries, as well as resources and management procedures for rapid response. Multi-sectorial collaboration on zoonotic, chemical and radiation events exists but could be improved.

Weaknesses such as the lack of experience and resource sharing between countries, and the lack of reports and Standard Operating Procedures (SOPs) to guide the implementation of procedures have been reported.

Major gaps have been reported in the fields of risk assessment, preparedness, risk communication, human resources, laboratory biosafety and biosecurity, and in surge and response capacity at designated PoE.

In most cases, a list of designated ports and airports has been defined and, as specified in IHR Annex 1, authorized ports have been communicated to WHO. Weaknesses at PoE in the Mediterranean Region have been ascribed to the absence of a competent authority in all designated ports/airports, to the absence of capacity assessments, and more generally to the lack of efficient surge and response capacities.
2.3. SCIENTIFIC RATIONALE FOR ACTION

Based on the mentioned evidence collected by EpiSouth WP7, risk assessment, preparedness, laboratory biosafety and biosecurity, and coordination of surveillance between PoE and NHS were identified as priorities for the EpiSouth region during a project sub-regional meeting that took place in July 2011 in Rome.

As the other priorities were already addressed by two dedicated EpiSouth Plus Work Packages, WP7 decided to focus on coordination of surveillance between PoE and NHS.

After a literature review, we proposed to conduct a situation analysis to study in depth how four countries of the EpiSouth network have addressed coordination of surveillance between PoE and NHS.

As defined by WHO, a situation analysis is a process of gathering and analysing information on the existing legal, institutional, administrative and technical infrastructure and available national expertise across key sectors. It is considered a crucial first step in the development of realistic national action plans for strengthening public health management practices.

The “EpiSouth Plus National Situation Analysis” (ENSA), we developed was designed to study in depth how four countries of the EpiSouth network have addressed coordination of surveillance between PoE and NHS.

We studied how the exchange of information is organized between PoE and NHS in four countries representative of the diversity of the EpiSouth region; identified formal procedures in place and legal constraints in these four countries and described main strengths and challenges.

The study was not conceived to be an evaluation of IHR implementation. All countries that participated in the ENSA were selected because they had already established mechanisms of coordination for surveillance of human health between PoE and the NHS.

The findings of the ENSA will be used to enrich the contents of the WHO global guidance on coordination of surveillance between PoE and NHS that is in development and has also benefited from the inputs of the experts of the EpiSouth WP7 Steering Team.
3. Coordination of surveillance between PoE and NHS in four EpiSouth countries

Italy\textsuperscript{10}, Malta\textsuperscript{11}, Jordan\textsuperscript{12} and Morocco\textsuperscript{13} were selected on the basis of their national demographic and geo-political characteristics. Each represented a specific scenario found in the Mediterranean (Table 1).

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>EXPECTED IMPACT ON COORDINATION BETWEEN POES AND NATIONAL SURVEILLANCE SYSTEM</th>
<th>PARTICIPATING COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small coastal states and islands</td>
<td>No or few ground crossings, numerous ports, few airports. Small countries with possibly fewer administrative levels/overlapping professional functions.</td>
<td>Malta</td>
</tr>
<tr>
<td>Large States with extensive coastlines and federal or strongly decentralized health systems</td>
<td>All PoE present in large numbers, numerous administrative levels with diversification of competencies and greater coordination complexities.</td>
<td>Italy</td>
</tr>
<tr>
<td>States with no or little coastlines</td>
<td>Ports absent or very limited, higher importance of airports and ground crossings where greater experience may have been gathered.</td>
<td>Jordan</td>
</tr>
<tr>
<td>Large States with extensive coastlines and more centralized health systems</td>
<td>All PoE present in large numbers, numerous administrative levels but central bodies.</td>
<td>Morocco</td>
</tr>
</tbody>
</table>

A country report was written for each country participating in the study with details on the data flows, processes and procedures explored and a country specific analysis of results. A systematic description of the actors, processes, tools and events detected at PoE in each country is included in these reports and will not be the object of this document. Rather this information will be referred to in order to identify recurring\textsuperscript{‡} strengths and challenges in coordinating surveillance between PoE and NHS.

