Asia Pacific Strategy for Emerging Diseases (APSED)

APSED (2010) Workplan

July 2011

CONTENTS

EXECUTIVE SUMMARY

The Asia Pacific region continues to face health security threats arising from emerging diseases and public health emergencies. An updated ***Asia Pacific Strategy for Emerging Diseases***, or *APSED (2010),* has been developed to confront such threats. APSED (2010) seeks to build on the common approach and maximize the benefits already achieved under APSED (2005), addresses the lessons learned from pandemic (H1N1) 2009 and the needs expressed by Member States during a series of intensive country and regional-level consultations initiated in July 2009.

This is the first year of the APSED (2010) implementation. The draft APSED (2010) Workplan, which is vital to ensure effective implementation, provides a vision of what will be accomplished in the next five years for each APSED Focus Area, and outlines the main steps towards the vision. Priority activities and key milestones are identified in the workplan. It has been developed to serve as a collective and practical tool for prioritization of the use of technical and financial resources of countries, WHO, donors and partners. It is anticipated the workplan will assist in national workplan development, taking into consideration national needs and capacity and be used to coordinate donor support and project-based activities, whenever possible. The workplan will remain flexible in order to meet evolving needs and will be updated to reflect annual TAG recommendations on priority activities.

The eight 'Focus Areas' for priority capacity building efforts include: 1) Surveillance, Risk Assessment and Response, 2) Laboratories, 3) Zoonoses, 4) Infection Prevention and Control, 5) Risk Communications, 6) Public Health Emergency Preparedness, 7) Regional Preparedness, Alert and Response, and 8) Monitoring and Evaluation.

INTRODUCTION

The Asia Pacific Strategy for Emerging Diseases (2010), or APSED (2010), has been developed based on the experiences and foundation laid out by APSED (2005), the lessons learned from pandemic (H1N1) 2009 and the needs expressed by Member States during a series of intensive country and regional-level consultations initialled in July 2009.

APSED (2010) was reviewed and endorsed by the 5th meeting of the Asia Pacific Technical Advisory Group for Emerging Infectious Diseases in July 2010 and the WHO Regional Committee Meeting for the Western Pacific in October 2010.

It is anticipated that APSED (2010) provides and serves as:

- ***A newly up-to-date bi-regional strategy*** to guide Member States and WHO in strengthening national and regional systems and capacities required for managing emerging diseases and public health emergencies.

- ***A common framework*** for Member States, WHO, donors and partners to work collectively towards regional health security through ensuring functional national and regional systems and capacities in place for preparedness planning, prevention, early detection and rapid response to emerging diseases and other public health emergencies.

- ***A road map*** towards meeting the IHR core capacity requirements in the Asia Pacific region.

1.1 SUMMARY OF APSED (2010)

APSED (2010) provides Member States, WHO, donors and partners with a strategic direction and priority actions for managing health security threats arriving from emerging diseases and other acute public health events.

While *APSED (2010)* continues to focus on emerging diseases, it seeks to build on a common approach and maximize the benefits already achieved by strengthening synergy and common components of various programmes such as emerging disease surveillance and response, food safety and emergency response to disasters. The common components may include disease/event surveillance and information system, risk assessment, common operational platform for public health emergency response.

The eight focus areas and key components for capacity building efforts are summarized in Table 1.

Table 1 *APSED (2010)* Focus Area and Key Components

Focus area	Key components
1. Surveillance, risk assessment and response	• Event-based surveillance • Indicator-based surveillance • Risk assessment capacity • Rapid response capacity • Field epidemiology training
2. Laboratories	• Accurate laboratory diagnosis • Laboratory support for surveillance and response • Coordination and laboratory networking • Biosafety
3. Zoonoses	• Coordination mechanism for: - sharing of surveillance information - coordinated response - risk reduction - research
4. Infection prevention and control	• National Infection Prevention and Control (IPC) structure • IPC policy and technical guidelines • Enabling environment (e.g. facilities, equipment and supplies) • Supporting compliance with IPC practices
5. Risk Communications	• Health emergency communications • Operation communications • Behaviour-change communications
6. Public health emergency preparedness	• Public health emergency planning • National IHR Focal Point function • Points of entry preparedness • Response logistics • Clinical case management • Health care facility preparedness and response
7. Regional preparedness, alert and response	• Regional surveillance and risk assessment • Regional information-sharing system • Regional preparedness and response
8. Monitoring and evaluation	• Country-level monitoring (including national workplan) • Regional level monitoring: Technical Advisory Group • Evaluation

1.2 PURPOSE OF THE WORKPLAN

The purposes of the APSED (2010) Workplan are:

- to provide a clear vision of each APSED Focus Area on what is to be accomplished in the next five years and develop main steps towards the vision;
- to provide direction on what priority activities that Member States, WHO, donors and partners may focus on in managing emerging diseases and public health emergencies effectively in the coming five years; and
- to serve as a practical tool to coordinate and monitor overall implementation progress of APSED (2010) at the national and regional levels.

1.3 GUIDING PRINCIPLES FOR IMPLEMENTATION

It is anticipated that the APSED (2010) Workplan will

- be used as a guide to assist in national workplan development, taking considerations national needs and capacity level and enabling links with other strategies where appropriate;
- be used as a guide to assist in WHO regional workplan development;
- serve as a practical tool for prioritization of use of technical and financial resources of countries, WHO, donors and partners;
- be utilized to coordinate donor support and project-based activities, whenever possible;
- incorporate the gender aspect in programmes related to emerging diseases and public health emergency management; and
- remain flexible to meet Member State needs and take into account annual TAG recommendations on priority activities.

1.4 ROLE OF MEMBER STATES AND WHO

The workplan is intended as a common workplan that will be used by Member States, WHO and relevant partners to identify priority activities for the implementation of APSED (2010). The workplan serves as a guide for Member States during their national workplan development process and is not intended to replace the national workplan.

WHO's role in APSED (2010) implementation includes:

- supporting development and update of national workplans for emerging diseases and/or public health emergencies;
- supporting Member States in implementing their priority activities that have been identified in the national plans and that are in line with the APSED (2010) workplan;
- strengthening regional preparedness, alert and response system and capacities, with participation of countries;
- mobilizing technical and funding resources; and
- supporting the development of a Pacific APSED (2010) workplan that helps to clarify the roles and responsibilities of partners working in the Pacific.

APPROACH AND PROCESS OF WORKPLAN DEVELOPMENT

APSED (2010) provides a common strategic framework and guidance on priority focus areas to build sustainable national and regional capacities in the Asia Pacific region. It adopts a systematic approach and focuses on the entire institutional capacity-building such as strengthening national and regional systems and structures for managing emerging diseases and other acute public health risks or events. All the focus areas of APSED (2010) are important and interlinked to support the coordinated preparedness for and response to future emerging disease outbreaks and public health emergences of international concern in a more effective way.

APSED (2010) has been developed through an intensive country and regional level consultative process that began in July 2009. The APSED (2010) workplan includes the outputs from the consultative process, including a number of national-level meetings or workshops as well as the bi-regional consultations with experts and Member States. Early drafts of the workplan were circulated to Member States through the WHO country offices, TAG members, and Member State participants for the 2011 TAG meeting for comment. The July 2011 TAG meeting reviewed the workplan which resulted in further amendments. The workplan is intended to be a living document and will continue to be revised or updated, as needed.

1. Stages

Stages were identified to allow the grouping of key steps towards achieving the vision. This enables Member States to identify what stage of development they are at so they may focus their efforts to key activities in that stage. Member States can then plan activities to move into the next stage of development until they reach the vision.

2. Priority activities

For each stage, priority activities were identified that would enable Member States to progress towards the subsequent stages and thus towards achieving the vision.

3. Key milestones

From the activities in each stage, key milestones were identified which would highlight the most important aspects of the workplan that would need to be achieved by specific time points by all Member States to ensure successful development towards the vision.

4. Key priority activities for the next year

Common priority activities were then identified for the coming one year which provides Member States in the first stage of development clear guidance as to the priority activities that should occur in the next year to ensure successful progress towards the vision.

WORKPLAN BY FOCUS AREA

The workplan for each APSED (2010) Focus Area has been developed based on the workplan development approach and structure. The proposed workplan for each focus area includes the following sections:

- vision that highlights what to be seen or accomplished in five years
- stages in moving the current status towards the Vision
- key components of each Focus Area
- key milestone for each year
- key common activities for the coming one year

1. Surveillance, Risk Assessment and Response

In the next 5 years we will be more reliant on each other's information for effectively reducing risk to public health as diseases and other hazards do not respect borders. Reinvigoration of our approach, to place risk assessment as a central part of the decision making process, will provide an evidence-base for decisions, optimize resource use and improve proportional and timely response. To do this effectively, evidence from surveillance needs to be both accurate and timely, thereby requiring an upgrade of indicator-based surveillance systems in many Member States.

The **highlights** for this focus area are risk assessment and indicator-based surveillance. Risk assessment, as a central part of an evidence-based and effective decision making process, enables an integrated and multi-disciplinary approach to decision making and action and serves to build capacity in surveillance and response. Evidence-based decision making through risk assessment provides policymakers with defensible proof for their decisions and actions which enables them to better cope with public pressure and the unpredictability and uncertainty of public health events. Risk assessment also serves as the base for risk communication which governments are mandated to do to protect public health. Many Member States have found problems with their current indicator based surveillance systems, including the inability to include laboratory information and have expressed a desire for some protection from IT driven upgrades. Member States have also highlighted the need for regional surveillance data to inform risk assessment.

Intelligence gathered to assist in early warning for acute public health events needs to be placed into context through understanding the previous levels of a specific disease or syndrome and which intervention measures efficiently and effectively reduce the risk to public health. **Indicator-based surveillance systems** need to reflect systematically collected data over a number of years that can be compared to the current levels of disease. This not only provides an indicator system for early warning of unusual disease occurrence but is also a basis for **assessing the risk** posed by ad-hoc events reported through **event-based surveillance**. While

the indicator based surveillance systems can be in place to record identified risks (mandatory notifications and laboratory surveillance) they can also be a systematic means of recording data for emerging risks (syndromic surveillance, mortality monitoring, prescription monitoring) and non-healthcare monitoring (poison centres, food safety, water supply, drug post-licensing). While tools do not make early warning systems, early warning systems need appropriate tools.

A core set of data from the indicator-based system that can be interpreted in a regional perspective would provide an opportunity for timely warning of emerging events that can cross borders. This would allow preventive measures to be put into place with consideration of the local and regional context.

