The global response to the spread of avian influenza A (H5N1) since 2003 and the influenza A/H1N1 2009 pandemic has helped shape a number of significant public health advances, providing a better understanding of the dynamics of pandemic influenza itself and of the issues that need to be addressed in pandemic preparedness. However, it is increasingly evident that an all-hazards approach multisectoral collaboration is required to combat public health threats. In 2013, the World Health Organization (WHO) issued a new guidance document, “Pandemic Influenza Risk Management”, which updates and replaces “Pandemic influenza preparedness and response: a WHO guidance document (2009)”. This is a report of the regional workshop on the Pandemic Influenza Preparedness Plan, 23–25 September 2014, Kathmandu, Nepal, to ensure national preparedness plans are updated along the lines of the WHO guidance, and have an all-hazards approach.
Pandemic Influenza Preparedness Plan

Report of a regional workshop
Kathmandu, Nepal, 23–25 September 2014
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<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ASEAN</td>
<td>Association of South-East Asian Nations</td>
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<tr>
<td>EID</td>
<td>emerging infectious diseases</td>
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<td>EVD</td>
<td>Ebola virus disease</td>
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<tr>
<td>ERF</td>
<td>emergency response framework</td>
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<td>HERMF</td>
<td>health emergency risk management framework</td>
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<td>IHR</td>
<td>International Health Regulations (2005)</td>
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<tr>
<td>ILI</td>
<td>influenza-like illness</td>
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<tr>
<td>KSA</td>
<td>Kingdom of Saudi Arabia</td>
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<tr>
<td>MERS-CoV</td>
<td>Middle-East respiratory syndrome coronavirus</td>
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<td>MS</td>
<td>Member States</td>
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<tr>
<td>NPIPP</td>
<td>national influenza pandemic preparedness plan</td>
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<tr>
<td>PHEIC</td>
<td>public health emergency of international concern</td>
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<tr>
<td>PIP</td>
<td>pandemic influenza preparedness</td>
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<tr>
<td>PIPF</td>
<td>pandemic influenza preparedness framework</td>
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<tr>
<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
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<tr>
<td>SARI</td>
<td>severe acute respiratory infection</td>
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<tr>
<td>SEAR</td>
<td>South-East Asian Region</td>
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<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
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<tr>
<td>US</td>
<td>United States of America</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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Summary

The global response to the spread of avian influenza A (H5N1) since 2003 and the influenza A(H1N1) 2009 pandemic has helped shape a number of significant public health advances, providing a better understanding of the dynamics of pandemic influenza itself and of the issues that need to be addressed in pandemic preparedness. Member States had prepared for a pandemic of high severity and appeared unable to adapt their national and sub-national responses adequately to a more moderate event. Clear risk assessments to the decision-makers and effective risk communications to the public were also demonstrated to be of significant importance, although challenging.

In 2013, the review of the International Health Regulations indicated that the world is not well prepared to prevent and mitigate major public health events. It is increasingly evident that multisectoral collaboration is required to combat these threats. In 2013, the World Health Organization (WHO) issued a new guidance document, “Pandemic Influenza Risk Management”, which updates and replaces “Pandemic influenza preparedness and response: a WHO guidance document (2009)”. This revision of the guidance takes account of lessons learnt from the influenza A(H1N1) 2009 pandemic and introduces two concepts. Firstly, pandemic influenza preparedness and response plans should be further developed to encompass public health emergency threats posed by “all-hazards”. Secondly, the management of public health emergencies should rely on a risk-based approach where responses are flexible and proportional to the levels of risk provided by national risk assessments and the WHO’s global risk assessments. In order to present these new recommendations and advocate for its introduction in the South-East Asia Region (SEAR), the WHO Regional Office for South-East Asia organized a meeting in Kathmandu, Nepal from 23 to 25 September 2014. The meeting was attended by national technical officers from communicable disease control and immunization Departments, representatives from the WHO Regional Office for South-East Asia and country offices and temporary advisers. The specific objectives of the meeting were to review the current status of
pandemic influenza preparedness in the South-east Asia Region; provide updates on emerging respiratory infectious disease threats in the Region and globally; present the new WHO guidance on the development of national influenza pandemic preparedness plans (2013); and identify the way forward in revising national influenza pandemic preparedness plans accordingly.

Six sessions were covered in the meeting, which included: (1) Overview and updates on the influenza Pandemic Preparedness Plan at the global, regional and SEAR country levels; (2) Situation of Pandemic Influenza: background and lessons learned; (3) New recommendations from the 2013 WHO Guidance on Pandemic Influenza Risk Management; (4) Approaches to introducing in MS these new WHO recommendations; (5) Updates on other emerging diseases of public health concern; and (6) conclusions and recommendations.