Most reported examples of communication between the PoE and the IHR NFP focussed on biological threats, in particular communicable diseases, zoonosis, and on food safety. Communication flows in the case of chemical and radio-nuclear events were discussed and found to involve the same actors as those involved in biological threat detection and response (Malta, Morocco), a number of directorates within the MoH with direct links to the IHR NFP (Jordan) and the Civil Protection in coordination with the MoH, involving the IHR NFP, for Health related matters (Italy).

In all the studied countries, IHR NFP are located within the MoH. Good coordination of surveillance between PoE and the NHS relies on the existence of strong links between the staff working on human health at PoE and the staff of the IHR NFP in the MoH, independently of the

\textsuperscript{‡} Occurring in two or more of the countries that performed the Episouth Plus National Situation Analysis on coordination of surveillance between Points of Entry and the National Health System
level of centralization of the health system. In each country, functional coordination and communication of human health events occurring at PoE was achieved in different ways according to the number of levels of the NHS, and to the decentralization of functions and responsibilities.

In Malta\textsuperscript{11}, the IHR-NFP is located in the Environmental Health Directorate of the MoH, which is also in charge of Port Health. The staff of the Port Health Services work from the Port Health and Airport Health Offices. One of the Port Medical Officers covers the role of IHR-NFP responsible person as well as Competent Health Authority (CHA) and works in close collaboration with the Surveillance Unit at MoH central level.

In Jordan\textsuperscript{12}, PoE host health centres, that are for the most part under the direct control of the MoH\textsuperscript{11}. As a consequence, health data collected at PoE are transmitted to all the levels of the NHS (from health centres to MoH central level). Direct notification to the IHR NFP responsible person is foreseen in case of events at PoE that might meet the criteria for a possible PHEIC, whether biological, chemical or radio-nuclear.

In Italy\textsuperscript{10} and Morocco\textsuperscript{13}, the direct link between the PoE and the MoH Central level-IHR NFP resisted the decentralization of competences and responsibilities that has affected other sectors of health care provision. In both countries, PoEs host MoH staff who depend directly on the IHR NFP. Information on health events at PoE in both countries follows a double communication flow: directly to the IHR NFP and through three different administrative levels as required by the statutory surveillance system.

### 3.1. Recurring Strengths

- In all countries studied, the IHR have been fully endorsed in national legislation and further defined for implementation in national and local norms and regulations.
- The legal framework (international/regional/national/local) has been consistently described as supportive to the implementation of coordinated surveillance.
- No legal constraints were highlighted.
- There are strong, at times historical, links between PoE and the MoH.
- The role of the CHA is well defined with dedicated personnel (including permanent staff) in each PoE.
- The role of the CHA at PoE is consistently recognized by PoE actors working in different sectors.
- In all countries studied, the CHA are generally employed directly by the MoH and benefit from its leadership and technical support (including training). This link strengthens the timeliness and completeness of reporting.
- Staff working on human health at PoE is consistently also involved in:
  - inspection and clearance of goods (including food and drugs) for import/export in collaboration with customs officers;
  - inspection and clearance of conveyances for aspects concerning public health (e.g. maritime declaration of health) working in contact with conveyance operators, control towers and hub authorities;
  - medical occupational and forensic practice in contact with crew members and conveyance operators; and
- active collaboration with veterinarians for aspects concerning animal health/food of animal origin at PoE.

This reportedly encourages exchange and collaboration among the different sectors at PoE.

- In all the countries studied, IHR NFP are closely related to both the MoH authorities in charge of disease surveillance and those in charge of health at PoE; they have competence on all events that may constitute a PHEIC.

- IHR NFP are located in the MoH Central Level, independently of the decentralization of the health system. Countries with highly decentralised health systems have arranged double communication and coordination lines to ensure that timely information can flow both through the administrative hierarchy of the NHS and directly between the PoE and the IHR NFP. This ensures the involvement of all the levels of the health system.

- Clear standard and official protocols for communication of health data are available and well known by professionals both at MoH and PoE level. In most settings these are also translated in official and publicly available SOPs.

- In all the visited PoE, processes and procedures related to epidemiological surveillance for communicable diseases and other threats to human health are coherent with national protocols.

3.2. RECURRING CHALLENGES

- The high level of competence required to work as CHA in PoEs makes continuous training necessary and replacement of staff difficult.

- Human resources were reported as insufficient numerically, at times critically so.

- Information related to human cases of illness at PoE is not collected through dedicated structured databases.