Well constructed tools for gathering intelligence on potential public health events need well-trained people for confirming, assessing and responding to events. Continued improvement in **field epidemiology training** and **rapid response teams** and their integration into the functions of surveillance are critical to efficient and effective management for health security.

2. Laboratories

In order to comply with IHR (2005), Member States should have capacity for the early detection of (novel) pathogens that may lead to an event of national or international concern. Laboratories play an important but supportive role in the early detection of and outbreak response to emerging diseases. Most Member States in the region have some form of public health laboratory system supporting public health services, but these are often disease -specific.

The highlight of this focus area is the development of public health diagnostic laboratories with a focus on national networking to develop a Public Health laboratory ***system to detect unknown pathogens more effectively.*** This will ensure more efficient and effective diagnostic services for public health purposes because laboratories will be closer to the front line and will be the entry point for surveillance and outbreak response. Public health diagnostic laboratories will allow diagnoses to be based on a syndromic approach which avoids pre-biasing the diagnosis. As the public health diagnostic laboratory will have capacity to test for multiple pathogens, the reference laboratory can focus more on reference work for identifying unknown/ new pathogens. The public health diagnostic laboratory will facilitate network development within country (nationally) and also regionally.

3. Zoonoses

The zoonoses focus area aims to facilitate the development of a functional coordination mechanism that is effective in bringing together all appropriate stakeholders. Under APSED(2005) the coordination mechanism was used for organising coordinated responses, however under APSED(2010), the coordination mechanism will also be used to develop risk reduction strategies, supported by research for selected priority zoonotic diseases. Working

collectively for both outbreaks situations and on a routine basis will reduce the risk to human health associated with both known and unknown emerging zoonoses.

4. Infection Prevention and Control

Establishing effective ***infection prevention and control (IPC)*** practices in health care settings is essential to reduce the risk of transmission of emerging diseases to health care workers, patients, their families and the community. Good IPC practices are especially important in health care facilities when outbreaks occur because of the risk that facilities will become epicentres for the spread of infection. IPC measures that will be applied during an outbreak should be built on a solid foundation of good routine IPC practices. Therefore, focus will be on developing a ***national functional organizational structure*** (e.g. a national multidisciplinary IPC committee) and a technical hub for IPC (e.g. ***a national IPC resource centre***) supported by the establishment of ***national policy and guidance***. In particular, the hub will provide technical advice during outbreaks and will facilitate coordination through the provision of standardized guidelines and training and provides a 'one stop shop' for IPC references and resources

5. Risk Communication

Effective communication is a fundamental element in managing emerging infectious diseases and other public health threats. Health emergency communications needs to develop messages based on risk assessment; capacity for this will be developed under the Surveillance Risk Assessment and Response focus area. Under APSED, A functional mechanism/structure/team that will allow risk communications to respond effectively to health emergencies will be institutionalised within the Ministry of Health.

The highlight of this focus area is **health emergency communication**. Timely and transparent risk communication is needed due to the rapidly changing situations during public health emergencies and due to pressure to communicate with the public for action during times of uncertainty. A risk communication structure/mechanism for health emergencies paves the way for coordination with relevant sectors to ensure consistency in messages to the public to prevent confusion and also ensure information is available from those with the necessary expertise. Health emergency communications provides a sustainable risk communications strategy which is needed due to the many new emerging diseases and public health emergencies and for advocacy for public health measures and establishing long-term relationships with stakeholders. A strong link will be maintained across the other components: operation communications and behaviour change communications, to ensure that the components are integrated as part of overall preparedness and response plans.

6. Public Health Emergency Preparedness

Public health emergency preparedness is a new APSED focus area. National preparedness for response to acute public health emergencies is vital to mitigate negative impact on health, and economic and social development. Strengthening of public health emergency preparedness

should build upon the foundations laid for pandemic influenza preparedness and the important lessons learned from response to the influenza A (H1N1) 2009 pandemic. ***A step-by-step approach*** will be used, moving from pandemic influenza preparedness to emerging infectious disease preparedness and then towards generic public health emergency preparedness.

The ***six components*** of this focus area include public health emergency planning; strengthening functions of the National IHR Focal Points; points of entry preparedness; response logistics; clinical management; and health care facility preparedness for emergency response.

The **highlight** of this focus area is the development of ***a public health emergency response plan (PHEP)*** that incorporates a common platform for command, control and coordination of response operations through the ***Emergency Operations Centre (EOC)***. The PHEP and EOC enable timely decision making and response that are required due to the rapidly changing nature of public health emergencies, increasing public pressure, and legal requirements under the IHR. Unpredictable hazards, multiple entry points for both hazards and people, and the numerous response actions needed require efficient coordination among multiple departments. The PHEP and EOC are tools that can be used to enhance this coordination. The PHEP and EOC also provide important links with other components or focus areas through providing the streamlined structure to connect them such as surveillance, risk assessments, response, risk communication, response logistics, coordination of surge capacity, and health care facility and point of entry preparedness.

By the end of five years, all Member States should have an overarching, flexible national public health emergency response plan (PHEP) and an incident command system in place to effectively respond to all acute public health emergencies of national and international concern. A step-by-step approach will be used to develop a generic PHEP. Each Member State should develop its national command and response structure and a common response operation platform – EOC – so that the PHEP can be rapidly implemented when required.

The National IHR Focal Points play a vital role in facilitating IHR ***event communication,*** information sharing and Ministry of Health-WHO joint risk assessment in responding to a public health emergency of international concern. The IHR Review Committee has recommended that "*States Parties should ensure that designated National IHR Focal Points* ***have the authority****, resources, procedures, knowledge and training to communicate with all levels of their governments and on behalf of their governments as necessary*".

Points of entry preparedness should be ***an integral part*** of the overall national and regional public health emergency preparedness and response efforts. Point of entry preparedness will be a focus and an entry point for strengthening the required IHR core capacities for designated points of entry. ***A regional mechanism is vital to connect points of entry*** to ensure more evidence-based and harmonized public health interventions at points of entry.

Response Logistics will focus on developing or strengthening logistics ***within the national command and control structure and EOC in the Ministry of Health*** to cover core logistics

functions during public health emergencies including management, legal and regulatory issues, information and communication management, human resources, security, supply chain management, waste management, and termination of deployment/recovery.

Delivery of high quality clinical care is critical to minimize morbidity and mortality during any outbreak of an emerging disease. Clinical case management will focus on increasing ***availability of guidance and clinical expertise*** on emerging infectious diseases, especially during outbreaks, through rapid information-sharing with a clinical expert group, increasing access to a cadre of local clinicians trained in outbreak response and links to international support from the ***Global Outbreak Alert and Response Network (GOARN)***, and increasing the availability of clinical management guidance for emerging diseases when required.

Health care facilities should be prepared to cope with surges that occur during public health emergencies. Health care facilities preparedness and response will focus on strengthening the planning cycle for national public health emergency ***preparedness and response plans that detail the function of health care facilities*** and strengthening the national ***health care facility coordination mechanism*** to provide a comprehensive framework for responding to any emerging infectious disease outbreak and with the purview of moving towards building the capacity in health care facilities to respond to any public health event of international concern.

7. Regional Preparedness, Alert and Response

Threats to public health, such as emerging diseases, go beyond national borders. Global responses to the influenza A (H1N1) 2009 pandemic highlighted to Member States the importance of sharing information that is vital to monitor situations and assess risks. Effective regional collaboration relies upon systems established at the country level under APSED(2005). By building on existing momentum and making the most of technological advances this new focus area envisions developing more effective regional preparedness, alert and response. A ***regional technical hub*** will provide quality services in monitoring and alerting emerging diseases and acute public health emergencies, producing risk assessment products, supporting rapid response through enhanced global and regional networking and sharing relevant information.

Strengthening ***GOARN*** in the region will enhance technical support to Member States and the region as a whole for outbreak response and preparedness. The ***Western Pacific Surveillance and Response (WPSAR) journal*** will provide opportunities to build capacity through scientific writing training, and by using social networking and other IT developments.

8. Monitoring and Evaluation

Monitoring and Evaluation (M&E) is a new and unique APSED focus area. The Asia Pacific region will have a simple, practical M&E system at both country and regional levels to facilitate the planning and monitoring of programmes. The results of the M&E process will be used to

improve programmes related to Emerging Infectious diseases and Public Health Emergency programmes in line with IHR (2005) and APSED (2010).

The **highlight** of this focus area is the development of ***a national and regional planning and review process.*** This will ensure **harmonization between M&E and workplan** development (including ad-hoc project based plans) within the country, avoiding dissociation between the two thereby reducing planning workload. It also facilitates **country ownership** as the M&E process is firmly based on country workplan development, ensuring M&E will meet the needs of the country. It also enables countries to **coordinate actions with other countries** in Asia-Pacific, encouraging sharing of experiences and lessons learnt among them.

APSED (2010) WORKPLAN

FOCUS AREA 1: SURVEILLANCE, RISK ASSESSMENT AND RESPONSE

1. Vision *[what is to be seen in five years]*

Member States will promote their surveillance, risk assessment and response systems as examples of how timely and accurate information enables an evidence-based approach to decision making for public health action. This approach will ensure the optimal use of resources by matching the level of response to the risk to human health. Information from sub-national, national and whole of region sources will be readily accessible, accurate and provide a solid evidence-base for fast and proportionate responses to public health risk in the Asia Pacific region. By the end of five years:

- ***Risk assessment*** *will be fully documented and used for systematic analysis of available information for decision making at times of uncertainty, ensuring that responses match the risks to human health.*
- ***Timely indicator-based and event-based surveillance*** *will ensure Member States know about threats as soon as they happen both within their country, to local level, and throughout the Asia Pacific region. The information will be accurate, up-to date and available for answering the important questions arising during risk assessment and response activities.*
- ***Multi-agency co-ordination*** *for surveillance, risk assessment and response will be in place enabling all relevant sectors to become involved, sharing their data and expertise, to enhance health security in the country and region.*
- ***Field Epidemiology Training*** *will ensure strengthened capacity in surveillance, risk assessment and response with graduates playing a key role in the public health system.*
- ***A region-wide surveillance system*** *will allow Member States to regularly share their data on priority emerging diseases for control and policy development (link with Focus Area 7).*

2. Stages *[describe the stages in moving from the current status to the Vision]*

Component 1.1: Linking and sharing for public health security

This is a cross-cutting, multi-stage component that will ensure links within components of focus area 1 , links with other APSED focus areas (e.g. zoonoses, laboratories, risk communication and regional preparedness, alert and response) and links between sectors within Member States (e.g. human health, animal health and food safety; national and local government). The key capacities of surveillance, risk assessment and response will be linked within a national surveillance system for optimum coordination.

