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Implementation of International Health Regulations (2005)

*Report of the First Regional Workshop
Male, Republic of Maldives, 23-25 April 2007*

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Acronyms

ADB	Asian Development Bank
APSED	Asia-Pacific Strategy on Emerging Diseases
BCT	Blood Safety and Clinical Technology
BSL 3	Bio-safety Laboratory- Level 3
CD	communicable diseases
CDC	Centers for Disease Control and Prevention
CEU	Clinical Epidemiology Unit
CIDA	Canadian International Development Agency
CSR	Communicable Diseases Surveillance and Response
DG	Director-General (WHO)
DPH	Department of Public Health
EC	emergency committee
EHA/HAC	Health Action in Crisis
EPR	Epidemic Preparedness and Response
ESR	Epidemiological Surveillance and Response
EU	European Union
EURO	Regional Office for Europe
EWARS	Early Warning and Response Network
FCS	Food and Chemical Safety
FETP	Field Epidemiology Training Programme
HPAI	Highly Pathogenic Avian Influenza
HQ	Headquarters
IDS	Integrated Disease Surveillance
IGWG	Inter-Governmental Working Group
IHD	International Health Division
IHR	International Health Regulations

IVD	Immunization and Vaccine Development
MOH	Ministry of Health
MS	Member State(s)
NFP	National Focal Point (IHR)
NIPPP	National Influenza Pandemic Preparedness Plan
PH	public health
PHEIC	public health emergency of international concern
PPE	personal protective equipment
RD	Regional Director
RRTs	Rapid Response Teams
SARS	Severe Acute Respiratory Syndrome
SEAR	South-East Asia Region
SEARO	WHO Regional Office for South-East Asia
SOPs	Standard Operating Procedures
TOT	training of trainers
TTX	Table-top Exercise
UN	United Nations
VBC	Vector-borne Disease Control
WHA	World Health Assembly
WR	WHO Representative
WHO	World Health Organization

1. Background

The threat from infectious diseases has over the past few years increased mainly due to their emergence and re-emergence, and increased international travel and trade. Severe Acute Respiratory Syndrome and avian influenza are just two recent examples of such threats with serious public health and socioeconomic implications. The earlier version of International Health Regulations (IHR), which dates back to 1969, required Member States to notify the World Health Organization (WHO) of only three infectious diseases, namely cholera, plague and yellow fever. This, however, was gradually felt to be inadequate to address the growing risk from infectious diseases and other public health emergencies. Considering the dynamics and growing risks, the World Health Assembly (WHA) requested the Director-General (DG) of the Organization to take appropriate measures to revise and update the Regulations.¹ Accordingly, Member States adopted a revised International Health Regulations, hereinafter referred to IHR (2005), on 25 May 2005.² The WHO Regional Office for South-East Asia (SEARO) and its Member States have actively participated in the revision and adoption of the Regulations at national, regional and global levels.³ The revised IHR (2005) came into effect on 15 June 2007.

The purpose and scope of the IHR (2005) “ is to prevent, protect against, control and provide a public health response to the international spread of diseases in ways that are commensurate with and restricted to public health risks; while avoiding unnecessary measures against international traffic and trade.”⁴ The Regulations have included significant changes and obligations, including:

- (1) Not limiting the scope to any specific diseases, but rather to “illnesses or medical conditions, irrespective of origin or source that presents or could present significant harm to humans”;
- (2) Obligation of the State Party to develop certain minimum core public health capacities;

¹ See resolution WHA48.7 on the need for revising and updating the International Health Regulations.

² See resolution WHA58.3 on the revision of the International Health Regulations.

³ See documents on Revision of International Health Regulations (SEA-CD- 133, SEA-CD-135 and SEA-CD-140).

⁴ See Article 2 of the IHR (2005) document.

- (3) Obligation of the State Party to notify WHO of all events which may constitute a public health emergency of international concern according to a defined criteria;
- (4) Provisions authorizing WHO to take into consideration unofficial reports of disease events;
- (5) Procedures for declaration by the Director-General of a “public health emergency of international concern” and issuance of temporary recommendations;
- (6) Extending human rights protection for travellers; and
- (7) Establishment of IHR National Focal Points and WHO Contact Points for urgent communication between State Parties and WHO.

The Fifty-eighth World Health Assembly (WHA), urged Member States, among others to build, strengthen and maintain the capacities required under the IHR (2005), and to mobilize the resources necessary for that purpose. It also urged that all appropriate measures, pending the entry into force of the IHR (2005), for furthering their purpose and eventual implementation, including the development of necessary public health capacities and legal and administrative provisions, and in particular to initiate the process of introducing the use of decision making in Annex 2.