**The main conclusions of the meeting were:**

1. Member States agree that it is necessary to revise the existing national influenza pandemic preparedness plan in line with “Pandemic Influenza Risk Management WHO Interim Guidance”.

2. Member States agree that it is necessary to broaden the scope of pandemic influenza preparedness plan to include Emerging Infectious Diseases.

3. Member States supports integrating and updating national influenza vaccine deployment plan as part of national influenza preparedness plan.

4. Revised national pandemic influenza preparedness plan needs to be aligned with IHR (2005).

5. Member States need further guidance on risk-based management of all-hazard public health emergencies.
The recommendations are as follows:

Member States were requested to:

1. Revise the existing pandemic influenza preparedness plan in line with ‘Pandemic Influenza Risk Management WHO Interim Guidance’;
2. Revise the National Pandemic Influenza Vaccine Deployment Plan and integrate with National Influenza Pandemic Preparedness Plan;
3. Further strengthen cooperation and coordination between relevant government sectors and other stakeholders in the national plan with specific roles and responsibilities defined in NIPPBP;
4. Broaden scope of pandemic influenza preparedness plan to include Emerging Infectious Diseases and all-hazards;
5. Interlink pandemic preparedness plan with disaster preparedness plan;
6. Conduct table top/drills/simulation exercise to test the revised National Influenza Pandemic Preparedness Plan;
7. Incorporate and strengthen capacity for risk assessment and risk communication at all levels in multiple sectors in National Influenza Pandemic Preparedness Plan;
8. Operationalize the National Influenza Pandemic Preparedness Plan;

WHO/SEARO were requested to:

1. Provide technical support to Member States to revise the existing national influenza pandemic preparedness plan in line with “Pandemic Influenza Risk Management WHO Interim Guidance”;
2. Continue to advocate with Member States and partners on the importance of preparedness plan for all-hazards public health events;
(3) Provide technical support to develop advocacy plans and materials;

(4) Support Member States in operationalizing the National Pandemic Influenza Preparedness Plan;

(5) Continue to support the strengthening of emergency operation centers in Member States, particularly during “interpandemic period”;

(6) Work with partners to mobilize technical and financial resources to support implementation of the new WHO interim guidance.
1. **Introduction**

Member States (MS) in South-East Asia are highly vulnerable to outbreaks and pandemics, due to both the high population density and close human–animal interaction in most countries of the Region. The international Health Regulations (IHR) 2013 review indicated that the world is not well prepared to prevent and mitigate major public health events. It is increasingly evident that multisectoral collaboration is required to combat these threats and that the health sector should play a lead role in this.

In 2013, the World Health Organization (WHO) issued a new guidance document, “Pandemic Influenza Risk Management” which updates and replaces “Pandemic influenza preparedness and response: a WHO guidance document”, issued in 2009. This revision of the guidance takes account of lessons learnt from the influenza A (H1N1) 2009 pandemic and introduces two concepts. Firstly, pandemic influenza preparedness and response plans should be further developed to encompass public health emergency threats posed by “all-hazards”. Secondly, the management of public health emergencies should rely on a risk-based approach where responses are flexible, accounting for the conclusions of national risk assessments and WHO’s global risk assessment.

2. **Inaugural session**

2.1 **Opening session**

The workshop was opened by the Minister of Health and Population of Nepal, His Excellency Khagaraj Adhikari. Dr Lin Aung, WHO Representative to Nepal, welcomed the participants and read out the inaugural address of Dr Poonam Khetrapal Singh, Regional Director, WHO South-East Asia, highlighting the constant pandemic threat posed by the emergence of new influenza virus strains in humans: “we have learned from the influenza pandemic in 2009–2010, which tested our preparedness”. The Regional Director emphasized the need for national
influenza pandemic preparedness plans (PIPP) to adhere to the new WHO guidelines issued in 2013 and entitled “Pandemic Influenza Risk Management – WHO Interim Guidance”. Dr Lin Aung also reminded us about some of various influenza strains for the past decades that posed a public health concern including H5N1 and 2009 H1N1 and pointed out that countries face different risks and impacts at different times. Therefore, preparedness plans should be sufficiently flexible so that responses could be adapted to different levels of risks.

2.2 Objectives

The workshop was held in Kathmandu, Nepal from 23 to 25 September 2014 with the following objectives:

1. to review the current status of influenza pandemic preparedness in the South-East Asia Region;
2. to provide updates on regionally and globally emerging respiratory infectious disease threats;
3. to present new WHO guidance on the development of national pandemic influenza preparedness plans (2013); and
4. to identify the way forward in revising national influenza pandemic preparedness plans accordingly.

The meeting was chaired by Dr Basu Dev Pandey and co-chaired by Dr Aishath Aroona Abdulla. The rapporteur was Dr Jagath Amarasekera.