Component 1.2: Indicator-based surveillance (IBS) – implementing an information centre for action and policy through reliable, systematic and linked data

Retrieving timely, representative and accurate information from IBS systems is currently a challenge for many Member States. Within this component, five stages of progression have been developed to help Member States move towards the goal of a reliable, systematic linked IBS system. Stage 1 will see the design of a population and geographically representative system for IBS. Stage 2 will involve the development of an IT system and deciding on report protocols. In stage 3 a skilled workforce will be built whilst trialling links between sub-national and national facilities. Stage 4 will see the launch of the networked system and regional sharing of the networked data outputs will assist with providing information for preventative action securing health outcomes for all Member States. Finally, the system will be adjusted for smooth operation.

Component 1.3: Event-based surveillance (EBS) – improving sensitive, rapid event-specific information

Since the start of APSED, detection of events using EBS has become common place, however, documentation and electronic archiving are, as yet, unmet challenges. Ensuring the optimal sensitivity and specificity for a sustainable EBS requires documenting, retrieval and review of evidence over time. Stage 1 will see the documentation of the reasons for event reporting and archiving outcomes as a day to day activity of rumour surveillance officers. In stage 2 the scope of EBS will be expanded to an all hazards notification system with appropriate links to rapid response teams and field epidemiology fellows an ongoing function of the EBS system.

Component 1.4: Risk assessment capacity – providing defensible decisions for action and communication

Three stages of progression towards a documented systematic risk assessment have been developed. In stage 1 people and opportunities to undertake risk assessments will be identified while adapting available training material to meet local needs. Stage 2 will see the further development of human capacity through training and the establishment of a mechanism to access appropriate expertise. Stage 3 will link to the launch of the IBS system (component 1.2, stage 4) and will see the IBS data analysed using a risk assessment approach to assist the response and management of identified diseases. Sharing of information on in-country vulnerabilities and accessing regional expertise for assessing risk will strengthen the system over time.

Components 1.5 and 1.6: Rapid response capacity and Field Epidemiology Training (FET) – enhancing capacity for surveillance, risk assessment, effective response and containment.

Continuing development (stages 1 and 2) of human technical capacity is necessary to fulfil needs in the surveillance and response teams. This will be achieved through recruitment of quality candidates for training and linking both FET and rapid response teams (RRT) with each other and the GOARN network. Sustainability of the FET will be achieved through aligning FET with the National Surveillance system and strengthening regional links will enhance in-country networking capabilities.

3. Components *[list the components of the focus area]*

- Linking and sharing for public health security
- Indicator-based surveillance (IBS)
- Event-based surveillance (EBS)
- Risk assessment capacity
- Rapid response capacity
- Field Epidemiology Training

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1	**Indicator based surveillance** • Consultation for IBS achieved **Risk assessment** • Risk assessment function allocated to a person or area within the Ministry of Health
Year 2	**Indicator based surveillance** • Protocol developed for IBS system **Risk assessment** • Documented risk assessment for event reporting from EBS is undertaken by surveillance team on a day-to-day basis
Year 3	**Indicator based surveillance** • IT system to support the capture, archiving and reporting of IBS data constructed **Risk assessment** • A mechanism for accessing technical expertise for risk assessments established
Year 4	**Indicator based surveillance** • System users are trained in operational requirement at national and sub-national levels **Event based surveillance** • EBS platform expanded beyond infectious and unknown diseases
Year 5	**Indicator based surveillance** • Upgraded IBS system launched nationwide **Risk assessment** • In-country capacities of health sector and population vulnerabilities identified and documented • Risk assessment used to inform proportional IBS response and review of policy implementation

5. Activities *[for each component, list priority activities according to the stage of implementation]*				
Component	**Multi-stage**			
1.1 Cross-cutting	• Formalize National Surveillance system (including policy and people) to undertake EBS and IBS with capacity to conduct risk assessment. Ensure appropriate expertise and links to FET • Seek out linkages to other focus areas, within Member State sectors and between levels of government • Seek out opportunities to harmonize data links across the Asia Pacific region where possible			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**	**Stage 4 Activities**
1.2 Indicator-based surveillance	• Develop a work plan for a representative IBS system through: o Identifying population and geographically representativ surveillance sites o Identifying prioritized disease/syndrome for IBS at national level (e.g. influenza, dengue, HFMD, or acute watery diarrhoea) o Understanding what information is needed for what purpose (e.g. data for gender analysis) • Link sentinel laboratories into IBS system similar to current influenza combined platform	• Construct IT system that will support the data capture, archiving and reporting for IBS diseases • Continue critical updates of current IBS system	• Train a skilled workforce for operational requirements at national and sub-national levels • Link sub-national IBS sites to national level for prioritized diseases • Trial IT system links from sub-national to national level	• Launch upgraded IBS nationwide • Make adjustments to system to ensure smooth networking operations occurring in a timely manner • Harmonise IBS system to Western Pacific Regional level to provide information that can be used for rapid preventive action in times of hazard threats that can spread within the Asia Pacific region

Component	Stage 1 Activities	Stage 2 Activities
1.3 Event-based surveillance	• Document reasons associated with assessing the risk to public health events reported • Computer-based archiving of events notified	• Expand EBS platform to all hazard reporting

Component	Stage 1 Activities	Stage 2 Activities	Stage 3 Activities
1.4 Risk assessment capacity for all hazard acute public health events	• Identify an area and person/people where risk assessment is allocated in the Ministry of Health • Identify opportunities and undertake risk assessments with technical assistance from WHO • Develop tools and methods for risk assessment • Adapt regional risk assessment methods for local needs	• Develop capacity and undertake documented risk assessment for event reporting from EBS on day-to day basis in surveillance teams. • Develop capacity for rapid risk assessment for all hazard acute public health events at surveillance team and National Coordination Committee level • Establish a mechanism for accessing technical expertise for risk assessments	• Apply risk assessment to IBS for proportional response and reviewing policy implementation • Evaluate and review the use of risk assessment, through regional interactions. • Identify and document in-country capacities of health sector or population (such as nutritional status and socio-economic status) that increase or decrease the adverse impact that a hazard may have on public health

Component	Stage 1 Activities	Stage 2 Activities
1.5 Rapid response capacity	• Improve rapid response capacity at national and sub-national level, particularly through links with FET and logistics • Document when additional support and assistance from GOARN is required	• Provide quality improvement of rapid response capacity through: o Reviewing how many times RRTs were deployed, their successes and problems they encountered, as well as solutions to those problems o Sharing of information through publication in national, regional and international journals

Component	Stage 1 Activities	Stage 2 Activities
1.6 FET	• Seek quality candidates to continue training of field epidemiologists. • Ensure periodic review of level, sector, number and expected competencies for FET graduates depending on changing environment • Align and further link FET programs and functions with o The National Surveillance Team o Developments occurring in surveillance, risk assessment and response areas	• Review core capacity of field epidemiologists within Member State and assign graduates to areas appropriate for their competencies • Strengthen regional network of field epidemiologist through o FETP Fellowship Training Program, Annual Forum o Co-ordinating with other FETP related networks (e.g., ASEAN FETP-N, TEPHINET) o GOARN related activities o Communication and exchange between FET programs o Publishing outputs in regional journal • Add more advanced training modules for modified FET

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*

- Conduct informal consultation to develop general protocol for upgrading IBS
- Conduct regional meeting to develop SOPs following discussion at informal consultation
- Develop national documentation system for event-based surveillance public health events
- Identify opportunities to undertake risk assessment for screening events and rapid assessments for public health events
- Develop materials and undertake risk assessment training courses at national and sub-national levels
- Ensure linkages between rapid response teams and field epidemiology trained people
- Conduct annual forum on Field Epidemiology Training

FOCUS AREA 2: LABORATORIES

1. Vision *[what is to be seen in five years]*

All Member States will have laboratory capacity for the early detection and response to known pathogens or hazards and capacity for the early identification and response to unknown /novel pathogens or hazards. By the end of five years,

- ***Public health diagnostic laboratories*** *in Member States will have a central role in surveillance and outbreak response and will be capable of detecting known pathogens*
- ***National reference laboratories*** *will support public health diagnostic laboratories in the identification of unknown pathogens and will support capacity building in terms of biosafety and quality assurance*
- ***Regional reference laboratories network*** *will support national reference laboratories in the identification of unknown pathogens and during the regional outbreak response*

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Public health diagnostic laboratories role in surveillance and response defined

Laboratories play a key role in the early detection of and outbreak response to emerging diseases. Most countries in the region have some form of public health laboratory supporting public health services, but this is often fragmented and compartmentalized. Laboratory capacity also varies within and between countries. Not all of these laboratories are currently engaged in early identification and participation in the outbreak response for known and unknown pathogens. In this stage, laboratory diagnosis must support public health surveillance and response. The model proposed is one where public health diagnostic laboratories may exist at the sub national and national levels supported by a national or regional public health reference laboratory system.

Stage 2: Ensuring safe and accurate diagnosis

Laboratory diagnosis must be made in an environment where safe laboratory practices and quality assurance are ensured through the strengthening of the national laboratory biosafety programme and national and international external quality assurance (EQA) programmes. If a country has a national reference laboratory this laboratory will support the capacity building of in-country laboratories in biosafety and quality assurance. A national network will exist. If countries do not have a national reference laboratory this function will be provided by the regional laboratory network.

Stage 3: Identifying unknown pathogens

In order to comply with IHR (2005), Member States should have capacity to early detect pathogens that may lead to an event of national or international concern. If a national reference laboratory system is present in-country, this will be linked to a regional network of reference laboratories. In countries without a national reference laboratory, their diagnostic laboratories will be supported by the regional network. At this Stage, the diagnostic laboratory is able to use a multiple panel of reagents and methods to identify known pathogens after which the isolates are sent to reference laboratories for further identification and characterization. Reference laboratories are needed to identify novel pathogens. National, regional and global networks are the key to supporting public health surveillance and response functions.

