Meeting Report

REGIONAL MEETING OF THE TECHNICAL ADVISORY GROUP ON THE ASIA PACIFIC STRATEGY FOR EMERGING DISEASES AND PUBLIC HEALTH EMERGENCIES (APSED III)

11–13 July 2017
Manila, Philippines

World Health Organization
Western Pacific Region

WORLD HEALTH ORGANIZATION

REGIONAL OFFICE FOR THE WESTERN PACIFIC

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MEETING REPORT

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NOTE

The views expressed in this report are those of the participants of the Regional Meeting of the Technical Advisory Group on the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III) and do not necessarily reflect the policies of the conveners.

This report has been prepared by the World Health Organization Regional Office for the Western Pacific for Member States in the Region and for those who participated in the Regional Meeting of the Technical Advisory Group on the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III) in Manila, Philippines from 11 to 13 July 2017.

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SUMMARY

The Regional Meeting of the Technical Advisory Group (TAG) on the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III) was held in Manila, Philippines from 11 to 13 July 2017.

The meeting provided updates on regional disease outbreaks, some of which have pandemic potential, and other threats to public health. Participants were briefed on the ongoing implementation of the International Health Regulations (IHR (2005)) and APSED III, including the eight focus areas:

(1) *Public health emergency preparedness* – encompasses the role of the National IHR Focal Point, incident management capability, emergency operations centres (EOCs), points of entry (POE) and all-hazards public health emergency plans.
(2) *Surveillance, risk assessment and response* – incorporates inputs from a range of different surveillance sources to characterize events and provide decision-makers with key information to direct response measures.
(3) *Laboratories* – supports surveillance and risk assessment. Laboratory networks should connect nationally, internationally and across sectors to link with animal health and environmental hazards. Also includes external quality assurance and biosafety.
(4) *Zoonoses* – adopts a One Health approach to collaboration and active coordination with the animal health sector. Also spans the food safety, wildlife and environment sectors.
(5) *Prevention through health care* – combines infection prevention and control, clinical case management, antimicrobial resistance (AMR) and health facility outbreak and emergency response plans.
(6) *Risk communication* – includes dynamic listening and risk perception assessment, reflecting the growing importance of social media.
(7) *Regional preparedness, alert and response* – mandates the coordination role of the Regional Office, including information sharing through the Western Pacific Surveillance and Response Journal (WPSAR) and use of event-based surveillance (EBS), indicator-based surveillance (IBS), continuous risk assessment and rapid response mechanisms.
(8) *Monitoring and evaluation* – represents a learning culture that benefits country ownership and capacity-building, informs priority setting and planning, and contributes to transparency and accountability.

At the request of Member States, WHO is preparing a five-year global strategic plan to strengthen implementation of IHR (2005). To help avoid duplication, this plan will take account of existing regional strategies such as APSED and will be the subject of consultation with Member States. Aspects of the new IHR Monitoring and Evaluation Framework draw directly from some of the successful elements of APSED, in particular the learning culture of continuous quality improvement. This is reflected in the strong emphasis placed on self-assessment, after-action reviews, simulation exercises and joint external evaluation (JEE).

Because the close geographic, social and economic ties between the Western Pacific Region and the South-East Asia Region also extend to the common public health risks that the two regions face, the continued importance of the biregional nature of APSED was recognized.

Four countries in the Western Pacific Region have recently conducted their respective JEE and applied the lessons learnt to their national action plans. Cambodia, the Lao People's Democratic Republic, Mongolia

and Viet Nam described their experience of preparing for, conducting and advancing the recommendations arising from the JEE process. Some of the insights gained include:

- the good level of alignment between JEE and APSED III;
- the importance of investing in the initial self-evaluation process using the JEE Tool;
- ensuring early inter-agency engagement to work systematically and effectively across the 19 technical areas, before, during and after the JEE mission;
- seeking and obtaining high-level, including ministerial, understanding of the process and support for addressing the outcomes of the JEE;
- taking a pragmatic approach to amending or developing the national action plan in light of the JEE recommendations, while also taking account of other relevant considerations such as universal health coverage (UHC) and the Sustainable Development Goals (SDGs); and
- while quite intensive, the JEE process and subsequent recommendations provide a strong basis with which to engage with external technical partners and donors.

Partners and donors described their contributions to health security initiatives across the region. These include direct support to JEE missions, the Global Health Security Agenda (GHSA) with both funding and technical assistance, and also the Asian Development Bank's use of the APSED focus areas to inform their projects. The World Bank has advised of its intention to increase the proportion of its funding devoted to health systems strengthening and encouraged health ministries to work with their finance ministry counterparts to develop robust proposals for donor support.

The meeting provided an overview of the SDGs, which will drive the global development agenda until 2030. While a number of the SDGs will directly and indirectly support health outcomes, SDG 3 has an exclusive focus on health. UHC will be used as a unifying platform for health-focused planning and donor support under the SDGs.

Overall, Member States, WHO and partners have all made good use of APSED, but Ebola virus disease (EVD), Middle East Respiratory Syndrome, arboviral diseases and a range of natural – and in some cases human-made – disasters all serve to remind us that capacity-building for national and regional public health security remains a work in progress.

1. INTRODUCTION

1.1 Meeting organization

The Regional Meeting of the Technical Advisory Group (TAG) on the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III) was held in Manila, Philippines from 11 to 13 July 2017.

The meeting comprised a series of presentations, panel discussions, group work and plenary sessions. It updated participants on regional emerging infectious disease (EID) threats and reviewed progress with the implementation of APSED III, including in particular the experience of four countries within the region that have conducted a joint external evaluation (JEE) and used this process to inform national action plans. Development partners, including donors as well as technical and operational stakeholders, provided updates on their activities in support of health security and APSED III implementation.

Dr Jeffery Cutter and Dr Paul Effler were appointed co-chairs of the meeting, and Mr Andrew Forsyth was appointed rapporteur. Refer to Annex 1 for the programme of activities and Annex 2 for a list of meeting participants.

1.2 Objectives

The objectives of the meeting were:

(1) to review emerging issues and progress made in implementing APSED III;
(2) to review the International Health Regulations (IHR (2005)) JEE experience and determine how JEE can be best used to inform national planning in line with APSED III; and
(3) to recommend common priority activities until the next TAG meeting in 2018, considering the findings and updates shared during the meeting.

2. PROCEEDINGS

2.1 Opening session

On behalf of Dr Shin Young-soo, WHO Regional Director for the Western Pacific, Dr Takeshi Kasai welcomed the Member States, TAG members, partners and other participants to the meeting.

Dr Kasai, who was involved in WHO's early response actions when influenza H5N1 emerged as a significant threat more than 20 years ago, followed by SARS, recalled the challenges of those times and their direct influence on the preparation of the draft IHR (2005) and the first APSED. Both frameworks continue to demonstrate their relevance in supporting public health security planning and operational programmes. Over the last decade, surveillance systems and risk assessment in particular have evolved significantly, reflecting both the core capacity requirements of IHR (2005) and the practical guidance provided by APSED. The Western Pacific Region, in conjunction with the South-East Asia Region, has sought to learn from a wide range of events, always looking to improve capacities for the inevitable next event. This approach has close parallels with pandemic planning, which has also been tested and improved over time, and which remains as much a priority now as in 2009.

Dr Kasai thanked Member States for their continued commitment to APSED and also the TAG members for their support, engagement and advice. The goal of universal health coverage (UHC) and more recently the United Nations Sustainable Development Goals (SDGs) will also contribute to collective health security. The Ebola virus disease (EVD) epidemic in 2014, while tragic, also provided a global learning opportunity, which in turn gave a very strong impetus to JEE.

Dr Kasai wished the participants well for this first TAG meeting of the APSED III era and advised that he would take a close interest in the meeting outcomes.

2.2 Plenary 1: Managing health security threats in a changing world

Dr Jeffery Cutter introduced the session. He welcomed the brand new APSED III publication and emphasized how it helps to focus on areas that are key to public health security and prepare to move forward in the face of inevitable disease outbreaks and public health emergencies (PHEs).

2.2.1 Managing health security threats: A continuing collective journey

Dr Li Ailan described the challenges of regional health security. Over the past seven years, WHO has responded to more than a thousand events, including 50 acute and protracted emergencies. One of the most recent, and complex, is cholera in Yemen, with more than 260 000 suspected cases and 1587 deaths, occurring in a conflict zone with damaged infrastructure and many health-care workers (HCWs) going unpaid. The Western Pacific Region has seen influenza H7N9, Middle East respiratory syndrome (MERS), dengue and a range of other EIDs. Dr Li reminded participants of the significant progress made over the last decade towards shared health security, but acknowledged that capacity-building takes time, resources and commitment.