(See Annexes 1 and 2 for agenda and list of participants)

3. Overview of the pandemic influenza preparedness plan

3.1 Regional updates on the status of pandemic influenza

Dr Bardan Jung Rana, Disease Surveillance and Epidemiology (DSE), WHO, SEARO, New Delhi, India reported that all 11 countries of the Region developed national PIPP (NPIPP); thanks to the introduction of the IHR (2005), that was catalysed by the emergence of SARS in 2002 and the
pandemic threat posed by A(H5N1) influenza virus since 2003. NPIPP were further tested when the A(H1N1) influenza pandemic occurred in 2009, which has led to some MS revising or updating their national PIPP. To date, most of these preparedness plans were under the responsibility of a coordination committee consisting of multisectoral bodies. Some national plans were developed addressing different pandemic scenarios from mild to severe (e.g. Bangladesh, Thailand). Many MS integrated or linked their influenza pandemic preparedness planning into /with their national disaster management structures/plan (e.g. Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand).

3.2 Global pandemic influenza preparedness – status updates, history, challenges and next steps

Professor Vernon Lee, Ministry of Health and Defense in Singapore focused on the rationale that has led to revising and publishing a new WHO guidance on pandemic influenza preparedness in 2013. Firstly, non-influenza epidemic threats (e.g. SARS CoV, MERS-CoV and Ebola virus) – although their incidence is relatively low – raise fear of spread and fear of the unknown that have had a major economic impact. Therefore, preparedness cannot solely focus on pandemic influenza. Secondly, lessons from the 2009 pandemic indicated that general confusion was created when national pandemic phases and their responses were not necessarily synchronized with the global pandemic phases issued by WHO. Phases required flexibility, as countries faced different risks and different impacts at different times. In addition, responses that were developed in NPIPP were too rigid, often not proportional to the severity level and the impact of the pandemic. Finally, he emphasized that influenza pandemics – like other disasters – need a comprehensive response across sectors, one of the core principles of emergency risk management for health. The next steps should be to review the NPIPP to incorporate all-hazards and risk-based management approaches and working across sectors (i.e. whole-of-government and all-of-society approaches).
4. **Country level updates on national PIPP – Lessons learned: best practices and challenges**

Member States (i.e. Bangladesh, Bhutan, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste) shared their experiences on influenza pandemic preparedness and response, focusing on “lessons learned” (i.e. best practices and challenges). The WHO country staff gave a brief description regarding the country situation for Democratic People’s Republic of Korea and India. The session demonstrated the common areas addressed by each country and the achievements of all countries in NPIPP. It also gave an insight into the diverse approaches used by different countries in achieving their objectives.

All countries had their NPIPP in place when the 2009 pandemic hit the Region. MS acknowledged that planning for PIP benefited from the IHR (2005) core capacity strengthening requirements and the pandemic threat posed by the emergence of A/H5N1 in humans. Several lessons learned were highlighted.

All recognized that NPIPP have helped to respond to the 2009 pandemic and other emerging infectious diseases of public health concern. However, some MS (e.g. Thailand) already had a sophisticated response system at the national level before the pandemic in 2009. Several countries have already revised their PIPP following the occurrence of the 2009 pandemic. Of these, many MS have incorporated all hazards, cross-border preparation plans, vaccine deployment plan and business continuity plan where participation of the private sector (Indonesia, Thailand) and the civil society organizations (Maldives) was mentioned. Thailand emphasized the crucial need for essential services to go on and made self-learning business continuity plan online to be downloaded from website.

Bangladesh highlighted the benefits of having strong and extensive surveillance systems and platforms to monitor and characterize the severity of an influenza pandemic (i.e. strong laboratory capacity, case-based surveillance in hospitals and in the community, event-based surveillance relying on media and rumours/community reports monitoring and information sharing with the animal health sector). Sri Lanka reported the benefits of web-based influenza-like illness (ILI) and severe acute respiratory
infection surveillance systems. Some presenters pointed out the need for these structures to be also active during the interpandemic periods.

All Member States described the pandemic preparedness and response structures in which there was high level of political commitment. All countries have national level emergency committees or equivalents such as the Prime Minister's Committees, national security committees and ministerial committees. Timor-Leste had a high command structure with a National Commission for Epidemic Control with the President as Chair, through resolutions. In some countries, these committees are supplemented with a working group mechanism, military support, and private sector/civil society organization collaboration.

In many Member States, the Ministry of Health is involved in the national emergency committee either as a lead or supporting ministry. In the case of pandemic influenza, the ministries of health have played a leading role in organizing national level response through multiministerial and multisectoral coordination.

Many NPIPP stressed as best practices the importance of good communication/interaction between the public health and animal sectors (e.g. Bangladesh, Bhutan, Myanmar, Nepal and Thailand) particularly during the interpandemic period.