3. Components
• Public heath diagnostic laboratories enhanced • National/regional networks support safe and accurate diagnosis • Regional coordination and laboratory networking

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1	• Guide on establishing a public health diagnostic laboratory developed
Year 2	• EQA mechanism for dengue established
Year 3	• Public health diagnostic laboratories established
Year 5	• Functional exercise to test public health laboratory system

5. Activities *[for each component, list priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Public health diagnostic laboratories enhanced	• Develop a guide for establishing public health diagnostic laboratories • Make laboratory diagnosis part of the outbreak investigation • Facilitate the participation of laboratory personnel in GOARN trainings	• Develop national level biosafety capacity • Define roles of laboratories within network including international reference laboratories • Select certain diseases including dengue to develop EQA at the national level	• Develop data management tools and standardized reporting formats to incorporate laboratory findings into indicator based surveillance • Develop sub national level biosafety capacity • Enhance drug resistance surveillance
National /regional network supports safe and accurate diagnosis	• Form a National Steering Committee o Establish inventory/ profile of labs to be included in network o Establish national laboratory standards o Establish roles and responsibilities of network members	• Establish a system for referral of specimens /pathogens • Identify sources of technical support for priority disease diagnosis • Establish EQA for dengue and other selected diseases	• Maintain EQA and expand the disease list • Test the EQA for selected diseases through a regional exercise
	• Identify a regional coordinating mechanism o Identify existing reference laboratories (ASEAN+3, disease-specific, animal health, unknown diseases)	• Establish roles and responsibilities of reference laboratories within the network • Establish referral system, communication and data flow for all networks	• Involve non infectious disease laboratories in the national and regional networks to improve detection and response for all public health threats

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Develop guide on establishing public health diagnostic laboratories through the formation of a technical working group • Initiate the development of in-country and regional networks through participation in regional meetings/workshops on laboratory networking which will include animal – human health collaboration • Support biosafety practices and timely diagnosis by allowing the participation of laboratory personnel in trainings on specimen collection, packaging and referral • Support laboratory support to surveillance and response by facilitating the participation of laboratory personnel in GOARN trainings

FOCUS AREA 3: ZOONOSES

1. Vision

Member States will have a functional coordination mechanism for zoonotic diseases that will enable sharing of surveillance information, coordinated risk assessment and response and development of risk reduction strategies. By the end of five years,

- ***A functional coordination*** *mechanism within Member States will be effective in bringing together appropriate stakeholders at all levels within a country. Through this mechanism, the stakeholders will have shared surveillance information and other data, assessed information, responded to emergency situations and developed longer term risk reduction strategies for selected priority zoonotic diseases.*
- ***Development of longer–term risk reduction strategies*** *using an evidence-based collaborative approach to systematically reduce the extent of exposure to a zoonotic risk and/or the likelihood of its occurrence. This approach ensures control measures are effective, directed towards areas where the most impact is likely and the impact of the controls are evaluated and improved as necessary. The use of the coordination mechanism to facilitate the development of risk reduction strategies ensures an effective, coordinated and integrated approach across the relevant sectors. Research supports this approach.*
- ***Regional support*** *will be available to facilitate the sharing of good practices and to assist in the identification, assessment and response to zoonotic outbreaks and also in the development and implementation of risk reduction strategies.*

2. Components

Component 1: Establish an effective coordination mechanisms

The development of coordination mechanisms between relevant sectors (e.g. animal and human health sectors, environmental, food safety authorities, wildlife management authorities, border quarantine services and environmental health personnel) at all levels (sub-national, national, regional) is critical in the effective management of zoonotic related events and for the development of longer term risk reduction strategies. The added value of a coordination mechanism include i) reduced time to obtain information for a coordinated response, ii) forum for data sharing, discussion, risk assessment and risk reduction strategy development and implementation iii) formalized channel of communication, and iv) respect and understanding of each others roles and functions.

Component 2: Systematic and multisectoral approach to developing and implementing risk reduction strategies for zoonoses

Internationally, good practises towards the control of zoonoses advocate the importance of controls being based on risk and underline the importance of control at the source of origin. This approach ensures control measures are effective, directed towards areas where the most impact is likely and the impact of the controls are evaluated and improved as necessary. The use of the coordination mechanism to facilitate the development of risk reduction strategies ensures a coordinated and integrated approach across the relevant sectors.

Component 3: Research to support outbreak procedures and risk reduction strategies

Outbreak responses require well developed reference points so that outbreaks can be better identified and assessed and information on the effectiveness of response options facilitates effective management of an outbreak. Also the development and implementation of risk reduction strategies requires the availability of evidence to base the programme on and to evaluate the impact of the controls.

Component 4: Regional technical support to assist in the management of zoonotic events and to facilitate sharing of good practises and experiences

Given communicable diseases do not respect boundaries, global health security is reliant on capacity in all countries and areas to be in place to be able to effectively manage zoonotic events originating at the human-animal interface. While such capacity is being developed, it is important to support the management in zoonotic events through provision of expertise and guidelines. Additionally, capacity is required to assist in the risk assessment process for acute public health events of international concern, at a regional level. Furthermore, a regional mechanism will be established to guide and facilitate information sharing in the development and implementation of risk reduction strategies (including sharing of good practices).

3. Key Milestones	
Year 1	• Coordination mechanisms at all levels (sub-national national and regional) established and/or strengthened for zoonoses outbreaks and for coordinating multi-sectoral risk-reduction strategies.
Year 2	• Regional guidance on a systematic approach to planning and implementing risk reduction strategies for zoonoses developed
Year 3	• Risk reduction strategies implemented
Year 5	• Impact of risk reduction strategies evaluated

4. Activities			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Coordination between relevant sectors at all levels	• Establish or strengthen coordination mechanism at all levels (sub-national, national, and regional) • Establish arrangements to share and assess (epidemiology and laboratory) surveillance data • Development of legislation or policy documents to define the roles of different government departments in preventing and responding to a zoonotic outbreak • Develop standard operating procedures to assist regional surveillance team with assessing zoonotic outbreaks	• Conduct national and sub-national workshop to strengthen coordination mechanism • Conduct training to build capacity to implement outbreak response in line with SOP at national and sub-national levels	• Conduct simulation exercises to test coordinated response at national & sub- national levels and to refine and improve systems
Risk reduction	• Document current risk reduction strategies in place for zoonoses • Identify and agree on priority zoonoses requiring other risk reduction strategies	• Develop regional guidance on a systematic approach to planning and implementing risk reduction strategies for zoonoses • Develop risk reduction strategies for priority zoonoses • Develop primary production food standards (food legislation defining actions required on farm and during processing) in accordance with international standards and guidance	• Provide technical support for risk reduction programme implementation and monitoring in countries • Training to build capacity to implement risk reduction strategies at national and sub-national levels • Implementation and evaluation of risk reduction strategies • Workshops to share information, experiences and best practices
Research	• Review scientific evidence regarding zoonoses • Develop priority research areas and mechanism for multisectoral collaboration on zoonoses research	• Begin collaborative research in at least one priority zoonoses area • Develop regional guidance to support national research activities	• Collaborative research on zoonoses is incorporated into everyday activities and workplans • Research output is disseminated through all sectors across the region

5. Key Activities for the coming one year
• Implement/strengthen an effective coordination mechanism • Advocate the coordination mechanism at all levels (sub-national, national and regional) • Agree on priority zoonoses for surveillance information exchange • Identify and agree on priority zoonoses for multisectoral action • Support operational research to generate evidence based information and to improve public health intervention techniques • Document and review current risk-reduction strategies in place • Organize annual workshops to share good practices, experiences and research findings

FOCUS AREA 4: INFECTION PREVENTION AND CONTROL

1. Vision *[what is to be seen in five years]*

In Member States infection prevention and control (IPC) will be an integral part of the health care system and a national IPC resource centre will support health care facilities with strengthened routine IPC practices and IPC practices during outbreaks.

- ***A National Infection Prevention and Control Resource Centre*** *provides ongoing IPC guidance and training for health care workers, and ensures the availability of appropriate guidelines.*
- ***An established organizational structure for national Infection Prevention and Control programmes*** *ensures IPC is a well organized, integral part of the health care system and supports the function of the IPC resource centre.*
- ***Technical guidelines and policies*** *ensure health care workers have access to the information they need to implement and support IPC practices.*

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Organization and Guidance

A national functional organizational structure to support and implement an IPC programme (eg. national multidisciplinary IPC committee) will be developed. IPC focal points in targeted health facilities will be identified. Country-specific national IPC policies and technical guidelines will be developed.

Stage 2: Structure and Roll Out

A national IPC resource centre will be established and IPC policy and guidance will be rolled out to selected facilities nationwide.

Stage 3: Integration

IPC will be fully integrated into health systems and part of routine activity for health workers.

3. Components *[list the components of the focus area]*
• Organizational structure of national IPC programmes • IPC policy and technical guidelines

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1	• National oversight structure of IPC programme developed (e.g. a national multidisciplinary IPC committee)
Year 2	• National IPC resource centre established
Year 5	• IPC policy rolled out to selected health facilities at national and sub-national levels

5. Activities *[for each component, list priority activities according to the stage of implementation]*

Component	Stage 1 Activities	Stage 2 Activities	Stage 3 Activities
Organizational structure of national IPC programmes	• Develop national functional organizational structure of IPC programme (eg. national multidisciplinary IPC committee) • Designate and define roles and responsibilities of IPC focal points	• Establish a national IPC resource centre	• Review the organizational structure and revise to be a sustainable part of the health system
IPC policy and technical guidelines	• Develop national IPC policy and technical guidance for in service training • Develop regional IPC curriculum for pre-service training for nurses and midwives	• Develop regional SOPs for outbreak investigation in hospital settings	• Develop protocols for nosocomial surveillance

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Develop terms of reference for a national multidisciplinary IPC committee • Develop national IPC guidance document and training package • Develop training packages for outbreak response • Develop terms of reference for the national IPC resource centre • Conduct training for staff that will run the national IPC resource centre • Support study tour to WHO collaborating centre for IPC

FOCUS AREA 5: RISK COMMUNICATIONS

1. Vision *[what is to be seen in five years]*

A functional mechanism/structure/team that will allow risk communications to respond effectively to health emergencies is institutionalised within the ministry of health. Sustainable and long-term risk communications plans will be implemented using an integrated multi-hazards approach. The ministry of health will have the capacity to engage the media, public and relevant stakeholders in sharing information in a timely and transparent manner during public health emergencies and as part of its ongoing social mobilization programmes. By the end of five years,

- ***The risk communications team*** *will work closely with risk assessment, surveillance and response, as well as with relevant sectors for proactive and coordinated risk communications for both prevention and response measures.*
- ***A strong link between health emergency communications, operation communications and behaviour change communications*** *will ensure these three components are integrated as part of overall preparedness and response plans, health emergency communication will remain the focus for public health emergencies.*
- ***Sustainable risk communications strategies*** *will be implemented and will take into account the use of both traditional and evolving new media approaches to maximise audience reach.*

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Enhancing structural arrangements and coordination for risk communications

A sustainable health emergency communications system that integrates operation communications and behaviour change communications will be established and functional. A communications team will be operational within the national health emergency unit to advocate for integrated risk communications capacity development while linkages with other sectors and stakeholders are established. Feedback channels will be established to understand public perception of messages and standard operating procedures (SOPs) will be developed, tested and regularly updated. A coordination arrangement will be established between the health promotion units and other stakeholders both for public health emergency and long-term social mobilization strategies.