- In more than one country:
  - Training opportunities are considered scarce,
  - Provision of systematic feedback from the MoH central level to PoE was identified as an aspect that could be strengthened.

3.3. LIMITS

While the recurring strengths are probably comprehensive because they draw from the experience of countries that have greatly invested on coordination of human health surveillance between PoE and NHS, all the challenges the Mediterranean countries face were probably not identified.

Another aspect to consider is that the procedures of coordination of surveillance between the PoE and the IHR NFP analysed in the four countries focused mainly on communicable disease surveillance and biological health threats. The data flows for chemical and radio-nuclear threat

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5 This has been also attributed to severe budget cuts

** In most cases databases exist for administrative and inspection functions at PoE that can aid in line listing. The same is true for statutory communicable disease surveillance in which some data from PoE could converge, although generally not distinguishable. Data is usually communicated by phone, fax and emails and, archived as reports in local computers. In some countries, analysis are performed at MoH central level.
detection and response were not described with the same level of detail and hence their strengths and weaknesses may not have been well captured.

Taking these considerations into account, the lessons learned of this document build on all the experience gathered in this area by the EpiSouth Plus Project with the support of WHO and, for the aspects referring to the ENSA, draw mainly from the recurring strengths observed.
4. Lessons Learned and Strategic Lines

Noteworthy aspects have been highlighted in the four countries involved in the ENSA. Firstly, all four countries established defined processes and procedures linking closely the MoH with the PoE through the CHA. Secondly, clear responsibilities, contacts and processes are established and have been translated in clear official and publicly available SOPs. Thirdly, CHA are consistently present at PoE and they are the recognized reference for inspection and human health matters, linking the MoH with the various PoE actors.

The ENSA confirmed the central role of the CHA at PoE, which had also been highlighted in 2010 by 18 Mediterranean countries responding to the WHO monitoring framework (see section 2.2). The ENSA also demonstrated how coordination of surveillance between PoE and the NHS was achieved in four countries with very different geographical, political and economic settings. The procedures and processes implemented by Italy, Malta, Jordan and Morocco to coordinate surveillance between PoE and NHS might be useful to other Mediterranean countries.

To this effect, the recurring strengths identified in the four countries studied in the ENSA have been translated in lessons learned and four derived strategic lines (Table 2) that may be considered by countries participating in the EpiSouth Network:

- Invest on a solid legal framework that is supportive to the implementation of coordinated surveillance between PoE and NHS in the framework of IHR. This framework should establish a strong link between the IHR NFP and the CHA at PoE;
- Ensure the presence of dedicated personnel covering the function of CHA in PoE. This personnel should work with other actors in the PoE, in liaison with the IHR NFP;
- Elaborate and update national protocols and local processes and procedures on coordination of human health surveillance between PoE and the NHS;
- Ensure, through training, that those protocols, processes and procedures are known and applied consistently at central and PoE level.

Challenges exist even in countries that have greatly invested in improving capacities at PoE. CHA at PoE are highly qualified and specialized staff in need of constant training and difficult to replace. Investment in human resources both quantitatively and qualitatively is the main recommendation that emerged from discussions with health officials in the four countries and it impacts on potential enhancement of activities at PoE.
Table 2 – Recurring strengths, lessons learned and derived strategic lines in coordinating human health surveillance between the Points of Entry and the National health Systems in four countries of the Mediterranean Region