APSED 2005 and later APSED 2010 helped to identify and address common priorities within the global legal framework of IHR (2005). APSED also embodies a philosophy of reviewing event responses and using these to improve capabilities for the next threat. More than 80% of Member States now have functional event-based surveillance (EBS), rapid response teams (RRTs) and risk communication plans. Furthermore, the likelihood of a global pandemic also demands attention. Global air traffic volumes continue to increase year on year and populations are becoming increasingly urbanized in both developed and developing countries. It is impossible to predict the next threat and it comes as a surprise. For example with the Zika virus, there is first its geographical spread and then the significant concerns over neurological birth defects. After the influenza H1N1 pandemic in 2009, the IHR Review Committee concluded that the world "… is ill-prepared to respond to a severe influenza pandemic or to any similarly global, sustained and threatening public-health emergency". Dr Shin, WHO Regional Director for the Western Pacific, was an "early adopter" of health security thinking and established a new Division of Health Security and Emergencies in the Regional Office. Following the difficult lessons of Ebola in 2014, WHO has now undertaken a global structural reform to establish the new WHO Health Emergencies Programme, which focuses on early warning, risk assessment, emergency response, and mitigation and control strategies. APSED III is compatible with the emerging global architecture for emergency preparedness and response, and continues to encourage monitoring and evaluation (M&E) as a central component of country-level and regional capacity-building. Dr Tedros, the new WHO Director-General, said at the recent G20 meeting that UHC and health security are two sides of the same coin, as each is reliant on the other. Health security threats remain and in some cases are growing – and also becoming more complex. Through a decade of effort the world is certainly better prepared, but still not ready. Moving forward, there is good collective momentum in the shape of APSED III and reinvigorated IHR implementation.

2.2.2 Disease outbreaks and other public health emergencies in the Western Pacific Region

Dr Babatunde Olowokure observed that the region remains vulnerable to disease outbreaks and other PHEs including those caused by weather and geological events. Preparedness activities are essential, since it is too late when the event occurs. The Western Pacific Region has a number of high-risk countries that could be the source of events with potentially global significance. Ongoing regional surveillance identifies multiple signals every week which are filtered through risk assessments and a grading process. Over time, more events are being detected by country-level and Regional Office surveillance, though this may likely reflect improved surveillance, laboratory and reporting capabilities. The majority of novel influenza A viruses have been first detected in the Western Pacific Region, suggesting that the Region could well be the origin of the next global pandemic. Influenza A(H7N9), currently in its fifth epidemic wave, continues to be a serious concern in this regard. However, to date the epidemiological profile of cases (mainly males over 50 years of age) has not changed.

There are also many arboviral diseases in the Western Pacific Region, with dengue fever a recurrent major concern. For example, both the Lao People's Democratic Republic and Viet Nam are currently experiencing outbreaks and in 2016 Solomon Islands had 12 300 suspected cases of dengue. In Singapore, an astute general practitioner detected the first instances of imported and locally acquired cases of Zika in 2016. Other events include an increase in cases of methicillin-resistant *Staphylococcus aureus* (MRSA) in one hospital in Kiribati in February 2017, for which WHO provided support. The Lao People's Democratic Republic is currently experiencing an outbreak of hepatitis A. Field Epidemiology Training Programme (FETP) fellows in Papua New Guinea have helped detect and investigate an outbreak of febrile illness, with samples sent to Australia for analysis. Mongolia had an especially severe winter in December 2016, during which some 260 000 people were affected and more than 40 000 animals perished. Tropical cyclone Donna caused considerable damage to Vanuatu in May 2017 and the conflict in Marawi in southern Philippines has resulted in over 400 fatalities, an estimated 84 000 families displaced and at high risk for infectious disease. More broadly, EVD persists in the Democratic Republic of the Congo and a recent outbreak resulted in five confirmed deaths. Drawing on APSED III and JEE, while there is better preparedness, the question remains: are we ready for the next PHE?

2.2.3 Managing health security threats at country level – China

China faces a range of public health threats, including outbreaks involving various strains of avian influenza, food safety events, natural disasters (floods, earthquakes), environmental pollution and the sinking of the Eastern Star cruise ship in 2015. The context for this is the country's rapid economic change, urbanization and industrialization, resulting in population movements. China uses an integrated framework that combines multiple operational mechanisms (including FETP, 37 national RRTs and over 18 000 RRTs at the local level), planning (for example, strategic plan for EIDs focused on surveillance, early detection and risk communication), legislative powers, and management systems at national, provincial, prefecture and county levels, including EOCs. Risk assessment is an ongoing routine practice for national and local threats, and China is increasingly supporting responses to international events such as EVD in West Africa and the Nepal earthquake in 2015. Annual self-assessments conducted for IHR (2005) reporting identified areas for improvement, including points of entry (POE), laboratory, zoonosis and food safety. In 2014, a self-assessment suggested compliance with 91% of IHR (2005) core capacities. With the guidance of IHR (2005) and APSED III, China is now further enhancing and improving capacities for prevention, detection and response to health security threats through implementation of the 13th five-year plan on EID prevention and control, and on emergency medical rescue for other PHEs.

The Chair invited questions and comments from the floor:

- Collaboration between human and animal health sectors in China over avian influenza has improved in recent years. This spans prevention, surveillance and control measures. There is now a formal arrangement for information exchange and coordination. There is still room for improvement, for example on detailed data sharing and processes for agreeing control measures at the local level, as large-scale culling of poultry or closure of wet markets has significant socioeconomic consequences.
- Antimicrobial resistance (AMR) is a serious global issue. How is this addressed in China? AMR is recognized as a major and growing problem in China, both in the human and animal health sectors. Primary responsibility lies with the department for hospital management.
- Based on its experience with influenza, China has established a pathogen identification network for novel pathogens. If a new pathogen manifested with large numbers of cases, would laboratory diagnostic capability still be able to be linked to case-based reporting at the local level? Laboratory capability is key at the local level. The experience with H1N1 in 2009 provided important lessons for the coordination of virology and public health responses. Routine pathogens are tested at the prefecture level, and national and provincial levels provide reference services and focus on quality control and capacity-building.
- How does China manage cross-border issues? This remains a strong focus for China and neighbouring countries. New initiatives may be needed to strengthen this area of activity, both at the national level between countries and also at the POE level.
- How does China report response measures for EID events? For avian influenza, the focus is on human and animal health cooperation and maximizing the communication between local, intermediate and national levels. The outbreaks with low fatality rates in poultry can be the most difficult to manage.
- WHO does not recommend exit screening for travellers in relation to H7N9, as it is considered neither effective nor a good use of resources.
- China has RRTs for chemical and radiation events. Are these under the Ministry of Health? At the national level, these are funded and under the coordination of the Ministry of Health.

2.3 Plenary 2: Implementing IHR (2005) through the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III)

The session chair, Dr Liu Haitao, opened the plenary.

2.3.1 Global updates on IHR (2005) implementation – *Mr Ludy Suryantoro, WHO headquarters*

Mr Suryantoro noted that in 2016 Member States requested WHO to prepare a global IHR strategic plan with a five-year time frame. The 2017 World Health Assembly endorsed the central importance of the IHR (2005) core capacities, essential public health functions and universal health coverage (UHC) – these being among the key lessons from EVD in 2014–2015. Member States are still required to report to the World Health Assembly on IHR implementation, but increasingly this should include external evaluations as well as self-assessment. The five-year global strategic plan reflects a number of principles including country ownership, consultation, the importance of domestic financing, WHO leadership, a focus on fragile countries and results. The plan comprises three main pillars: strengthening and maintaining core capacities, event management, and measuring progress and accountability. Alongside voluntary JEE, simulation exercises and after-action reviews from real events will increasingly inform capacity-building. Noting that the African and European regions also have regional strategies, the Western Pacific Region and APSED have led the way with some of these initiatives. The intention is to support countries in

developing and implementing multisectoral national action plans for health security. Until the new global strategic plan is finalized in 2018, the existing annual reporting framework will apply.

2.3.2 APSED III: Advancing IHR (2005) implementation – *Dr Frank Konings, WHO Regional Office for the Western Pacific*

Dr Konings explained the APSED principles: placing countries at the centre of activity, focusing on the core systems for EIDs and PHEs, a common platform for stakeholder engagement, learning from real-world events and sustainability. He also described the eight APSED III focus areas:

(1) *Public health emergency preparedness* – sits at the core of APSED III, encompasses the role of the National IHR Focal Point (IHR NFP), incident management capability, EOCs, POE and all-hazards PHE plans.
(2) *Surveillance, risk assessment and response* – a fundamental IHR core capacity as included in the original APSED (2005), incorporating inputs from a range of different surveillance sources to characterize events and provide decision-makers with the information they need to direct response measures. Includes field epidemiology training (FET) and linkages to clinical care to support case management.
(3) *Laboratories* – continue to play a key role supporting surveillance and risk assessment. Laboratory networks should connect nationally, internationally and across sectors to link with animal health and environmental hazards. External quality assurance is also recognized to support functionality and biosafety.
(4) *Zoonoses* – another legacy from the original APSED, the One Health interface with the animal health sector, food safety, wildlife and other relevant sectors remains as important as ever. While all the focus areas require active intersectoral collaboration, it is particularly important for zoonoses.
(5) *Prevention through health care* – combines infection prevention and control (IPC), clinical case management and AMR. Promotes health sector resilience through health facility-specific outbreak and emergency response plans.
(6) *Risk communication* – is embedded in the national preparedness and response plans. Risk communication strategies include internal and partner communication, public communication (including use of social media), community engagement, and dynamic listening and risk perception assessment. A system needs to be in place to routinely evaluate risk communication strategies for programme improvement.
(7) *Regional preparedness, alert and response* – mandates the significant coordination role of the Regional Office, includes information sharing through the Western Pacific Surveillance and Response Journal and use of EBS, indicator-based surveillance (IBS), other active surveillance inputs, continuous risk assessment and rapid response mechanisms including the Global Outbreak Alert and Response Network (GOARN).
(8) *Monitoring and evaluation* – reflects a learning culture and a process of continuous quality improvement, including annual TAG meetings, after-action reviews, simulation exercises and the bold new focus on JEE.