Indonesia described the presence of influenza outbreak command post at central, provincial, district/municipality and field levels and highlighted the importance of coordination/structure spreading to subnational levels.

Some countries have started to incorporate/link PIPP into the disaster management plan (e.g. Bhutan, Nepal, Thailand) while others have expanded NPIPP to only include other emerging infectious diseases.

Most countries have introduced a vaccine deployment plan only when the 2009 pandemic occurred. Many countries struggled with the lack of skilled staff due to high turnover; limited capacity for isolation spaces or to sustain a plateau level of response teams during the interpandemic period. Already several pandemic scenarios were developed in some NPIPP; however, many of these lacked a specific link with the risk assessment and management components. In addition, their planning rarely
captured the assessment of risk and impacts from the point of view of the whole society.

Shifting or competing priorities due to fatigue following the 2009 pandemic were observed in many countries. For instance, in Bangladesh, although NPIPP were reviewed and revised, approvals from higher levels are yet to come.

Risk communication with the media was indicated as a point of discussion, as to what extent should information be shared with the media. Some principles and guidance should be provided in national PIPP.

5. **Background and situation of pandemic influenza**

5.1 **Current respiratory infectious disease threats in the world and SEAR**

Professor Tjandra Yoga Aditama, National Institute of Health and Research, Ministry of Health, Indonesia gave a rapid overview of the burden of ALRI and emerging respiratory viruses in the Asian region (SARS, H5, H7N9, MERS). Respiratory infections are responsible for a large global burden of disease; lower respiratory tract infections when including tuberculosis were the leading cause of premature death globally in 2012. The vast majority of these cases and the related deaths occurred in South-East Asia and Africa.

To date, noncommunicable diseases as a whole have supplanted infectious diseases in terms of mortality rates in the South-East Asia Region. However, emerging infectious diseases continue to pose a serious public health threat for their frequently high mortality rates, as they can result in severe economic and social disruption. Of the emerging infectious disease threats in the past decade, most were related to respiratory infection, which included severe acute respiratory syndrom (SARS), avian influenza viruses, MERS CoV and rising drug-resistant tuberculosis and drug-resistance against seasonal A(H3N2) influenza virus. In conclusion, the benefits associated with IHR (2005) were emphasized, in which synergistic political commitment and leadership at the national, regional and global levels are crucial.
5.2 **International Health Regulation: pandemic influenza review**

Professor Mahmudur Rahman, Director, Institute of Epidemiology, Disease Control and Research, Ministry of Health and Family Welfare, Bangladesh reported the main outputs of the first IHR review committee that were presented that the Sixty-fourth World Health Assembly in May 2011. The Committee aimed at assessing the functioning of the IHR (2005) and the ongoing global response to the pandemic H1N1, and (2) identifying lessons learned for strengthening preparedness and response for future pandemics and public health emergencies. The main conclusions were as follows:

- IHR made the world better prepared to cope with public health emergencies although not fully operational, as many countries were not yet able to meet the IHR core capacity requirements.

- The early global response to the 2009 influenza pandemic highlighted the benefits of global cooperation; however, the committee estimated that the world is still ill-prepared to respond to major public health emergencies.

- Vaccination for A(H1N1) pandemic started after the peak of the pandemic (too little, too late), which suggested the need to improve the mechanism for quick vaccine production, deployment and to make it available at an affordable price.

5.3 **Pandemic preparedness vaccine deployment plan**

Dr Arun Thapa, Coordinator, IVD, WHO, Regional Office for South-East Asia provided a rapid overview of the pandemic vaccine deployment during 2009 – 2010 in the Region. Eight of the 11 SEAR countries deployed pandemic influenza vaccines during, and all after the pandemic peak. Of the 24 million doses that were deployed, 70% were utilized. While India and Thailand self-procured, Nepal and Indonesia did not accept vaccines. Myanmar did not utilize due to short expiry and one country deployed vaccine with a month’s life.

Lessons from the deployment of pandemic vaccines suggest that deployment goes smoothly when infrastructure for routine vaccination are well in place. In addition, three countries of the Region have good vaccine
manufacturing capacity and could meet the needs of the Region and beyond.

Nevertheless, countries were encouraged to review their vaccine deployment operations in 2009–2010 to address gaps. In particular, vaccine deployment plans should ensure surge capacity for responding to pandemics and other emergencies. Finally, he insisted that countries provide a detailed vaccine deployment plan—legal and regulatory planning, and AEFI planning in particular—to ensure support from donors.

5.4 How risk communication has helped mitigate influenza pandemics: what have we learnt

Dr Supriya Bezbaruah, Pandemic Influenza Preparedness (PIP) Project Manager, DSE, WHO Regional Office for South-East Asia reported that risk communication was a challenge during the response to the 2009 pandemic. Improper risk communication occurred in many countries, particularly with health-care professionals, which led to poor vaccine uptake among health professionals and subsequently among the public.