Stage 2: System integration and institutionalisation of risk communications

A system that provides an interface between risk assessment and risk communications during health emergencies will be functional and effective. The risk communications team will work closely with surveillance, risk assessment and response and provides advice on the relevant actions for both prevention and response. SOPs for media response, monitoring and analysis and formulation of health messages will take into account the result of risk assessment. Challenges, lessons and best practices from past health emergencies will be identified and documented and strategies will be developed to address those challenges.

3. Components *[list the components of the focus area]*
• Health emergency communications – timely and transparent communications during a public health emergency is the main component under the focus area • Operation communications –timely information sharing among relevant stakeholders to enable decision-making and coordinated response in a public health events • Behaviour-change communications – health promotion programmes for prevention and control of emerging diseases and other public health threats

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1	• Focal points and teams for risk communications are identified • Functional regional risk communication network organized
Year 3	• Public health emergency communication structure/mechanism established • Appropriate SOPs for risk communications and media response, monitoring and analysis developed
Year 5	• Member states apply risk communications during public health events and use its SOPs and mechanisms for its communication needs

Component	Stage 1 Activities	Stage 2 Activities
Health emergency communications Operation communications	• Synthsize lessons learnt, best practices and challenges from previous health emergencies (regional and country-level) based on a systematic review of risk communications systems • Identify and sustain a communications team comprising of the three components of risk communications for capacity development advocacy • Identify and train trusted professional experts as spokespeople and provided an important role in the incident response structure, rather than just viewing it as an add on. • Develop health emergency communications structure and appropriate SOPs for media response, monitoring and analysis • Identify other communications technologies for risk communications (e.g. social media, mobile communications, etc.) • Establish and maintain formal linkages with relevant stakeholders that would be involved in a public health emergency • Document and share best practices and lessons learnt on risk communications through regional or national workshops • Train emergency communications trainers • Hold regional and national level advocacy workshops and meetings for risk communications	• Conduct joint workshops with the risk assessment, surveillance and communications teams to establish/strengthen linkages • Develop, test and evaluate health emergency communications structure and appropriate SOPs and linkages with appropriate surveillance and risk assessment units within Ministry of Health • Hold regional/national level meetings with other United Nations agencies and international organizations to strengthen advocacy for risk communications • Conduct skills training programme for risk communicators and other personnel such as spokesperson(s), surveillance, risk assessment and response officers • Operationalisation of a sustainable multi-hazards risk communications plans
Behaviour-change communications	• Establish and/or strengthen mechanisms and coordination to engage behaviour-change communications units during acute health emergency event and for ongoing and longer-term social mobilization strategies.	• Test and evaluate these mechanisms to engage behaviour-change communications units during acute health emergency event for further refinement

5. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Synthesis of lessons learned from past emergencies • Development of structure (mechanism, teams, focal points, etc.) • Organisation of a functional regional risk communication network • Development of SOPs based on real-life events • Skills training on risk communications

FOCUS AREA 6.1: PUBLIC HEALTH EMERGENCY PLANNING

1. Vision *[what is to be seen in five years]*

Member States in the Asia Pacific region will have an overarching, flexible national public health emergency preparedness and response plan (PHEP) and a national command, control and coordination structure for health response that is supported by a functional emergency operation centre (EOC) within the health sector, to effectively respond to all acute public health emergencies of national and international concern, including an influenza pandemic.

- **One Plan:** each country will have an overarching PHEP within the health sector (e.g. the ministry of health) that will
  - be developed building on the foundation of the pandemic influenza preparedness and response plan, the experiences and lessons learnt from pandemic (H1N1) 2009 and other events
  - describe the command, control and coordination structure of the public health emergency response and outline policies, personnel roles and responsibilities, and SOPs that will be integrated into this uniform structure
  - provide a common framework within which staff from all relevant divisions and offices within the ministry of health can work and coordinate activities during an emergency response situation, including a common platform for response operation through an equipped EOC within the ministry of health
  - describe the functions of all emergency response related facilities and equipment to be used during the emergency response efforts
  - contain (either as chapters or appendices) the disease or hazard specific preparedness and response plans (including an updated national pandemic influenza preparedness and response plan and the food safety emergency response plan)
  - link with the national disaster response plan (e.g. the health sector is part of the national command, control and coordination structure used in the national disaster plan)

- **Emergency Operation Centre (EOC):** each country will have a national command, control and coordination structure in place for public health emergency response is supported by a functional EOC within the ministry of health.

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Revising the pandemic influenza preparedness and response plan

The pandemic influenza threat continues to persist. Member States and the international community need to continue their efforts in strengthening pandemic influenza preparedness and response. This includes the revision, exercise and maintenance of the national pandemic preparedness and response plan building on the lessons learned from pandemic (H1N1) 2009.

Stage 2: Developing a generic public health emergency preparedness and response plan (PHEP)

The foundations laid for pandemic influenza preparedness and response over the past years are vital to public health emergency response for other emerging infectious diseases (EID) and acute public health events. Generic elements or components that are common for EIDs and public health emergency response will be identified and used as a basis to develop a PHEP and strengthen the national command, control and coordination structure for health response, supported by a common platform for health emergency response operation (i.e. a functional EOC within the heath sector). Other disease/hazard specific plans can also be developed to guide special preparedness and response in connection with the PHEP and depending on country specific needs.

Stage 3: Testing and maintaining the PHEP and EOC

It is vital to ensure the public health emergency preparedness and response plan together with disease/hazard specific plans are relevant and up-to-date. Regular exercises have proved to be useful in building working relationships with stakeholders, and to update and maintain the PHEP. The plan itself is not enough for effective public health emergency response. Testing and maintenance of the command, control and coordination structure and EOC is an important complement of the overall preparedness for response to all acute public health emergencies.

3. Components *[list the components of the focus area]*
• Plan development, exercise and revision • National command, control and coordination structure supported by an EOC within the ministry of health

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 2	• National pandemic influenza response plan revised building on the lesson learnt from pandemic (H1N1) 2009
Year 3	• An EOC established within the ministry of health. With relevant EOC facilities in place, EOC functions will be strengthened to support public health emergency response operations.
Year 5	• A national PHEP developed

5. Activities *[for each component, list priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Plan development, exercise and revision	• Review lessons learnt from pandemic (H1N1) 2009 • Revise the National Pandemic Influenza Preparedness and Response Plan • Improve and maintain regional preparedness for pandemic response including regional stockpiles • Conduct exercise to test National Pandemic Influenza Preparedness and Response Plan and regional preparedness, including rapid containment exercise	• Building on the foundation of National Pandemic Influenza Preparedness and Response Plan, identify common or generic components of emergency response that will be used for development of a generic plan for all EID and/or public health emergencies • Develop WHO guide on public health emergency planning , building on the experiences and lessons learnt from pandemic and other public health emergency response • Develop an overcharging PHEP that is flexible and will be used to support emergency response to all EIDs and acute public health events	• Test, revise and maintain the PHEP • Develop other disease/hazard specific plans, as needed (in additional to the pandemic influenza preparedness and response plan)
National command, control and coordination structure and EOC	• Review the existing national system and organizational structure related to pandemic response • Develop a guide on setting up an EOC within the health sector (e.g. ministry of health) • Establish the national command, control and coordination structures (e.g. using an Incident Command System as a tool, as needed) and building the foundation of the pandemic response	• Develop a national decision-making mechanism including the establishment of a National Coordination Committee for public health emergency response with terms of reference clearly defined • Establish an EOC within the ministry of health that will support all the response functions • Develop relevant operational guidelines and SOPs for public health emergency response (e.g. operation communication, logistic functions in relation to public health emergency response) • Develop mechanism for multisectoral response as needed.	• Train and brief staff roles in emergency response (especially role and procedures) • Test and exercise the PHEP and EOC • Improve and maintain the PHEP and EOC functions, including updated contacts, task folders, and SOPs • Share and document country experiences in PHEP

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*

- Revise and test the national pandemic influenza preparedness and response plan to incorporate the lessons learnt from pandemic (H1N1) 2009, taking into consideration the IHR Review Committee recommendations and any updated WHO guidance
- Conduct national and regional level exercises (including "PANSTOP" exercise) to test national plans and regional response
- Organize informal consultation on PHEP building on the foundation laid out through the pandemic influenza preparedness and response
- Develop a guide document on setting up a functional EOC

FOCUS AREA 6.2: NATIONAL IHR FOCAL POINT FUNCTIONS

1. Vision *[what is to be seen in five years]*

The National IHR Focal Point (NFP) will serve as ***an authorized national office*** within the health sector to communicate disease/event information especially with respect to responses to acute public health events and emergencies in a timely and consistent matter, including both responses carried out with national resources within the country as well as those carried out with other countries and/or international partners such as WHO. As part of the national public health emergency management structure, the NFP is ***identified and equipped*** as a critical centre to connect national surveillance unit(s), senior health officials, relevant government ministries/departments, WHO and NFPs in other countries for ***the communication of information related*** to public health events (such as situation reports, briefing notes, major announcements or decisions nationally and internationally, Event Information Site posting). Such communication from NFPs will provide an essential contribution to timely risk assessment for critical national and international decisions for public health emergency response and for situation monitoring.

By the end of five years, the NFP will:

- *have a senior responsible officer responsible for timely decision on IHR event communications, including information related to all acute public health events and emergencies of national and international concern. Through the senior responsible officer, the NFP will have an access to senior national decision makers;*
- *have the necessary authority and be in an appropriate position to request, verify and consolidate event related information from and send to relevant departments/agencies and WHO in a timely, consistent matter;*
- *be equipped with trained staff competent in managing day-to-day operational aspects of the NFP functions on a 24/7 basis (both technically and with required language skills e.g. English);*
- *be part of the national public health emergency command and response structure and have the authority to support regional mechanisms and networks to facilitate rapid sharing of information and participate in joint risk assessments with WHO, wherever needed, especially at the early stage of a public health emergency of international concern under IHR (2005)*

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Updating the Terms of Reference of the NFP and connecting NFPs

The experiences and lessons learnt from past public health events, especially pandemic (H1N1) 2009 and IHR exercises, clearly demonstrated the value, crucial role and some challenges faced by the National IHR Focal Points in facilitating event communications as required under the IHR (2005). The recently concluded IHR Review Committee recommends that States Parties should ensure that designated National IHR Focal Points have the authority, resources, procedures, knowledge and training to communicate with all levels of their governments and on behalf of their governments as necessary. To move this forward, it is vital to update the terms of reference of the NFP to guide future efforts in strengthening NFP functions. The NFPs will be connected through scenario-based regional exercises and real event communications such as information sharing.