2.3.3 Progress on implementation since the 2016 APSED TAG Meeting

The 2016 TAG meeting made 17 recommendations to Member States, WHO and partners. Overall progress includes endorsement of APSED III by the Regional Committee for the Western Pacific. Four JEEs have been completed in the Region. Two more JEEs are planned for 2017, including Australia. The trend in IHR (2005) core capacity reporting continues to show improvement, although the number of countries completing reports in 2016 was 13 out of 27 countries in the Western Pacific Region. Several

countries have started updating their national work plans using the APSED III framework. IHR Exercise Crystal continues to have high participation rates by Member States, and, more recently, some territories and areas from the Pacific participated for the first time. The development and revision of generic PHE plans remains a priority, particularly for countries completing their JEEs. FET remains important for capacity-building for front-line staff, but sustainable funding is often hard to find. For a variety of reasons, specimen referral between laboratories (both within and between countries) remains difficult across the Region, particularly in the Pacific. IPC and AMR are now included (along with quality clinical care) in the new "prevention through health care" focus area. These remain a challenge for many countries.

2.3.4 Malaysia Strategic Workplan for Emerging Diseases and Public Health Emergencies (MySED II)

Recent events such as EVD in West Africa, Zika, imported cases of MERS-CoV and human infection with avian influenza A(H7N9) and the first cases of rabies in 20 years have all reminded Malaysia of the importance of constant vigilance with regard to health security. The deliberate release of a chemical toxin and several natural disasters have also served to highlight the rationale for generic PHE preparedness. Malaysia has made extensive use of the three generations of APSED. The second version of the multi-sectoral Malaysia Strategy for Emerging Infectious Diseases and Public Health Emergencies (MySED) and associated five-year work plan is now being developed. In addition to IHR (2005), this work plan will take account of the SDGs and the Global Health Security Agenda (GHSA). MySED II will include further strengthening of linkages between national/multi-sectoral agencies, public health and clinical services and reflect the roles of other lead agencies, for example, in chemical and radiological events. The work plan runs from 2017 to 2021 and sets out targets, resources and accountabilities for delivery. Working groups will lead and coordinate activities for each of the eight APSED III focus areas. Different agencies of course have differing capacities and priorities, and collaboration requires active and ongoing efforts.

The session Chair invited comments and questions:

- The annual IHR questionnaire has a number of shortcomings, for example asking for the presence/absence of capabilities, rather than their level of functionality. Sometimes it is prepared by only one or a small number of individuals. How will the new IHR review process address these problems? The IHR secretariat in Geneva is aware of the weaknesses of the existing questionnaire and is working with the health systems strengthening and UHC teams within WHO to improve data collection.
- Will there be impact indicators that are integrated with other capacity-building frameworks? Impact indicators arising from JEE, for example benchmarking, have not yet been finalized. WHO also recognizes that in some countries, communication is required with ministries of finance and planning as well as health to achieve engagement and make progress.
- Was support from external parties sought in the development of MySED? Yes, other stakeholders were involved in the process including technical assistance from WHO and the United States Centers for Disease Control and Prevention (US CDC). As an Association of Southeast Asian Nations (ASEAN) member state, partner countries were also involved in providing expertise.
- With MySED, how difficult was it to merge and reconcile different frameworks? The process of engagement across sectors used to review MySED I set the groundwork for a comprehensive review of the different focus areas, and identification of the themes and work-plan components.
- Health security has implications for economic and social security as well as health outcomes. JEE is like a diagnosis tool, whereas APSED III is a planning tool to support resource allocation and to map out the actions needed to achieve the objectives.
- For countries that have not yet done their JEE, where should they start? The national planning process for IHR implementation should be ongoing, so countries should already have an idea of

their priorities and capacity requirements. JEE augments this process, but is not a cause to suspend existing systems.

- Tanzania was the first JEE country, and their work plan had already been informed by IHR (2005), GHSA and other frameworks. The JEE raised the opportunity to engage with the Ministry for Finance and Planning and other senior politicians as well as health officials. This ensured the revised plan was thoroughly costed and seen as a whole-of-government exercise, requiring commitment from a range of agencies.
- Countries that have a commitment to, and standard operating procedures for, after-action reviews, simulation exercises and intersectoral collaboration will benefit from this preparedness as the JEE process explores the functionality, not just the presence/absence, of core capacities.
- While achieving progress with IHR/APSED capacities is complex and measuring that progress is difficult, when it comes to engaging with domestic and international sources of funding, it is important to be able to describe exactly what is being purchased, and how the success of the proposed investment will be assessed. This is because there will be many competing demands for limited resources. This is doubly so when achieving an objective is only half the battle and sustaining those capacity improvements is at least as important for ongoing health security.

2.4 Panel discussion 1: Utilizing the momentum of JEE

The session Chair, Mr Graham Rady, noted the framework of self-assessments, after-action reviews and exercises which provides the context for voluntary joint evaluation with external experts. This promotes genuine learning and transparency. The Regional Office for the Western Pacific has conducted four JEEs to date and this is an opportunity to share experiences following the mission visits.

2.4.1 APSED monitoring and evaluation

JEE builds on the M&E framework that was built into APSED in 2010. The focus is on a culture of learning and improvement to enhance health security. The process covers annual reporting (e.g. self-assessment, APSED progress reports and TAG meetings), after-action reviews (e.g. outbreak reviews and PHE debriefings), simulation exercises (e.g. IHR Exercise Crystal) and JEE (e.g. the APSED evaluations conducted in 2015 to mark the conclusion of APSED (2010)). The JEE provides added momentum to advance M&E and promotes continuous improvement, transparency and accountability. The JEE Tool comprises 19 technical areas and helps countries identify strengths to build on and priority areas for priority investment in health security through domestic and external resource mobilization. After the JEE is completed, the country is better placed to plan and implement ongoing capacity enhancements via an updated national action plan. Key lessons to date from the Western Pacific Region are that JEE provides globally consistent benchmarking but is flexible enough to accommodate country situations while still building momentum for IHR (2005) implementation. The JEE process also cultivates country ownership and fosters multisectoral engagement. The outcome should also avoid a narrow or undue emphasis on scores. It is noteworthy that just because capacity gaps might be identified, depending on the country situation these need not automatically become priorities for corrective action.

2.4.2 Panel discussion: Using the momentum of JEE

Cambodia: Cambodia was the first country in the Western Pacific Region to conduct a JEE. They found APSED to be a valuable framework to prepare for the evaluation. The preliminary self-evaluation using the JEE Tool was key to laying the groundwork for the subsequent mission visit by the external experts. The existing coordination and leadership role of the NFP was also valuable in gaining engagement with the wider health sector and nine other government agencies. Both the process and the outcome provided excellent opportunities to raise awareness with senior government decision-makers. It also helped to confirm the value of the existing technical working groups and coordination mechanisms.

Lao People's Democratic Republic: The Lao People's Democratic Republic has had previous experience with the APSED M&E framework. Together with the self-evaluation process, they were key investments in preparing for the JEE process. Ten groups were established or identified to take responsibility for all 19 JEE technical areas. The period of the JEE mission was intensive and required participants to be well prepared in advance. EOCs and NFP functionality were identified as important capacities. High-level political commitment was essential to follow up on the lessons learnt from the JEE.

Mongolia: APSED helped build a culture of evaluation and set up a formal M&E mechanism. The process of JEE preparation, including the early self-evaluation using the JEE Tool was vital. Close collaboration at the technical level as well as support and engagement of high-level government officials has been demonstrated. The JEE clearly helped identify gaps in system functionality and improve linkages and alignment. It was important to see the big picture, including linkages within and between agencies and human resources implications. High-level commitment was required from the outset, to maximize the benefit from both the process and the final report. The outcome provided a positive lever with which to engage with external partners and donors.

Viet Nam: Preparation in advance of the mission was vital to the success, including relationships with other agencies required to participate in the process. The self-evaluation also provided a valuable opportunity to assess the systems and procedures that the external evaluators would also be reviewing. The field visits required considerable coordination and overall the process of JEE was quite intensive. The Vice Minister was very interested in the results of the report, which included 74 recommendations, many of which had to be shared and followed up with other agencies. Some recommendations were very general and some were very detailed.