She reminded the participants about the central role of risk communication during epidemics, whose principles consist of transparency to build trust and listening to the public demonstrating compassion and optimism. Risk communication requires strategy and planning for proactive and continued communication with the media and among stakeholders; it must be integrated onto preparedness. Risk communication is a continuing process during crises, which is to be coupled with risk assessment and management.

5.5 Influenza pandemic preparedness and response: a review of legal frameworks in India

Professor Sanjay Zodpey, Vice President and Director – Public Health Education, Public Health Foundation of India, New Delhi said that comprehensive legal frameworks are required to strengthen pandemic influenza preparedness (PIP) planning. A sound public health law infrastructure establishes the powers and duties of government to prevent disease and injury, and to promote the population’s health. Legal
Frameworks play a critical role during emergency situations, since it can prescribe not only rights and duties of individuals but also the scope of government’s responses to public health emergencies at local, national and international levels. Professor Zodpey and his team highlighted the key gaps in the legal frameworks in India. Existing Indian legislation for public health responses is scattered and largely “policing” in nature, rather than being based on specific public health focus. He recommended enacting one overarching public health legislation in India, so that tools are made available for better monitoring of the response to crises.

5.6 Introduction to pandemic influenza preparedness (PIP) framework

Dr Bezbaruah introduced the PIP Framework, which became effective on 24 May 2011 when it was endorsed by the Sixty-fourth World Health Assembly. It has brought together Member States, industry, other stakeholders and WHO to implement a global approach to pandemic influenza preparedness and response. The PIP framework pursued two objectives that are on an equal footing:

- improve sharing of influenza viruses with the potential to cause a pandemic among humans; and
- achieve more predictable, efficient, and equitable access to benefits arising from the sharing of viruses, notably vaccines and antiviral medicines.

While affected MS are willing to share influenza viruses with pandemic potential, partnership meant equitable access to vaccines. Technical and financial support to strengthen national pandemic influenza response capacities will be made available for all MS.

More specifically, partnership contribution aims at strengthening capacities in five areas: laboratory and surveillance, regulatory capacity, burden of disease, risk communication, planning for deployment. In the South-East Asian Region, six MS and the Regional Office received >US$1.6 million for 2014 with a special focus on laboratory and surveillance.
6. WHO guidance on pandemic influenza risk management 2013

6.1 Draft health emergency risk management framework

Dr Liviu Vedrasco, Technical Officer (EHA), WCO, Thailand presented the WHO health emergency risk management framework (HERMF). Although not officially endorsed by the World Health Assembly, this framework served as a backbone for developing the new WHO interim guidance on pandemic influenza risk management. The goal of HERMF is to provide guidance on key capacities that MS need when facing disasters or civil unrest. The guiding principles include a comprehensive risk management approach, all-hazards, multisectoral principles, strong community resilience (indicative of a prepared population), responses guided by sustainable development and ethical considerations (where most vulnerable populations are central to the response). There are six essential areas of work that one needs to focus on: (1) policies/resource management; (2) planning and coordination; (3) information and knowledge management; (4) infrastructure and logistics; and (5) health services and (6) community capacities.

The WHO Emergency Response Framework (ERF) is not to be confused with the HERMF. ERF is an internal WHO document whose purpose is to clarify roles and responsibilities between all WHO levels (i.e. headquarters, regional offices and country offices) in this regard and to provide a common approach for WHO’s work during emergencies.

6.2 Introduction of WHO guidance: pandemic influenza risk management

Professor Vernon J.M. Lee, Head, Singapore Armed Forces Defence Centre drew attention to the four new additions into the 2013 WHO interim guidance:

(1) Emergency risk management for health: In each of the six essential areas of work of the HERMF, the new guidance provides key elements to go through when reviewing the NPIPP. These elements are either questions to address or steps to consider when assessing and/or revising the NPIPP.
(2) **Risk-based Approach**: It requires flexibility in the PIPP, so that responses to the pandemic one proportional to its impact.

(3) **Revised global pandemic phases and its uncoupling with national actions.** Global pandemic phases have been simplified to include interpandemic/alert/pandemic/transition/interpandemic phase again. National phases— including preparedness, response and recovery—are decoupled from the global phases. Furthermore, the guidance emphasizes the central role of continuing national risk assessments to move from one national phase to another. Early severity assessment to be part of the NPIPP was highlighted as key rapid evaluation of the impact and accurate risk assessments.