Stage 2: Strengthening and maintaining functions of the National IHR Focal Points and the WHO IHR Contact Point

Functions of both National IHR Focal Points and the WHO IHR Contact Point will be further strengthened and tested to ensure smooth IHR event communications on a routine basis and during a public health emergency of international concern. They include ensuring functional communication facilities (i.e. generic email, mobile and fax) that are truly accessible 24/7, updated SOPs and regular training/briefing in place that guides NFP and WHO staff to facilitate IHR communications within the country and internationally, including Event Information Site postings. Regular exercises at the country and regional levels will be conducted to test IHR event communications and recommend actions for the maintenance and enhancement of the functions of the National IHR Focal Points and the WHO IHR Contact Points.

Stage 3: Enhancing NFP networking

As a consequence of enhanced interaction between the NFPs and the WHO IHR Contact Points, countries will also be connected to each other in a more easy and timely manner. Information related to acute public health events and emergencies will be more accessible for risk assessments that inform public health decisions in all countries as well as by international organisations.

3. Components *[list the components of the focus area]*
• IHR event communications • IHR implementation monitoring

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 2	• NFP operating procedures for communications with relevant national group and WHO on acute public heath events developed/updated
Year 3	• The Terms of References for the NFPs updated
Year 5	• NFP is part of the national public health event/emergency management group, where appropriate
Years 1 to 5	• Regional exercise (“IHR Exercise Crystal”) to test and maintain the functions of NFPs and the WHO IHR Contact Point to connect NFPs

5. Activities *[for each component, list priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
IHR event communications	• Review and summarize experiences and lessons learnt from the past events, including pandemic (H1N1) 2009, and the IHR communication exercises • Update the terms of reference for the NFP, where appropriate	• Develop or update internal mechanism and operating procedures for multiagency communication on acute public health event • Establish and implement a national mechanism for application of the IHR decision instrument • Strengthen the NFP capacity through training for NFP staff (e.g. training duty officers on IHR event communications (reporting, notification, verification and information sharing etc) • Make real event communications and facilitate EIS postings • Facilitate joint ministry of health-WHO risk assessments (e.g. through teleconference and other means of communications), when required • Conduct regular exercise to test IHR event communications	• Conduct regional-wide exercise on IHR event communications • Document and share IHR event communications and achievements in the region
IHR implementation monitoring	• Facilitate annual State Parties' reporting using the IHR monitoring tool (e.g. through participation and utilization of the national and regional planning and review process on APSED (2010) implementation) • Advocate IHR (2005) requirements, where appropriate		

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Discuss and update (when possible) NFP terms of reference, building on the experiences and lessons learnt from past events, especially pandemic influenza and incorporating the IHR Review Committee recommendation • Conduct and participate in the IHR Exercise Crystal 2011 (1-3 December 2011) • Brief and train NFP staff on IHR requirements and operating procedures for event communications within the country and with WHO, including application of the IHR Decision Instrument and the use of Event Information Site to facilitate information sharing. • Facilitate the 2012 IHR State Parties report (before the TAG meeting e.g. by end of June 2012)

FOCUS AREA 6.3: POINTS OF ENTRY PREPAREDNESS

1. Vision *[what is to be seen in five years]*

As part of the overall national and regional public health emergency preparedness and response system(s) points of entry (POE), in particular designated international airport(s) and port(s), in all Member States of the Asia Pacific region are better prepared for and capable of appropriate response to potential or declared public health emergencies of international concern (PHEIC) in line with IHR (2005). By the end of five years,

- ***The POE national public health authority*** will be equipped and recognised as a technically competent authority to assess overall POE health situations and advise on public health emergency response at POE.
- ***The POE public health authority*** will ensure smooth communication and operational links with senior health officials, local competency authorities at each POE, the National IHR Focal Point, the Emerging Infectious Disease (EID) programme manager (if different), conveyance operators, service providers and other relevant agencies at the national and international level (including WHO).
- ***A balanced decision-making mechanism using risk assessment information*** will be developed and used to inform (activate/deactivate) public health interventions at international borders (in particular designated international airports and ports). Response to public health emergencies is viewed as more evidence-based, and consistent with other countries in the region and globally.
- ***A public heath emergency contingency plan*** will be developed and in place for all the designated international airports and ports. Such a public heath emergency contingency plan will remain flexible and have clear links with relevant local and national EID response and/or public health emergency plans (PHEP).
- ***Routine public health measures*** are in place according to updated national guidelines that are consistent with international guidelines.
- ***Operational links with WHO*** will facilitate early information sharing, joint risk assessments among countries and advise more evidence-based, consistent public health measures at POE in the region during a potential or real PHEIC in line with IHR (2005)
- ***POE public health authorities will be connected*** through an established regional mechanism and actively participate in regional information sharing, joint risk assessments that will inform appropriate POE public health response. POEs among countries can also be connected and communicated with each other during an urgent situation such as passenger contact tracking, when required.

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Promoting new role of POE in line with the IHR (2005)

POE have a new role to play under the new IHR. Historically, POE played an important role in preventing or stopping entry of *three quarantinable diseases* (yellow fever, plague and cholera) through main measures such as vaccination, isolation and quarantine. However, in this highly interconnected and changing world, with much faster means of transportation and increasing international travel and trade, POE will have a very unique, adaptable role to play in preparing for and responding to various ranges of acute public health events and emergencies of national and international concern. Such role will focus on not only "***entry",*** but also ***"exit"*** controls***,*** when required, depending on the nature and assessed risk of public health events. To ensure better understanding about the paradigm shift of the IHR (2005) and its related POE role, simple advocacy materials with a few key messages on the new role of POE in public health emergency preparedness and response will be developed and disseminated at the country and regional levels.

Stage 2: Preparing for and responding to public heath emergencies

As part of the overall national and regional public health emergency preparedness and response system(s), POE especially designated international airport(s) and port(s) in Member States will be better prepared for appropriate or proportional response to any future public health emergencies of international concern (PHEIC) in line with IHR (2005). To achieve this, a POE national public health authority (with a designated POE National Coordinator) will be identified with updated terms of reference in place. Countries will prioritize POE designation and then ensure the IHR core capacities are met. The WHO guide on public health emergency planning at POE will be developed and used by Member States to develop a ***public health emergency contingency plan*** for the designated international airport(s) and seaport(s). An Incident Command System and emergency operational centre (EOC) will be established or in place to facilitate emergency response operation at designated POE. Practical arrangements will be made in advance on the provision of and access to various medical and public health services (e.g. passengers screening, medical assessment, treatment, diagnosis, transport of ill travellers, isolation and quarantine, and control measures such as disinfections and decontamination etc).

Stage 3: Building a regional mechanism and connecting POE

POE are much more interconnected and interactive than ever before. This means that acute public health security threats, especially those caused by emerging infectious diseases like pandemic influenza, can spread from country to country through POE much faster than before. No single country alone can manage its appropriate POE response. A regional mechanism will be established in this Stage with participation of all Member States to facilitate timely information sharing, coordinated risk assessments that inform evidence-based and balanced decision-making for more consistent border health measures during a public health emergency situation. With the regional mechanism in place, Member States will be able to obtain more reliable and fast information on POE response by different countries. Member States will also be able to participate in joint or coordinated risk assessments that are vital for making decisions on public health measures at POE in response to a PHEIC.

3. Components *[list the components of the focus area]*

- Public health emergency preparedness and response
- Routine public health functions

4. Key Milestones *[Key expected results to be achieved by identified timeframe]*

Year 1	• Key messages developed and disseminated to advocate new role of POE under the new IHR (2005)
Year 3	• A public heath emergency contingency plan is in place for the designated international airport and port
Year 5	• POE public heath emergency contingency plan is linked with relevant local or national public health emergency planning and EOC (POE public heath emergency contingency plan as part of the overall national and local public health emergency preparedness and response system)
Year 5	• Regional mechanism for information sharing, collaborative risk assessments and coordinated POE response to a PHEIC established and tested with the participation of Member States

5. Activities *[for each component, list priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Emergency preparedness and response	• Develop key messages on the unique role of POE, building on the experiences and lessons learnt from pandemic (H1N1) 2009 and in line with the new IHR (2005) • Disseminate key messages within the country, regionally and internally to advocate and promote the new role of POE in public health emergency preparedness and response • Conduct relevant core capacity assessments for designated POE, when appropriate • Update functions and terms of references of POE national public health authorities, as needed in line with the new role of POE under the new IHR (2005)	• Identify POE national public health authority with a designated POE National Coordinator to coordinate and guide POE public health emergency preparedness and response • Designate priority international airport(s) and port(s) that will have the IHR core capacities including emergency response and share the list with WHO • Develop and publish a WHO guide on POE public health emergency planning • Develop a public health emergency contingency plan at designated international airport(s) and port(s) in line with WHO guide and disseminate the plans to stakeholders (especially those involving in planning process) • Make practical arrangements on access to various medical services and public health responses (e.g. treatment, diagnosis, quarantine, control measures), as needed • Develop procedures for sharing information, communication and coordination with various stakeholders • Strengthen syndromic surveillance capacity at points of entry (as needed), and participant in or link with national surveillance system. • Establish the relevant command and response structure (e.g. using an incident command system as a tool) and EOC for public health emergency response at designated POE, taking consideration of the overall national command, control and coordination structure • Test and maintain the public health emergency contingency plan and EOC for POE response to a PHEIC	• Conduct country and regional-level consultations in establishing a regional mechanism for information sharing, coordinated risk assessments and harmonization of POE response during public health emergencies of international concern • Establish a regional mechanism for early information and POE response to PHEIC • Conduct and support operational research and share results that will inform more evidence-based international border measures • Conduct regional-wide exercise to test POE response to a PHEIC in the western pacific region (connecting POE public health authority and POEs among countries)
Routine public health functions	• Promote POE role in routine measures in line with the IHR (2005)	• Update national guidelines and conduct routine public health measures that are consistent with national and international guidelines *(including issuing Ship Sanitation Certificates; health documents)*	• Share country practices among countries in the region and internally when relevant