The session Chair invited comments and questions:

- Panel members were invited to offer one or two key findings, lessons or recommendations:
  - There is good alignment between JEE and APSED processes.
  - It is important to work closely with other government agencies before, during and after the mission.
  - An updated EID/APSED work plan should include stakeholders, responsibilities and financial resources, in particular the IHR inter-agency coordination mechanisms.
  - Use existing systems and procedures, e.g. the NFP.
  - Language issues made some of the technical papers quite challenging.
  - Secure early and strong commitment from the Minister of Health.
  - Invest in the preliminary self-evaluation process, both to familiarize staff with the JEE Tool and for the substantive insights it yields.
- Bringing together all the various partner agencies within Member States in a formal way is a key component of the JEE process and outcome.
- The Regional Office begins discussions with a Member State approximately six months before the mission visit. The Regional Office understands how intensive and demanding the JEE process can be, including the added complication of language challenges. Both the process and outcome are important for building confidence and trust in country-level capacities and also collective health security.
- Preliminary briefings with ministers and other agencies provide an opportunity to inform them of the nature and importance of IHR (2005), what the JEE process involves, what the outcome will be and the critical nature of a whole-of-government commitment to owning the report and implementing the recommendations.

- JEE creates an environment where a range of stakeholders across different sectors have to talk to each other and discuss how to collaborate to advance the recommendations. However, there can be a risk that countries are overwhelmed by receiving dozens of recommendations with multiple priorities. The JEE process needs to be sufficiently flexible to recognize the different capacities and resources of Member States.
- There is also a proliferation of terminology relating to health security, regional health security, EIDs, public health risks, outbreaks, epidemics, pandemics and so on. While the experts are familiar with these terms, it can be confusing to outsiders, including the media, politicians and donors.
- Regarding the best way to move from the JEE report to the national action plan, EID programme managers do not always compartmentalize activities into discrete projects, but look to strengthen their overall systems and capacities with the resources available to them.

2.5 Panel discussion 2: Developing and implementing updated national action plans

The Chair, Dr Jeffery Cutter, introduced the session.

2.5.1 National planning for health security

Planning is an ongoing process. It starts with a situation analysis, which then informs strategic prioritization and planning as part of developing the country action plan. This can include other contributions such as existing plans, results of annual reviews of implementation of national IHR and APSED plans, after-action reviews, simulation exercises, JEE, risk mapping, TAG recommendations, the broader social situation, UHC and, more recently, the SDGs. Matters of resources, including personnel and funding, are addressed from the beginning of the process. The planning process should be inclusive and set realistic and implementable targets. Once agreed, implementation and operational activity become the focus. The final element is the need to monitor and evaluate the outcomes, what worked well and what components need to be revised. In a cyclic model, the review then provides an input to the next round of situational analysis. As we know, health security is complex, and many aspects such as governance, surveillance and health system, front-line workforce, research and development for new medicine and vaccines, noncommunicable diseases and ageing population conflict, disaster and health security, international migration, and access to health services must come together to protect public health. The different components must all have the same, preagreed understanding of their roles and responsibilities, and be accountable for them. National planning for health security is an opportunity for alignment of all stakeholders and full country ownership. APSED III is a useful framework for national planning.

2.5.2 Costing national action plans

Priorities for the new WHO Health Emergencies Programme (WHE) include IHR (2005) implementation, risk assessment and a focus on vulnerable countries. It also works with the Sendai Framework and regional strategies such as Health 2020 in the European Region, Integrated Disease Surveillance in the African Region and of course the biregional APSED strategy. To date, some 50 countries have completed JEE and a further 27 are currently planned. WHE is aware of the need to use consistent terminology and provide cross-referencing between the various elements of the IHR M&E Framework (MEF) including annual questionnaires, the JEE Tool and others such as UHC and GHSA. JEE is a voluntary process and this requires genuine country ownership at every step along the way – right through to the consideration of recommendations and the revision/development and implementation of the country national action plan. Based on experience to date, the JEE Tool itself is also being revised, with piloting of the new Tool to start hopefully in 2018. Just as Member States have to ensure coordination across multiple agencies, so WHO maintains parallel collaboration arrangements with other organizations including the World Organisation for Animal Health (OIE), United Nations Office for the Coordination of Humanitarian Affairs (OCHA),

International Atomic Energy Agency (IAEA) and others. WHE has reviewed existing costing and planning tools, including the SDGs, but none are a perfect match for the 19 JEE technical areas. The emphasis is on a costing tool that is flexible, modular and able to be adapted so as to be relevant to the country concerned. The tool needs to be sufficiently detailed but still easy to use, and consistent with the One Health tool for animal and human health.

2.5.3 Panel discussion: Country experience with national planning

Cambodia: Since 2010, Cambodia has undertaken dedicated APSED national planning and in 2012, like many other Member States, Cambodia obtained an extension to IHR (2005) core capacities. In 2016, Cambodia undertook the JEE internal and external evaluation and developed a third national action plan. This plan emphasizes the coordination role of the Ministry of Health, rather than claiming a leadership position.

Lao People's Democratic Republic: In 2010, the Lao People's Democratic Republic developed a national EID work plan and in 2011, after the APSED TAG meeting, updated their national plan. In 2013, following a major dengue outbreak, an after-action review was conducted and the following year a national EOC was established. In 2015, a national EID/PHE work plan was developed. In 2016, a risk assessment manual was prepared, as was a national health workforce strategy (which includes FET). In 2017, the country conducted a JEE and used this and APSED III to update their work plan and develop a national AMR action plan.

Mongolia: Mongolia adopted an annual planning and review process, outbreak reviews and APSED performance indicators. The annual planning and review meeting, which started in 2013, is a major M&E process. The national programme for communicable diseases 2010–2015 and the updated 2017–2021 programme have incorporated the APSED structure. Following the JEE, Mongolia developed a national AMR plan and revised the national plan for EIDs and PHEs, incorporating JEE recommendations and using APSED III. The national plan is seen as an important tool for partner coordination and resource mobilization. Involving other sectors and allocating resources were key to the progress made. Another key lesson was to take a pragmatic approach to the challenges faced.

Viet Nam: In 2012, having collated all the required information, Viet Nam conducted the IHR self-assessment using the reporting questionnaire. Minimum core capacity of IHR (2005) has been achieved since 2014. Viet Nam has also prepared an action plan for EIDs. In 2016, Viet Nam took part in the JEE process and in 2017 used the JEE recommendations and APSED III to develop a national IHR master plan. Active efforts to coordinate and collaborate with other government agencies and high-level political commitment both proved essential to these planning processes. Making plans is rather the easy part, allocating resources to implement them is the most important – and sometimes the harder – part.

2.6 Plenary 3: Implementing APSED III – step-by-step approach

The session Chair, Dr Haruo Watanabe, introduced the session. He noted that collective preparedness has improved using earlier versions of APSED and APSED III, with its updated focus areas, so that countries are now well placed to continue to enhance capacities.

Focus area 1 – public health emergency preparedness: The expected outcome is that national plans, structures and resources for PHEs are in place and function well. Incident management system (IMS) principles underpin this focus area. All-hazards PHE plans should be developed and tested. EOCs should be operational and existing multisectoral coordination mechanisms further strengthened. This focus area requires that many of the IHR (2005) core capacities, including at POE, are strengthened.

Focus area 2 – surveillance, risk assessment and response: Member States to conduct systematic ongoing risk assessments using multiple information sources to inform timely decision making. Information sources should come from across the health sector and also other sectors, and this combined surveillance input converted into intelligence via the risk assessment process. This requires trained front-line staff, usually from FET/FETP. The relative allocation of resources to the different components can change during the course of an event, for example IBS such as for notifiable diseases can be moderately important prior to an event, but once an outbreak occurs, becomes relatively less important than EBS. During the response stage, risk assessment and risk communication should be run out of EOCs to ensure consistency and linkages with incident control.

Focus area 3 – laboratories: The public health laboratory system should be able to identify infectious and other hazards rapidly, accurately and safely. Laboratories should be closely linked to surveillance and risk assessment functions. There should be periodic review of diagnostic technologies. Public health laboratories should work closely with clinical colleagues and also across sectors, for example with food safety, environmental hazards and animal health. This should all occur locally, nationally and with international reference laboratories – hence the concept of the laboratory system. Biosafety and biosecurity protocols and mechanisms for specimen sharing should be in place and tested through exercises and "live" events.

Focus area 4 – zoonoses: The primary objective is promoting improved communication and coordination mechanisms across multiple sectors including public health, food safety, animal health and wildlife services. Information-sharing and risk reduction strategies are fundamental to the management of zoonotic threats. Pooling expertise and surveillance information to support risk assessment and risk communication are key elements of this focus area.

Focus area 5 – prevention through health care: This focus area brings together IPC, AMR, clinical case management and health-care facility preparedness under the umbrella of prevention. It recognizes that the safe treatment of patients and the containment of risks (such as the amplification of infections that can occur in health-care settings with Ebola and MERS) play a key part in risk reduction. This focus area promotes capacities to rapidly identify, report and manage EIDs – ultimately, preparedness contributes to prevention. Facility-level preparedness should be reviewed against national guidance and upgraded where necessary. All major facilities should have measures in place such as standing committees to champion IPC and AMR policies, ensure equipment availability and promote staff vaccination in line with the WHO Safe Hospitals Programme. Such arrangements, including business continuity plans, support health sector resilience.