(4) PIP framework (as explained in section 5.6)

7. **Implementation of the new WHO recommendations**

For WHO to provide better support to and coordination among MS with respect to implementing the new additions of the WHO interim guidance, active participation was requested. Three work groups were organized to address two issues, namely, strengthening the national influenza pandemic preparedness plan incorporating the ‘all-hazards’ ‘all public health emergency events’ approach and revising the NPIPP in line with the WHO guidance on pandemic influenza risk management (including incorporation strategy for pandemic influenza vaccine deployment plan). The discussion revolved around the steps to move towards risk management approach when dealing with pandemic influenza and other public health emergencies, the challenges and identification of areas for WHO assistance and support.

To strengthen NIPPP incorporating the ‘all-hazards’ approach, there is a need to advocate at a higher level; review the existing documents/plan (including disaster management plan / one health documents) and policies/plans from other countries; link/coordinate with national disaster management agency; review current vaccine and drugs deployment plan for incorporation; and build health-care workers capacity.
The challenges include human resources such as increased turnover of trained health personnel; lack of cooperation between government sectors; and competing priorities/lower political commitment (fatigue from last pandemic).

WHO’s support is needed in providing funding for simulation exercise and capacity building; technical support for preparedness at provincial and township level; coordination between Association of Southeast Asian Nations (ASEAN) and South Asian Association for Regional Cooperation (SAARC) or between the Regional Office for South-East Asia and the Western Pacific (e.g. Mekong region); provision of revised guideline to cover not only influenza, but also EID based on all hazard approach; and to provide common framework for countries to adopt for revising pandemic preparedness plan.

The following steps were identified for risk-based management approach when revising the NPIPP: objective way of assessing severity with standardized guidance available for countries; sensitization at provincial levels; dissemination of final revised guidance document (official launch), and workshop/orientation at the country level, a checklist or template would be helpful to accompany the new guideline. The national influenza vaccine deployment plan should be integrated as part of national influenza preparedness plan and mechanism of vaccine deployment can be through the existing EPI infrastructure.

Challenges include lack of awareness, competing interests and lack of resources; feasibility – complexity problem: e.g. capacity for severity assessment; and lack of cooperation between government sectors.

WHO could facilitate development of a comprehensive package for impact assessment inclusive of assessment tool and provide guideline, training and dedicated team for impact assessment.
8. Updates: other emerging infectious diseases (EID) of public health concern – regional preparedness

8.1 Update on avian influenza A(H7N9) and MERS coronavirus

Dr Nihal Singh, Medical Officer (Epid.), WCO, Nepal said that date, global risk assessments issued by WHO regarding MERS CoV and avian influenza A(H7N9) remain unchanged. Both viruses caused severe human infections with high mortality rates and limited human to human transmission. The two diseases are not considered by WHO as public health emergencies of international concern (PHEIC); however, WHO remains alert and closely monitors the viruses potential capacity for sustained human to human transmission.

As of 20 August 2014, WHO reports 855 laboratory confirmed MERS-CoV infected human cases including 333 related deaths. MERS-CoV infected emerged in the Middle East and has sporadically spread beyond the Region affecting many countries in Europe, North Africa, South-East Asia and the United States. The WHO missions to the Kingdom of Saudi Arabia (KSA) and United Arab Emirates (UAE) found that the upsurge in cases in both countries was explained by several hospital-acquired outbreaks that resulted from a lack of systematic implementation of infection prevention and control measures. Since May, the number of cases in KSA and UAE has sharply declined. In contrast, transmission of avian influenza A(H7N9) in humans remains limited to mainland China; cases that were reported in Hong Kong, Malaysia and Taiwan were reported to be infected in mainland China. Since its emergence in humans in March 2013, 450 A(H7N9) human cases were reported to WHO, including 165 deaths.

Most countries in SEAR are providing advice about MERS and H7N9 to individuals travelling to or returning from the Middle East. Risk communication messages have been prepared in most MS and media briefing conducted. However, not many media training courses have been conducted. All SEAR countries have updated their national infection prevention and control guidelines to address MERS and H7N9 infections
specifically. Countries have strengthened their surveillance systems for SARS and early laboratory detection of MERS-CoV and A(H7N9) virus. Countries with large number of pilgrims to the Middle-East are alert on event-based notification for SARI.

8.2 Update on Ebola virus disease

Dr Ritu Singh Chauhan, National Professional Officer (Microbiology), WCO, India said that the current Ebola virus disease (EVD) outbreak began in Guinea in December 2013. This outbreak now involves transmission in Guinea, Liberia, Nigeria, and Sierra Leone. As of 22 September 2014, countries have reported 5864 cases including 2811 (48%) deaths. This is currently the largest EVD outbreak ever recorded. Affected countries have been facing several challenges which include (1) a fragile health system where there have been deficits of human, financial and equipment resources; (2) misconceptions of the disease and its transmission in some communities; (3) high mobility of populations within and between countries including those infected; (4) several generations of transmission and (5) inadequate infection control practices in many facilities. On 8 August 2014, the WHO Director-General accepted the IHR (2005) – associated Emergency Committee’s assessment of the EVD outbreak and declared the Ebola outbreak in West Africa PHEIC. WHO issued them as temporary recommendations under IHR (2005) and requested the EC’s reassessment of the situation in three months.