6. Key Activities for the coming one year *[Key common activities to be completed in the coming one year e.g. July 2011-June 2012]*
• Identify POE national public health authority to guide POE public health emergency planning process • Designate priority international airport(s) and port(s) that will have the IHR core capacities including public health emergency response and share the list with WHO • Publish and use a WHO guide on public health emergency contingency planning at designated POE • Organize a regional meeting on POE capacity and public health emergency preparedness (October 2011) to discuss workplan implementation • Develop and disseminate key messages to advocate POE new role under the new IHR (2005) • Develop a public health emergency contingency plan for at least one designated international airport and port in line with WHO guide • Make practical arrangements to endure ill travellers have access to various existing medical services and public health responses (e.g. treatment, diagnosis, quarantine, control measures), as needed • Develop procedures for sharing information, communication and coordination with various stakeholders (e.g. surveillance unit)

FOCUS AREA 6.4: RESPONSE LOGISTICS

1. Vision *[what is to be seen in five years]*

Member States in the Asia Pacific region will be able to rapidly, efficiently, and effectively deploy required resources (including human and medical/pharmaceutical material and critical logistics information) to all acute and ongoing (long-term) public health events. By the end of five years, in order to achieve this vision, Member States will have:

- ***An outbreak response logistics system*** *built on lessons learnt from pandemic (H1N1) 2009 that will cover core functions including management, legal and regulatory issues, information and communication management, human resources, security, supply chain management, and waste management. This system will be used during public health emergencies.*
- ***A response logistics focal point in the ministry of health*** *with staff trained in outbreak response logistics.*
- ***A logistics component in preparedness and response plans*** *that will ensure logistics is integrated as part of the command and control structure for public health emergency response.*

2. Stages *[describes the stages in moving from the current status to the Vision]*

Stage 1: Develop response logistics system

Consultations with Member States revealed that logistics is not well understood in health agencies and organizations and systems and structures for logistics do not currently exist in many health agencies. Logistics support for response to emerging infectious disease outbreaks and other public health emergencies involves more than supply-procurement functions as the nature of these events often requires support for wider issues such as communication, human resources and safety and security.
In order to address these concerns, Member States are encouraged to develop a comprehensive response logistics system with trained staff within existing health structures to support outbreak and public health emergency response.

Stage 2: Refine and further integrate response logistics

Effective coordination of logistics support is necessary as responses to emerging infectious disease outbreaks and other public health emergencies require input from multiple partners and also may require swift clearance through regulatory authorities such as customs or immigration. To help ensure efficient coordination during emergencies, response logistics will be integrated into routine operations, as well as into emergency responses and outbreaks as part of the command and control structure for public health emergency response and supported by the emergency operations centre (EOC).

Stage 3: Rapid responses to outbreaks and emergencies

A clear human resource management plan for those trained in response logistics will help to ensure the ongoing availability of trained, professional staff to support outbreak and public health emergency responses. By the end of five years each ministry of health understands what logistics entails and can do to support its efforts through adequate constitution and recognition of the response logistician professional discipline. The ongoing cycle of response, refinement and improvement will turn into established practices ensuring the required level of logistics support for public health emergencies.

3. Components

- Response logistics model to be used during public health emergency situation
- Human resource development
- Response logistics system to support outbreak and public health emergency response

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*

Year 1	• A guide on establishing response logistics within the health sector developed
Year 3	• Response logistics focal point within the ministry of health identified and trained, with the agreed terms of reference in place
Year 5	• Response logistics included as a core function of the national command and control structure for public health emergency response and as part of EOC functions

5. Activities *[priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Response logistics guide/model to be used during public health emergency situations	• Develop guide on establishing response logistics system for Member States which will ensure the following core functions are addressed: o Management: Command and Control o Legal and Regulatory Issues o Information and Communication Management o Human Resources o Security o Supply Chain Management o Waste Management	• Advocate response logistics based upon agreed model.	• Conduct exercises to assess and revise response logistics model.
Human resource development	• Identify response logistics focal point or person with established terms of reference within the ministry of health	• Include logistician or person trained in response logistics in the rapid response team for outbreak response.	• Incorporate lessons learned from exercises into additional duties and responsibilities of the response logistics focal point/person.
Response logistics system to support outbreak and public health emergency response	• Update preparedness and response plans to ensure response logistics functions are included.	• Ensure logistic component is integrated as part of command and control structure for public health emergency response and the emergency operations centre (EOC).	• Establish and test response logistics system in the ministry of health.

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Develop a response logistics guide/model through informal consultations • Identify a focal person (or logistician) for response logistics within the ministry of health in each Member State • Organize a regional workshop on response logistics for all designated focal persons or logisticians (terms of reference development and training) • Develop SOPs for the regional EOC to support the essential logistics functions of WHO regional response to disease outbreaks and acute public health events

FOCUS AREA 6.5: CLINICAL MANAGEMENT

1. Vision *[what is to be seen in five years]*

Excess morbidity and mortality from emerging diseases will be reduced through rapid information-sharing with a clinical expert group, increasing access to a cadre of local clinicians trained in outbreak response, increasing links to international support from the ***Global Outbreak Alert and Response Network (GOARN)***, and increasing the availability of clinical management guidance for emerging diseases when required.

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Develop Human resources
Increase access to clinicians trained for outbreak response

Stage 2: Provide Guidance
Develop guidelines and training materials to address gaps in clinical management and establish an information-sharing mechanism for and with the regional clinical management network

Stage 3: Sustain
Establish a mechanism to ensure sustainable clinical management human resources are available for outbreak response

3. Components *[list the components of the focus area]*

- Establish arrangements to allow mobilization of experts in clinical management to provide on-the-ground support during outbreaks
- Facilitate information exchange on clinical management issues by connecting clinicians who have information needs to others with disease specific expertise and specialist knowledge
- Formulate guidelines and training materials and distribute them in a timely manner during an outbreak

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1	• Outbreak response training programmes and SOPs for deployment during outbreaks developed for clinical experts
Year 3	• Training materials and guidance documents developed for priority diseases
Year 5	• Cadre of clinical experts at national level and sub-national level trained for outbreak response

5. Activities *[for each component, list priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Establish arrangements to allow mobilization of experts in clinical management to provide on-the-ground support during outbreaks	• Develop a cadre of clinicians at national level trained for outbreak response • Develop SOPs for deployment of local clinical experts during outbreaks • Develop SOPs to avail the members of the clinical management network as a pool of human resources to be mobilized by GOARN during outbreaks	• Develop a cadre of clinicians at sub-national level trained for outbreak response	• Establish a mechanism to ensure sustainable clinical management human resources are available for outbreak response
Facilitate clinical management information sharing among clinicians on specific diseases	• Review and revise the scope of activities for the clinical management network	• Develop an information-sharing and networking mechanism for the clinical management network	
Formulate guidelines and training materials	• Identify priority diseases with knowledge gaps in clinical management and develop training materials and guidance documents		

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Develop guidance and training materials on clinical management for priority diseases • Develop mechanism and SOPs for deployment of clinical experts during outbreaks

FOCUS AREA 6.6: HEALTH CARE FACILITY PREPAREDNESS AND RESPONSE

1. Vision *[what is to be seen in five years]*

Under a national coordination mechanism, health care facilities will have established and tested preparedness and response plans to deliver appropriate care for people affected by emerging diseases, public health threats, or humanitarian emergencies

- ***Preparedness and response plans*** *will include arrangements for surge capacity during outbreaks to ensure efficient and equitable delivery of health services*
- ***Planning cycle for preparedness and response plans*** *will include the testing and evaluation then revision of plans to maintain the highest level of preparedness possible.*
- ***Guidance and training*** *materials will support the preparedness planning for all health care facilities.*

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 1: Prepare
Identify key areas for capacity development of Health Care Facilities (HCFs) to strengthen their role in response to outbreaks and other public health and humanitarian emergencies and develop guidance documents for preparedness and response planning. Identify inter-sectoral and national HCF coordination mechanisms. Update national preparedness and response plans to ensure HCF surge capacity during public health and humanitarian emergencies.

Stage 2: Test
Conduct exercises to test the HCF component of preparedness and response plans.

Stage 3: Update
Update preparedness and response guidance documents and plans.

3. Components *[list the components of the focus area]*
• Formulate national guidance and training materials on HCF preparedness and response planning and support to the planning process • Establish a cycle of planning, test and evaluating with exercises, and revising the plans to improve and strengthen HCF preparedness and response plans • Strengthen national coordination and oversight of health care delivery during a large outbreak to address surge capacity and ensure efficient and equitable delivery of health services

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1	• HCF component of preparedness plans updated and guidance documents developed to ensure HCF preparedness during outbreak response, and mechanism developed for coordination of health care delivery during large outbreaks and patient surges
Year 3	• Exercises conducted to assess HCF coordination, preparedness and response plan and HCFs' capacity
Year 5	• Guidance documents and preparedness and response plan updated based upon exercise and linked to safe hospital initiative

5. Activities *[for each component, list priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Formulate national guidance and training materials on health care facility preparedness and response planning and support to the planning process	• Identify key components for HCFs outbreak response and develop guidance documents for planning		• Update guidance documents
Establish a cycle of planning, testing and evaluating with exercises, and revising the plans to improve and strengthen health care facility preparedness and response plans	• Update preparedness and response plans to ensure national coordination for surge capacity of HCFs	• Conduct exercises to assess HCF component of preparedness and response plan	• Update preparedness and response plans
Strengthen national coordination and oversight of health care delivery during a large outbreak to address surge capacity and ensure efficient and equitable delivery of health services	• Establish national intersectoral collaboration mechanism on outbreak response in HCFs		

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Conduct consultation to develop mechanism for national coordination of HCFs during large outbreaks and to identify key components necessary for HCFs to be prepared and capable during outbreak response
• Develop guidance documents for planning of HCF component of preparedness plans
• Update preparedness and response plans to strengthen HCF preparedness and response and national coordination for surge capacity of HCFs

FOCUS AREA 7: REGIONAL PREPAREDNESS, ALERT AND RESPONSE

1. Vision *[what is to be seen in five years]*

Under IHR(2005), WHO has the mandate to strengthen regional and global systems and capacity in the preparedness, alert and response to public health events. It is envisioned that **a regional system** will be developed to provide quality services in monitoring and alerting emerging diseases and acute public health emergencies, producing risk assessment products, supporting rapid response through its enhanced global and regional networking and sharing relevant information. By the end of five years,

- ***A systematic regional platform*** for regional outbreak alert and response will support Member States for outbreak alert and response.
- ***Linking with similar WHO initiatives*** (e.g. GOARN, clinical network, global IPC network, laboratory network) will enhance regional support to Member States for the broader all-hazard approach
- ***Information dissemination via new IT technologies and social networking site*** will enable timely sharing of information on the surveillance of and response to public health events. Regional information sharing system will be developed and diversified by using new IT technologies and social networking sites. Country capacity in scientific writing will be strengthened through scientific writing training including train the trainer and through opportunities to publish a wide variety of article types through the expansion of the Western Pacific Surveillance and Response (WPSAR) journal.