Focus area 6 – risk communication: Member States have the capacity and system to manage risk communication across all phases of PHEs. This entails having functional links with surveillance and risk assessment and a mechanism for dynamic listening and incorporating risk perception into risk assessment practices. Social media and community engagement strategies are used to complement other more traditional risk communication platforms. Key messages to the public need to be actively aligned with information provided to other agencies, as both may change in a rapidly evolving outbreak situation. Existing risk communication procedures should be assessed as part of after-action reviews and revised as appropriate.

Focus area 7 – regional preparedness, alert and response: This applies to the Regional Office for the Western Pacific in its role as a regional, operational hub assisting Member States. This includes information sharing, and systematic and timely risk assessment in support of country-level and WHO response activities. It provides for strong linkages between NFPs, EOCs (when activated), and other

partners and networks. The Regional Office (like Member States) uses multiple information sources to inform risk assessment. The annual IHR Exercise Crystal is one activity it uses to implement its regional preparedness role.

Focus area 8 – monitoring and evaluation: M&E systems should be included in national work-plans to ensure continuous learning and improve effectiveness and efficiency of core capacities. The IHR MEF includes self-assessment (e.g., the annual questionnaire), after action reviews, simulation exercises and JEE. The goal is not to undertake M&E for its own sake, but to use the various elements to revise plans, improve programmes and build confidence in capacities and transparency with stakeholders.

The session Chair invited comments and questions:

- Different countries will be at different stages of the step-by-step approach to capacity=building, so they should assess their own situation carefully to determine the next steps that are appropriate to their specific circumstances.
- Effective surveillance requires public health laboratory results to be closely linked to clinical case counting (and case management) to support risk assessment and response measures.
- National health security provides the building blocks for regional and ultimately global health security.
- Social media can have a significant and complex influence on both the surveillance environment and political reaction to risk assessment reports. Social media is so rapid and tangible that it conveys immediacy and authenticity for "status updates" that may not actually be representative of the broader situation. This raises challenges when social media creates an unreliable perception of hazards and even response measures. This in turn can undermine political confidence in surveillance, risk assessment and risk communication processes.
- Some countries have multiple plans and are working to consolidate these where possible. Will new focus areas or indicators be added to APSED in the near future, as this could complicate current planning? Financial planning support would also be appreciated to support implementation. There can be a "pandemic of plans", often with different names and overlapping scopes. Donors and partners can also require project-specific plans. WHO suggests that it could be useful to do a stocktake of existing plans, involving all the stakeholders, to clarify their purposes and operational arrangements. There is no one solution to this issue, as countries will need to determine for themselves how the various plans can either be combined or cross-referenced so that they work together. The Regional Office can provide technical advice on this, but countries themselves will need to determine the best way forward. There is no intention whatsoever to add any new focus areas to APSED, as there are already plenty of priorities. Essential public health functions, such as for national surveillance, risk assessment and response should always be funded by the national government. External funding can be used to complement domestic funding, but should not be a substitute.
- The "prevention through health care" focus area intends, among others, to ensure a sufficient number of qualified health professionals. With many HCWs facing retirement or being recruited to other countries, this is a challenge for a number of countries and is directly relevant to UHC as well as health security. It is acknowledged that maintaining an adequate workforce can be difficult and part of the solution often comes back to the need for sustainable funding paths for the health sector, especially HCW salaries. While APSED provides a strategy within which workforce development planning can occur, a major PHE will always stress the health workforce of all countries, even those not directly affected.
- With social media, in addition to risk perception, how can it be included in surveillance functions and used to manage public expectations? Monitoring social media can be coupled with EBS to

help provide early warning of a "signal", but this will always need to be filtered to eliminate the "noise", and, where follow-up is necessary, verification will need to be sought. During an outbreak or event, monitoring of risk perception through social media can also inform the need to revise key messages for risk communication.

2.7 Plenary 4: Fostering partnerships for health security in the Western Pacific Region – *Dr Li Ailan, WHO Regional Office for the Western Pacific*

The meeting Co-Chair, Dr Paul Effler, introduced the session.

2.7.1 Working together towards regional health security

The Western Pacific Region remains vulnerable to a range of health security threats. No single institution or country has all the capacities and resources necessary to deal with a major PHE. In this light, partnerships are more important than ever. Collaboration can occur on both a formal and informal basis, including at the national government level between agencies, between Member States, with WHO and with other international partners including GOARN and donors. This endeavour is guided by keeping people and communities at the centre of planning and service delivery. Dr Li reminded participants that it is the investments in preparedness made in so-called "peace-time" that often provide the best returns. The Mekong Basin countries have made significant progress in building and maintaining capacities for health security, including EBS, FETP and risk communication.

2.7.2 Major health security initiatives

Australia: Three key themes are the need for stronger systems, new ideas and closer collaboration. Australia has made a sustained contribution to health security in the Western Pacific Region, beginning with emergency responses to EIDs and moving to strengthen human and animal health systems. Currently, Australia is working with the World Bank on health financing and with WHO to support the WHE; investing in product development partnerships to find novel solutions to drug resistance; and promoting regional collaboration through initiatives such as the Asia Pacific Leaders Malaria Alliance. Australia is developing a new Regional Health Security Initiative across three areas – research, partnerships and people-to-people links – and has appointed an Ambassador for Regional Health Security to advocate the health security needs of Asia and the Pacific.

Republic of Korea: Initiatives address a wide range of activities including tuberculosis control, poliomyelitis eradication, AMR, neglected tropical diseases, access to vaccines and FETP. The Republic of Korea has also provided staff on secondment to WHO and contributed experts to JEE missions. Support extends beyond the Region and includes countries in Africa and the Middle East.

United States of America: Global health has been given policy priority. GHSA remains a focus for the country, including funding and technical support, spanning more than 20 federal departments and government agencies, plus other partners. Fifty countries have joined GHSA, currently chaired by the Republic of Korea (and to be chaired by Italy in 2018). The United States of America sees JEE as a bridge that links GHSA and IHR (2005) and applies the lens of the human–animal–ecosystem interface to help with hazard characterization, surveillance, risk assessment and response. The Government is currently assessing the future of global health security beyond 2019.

Asian Development Bank (ADB): A total of 80% of ADB funding goes to infrastructure projects. However, in recent years, ADB has resolved to increase investment in the health sector, looking to increase funding from US$ 420 million in 2015 up to US$ 700–1000 million by 2020. At present, the main beneficiaries of health funding across the two regions of APSED are the Greater Mekong

Subregion (GMS) countries, India, Papua New Guinea, Bhutan, Sri Lanka and a number of Pacific islands. The GMS health security project, for example, which is aligned with the APSED focus areas, is a US$ 132 million project supporting 13 provinces in Cambodia, 12 provinces in the Lao People's Democratic Republic, 6 states and regions in Myanmar, and 36 provinces in Viet Nam.

2.7.3 Strengthening health security partnerships in Cambodia

Cambodia used the IHR self-assessment questionnaire and APSED to inform the development of its national work plan. The recent JEE process provided new ideas and practical recommendations. The JEE involved collaboration with 9 ministries and 22 other partners. The partners, for example, participated in the technical working groups that helped prepare the national plan. Once completed, the plan was also the subject of a dissemination workshop. The national plan was used in developing the ADB GMS health security project and also helped with Cambodia's GHSA road map.

The Co-Chair invited comments and questions:

- How does ADB provide sustainable support for health systems strengthening? ADB loans are available to fast-track capacity-building projects, but these are always discussed with senior politicians during the project design stage to ensure ongoing country ownership.
- ADB also supports measures to support migrant populations, some of which are currently being piloted.

2.8 Plenary 5: Breakout session group feedback

The meeting Co-Chair, Dr Paul Effler, introduced the feedback from the group work.

2.8.1 Regarding National IHR Planning

(1) *What type of plan do you currently have in place?*

Member States reported a variety of strategies with regard to national IHR planning, including a five-year EID/PHE work plan, PHE response plan, national plan for EIDs, strategic action plan for One Health and GHSA road map. Most reported a whole-of-government approach for major emergencies with clear guidelines about roles and responsibilities during an emergency for different departments or agencies at national and subnational levels. Many had different functional plans for different risks and hazards.

(2) *What are the available options for development and updating this plan and how will you go about this?*

In order to update and improve plans, several Member States reported systems for ongoing evaluation based on events, exercises and routine reviews at prespecified time periods, such as APSED progress reports and IHR self-assessment. Additional methods were JEE recommendations, APSED III guidelines and focus areas, guidance from WHO and other agencies, and development sector priorities. Factors that determined whether updating plans was feasible included available funding and partner support, political and APSED cycles, and plans that cannot be changed for several years and instead focus on implementation. Multisectoral mechanisms, such as a task force or working group, and legislation and policy were emphasized as key to guiding the process of national plans.