All states that are not affected by EVD or have no borders with the affected ones (e.g. countries of SEAR) should not ban international travel or trade. Travellers to Ebola-endemic areas should be provided with relevant information on risks and its prevention. States should be prepared to detect, investigate and manage Ebola cases. States should be prepared to facilitate the evacuation and repatriation of nationals (e.g. health care workers) who have been exposed to Ebola.

India has taken the following measures to be prepared for a potential importation of cases. These measures include: daily press releases from the Ministry of Health and Family Welfare; regular monitoring at the central level; states remain on alert; guidance prepared and disseminated; technical support provided; points of entry activated (18 airports) with screening activities and isolation facilities prepared; reference hospitals designated; and training of rapid response teams started.
9. Conclusions

(1) It is necessary to revise the existing NIPPP in line with pandemic influenza risk management WHO interim guidance.

(2) It is necessary to broaden the scope of PIP plan to include emerging infectious diseases (EID).

(3) Integrating and updating national influenza vaccine deployment plan as part of national influenza preparedness plan is supported.

(4) Revised national pandemic influenza preparedness plan needs to be aligned with IHR (2005).

(5) Further guidance on risk-based management of all-hazard public health emergencies is required.

10. Recommendations

10.1 To the Member States:

(1) The existing NPIPP should be revised in line with pandemic influenza risk management WHO interim guidance.

(2) The national pandemic influenza vaccine deployment plan should be revised and integrated with the NIPPP.

(3) Cooperation and coordination between relevant government sectors and other stakeholders in the national plan should be further strengthened with specific roles and responsibilities defined in NIPPP.

(4) The scope of pandemic influenza preparedness plan should be expanded to include EID and all-hazards.

(5) The pandemic preparedness plan should be Interlinked with disaster preparedness plans;

(6) Table top/drills/simulation exercises should be conducted to test the revised NIPPP.
(7) Risk assessment and risk communication at all levels in multiple sectors in the NIPPP should be incorporated and strengthened.

(8) NIPPP should be operationalized.

10.2 To WHO:

(1) Technical support should be provided to MS to revise the existing NIPPP in line with pandemic influenza risk management WHO interim guidance.

(2) Advocacy should be continued with MS and partners on the importance of preparedness plan for all-hazards public health events.

(3) Technical support to develop advocacy plans and materials should be provided.

(4) MS should be supported in operationalizing the NIPPP.

(5) Strengthening of emergency operation centres in MS should continue to be supported, particularly during interpandemic period.

(6) WHO should work with partners to mobilize technical and financial resources to support implementation of the new WHO interim guidance.
Annex 1

Agenda

(1) Regional overview of pandemic preparedness, assessments and lessons learnt

(2) Emerging global and regional respiratory infectious disease threats

(3) Overview and implementation of the pandemic influenza preparedness framework.

(4) Sharing of country experiences and best practices

(5) Updated WHO guidance on pandemic influenza risk management

(6) Categories in national pandemic preparedness plans

(7) Recommendations and way forward
# Annex 2

## List of participants

### Member Countries

**Bangladesh**
- Dr Sukumar Sarker  
  Deputy Director  
  Communicable Disease Control  
  DGHS  
  Dhaka  
- Dr Shahid Md. Sadiqul Islam  
  Assistant Director & DPM  
  DGHS  
  Dhaka  

**Bhutan**
- Mr Kencho Wangdi  
  Program Officer  
  International Health Regulations (IHR)  
  Department of Public Health  
  Ministry of Health  
  Thimphu  
- Mr Kunzang Dorji  
  Laboratory Officer  
  Health Laboratory  
  Jigme Dorji Wangchuk National Referral hospital  
  Thimphu  

**Indonesia**
- Mr Edy Purwanto  
  Epidemiology, Sudit Surveillance and Outbreak Response  
  Directorate of Surveillance, Immunization, Quarantine and Matra Health  
  Directorate General of Disease Control and Environmental Health, Ministry of Health, RI Jakarta  
- Dr Dyan Sawitri  
  Epidemiology, Sudit, Health Quarantine  
  Directorate of Surveillance, Immunization, Quarantine and Matra Health  
  Directorate General of Disease Control and Environmental Health, Ministry of Health, RI Jakarta  