According to the Regulations, Member States need to assess existing core capacities and legal arrangements, identify needs and make necessary preparations for implementation of the IHR (2005) within two years of its entry into force. In the interim, the WHA had called upon its Member States to comply immediately on voluntary basis with provisions of IHR (2005) considered relevant to the risk posed by avian influenza and pandemic influenza.⁵

Since late 2006, the WHO Regional Office for South-East Asia in coordination with the National IHR Focal Points and WHO contact persons is conducting country assessments as part of the preparedness for implementation of IHR (2005). So far, eight of the 11 member countries of the SEA Region have completed the assessment.⁶

⁵ See resolution WHA59.2

⁶ Detailed country reports shared with all member countries and available with CSR/SEARO.

The specific objectives of the county assessment missions were: (i) to assess existing core capacity for implementation of IHR (2005); (ii) to document progress made in strengthening core capacity and in amendment of public health rules; and (iii) to identify gaps and needs in implementation of the Regulations.

This First Regional Workshop on Implementation of IHR (2005) held from 23-25 April 2007 deliberated on the results of the above assessments and shared country-specific experiences and lessons in strengthening of core capacities and responding to public health emergencies of national and international concern.

WHO and the Department of Public Health, Ministry of Health, and Government of Republic of Maldives jointly organized the workshop.

2. Objectives

The general objective of the workshop was to review the progress made in preparation for implementation of IHR since its adoption on 23 May 2005.

The specific objectives were:

- To review progress and analyze status of preparedness for implementation of IHR (2005).
- To agree on strategic framework of the step-by-step implementation of IHR (2005), including mechanisms for intercountry collaboration and sharing of information.
- To recommend next steps and outline follow-up action by WHO and MS.

3. Inauguration

The Honourable Deputy Minister of Health of the Republic of Maldives, Dr Abdul Azeez Yoosuf, welcomed the participants. He stressed the need for enhanced collaboration among Member States to combat public health threats and highlighted the significance of IHR (2005) to this effort.

His Excellency Ilyas Ibrahim, Honourable Minister of Health, Republic of Maldives, officially opened the workshop. He noted that the emergence and re-emergence of infectious diseases has posed a growing threat to global health security and socioeconomic development. He mentioned that a number of emerging diseases, such as Severe Acute Respiratory Syndrome (SARS) and avian influenza A (H5N1) have had a profound adverse effect on general public health and economic development in many nations.

The Honourable Minister emphasized the need for partnerships to combat the growing threat from infectious diseases and remarked: *"The revised International Health Regulations (2005) is a step forward to strengthen our collaborative efforts to improve the monitoring and surveillance mechanisms within our Region and in the world."* Furthermore, the Minister stressed the need to invest more in building systems, and strengthening capacity and infrastructure that support their application. He said there is a need to be prepared for global threats and to do everything possible to minimize or eliminate them; and expressed his confidence that this meeting is part of the global effort to fulfil that obligation.

In his concluding remarks, the Minister expressed his thanks to WHO for hosting this workshop in the Maldives and for the very generous support provided in achieving health for all (Annex 1).

The WHO Representative to the Maldives delivered the speech of the Regional Director welcoming the participants to the workshop. In his message, Dr Samlee Plianbangchang, Regional Director for the WHO South-East Asia Region, highlighted the significance of this workshop organized just few months before the entry into force of the IHR (2005). He noted the serious impact from infectious diseases on health and socioeconomic development. In this regard, the Regional Director said "the latter part of the 20th and beginning of the 21st Century saw the rapid spread of a number of serious emerging and re-emerging infectious diseases, such as SARS and avian influenza H5N1, across international boundaries. Their spread caused tremendous economic loss and social disruption in many countries of the world." He highlighted that the global community remains at risk, and noted that "these public health threats also demonstrated clearly the vulnerability of the global community in terms of the rapid spread of these diseases from one part of the world to another within a matter of just a few days or even hours."

The Regional Director also underscored that the revision and adoption of the International Health Regulations is an important step. In this regard, he remarked that the IHRs “are a unique, internationally-binding and comprehensive legal instrument to protect ourselves against Public Health Emergencies of International Concern (PHEIC), irrespective of their origin.” He emphasized the need for building core capacities required for its implementation and highlighted the importance of this workshop to define roadmap, with important milestones to guide ongoing efforts and to facilitate the timely and effective implementation of the International Health Regulations (2005) (Annex 2).