(3) *What are your country priorities in the short (1 year) and long term (5 year)?*

Priorities for national planning varied between Member States in both the short and long term. Some examples of priorities are listed below:

Short term

- Strengthen existing surveillance and response system, including FET, risk assessment and risk communication
- Finalize existing plans and advocate for implementation
- National master plan for IHR
- Five-year EID/PHE work plan and GHSA road map
- EOC and IMS functionality
- Standard operating procedures, guidelines
- Strengthen collaboration on zoonotic disease
- Fulfil IHR core capacities at POE
- Move from multiple plans to generic all-hazards
- Recruiting and training new staff
- Timely information sharing
- Improve networking and collaboration
- Expand and acquire international accreditation for FETP
- Maximize the EOC functions

Long-term

- PHE plan
- EOC subnational networking
- Implement AMR programme
- Regional collaboration for EID events
- Strengthen laboratory capacity
- National action plan for AMR
- Laboratories to be increased
- M&E systems in place
- Capacity-building at the community level
- All-hazards plan to include chemical and radiation, zoonoses (One Health approach)
- IPC
- Greater linkages between public and private sectors

(4) *How will the APSED III step-by-step approach help you with your national planning?*

The step-by-step approach presented during plenary 3 provides a systematic approach to national planning and will apply to Member States in different ways depending on priorities and capacities. However, in general, Member States thought that the step-by-step approach is well established and is useful for developing new ideas and facilitating implementation, particularly as an advocacy tool for priority areas. It helps with sequencing and prioritizing different activities as well as assessing progress within each APSED III focus area. This approach allows for success at one level to provide a positive incentive for the next.

(5) *What are the factors for successful implementation of the national IHR plan?*

Successful implementation of national IHR plans was discussed and revealed to be dependent on several key factors. The involvement and commitment of high-level politicians and leaders as well as close collaborations and communication with multiple sectors both internal and external to the government were highlighted as crucial to success. Member States also discussed how the ability to mobilize resources as well as existence of appropriate and comprehensive people-centred plans were necessary for successful implementation. Continuous monitoring and evaluation through learning from major events, such as SARS, exercises and other factors were also discussed as being important for determining baseline and progress, as well as for appropriate updates to plans. Additional factors included country ownership with WHO leadership and technical support, strong national and international collaboration including partnerships for funding, and skilled workforce for implementation.

(6) *What could be innovative ways to strengthen IHR NFPs?*

In addition to ongoing improvements to IHR NFPs through training and use of a generic email address managed by a pool of people who rotate being on call, innovative suggestions of how to strengthen IHR NFPs were discussed. This included better sharing of information with relevant colleagues, including better use of the IHR WHO Event Information Site (EIS) website, and rapid verification of information from a variety of sources, including social media, to assist with rapid information dissemination. Functional EOCs, equipment and surveillance systems are fundamental to strong IHR NFPs. Regular meetings at NFPs and externally to share experiences, for example, following APSED TAG as well as high-level political recognition of the roles and functions of NFPs could also help strengthen IHR NFPs. Revision of national terms of reference for the NFP to include all-hazards, potential incentives for after-hours duty (e.g. financial incentives), and continued demonstration of competence and usefulness of NFPs were also discussed.

2.8.2 Regarding a global strategic plan for IHR implementation

(1) *What are the expectations of such a global plan and how would this be useful to you at the national level?*

Member States discussed the global strategic plan for IHR implementation and what would be expected from this kind of plan. Firstly, APSED is well established in the Region and as such a global plan must be aligned with APSED and other strategies (such as the Sendai Framework, UHC, SDGs, emergency medical teams, JEE, etc.). The global plan could be a tool for advocacy and to reinforce political support for national plans but should not require Member States to develop new plans and should be synchronized with national timelines. A global plan must also be flexible and generic enough to be useful in all Member States regardless of country context. Member States highlighted expectations of WHO, which included commitment to assist with resource mobilization and clear differentiation of roles and responsibilities for Member States and the three levels of WHO. Partners could use a global plan as a tool for prioritization of support. Member States should continue to use IHR monitoring and evaluation tools to monitor annual progress of IHR core capacities and there is no need for additional evaluation tools.

2.8.3 Regarding the Regional APSED progress report

(1) *How can we best communicate the achievements and challenges of the Member State to external audiences?*

The current APSED progress report is compiled annually by the Regional Office with information provided through a document completed by Member States. Member States discussed how the format of this report could be changed to better communicate with external audiences. Suggestions included the

addition of more photos and figures with shortened text to facilitate understanding and allow for translation, if needed. Highlighting key achievements or challenges through an executive summary and boxes was also suggested. The report could highlight specific focus areas each year, focus on the "way forward" section, be shortened into a newsletter format with more frequent publications or support more in-depth discussions during APSED TAG meetings. Alternate mediums for publication suggested were the Western Pacific Surveillance and Response Journal or other online platforms, including the Regional Office website or other sites such as ASEAN. Including information on references, IHR M&E, measureable indicators (e.g. EBS, EOCs, IMS), and focusing on results-based instead of process-based reporting were also suggested. The rationale and challenge of the reporting cycle from July to June instead of January to December was also discussed.

2.8.4 Partners' Forum

Progress

The Partners' Forum revealed high and increasing attention to health security as well as partner engagement in many activities. Given this, it is likely that funding will increase.

Points discussed

Several key areas were discussed, including the below:

- Mapping – the who, what and where of partner activities for APSED and health security
- Governance, both during emergency responses and in health systems strengthening more generally
- Investment financing
- Risk communication
- Community engagement
- Cross-border surveillance
- Collaboration at the implementation level
- Mass gatherings such as the Olympics, and associated opportunities for capacity-building
- Engagement of the private sector
- One Health collaboration
- Multisectoral agenda
- Systems integration

Way forward

The partners also discussed various ways to move forward with supporting health security in the Western Pacific Region. The first was to continue support of country leadership and ownership in developing and implementing national action plans, as guided by APSED III. Additionally, further strengthening of existing partner mechanisms at both the national and regional levels was highlighted. In particular, there is need for more frequent communication to continue discussions and sharing of more details regarding partners, including where they are working. Finally, the partners discussed the importance of exploring new ways of communicating, collaborating and engaging new partners to enhance national, regional and global health security.

The Co-Chair invited comments and questions:

- Who is responsible for the mapping of partner programmes and activities? It was suggested that the Regional Office could coordinate this where it relates to IHR (2005) or APSED. Under JEE, there is a requirement for Member States to itemize partner and donor support.
- It was noted that the JEE Tool also provides a framework for the mapping of capacity functionality as well as the identification of capacity gaps.
- What does or should systems integration look like? Some countries have well developed community-based services, but these are not necessarily well coordinated, especially when they are called on to support responses to emerging events.
- It remains difficult to estimate the costs of outbreaks and events, as often different parties such as the World Bank, ADB, US CDC and WHO have different objectives, use different methodologies, and arrive at different estimates. This was clear when the social and economic costs of EVD in West Africa were assessed. It would be helpful if these agencies could improve their cooperation to derive more standardized costings.

2.9 Plenary 6: Investing in health security to contribute to achieving the SDGs

2.9.1 Regional Action Agenda on Achieving the SDGs in the Western Pacific

The Western Pacific Region had good success with the Millennium Development Goals, though these tended to be programme specific and targeted at developing countries. The SDGs provide an opportunity to build on MDG successes and lessons learnt, reaffirm commitment and catalyse action for health and development by 2030. Even where MDG targets were achieved at the population level, not all groups benefited equally. The SDGs take a more integrated approach, stress equity and sustainability, and are relevant to all countries. There are 17 SDGs supported by 169 targets and associated indicators. SDG3 focuses on health, including targets such as communicable diseases, child and maternal health, NCDs, substance abuse, universal health coverage and environmental health as well as four means of implementation focusing on tobacco control, vaccine and medicine availability, health financing and workforce and global health security. Core health issues are also included in other goals, for example nutrition in SDG2, violence against women in SDG5 and birth registration in SDG16. The SDGs also include many health determinants, for example reducing poverty, ending hunger, water, sanitation and climate change. Health is influenced by and influences all goals. UHC is a specific target under SDG3 as well as a unifying platform that can bring together different health and development efforts. UHC promotes health systems that are of good quality, efficient, equitable, accountable and sustainable, and resilient. Achieving health in the SDGs so that no one is left behind, a central tenet of the SDGs, requires whole-of-system, whole-of-government and whole-of-society approaches, bringing together various government sectors, civil society, academia, development partners and communities. Parallel coordination will also need to occur regionally, for example to address multi-country environmental issues. Each country has its own development pathway, so customization of work programmes is required. The regional Office has developed and endorsed its own action agenda to progress the SDGs. It builds on and aligns with existing global and regional strategies, World Health Assembly and Regional Committee resolutions, as well as broader United Nations mandates and guidance. It suggests 12 action domains across four guiding questions – on monitoring and evaluation, policy and programme priorities for leaving no one behind, implementation options and health sector capabilities.