<table>
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<tr>
<th>Recurring Strengths</th>
<th>Lesson Learned</th>
<th>Derived Strategic Line</th>
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<tbody>
<tr>
<td><strong>1.</strong> The IHR have been fully endorsed in national legislation in all countries studied and further defined for implementation in national and local norms and regulations.</td>
<td>A strong legal framework sustaining the implementation of IHR, defining the role and function of the IHR NFP and the responsibilities of the Competent Health Authorities (CHA) at PoE is the basis upon which to build links between the PoE and NHS for the coordination of human health surveillance.</td>
<td>Invest on a solid legal framework that is supportive to the implementation of coordinated surveillance between PoE and NHS in the framework of IHR. This framework should establish a strong link between the IHR NFP and the CHA at PoE.</td>
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<td><strong>2.</strong> The legal framework (international/regional/national/local) has been consistently described as supportive to the implementation of coordinated surveillance.</td>
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<td><strong>3.</strong> No legal constraints were highlighted.</td>
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<td><strong>4.</strong> There are strong, at times historical, links between PoE and the MoH.</td>
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<td><strong>5.</strong> In all countries the role of CHA at PoE are well defined with dedicated personnel (including permanent staff) in each visited PoE.</td>
<td>The Competent Health Authority at PoE is a central professional figure that links with other actors at PoE and directly liaises with the IHR NFP/MoH.</td>
<td>Ensure the presence of dedicated personnel covering the function of CHA in PoE. This personnel should work with other actors in the PoE, in liaison with the IHR NFP.</td>
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<td><strong>6.</strong> In all countries the role of CHA at PoE is recognized by PoE actors working in different sectors.</td>
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<td><strong>7.</strong> In all countries CHA are generally employed directly by the MoH and benefit from its leadership and technical support (including training). This link strengthens the timeliness and completeness of reporting.</td>
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<td><strong>8.</strong> In all the countries the IHR NFP is closely related both to the MoH authorities in charge of disease surveillance and to those in charge of health at PoE.</td>
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<td><strong>9.</strong> IHR NFP are located in the MoH Central Level, independently of the decentralization of the health system. Countries with highly decentralised health systems have arranged double communication and coordination lines to ensure that timely information can flow both through the administrative hierarchy of the NHS and directly between the PoE and the IHR NFP. This ensures the involvement of all the levels of the health system.</td>
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<td><strong>10.</strong> Clear standard and official protocols for communication of health data were available and well known by professionals both at MoH and PoE level. In most settings these were also translated in official and publicly available SOPs.</td>
<td>Coordination and communication of health data between PoE and the NHS need clear national protocols that are applied consistently in the processes and procedures at PoE.</td>
<td>Elaborate and update national protocols and local processes and procedures on coordination of human health surveillance between PoE and the NHS. Ensure, through training, that those protocols, processes and procedures are known and applied consistently at central and PoE level.</td>
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<tr>
<td><strong>11.</strong> In all the visited PoEs, processes and procedures related to epidemiological surveillance for communicable diseases and other threats to human health were coherent with national protocols.</td>
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5. Conclusions

Since 2010, when the EpiSouth Plus Project started, there has been a slight increase in the proportion of attributes achieved at PoE in all WHO regions bordering the Mediterranean (EUR from 56% to 61%; EMR from 52% to 62% and AFR from 42% to 47%)\textsuperscript{5}. Countries are trying to improve detection, surveillance and response capacities at PoE, a now recognized common weakness. The facilitating role of regional networks in enabling collaboration in the detection, assessment and response to events under the reporting scope of IHR is recognized under the Regulations (Art. 44.3) and its technical relevance in the field of surveillance has been reported in literature\textsuperscript{14}. The collaboration established between WHO and EpiSouth Plus was more policy oriented and aimed at identifying and studying a priority area of intervention for the Mediterranean region in the framework of IHR.

WHO set this process in motion by providing subject-matter expert advice and enabling EpiSouth Plus to access regionally aggregated data collected through the WHO yearly monitoring of IHR implementation, therefore avoiding an \textit{ad hoc} survey that would have duplicated this effort. This work was instrumental in putting the spotlight on the need to enhance the coordination of surveillance between PoE and NHS in the Mediterranean, and EpiSouth Plus was the voice of 27 countries in the Mediterranean used to convey this message. From this initial input, WHO took the matter further. Having consulted all WHO regions, it concluded that coordination of surveillance with PoE was a global priority and initiated the development of a WHO global guidance on this topic.

Meanwhile EpiSouth Plus contributed to the development of knowledge in this area, substituting a second survey, initially planned, with the ENSA. This type of study was found to be instrumental to the integration of available knowledge on coordination of surveillance at PoE as opposed to a quantitative approach that would have duplicated work carried out by WHO and Member States. The ENSA was designed in close collaboration with WHO subject-matter experts and implemented thanks to the strong commitment of the four participating countries. Its findings are being used to enrich the contents of the WHO global guidance on coordination of surveillance between PoE and NHS.

This experience is a proof of concept that collaboration between WHO and regional networks in the framework of IHR is not only useful and possible, but can avoid duplication of data collection and streamline operational research to contribute to the development of needed international tools.
6. References