4. Preparedness for implementation of IHR (2005)

4.1 Progress towards implementation: An overview

Since the adoption of IHR (2005), WHO has provided support to MS in preparedness for implementation of the regulations. Some of the main activities and progress in this regard include the followings:

Documents, guidelines and tools: Hard copies of IHR (2005) have been widely distributed and are accessible at the IHR website; <http://www.who.int.csr/ihr>. The website provides a number of articles, and shares the progress made towards implementation. A briefing material on introduction to IHR (2005) was also developed. Final draft of checklist on required core capacities for implementation of IHR is ready. A guide on IHR points of entry protocols is also available, while SOPs are in the process of development. Moreover, existing WHO guidelines including on recommended standards and strategies for surveillance, prevention and control of communicable diseases, on early warning and response; monitoring and evaluation of disease surveillance and response systems; and setting priorities in communicable disease surveillance were prepared. The Regional office has adapted guidelines, toolkits and check-lists, i.e. clinical case management of highly pathogenic avian influenza, TTX, were developed and are currently in use.

Advocacy and sensitization: A number of Member States of the South-East Asia (SEA) Region have organized IHR sensitization and familiarization workshops (for example, in Myanmar and India). At the

global level, materials for improving skills including E-quiz for IHR (2005); and E-briefing for WHO Representatives and staff are in process of development.

Strengthening core capacities: Eight of the 11 Member States in the South-East Asia Region have completed documentation of their progress in implementation of NIPPP and have assessed existing core capacities for implementation of IHR (2005). WHO has provided technical support to Member States including advice, guidance on surveillance and laboratory strengthening, outbreak management and risk communication. Moreover, capacity building activities including training in FETP, RRT, IDS and EWARS, and Table-top exercises (TTX) are ongoing.

The Regional Office has established the Strategic Health Operation Center (SHOC) to verify, track and coordinate response to outbreaks and unusual health events. In addition, CSR sub-units were established in Delhi and Bangkok as part of the process of decentralization of WHO's technical activities and coordination of emergency preparedness and response measures at the country level. Currently, the regional CSR team is composed of multidisciplinary professionals networking with CSR focal points in WR offices.

IHR focal points and experts: Globally, the number of Member States with designated IHR National Focal Points has reached 142 Member States (73% of the total) in mid-April 2007. In the SEA Region, all 11 Member States have designated focal points. Moreover, as in mid-February, 48 Member States had designated National IHR experts.

Review and amendment of public health rules: According to the IHR (2005), Member States need to review their existing public health rules to check if there are any obstacles to the implementation of IHR and to amend as and when required. The experience from Myanmar and India show the importance of this process. Myanmar, for example, has finalized the review of its existing Public Health Law (1974) and the Prevention and Control of Communicable Disease Law (1995) and submitted the same to the State Office for endorsement. Likewise, India has finalized a revised version of public health rules for aircraft and ports, which was initiated in late 2006. Currently, the final version is ready for submission to the department concerned.

4.2 Results of assessment of existing core capacities

Assessment of status of core-capacities required for implementation of IHR (2005) was undertaken in eight member countries of WHO/SEARO. Accordingly, WHO/SEARO in coordination with country offices and national partners has conducted assessments in eight Member Countries.

The findings of these assessments show that all Member Countries have designated IHR National Focal Points and coordination mechanisms are in place. Relevant rules on communicable disease prevention, including for quarantine, vector control, vaccination and prevention, and health emergency response exist in all countries. Four countries have reviewed these to see if there are any obstacles or constraints for implementation of IHR (2005) and begun the amendment of the existing public health rules. Similarly, many have either adapted or developed EPR plans and others are in the process of doing the same. All Member Countries have prepared comprehensive and multi-sectoral national influenza pandemic preparedness plans (NIPPP).

National communicable disease surveillance systems exist in all countries with a list of priority diseases/syndromes relevant to each. The system generates weekly epidemiological data on these priority diseases, which are in some countries incorporated to epidemiological bulletins. However, timeliness and completeness of reporting, data analysis and use for action, in a number of countries, particularly at the peripheral levels require further improvement.

Overall, there is a human resource capacity gap and a need to train health workers in basic epidemiology, outbreak investigation, surveillance, data management and analysis. Moreover, while there is an improving trend in collaboration between animal and public health sectors, there is a need to strengthen regular sharing of surveillance data. In addition to improving collaboration within the public sector, it is imperative to involve the private sector in surveillance and early warning. The findings indicated that there is limited capacity at ports of entry for surveillance and response, including quarantine, screening and vector control services. However, in countries with designated seaports, these capacities are more limited compared to their airport health services.