2.9.2 Financing of health security; challenges and opportunities

Talking about money always gets people's attention, but it quickly gets complicated. It is important to recognize that the health sector, although important, is only one of the many players in health security. In terms of health system financing, the first question is: *what to finance?* This is a key issue that APSED III helps to answer by providing a proven framework for setting priorities. However, this work also needs to

occur within the broad scope of UHC, as health security cannot operate separately from the wider health system. Essential public health functions must still be planned and prioritized within a context that considers the availability of essential medicines, the need to address the large and growing burden of NCDs, the entire health workforce and related governance structures. The second question is: *who are the funders?* There may be multiple actual and potential funders including central government, local government, the private sector and external sources such as bilateral partners and multilateral agencies and donors. The third question is: *how to finance?* This can start with services or functions and then the provider landscape, including government providers, institutions, NGOs and the private sector. Closer engagement with the Ministry of Finance and understanding their priorities, planning cycles and what language they use are important to help grow the size and percentage of domestic health funding secured from the government. Domestic public funding is critical for the sustainability of essential public health functions. External funding can be volatile and is often tied to specific programmes and donor priorities. Which costs could be covered by external funding is highly country specific. The key is to take into consideration the long-term sustainability when making decisions to solve immediate problems.

2.9.3 Investing in health security in East Asia and the Pacific: where is the money?

Finance ministries are usually working within a "funding envelope" and weighing up the relative priorities of different sectors (there are about 20–30 sectors in many countries, for example health, agriculture, urban, information and communication, education, transport, justice and environment). The health sector cannot expect to be "at the front of the queue" and must be prepared to put up a strong case for why its priorities should be finances. Many countries and development partners understand that increasing travel, urbanization, habitat loss, ecosystem changes and climate change resulting in new patterns of disease vectors, and proximity to animals and zoonoses raise the risk of EIDs up to and including pandemics. Health problems can rapidly become major economic problems. However, there is no universally agreed framework for financing of PHE preparedness and existing capacity assessment tools, including the JEE and the OIE Performance for Veterinary Services (PVS) pathway, do not explicitly address financing issues. The World Bank has a commitment to support pandemic preparedness in at least 25 low-income countries globally, from its International Development Association funding envelope. The World Bank also established a Pandemic Emergency Financing Facility, which will provide rapid financing during outbreaks of severe pathogens. The new Health Security Financing Assessment Tool (HSFAT) assists countries to identify the level and sources of funding for prioritized JEE recommendations, builds on existing OIE PVS Pathway Gap Analysis, and will be piloted in Viet Nam in September this year. The World Bank intends to continue to engage with countries and technical partners to support JEE, and countries are encouraged to use JEE recommendations to develop robust and agile financing plans to support preparedness and response capacity building.

2.9.4 WHO tool for financing national action plans

Feedback from countries is that JEE should be used and the recommendations considered in conjunction with other assessment tools and findings. Further and very specific feedback has been the need to strengthen the financial and resourcing components of the JEE Tool. As a result, two finance indicators (one for routine funding and one for emergency response funding) will be added to the "legislation, policy and finance" technical area. The process of revising the JEE Tool involves consultation with all WHO regions and also some Member States and technical partners. The outcome will be JEE Tool version 2.0 and is expected to be rolled out in 2018. The HSFAT being developed by the World Bank will be complementary to the JEE Tool, providing a "deeper dive" into budgetary issues.

The session Chair, Dr Jordan Tappero, invited comments and questions:

- What should external funding be used for? There are no easy answers to this question, but countries can be guided by considering the consequences of what would happen if and when external funding is discontinued. Clearly though, it can help considerably with emergency responses and, depending on country circumstances, may be appropriate to initiate capacity-building or supplement salaries for some HCWs.
- Vector control for arboviral diseases reminds us of the collective benefits of good preventive measures, including investing in environmental measures. Some countries can domestically fund only basic core capacities such as RRTs, but funding from external partners can take the functionality to a higher level.
- Where developing countries have a long-term relationship with another country, for example longstanding bilateral arrangements, these can be used to fund key services that might otherwise be marginal.
- The Communicable Diseases Division of the Regional Office has traditionally been based on strong vertical programmes, often with some external funding. However, it is transitioning to models that are similar to what is needed for health security, such as acute surveillance and laboratory capacities with sensitive, case-based surveillance. Some of the factors driving this are changes in donor preferences, but also changes in morbidity and mortality. For example, countries approaching elimination of conditions such as measles, poliomyelitis and some neglected tropical diseases, must thus be extremely vigilant for new cases.
- How can countries best access the World Bank funds? Many countries are already sourcing resources from domestic and external options. Well documented proposals, for example based on JEE findings and prepared by the Ministry of Health in conjunction with the Ministry of Finance, are likely to make stronger cases for assistance. In the Pacific, though, there remain major challenges. The World Bank is interested in opportunities to collaborate with WHO and other partners to increase practical support to Pacific island countries and territories.

2.10 Closing remarks

Dr Li Ailan congratulated the participants on their continued progress along the path to collective health security. The meeting demonstrated that APSED III is, and will continue to be, a guide in the next steps of this journey. The concept of keeping Member States at the centre is not just about words but must also be reflected in WHO's actions. She expressed her appreciation for the immense expertise and experience that the TAG members and temporary advisers had brought to the table. A special mention was made to the partners, whose participation in and contribution to the proceedings and outcomes are highly valued.

Dr Li thanked the Secretariat staff for their preparations for the meeting and also acknowledged the contribution of country offices and staff from headquarters and the Regional Office for South-East Asia.

Four JEE have been completed, two more are planned this year, and the Regional Office for the Western Pacific has already received requests for eight in 2018. These place a significant workload on regional Office staff, on top of all other ongoing commitments and the inevitable reactive work. The Regional Office does not want to compromise the quality and benefit of JEEs, so Dr Li asked for patience from Member States if WHO cannot meet their exact timing expectations.

On behalf of the Regional Office for South-East Asia, Dr Gyanendra Gongal thanked the participants for their continued engagement with APSED. He observed that the geographical, social, economic and cultural connections between the two regions also mirror the common public health threats within the them. He also noted that the Regional Office for South-East Asia will host the biregional meeting in 2018. At the moment, there is good momentum with regard to health security in the region, but plenty of work lies ahead.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

(1) Over the past year, the Asia Pacific region has faced various EID outbreaks, including influenza with pandemic potential and those caused by arboviruses, as well as other PHEs. These threats to health security remain of concern and some are becoming more frequent and complex.

(2) APSED III enhances the strategic direction of previous versions of the strategy and updates current contexts and will allow emerging needs of Member States to be addressed. Member States have begun using APSED III to guide strategic actions to strengthen national health security. APSED III is also a priority of the WHE in the Western Pacific Region.

(3) Member States have made significant progress with the implementation of IHR (2005) through a decade of capacity-building under APSED. Member States are fully committed to continuing to maintain and improve their capacities through APSED III for advancing IHR (2005) as a means to collective health security.

(4) Member States were informed about new developments, including the implementation of the new WHE and the consultation process for the development of a five-year global strategic plan to improve public health preparedness and response, and other new initiatives.

(5) Monitoring and evaluation has been an APSED focus area since 2010 and Member States in the Western Pacific Region noted that the APSED monitoring and evaluation system contributed to the recently adopted global IHR MEF, including annual reporting, after-action reviews, simulation exercises and JEEs.

(6) Voluntary JEEs provide momentum for advancing IHR (2005) capacities, a platform for high-level advocacy for investments in health security, the promotion of Member State ownership, and fostering multisectoral collaboration and international partnerships. The priorities identified through the IHR (2005) MEF, the JEEs and other components will contribute to the identification, revision and implementation of priority activities and, using APSED III as a guide, provide a basis for updating of Member States' national action plans.

(7) Four JEE missions have been conducted in Member States of the Western Pacific Region since the last TAG meeting (in chronological order): Cambodia, Viet Nam, the Lao People's Democratic Republic and Mongolia. These Member States shared their valuable insights and experience regarding planning for and conducting JEEs as well as updating national plans for health security. Key areas included the value of multisectoral and high-level political engagement and the importance of the self-evaluation component.

(8) No single institution has all the capacities and resources to manage health security threats. Working together leads to effective and efficient use of resources for a stronger regional health security system. APSED III serves as a regional platform to foster health security partnerships.

(9) Public health preparedness is part of UHC and contributes to resilient health systems as well as the SDGs, in line with the *Regional Action Agenda on Achieving the SDGs in the Western Pacific*.

(10) The need to strengthen financial costing components of JEEs and national action plans was recognized and participants were briefed on financing indicators as part of the proposed JEE Tool version 2.0, as well as the more comprehensive World Bank HSFAT.

(11) The importance of linking the global strategic plan with key existing global frameworks (Sendai Framework for Disaster Risk Reduction, SDGs, UHC, etc.) is recognized, as is considering existing regional strategies (e.g. APSED III) and being flexible in recognition of different country contexts.

3.2 Recommendations

3.2.1 Recommendations for Member States

Member States may consider the following:

(1) To continue to work to maintain and advance IHR (2005) core capacities towards health security, guided by APSED III.