**Maldives**
- Dr Aishath Aroona Abdulla  
  Epidemiologist  
  Health Protection Agency  
  Malé  

**Myanmar**
- Dr Kyaw Kyaw (Mr)  
  Deputy Regional Health Director  
  Sagaing Regional Health Department Region  
  The Government of the Republic of the Union of Myanmar  
  Ministry of Health  
  Nay Pyi Taw  
- Dr Thet Su Mon (Ms)  
  Township Medical Officer  
  Ayeyawaddy Regional Health Department  
  The Government of the Republic of the Union of Myanmar  
  Ministry of Health  
  Nay Pyi Taw  

**Nepal**
- Dr Basu Dev Pandey  
  Medical Superintendent  
  District Hospital  
  Ramechhap  
- Mr Kumar Dahal  
  Public Health Inspector  
  Epidemiology & Disease Control Division  
  Department of Health Services  
  Kathmandu  

**Sri Lanka**
- Dr Madhava Gunasekera  
  Medical Officer  
  Epidemiology Unit  
  Colombo  
- Dr Jagath Amarasekera  
  Epidemiology Unit  
  Colombo
Thailand
Dr Teerawat Valaisathien
Director
Office of disease Prevention and Control 5
Nakhon Ratchasima
Department of Disease Control
Ministry of Public Health
Nonthaburi
Dr Teerasak Chuxnum
Veterinarian, Senior Professional Level
Bureau of Epidemiology
Department of Disease Control
Ministry of Public Health
Nonthaburi

Timor-Leste
Dr Antonio Gusmao Guterres
Executive Director,
Guido Valadares National Hospital
Dili
Dr Frederico Bosco Alves
Acting Head
Department of Communicable Diseases Control
Ministry of Health
Dili

Temporary Advisers
Professor Mahmudur Rahman
Director
Institute of Epidemiology Disease Control and Research (IEDCR) &
National Influenza Centre (NIC)
Dhaka, Bangladesh
Professor Sanjay Zodpey, MD, PhD
Vice President [North] and Director – Public Health Education,
Public Health Foundation of India, New Delhi
Director – Indian Institute of Public Health
Delhi, India
Professor Dr Tjandra Yoga Aditama
Chairman of the National Institute of Health
Research and Development (NIHRD)
Ministry of Health
Jakarta, Indonesia

Professor Vernon J.M. Lee
Head
Singapore Armed Forces Biodefence Centre & Adviser to Public Health Group
Ministry of Public Health
Singapore

Secretariat
WHO Regional Office for South-East Asia Region, New Delhi, India
Dr Arun Thapa
Coordinator (IVD)
Immunization and Vaccine Development Unit
Department of Family Health and Research
Dr Bardan Jung Rana
Medical Officer (IHR) - Disease Surveillance and Epidemiology (DSE) Unit
Department of Communicable Diseases
Dr Supriya Bezbaruah
Project Manager
PIP Framework Partnership Contribution
Disease Surveillance and Epidemiology (DSE) Unit
Department of Communicable Diseases

Country Offices
WCO Bangladesh, Dhaka
Dr A.S.M. Alamgir
National Professional Officer
WCO Bhutan, Thimphu
Mr Kinley Dorji
National Professional Officer
WCO Democratic People’s Republic of Korea, Pyongyang
Dr Suraj Man Shrestha
MO-FCH
WCO India, New Delhi
Dr Ritu Singh Chauhan
NPO (Microbiology)
Dr Leonard Machado
Training Focal Person
Polio Surveillance Project.
WCO Indonesia, Jakarta
Dr Endang Widuri Wulandari
Disease Surveillance and Epidemiology Unit
Dr Sidik Utoro MPH
Temporary National Professional
Expanded Programme on Immunization

WCO Nepal, Kathmandu
Dr Nihal Singh
Medical Officer (Epidemiologist)
Dr Rajendra Bohara
Coordinator, IPD

WCO Thailand, Nonthaburi
Dr Liviu Vedrasco
Technical Officer (EHA)

WCO Timor-Leste, Dilli
Mr Jermias Da Cruz
DSE Focal Point
The global response to the spread of avian influenza A (H5N1) since 2003 and the influenza A(H1N1) 2009 pandemic has helped shape a number of significant public health advances, providing a better understanding of the dynamics of pandemic influenza itself and of the issues that need to be addressed in pandemic preparedness. However, it is increasingly evident that an all-hazards approach multisectoral collaboration is required to combat public health threats. In 2013, the World Health Organization (WHO) issued a new guidance document, “Pandemic Influenza Risk Management”, which updates and replaces “Pandemic influenza preparedness and response: a WHO guidance document (2009)”. This is a report of the regional workshop on the Pandemic Influenza Preparedness Plan, 23–25 September 2014, Kathmandu, Nepal, to ensure national preparedness plans are updated along the lines of the WHO guidance, and have an all-hazards approach.