2. Stages *[describe the stages in moving from the current status to the Vision]*

Component 7.1: Regional Surveillance and Risk Assessment

In stage 1, regional event-based surveillance (EBS) will be strengthened and systematic risk assessment at the regional level will be established. Stage 2 will see the establishment of regional indicator-based surveillance (IBS) targeting 1-2 priority disease, and a regional information and communications technology (ICT) unit will be established to support Member States for outbreak alert and response. Finally, in stage 3 the new regional surveillance system will be launched.

Component 7.2: Regional Information Sharing System

In stage 1 train-the trainer will be conducted for data analysis and scientific writing, to support WPSAR development. Regional information sharing system will be developed and diversified (e.g. links to report/guidelines, Facebook with FETP discussion board). Stage 2 will see the review of WPSAR and the information-sharing system, and an annual international conference on regional surveillance, risk assessment and response will be conducted.

Component 7.3: Regional Preparedness and Response

The strengthening of GOARN regionalization will begin in stage 1 and will include developing rapid deployment capacity (e.g. rapid procurement procedures) and scenario-based GOARN training. In stage 2 GOARN will be expanded to include technical partners in the areas of logistics, chemical events, animal human interface etc, and to include non-infectious disease events in GOARN training. In stage 3 experiences and lessons learnt on public health interventions in response to emerging infectious disease outbreaks and public health emergencies of international concern will be published.

3. Components *[list the components of the focus area]*

- Regional surveillance and risk assessment
- Regional information-sharing system
- Regional preparedness and response

4. Activities *[for each component, list priority activities according to the stage of implementation]*			
Component	**Stage 1 Activities**	**Stage 2 Activities**	**Stage 3 Activities**
Regional surveillance and risk assessment	• Strengthen and evaluate event-based surveillance • Develop an ICT strategy for surveillance and response • Establish regional risk assessment practices, and develop corresponding guidelines, tools and conduct training courses.	• Establish regional indicator-based surveillance, targeting 1-2 priority diseases • Establish a regional ICT unit to support MS for the development of the surveillance system • Conduct regional risk assessment for priority public health threats in collaboration with partners	• A new regional surveillance system will be developed and launched
Regional information-sharing system	• Strengthen WPSAR by advocacy; develop SOPs for editorial process, scientific writing training, etc. Expand the context of WPSAR.	• Implement the regional information-sharing system: Diversify and regional information sharing website (e.g. links to report/guidelines, Facebook with FETP discussion board) • Develop online rapid communication products including regional GOARN updates	• Review WPSAR and the information-sharing system • Conduct annual international conference on regional surveillance, risk assessment and response
Regional preparedness and response	• Strengthen the regionalization of GOARN, including developing rapid deployment capacity (e.g. rapid procurement procedures), scenario-based GOARN training • Develop guidance on public health intervention options in response to a public health emergency • Expand regional stockpile to include other essential equipment and supplies	• Expand GOARN to include technical partners in the areas of logistics, chemical events, animal human interface etc, and to include non-infectious disease events in GOARN training • Strengthen the management and tracking system of regional stockpile	• Publish experiences and lessons learnt on public health interventions in response to EID outbreaks and public health emergencies of international concern

5. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1	• Systematic risk assessment established at the regional level
Year 3	• Regional indicator-based surveillance (IBS) targeting 1-2 priority disease established
Year 5	• New regional surveillance system established

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Strengthen regional EBS by incorporating systematic risk assessment, and by archiving and automating the regional EBS process
• Strengthen the regionalization of GOARN, including developing rapid deployment capacity (e.g. rapid procurement procedures), scenario-based GOARN training
• Develop training module for data analysis and writing for use in Member States, and conduct train-the trainer

FOCUS AREA 8: MONITORING AND EVALUATION

1. Vision *[what is to be seen in five years]*

Monitoring and Evaluation (M&E) has been included as a new focus area for capacity building under APSED (2010). The Asia Pacific region will have a simple, practical M&E system in place at the country and regional levels through establishing an integrated national and regional planning and review process that aims to monitor and improve national and regional capacities for managing emerging infectious diseases and public health emergencies in line with IHR (2005) and APSED (2010). The integrated national and regional planning and review process and system will include the following key components for the next five years:

- ***National mechanism*** *such as the establishment or strengthening of a national team/working group with a designated coordinator or facilitator who can also serve as an M&E focal point to facilitate the regular national planning and review process.*
- ***Regular stakeholder's planning and review meetings at country-level*** *to plan priority activities in line with the APSED (2010) workplan, review and monitor country's implementation progress*
- ***Development and implementation of an updated five-year national work plan*** *to guide implementation of priority activities required.*
- ***Utilization of the IHR core capacity monitoring tool and APSED(2010) performance indicators*** *to monitor national and regional progress in capacity development, including the functioning/performance of combined capacity building efforts of the APSED (2010) focus areas*
- ***Development and sharing of a common narrative report,*** *when appropriate, for relevant stakeholders, donors and partners who have been involved in implementing ASPED (2010). Member States have reliable regionally recognised information about the programme implementation that will be shared as appropriate*
- ***Conduct of annual regional TAG meeting (or equivalent)*** *to serve as a regional mechanism or a common regional platform for Member States, TAG members and experts, WHO, donors and partners to review and discuss APSED (2010) implementation and recommend common priority activities on a yearly basis.*

2. Stages *[describe the stages in moving from the current status to the Vision]*

Stage 0 (Preparation): Preparation of M&E framework and tools

Many issues have been identified through past experience including the implementation of APSED (2005) and the lessons learned from the pandemic in 2009, such as country ownership (e.g. lack of country-driven process), burdens of external assessment and reporting, information collection and quality of available data. Moving forward, M&E has now been included as a new focus area for capacity building under APSED (2010). A few steps have already been taken towards establishing a simple system to strengthen national and regional capacity for M&E. The national workplan has been recommended by the 2010 TAG meeting as an integral part of the M&E process at country level. The global IHR core capacity monitoring tool has been identified as an existing tool that can be better utilized for monitoring APSED (2010) implementation. A minimum set of APSED (2010) performance indicators that can measure performance of the system have been identified through a consultative process, following the 2010 TAG meeting recommendation. TAG or equivalent regional mechanism has proved to be an effective M&E mechanism and continues its functions of serving Member States and partners.

Stage 1 (Implementation): Development and implementation of a simple and practical M&E system

Robust M&E is considered as an integral part of APSED (2010). The goal of strengthening M&E capacity is to establish and implement a simple and practical M&E system that has incorporated both country and regional level components. The central focus of ensuring a sustainable M&E system is the establishment and implementation of an integrated national and regional planning and review process, supported by the IHR and APSED monitoring indicators. The process aims to facilitate improving national and regional programmes for emerging infectious diseases and public health emergency management.

3. Components *[list the components of the focus area]*

• ***Country-level***
  o Country workplans, supported by IHR and APSED indicators
  o Regular national review and planning meeting
 	
• ***Regional-level***
  o Regional workplan, supported by IHR and APSED indicators
  o Annual regional TAG Mechanism or equivalence

4. Key Milestones *[Key expected results to be achieved collectively by defined timeframe]*	
Year 1-5	• National and regional planning and review process established • National and regional workplan developed in line with the APSED (2010) workplan • National planning and review meetings conducted • Annual regional TAG meeting conducted
Post implementation	• Post-APSED (2010) implementation full scale exercise to test national and regional system and capacities to respond to emerging disease outbreaks and public health emergencies

5. **Activities** [for each component, list priority activities according to the stage of implementation]		
Component	**Stage 0 Activities**	**Stage 1 Activities**
Country Level	• Advocate and use APSED (2010) as a common framework to strengthen national systems and capacity for emerging infectious diseases and public health emergencies • Explore national mechanism including possibility of designating a national coordinator/facilitator to facilitate all the APSED (2010) focus areas within the country • Discuss how to utilize the existing IHR core capacity monitoring indicators and the suggested APSED (2010) performance indicators to improve monitoring of national capacity development	• Establish a national planning and review group/team with an identified coordinator or facilitator who can also serve as an APSED M&E focal point • Organize regular planning and review meetings to develop an updated five-year national workplan in line with the APSED (2010) workplan document • Conduct regular review meeting to review progress made against the workplan and the IHR and APSED indicators • Develop annual national progress report and share with relevant stakeholders as appropriate • Participate in annual regional planning and review meeting (e.g. annual TAG meeting) to share country experience and progress, and contribute to identification and implementation of common priority activities that are important for regional health security
Regional level	• Advocate APSED (2010) as a common framework for strengthening both national and regional capacities for regional health security • Organize a consultation meeting to identify a minimum set of APSED (2010) performance indicators, following the 2010 TAG meeting recommendation • Develop a draft APSED (2010) workplan that serves a guide for national and regional workplan development • Explore the possibility of a common narrative progress report for donors and key stakeholders • Facilitate technical and financial resource mobilization required for APSED (2010) implementation	• Develop practical guide on establishing an APSED (2010) M&E system (including planning and review process and use of monitoring indicators) • Organize annual TAG meeting (or equivalent) to provide a common regional platform for discussions on progress of APSED implementation in the region, with participation of Member States, WHO, donors and partners • Facilitate regular APSED (2010) 'Partners Forum' • Develop annual progress report on APSED (2010) implementation and share with relevant stakeholders at regional level • Coordinate final evaluation of APSED (2010) implementation in selected countries

6. Key Activities for the coming one year *[Key common activities to be completed collectively in the coming one year e.g. July 2011-June 2012]*
• Establish a national planning and review group/team and identify/designate a coordinator or facilitator to facilitate the national planning and review process • Hold national planning meetings and develop a five-year national workplan, using the APSED (2010) workplan as a guidance document. • Develop a practical guide on establishing an integrated planning and review process as a central effort to strengthen the M&E capacity • Hold national review meetings and develop national annual progress report on national workplan implementation. • Develop regional annual progress report. • Organize annual TAG meeting.