(2) To consider volunteering to conduct a JEE and share lessons learnt with the 2018 TAG meeting, if they have not yet done so.

(3) To use APSED III as a framework to develop or update national action plans to advance IHR implementation incorporating costing and resource issues. Such plans should also take into consideration the findings and recommendations of JEEs and other components of the IHR MEF, including annual reporting, after-action reviews and simulation exercises.

(4) To implement national action plans as well as share progress, practices and lessons during next year's TAG meeting, including:

- strengthening emergency operations centres, including implementing the IMS in line with WHO guidance;
- strengthening the functions of the IHR NFP, particularly in event communications;
- enhancing risk assessment and decision-making by using multiple sources of information;
- improving national and international specimen referral mechanisms;
- enhancing multisectoral coordination mechanisms, including for zoonoses;
- updating the risk communication plan, including use of new media; and
- contributing to the development and implementation of national action plans for AMR.

(5) To continue to detect, verify and report outbreaks and PHEs for information sharing, risk assessments and rapid response.

(6) To advocate and position the work of health security in the broader context of UHC and the SDGs.

3.2.2 Recommendations for WHO

Member States is requested to do the following:

(1) To continue to support Member States with maintaining and advancing IHR core capacities for health security through implementation of APSED III as a priority of WHE in the Western Pacific Region.

(2) To continue to coordinate and support IHR JEE for those Member States that volunteer to conduct one in the future, taking account of the lessons learnt by Member States that have already completed a JEE.

(3) To support Member States with updating, providing advocacy for high-level support and implementing their national action plans taking into consideration findings from JEEs and other components of the IHR MEF.

(4) To enhance the regional surveillance and risk assessment system through optimizing the three levels of WHO to improve alert and response.

(5) To continue to provide support to Member States for outbreak and emergency responses as guided by the WHO Emergency Response Framework (ERF).

(6) To take Member States' feedback into consideration for the development of the global strategic plan.

(7) To support Member States to access existing funding sources.

(8) To revise the format of the regional APSED progress report to better summarize Member State progress (using graphs etc.) and to enhance learning through analysis to capture the impact of activities under APSED III and also a small number of cross-cutting themes, e.g. major findings from JEEs.

3.2.3 Recommendations for partners

Partners are requested to do the following:

(1) To support Member States' leadership and ownership in developing and implementing their national action plans in coordination with WHO.

(2) To support and participate in the Partners' Forum including providing updates, strengthening partnerships and encouraging new partners in health security in the Western Pacific Region.

(3) To work with WHO and Member States to enhance the utilization of financing opportunities.

(4) To explore new communications mechanisms to facilitate information sharing and knowledge exchange to support capacity-building.

ANNEXES

Annex 1. Programme of activities

Day 1 – Tuesday, 11 July 2017

08:30 – 09:00	Registration
09:00 – 10:00	Opening session
	Welcome and opening remarks
	Dr Takeshi Kasai, Director, Programme Management *WHO Regional Office for the Western Pacific (WHO/WPRO)*
	Self-introductions Overview of objectives and agenda Nomination of Chairs and Rapporteur Administrative announcements Group photo
10:00 – 10:30	*Coffee break*
10:30 – 12:00	Plenary 1: Managing health security threats in a changing world
10:30 – 10:45	Managing health security threats: A continuing collective journey - *Dr Li Ailan, WHO/WPRO*
10:45 – 11:00	Disease outbreaks and other public health emergencies in the Western Pacific Region - *Dr Babatunde Olowokure, WHO/WPRO*
11:00 – 11:15	Managing health security threats at country level - *Dr Ni Daxin, Chinese Center for Disease Control and Prevention, China*
11:15 – 12:00	Questions and clarifications
12:00 – 13:00	*Lunch break*
13:00 – 15:00	Plenary 2: Implementing IHR (2005) through the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III)
13:00 – 13:20	Global updates on IHR (2005) implementation - *Mr Ludy Suryantoro, WHO Headquarters (WHO/HQ)*
13:20 – 13:40	APSED III: Advancing IHR (2005) implementation - *Dr Frank Konings, WHO/WPRO*

13:40 – 14:00	Progress on implementation since the 2016 APSED TAG Meeting *- Dr Babatunde Olowokure, WHO/WPRO*
14:00 – 14:20	The Malaysia Strategic Workplan for Emerging Diseases and Public Health Emergencies (MySED II) *- Dr Norhayati Rusli, Ministry of Health, Malaysia*
14:20 – 15:00	Questions and clarifications
15:00 – 15:30	*Coffee break*
15:30 – 17:00	Panel discussion 1: Utilizing the momentum of the Joint External Evaluation (JEE)
15:30 – 15:45	APSED monitoring and evaluation *- Ms Joy Rivaca Caminade, WHO/WPRO*
15:45 – 17:00	Panel discussion: Utilizing the momentum of the JEE *- Dr Ly Sovann, Director, Ministry of Health, Cambodia* *- Dr Sibounhom Archkawongs, Ministry of Health, Lao People's Democratic Republic* *- Dr Narangerel Dorj, Ministry of Health, Mongolia* *- Dr Dang Quang Tan, Ministry of Health, Viet Nam* Facilitated discussion
17:00 – 17:30	*Break*
17:30 –19:00	*Welcome reception*

Day 2 – Wednesday, 12 July 2017

08:30 – 08:40	Recap of day 1
08:40 – 10:00	Panel discussion 2: Developing and implementing updated national action plan
08:40 – 08:55	Options for national planning *- Dr Luo Dapeng, WHO Papua New Guinea*
08:55 – 09:10	Costing national action plans *- Mr Ludy Suryantoro, WHO/HQ*
09:10 – 10:00	Panel discussion: Country experience on national planning *- Dr Ly Sovann, Director, Ministry of Health, Cambodia* *- Dr Onechanh Keosavanh, Ministry of Health, Lao People's Democratic Republic* *- Dr Narangerel Dorj, Ministry of Health, Mongolia* *- Dr Dang Quang Tan, Ministry of Health, Viet Nam* Facilitated discussion

10:00 – 10:30	*Coffee break*
10:30 – 12:00	Plenary 3: Implementing APSED III: Step-by-step approach
10:30 – 11:10	Focus area 1: Public Health Emergency Preparedness Focus area 2: Surveillance, risk assessment and response Focus area 3: Laboratories Focus area 4: Zoonoses Focus area 5: Prevention through health care Focus area 6: Risk communication Focus area 7: Regional preparedness, alert and response Focus area 8: Monitoring and evaluation
11:10 – 12:00	Questions and clarifications
12:00 – 13:00	*Lunch break*
13:00 – 14:00	Plenary 4: Fostering partnerships for health security in the Western Pacific
13:00 – 13:15	Working together towards regional health security - *Dr Li Ailan, WHO/WPRO*
13:15 – 13:35	Major health security initiatives - *Ms Prudence Borthwick, Department of Foreign Affairs and Trade, Australia* - *Dr Ok Park, Korea Centers for Disease Control and Prevention, Republic of Korea* - *Mr Matthew Johns, Department of Health and Human Services, United States of America* - *Dr Gerard Servais, Asian Development Bank*
13:35 – 13:45	Strengthening health security partnerships in Cambodia - *Dr Ly Sovann, Ministry of Health, Cambodia*
13:45 – 14:00	Questions and clarifications
14:00 – 14:10	Introduction to breakout session - *Dr Frank Konings, WHO/WPRO*
14:10 – 17:30	Breakout session
14:10 – 15:00	Groups A, B and C: (1) National planning and priority activities (2) Consultation on the development of the Global Strategic Plan Partners' Forum: Working together towards regional health security
15:00 – 15:30	*Coffee break*
15:30 – 17:30	Breakout session *(continued)*

Day 3 – Thursday, 13 July 2017

08:30 – 08:40	Recap of day 2
08:40 – 10:00	Plenary 5: Breakout session group feedback
08:40 – 08:50	Group A
08:50 – 09:00	Group B
09:00 – 09:10	Group C
09:10 – 09:20	Partners' Forum: Working together towards regional health security
09:20 – 10:00	Questions and clarifications
10:00 – 10:30	*Coffee break*
10:30 – 12:00	Plenary 6: Investing in health security to contribute to achieving the Sustainable Development Goals (SDGs)
10:30 – 10:45	Regional Action Agenda on Achieving the Sustainable Development Goals in the Western Pacific - *Dr Kate Silburn, WHO/WPRO*
10:45 – 11:00	Financing of health security: Challenges and opportunities - *Dr Xu Ke, WHO/WPRO*
11:00 – 11:10	Investing in health security in East Asia and Pacific: Where is the money? - *Dr Patrick Lumumba Osewe, World Bank*
11:10 – 11:25	WHO financing tool - *Mr Ludy Suryantoro, WHO/HQ*
11:25 – 12:00	Questions and clarifications
12:00 – 14:00	*Lunch break*
14:00 – 15:00	Plenary 7: Conclusions and recommendations
14:00 – 15:00	Conclusions and recommendations
15:00 – 15:30	*Coffee break*
15:30 – 16:00	Closing session

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