Rapid Response Teams (RRTs) are established at different levels, depending on the context and arrangement of the health system in each

country. Training of RRTs is ongoing in all countries. However, there is a need to strengthen and scale-up training of RRTs, particularly at the district and facility levels.

There is a designated national institution or department for coordination of national response. The organization responsible for epidemiological surveillance is responsible for coordination of outbreak response and the IHR National Focal Point as well.

Guidelines were available for select diseases, including on case management, infection control and disease control. Few countries have designated national reference infectious disease hospitals to handle highly infectious disease, and other PHEIC. Overall, there are limited infection control facilities in Member States including PPEs and stockpiles of antiviral drugs, and lack of systematic hospital preparedness planning for mass casualty from a dangerous pathogen. While two Member States have BSL-3 labs, overall the capacity of laboratory services remains limited. As a result, Member States mostly refer specimens to other countries outside the region, underscoring a need to improve lab capacity and to establish a regional lab referral network.

Based on the findings from the assessments, it was recommended to implement key activities in a stepwise approach (assessment, then planning, implementation and review of progress). As outlined in the roadmap, Member States are expected to finalize assessment of current structures and systems within two years of entry into force of the IHR (2005). In this context, the progress made in the SEA Region is ahead of the deadline. The challenge ahead is to establish and maintain surveillance systems with the capacity to detect, assess, notify and report events, and to ensure that these core capacities are present and functioning throughout their territories. Country presentations and the assessment indicate that while some Member States are right on track as per the roadmap, a lot more is required to ensure that all Member States develop and maintain such capacity.

4.3 Experiences in surveillance and response

Deployment of rapid response teams: Myanmar

The Union of Myanmar shared its experiences from responses to HPAI outbreak in poultry farms, food poisoning, dengue and severe diarrhoeal disease outbreaks. Myanmar has established rapid response teams (RRTs) in

130 districts and 17 states/divisions. Each team is composed of the health director (serving as team leader), the surveillance officer, a clinician, microbiologist and veterinarian. Each RRT is responsible for verification of rumours, outbreak investigation, initiating control measures, and providing technical support and communication. While the RRT is a team of professionals that investigates suspected cases of avian influenza and supports the first 72 hours of a response, the scope of work includes diseases and emergency health events.

Country experiences from the Union of Myanmar underscore the importance of defining responsibilities and ensuring that the RRTs are multidisciplinary and trained. Furthermore, adaptation of modules with due considerations to country context is important. The experience shows that it is essential for effectiveness of RRTs to involve communities and engage more partners including non-governmental organizations.

Preparedness and response to PHEIC: Thailand

According to the IHR (2005), a public health emergency of international concern is an extraordinary event which constitutes a public health risk to other countries through the international spread of disease that potentially requires a coordinated international response.

The experience in Thailand showed that during the SARS alert there were 314 notifications (31 suspected and 9 probable cases) from 54 provinces of the country within 115 days. Following the outbreak of HPAI (H5N1) in 2004 till today at least 3000 notifications were investigated each year with 25 human cases detected and 17 deaths. More than 60 million birds died or were culled to prevent the spread of the outbreak. During another public health emergency, the 2004 Tsunami, there were 5383 deaths and 8457 people were injured, necessitating mass mobilization of rescue and response efforts. A massive outbreak of botulism, in 2006 required international partnerships to mobilize 93 doses of antitoxin from the United Kingdom, the United States and Japan through WHO and the US CDC. A total of 209 cases — of which 134 required hospitalization and 43 required ventilation equipment — were reported. All survived with no deaths.

Based on the above experiences and lessons, Thailand is currently preparing to handle PHE through the strengthening of core capacity (surveillance, laboratory, RRTs, infection control, stockpiling). It is also

strengthening management capacity, including by the establishment of a Public Health Emergency Task Force and exercises at all levels of the health system. The IHR (2005) can in this respect help to be more effective and serve as a powerful tool to strengthen basic structure and capacity on Epidemiology, Disease Control and international collaboration.

Epidemiological surveillance and response (ESR)

Surveillance contributes to monitoring spread and genotype of the virus, identifying potential hosts, preparing for subsequent outbreaks with vaccinations or other preventive measures. Early and accurate detection and appropriate local, national, and international responses (when the latter are required by the decision Tree protocol described in Annex 2 of the new IHR (2005)), are vital to prevent the spread and early containment of epidemics at source. Recognizing this, a project to strengthen epidemiological surveillance in Indonesia, Malaysia and Philippines was initiated with ADB support.

The main objectives of the project are to strengthen national and sub-national ESR systems for early detection and response to emerging infectious diseases, strengthen national ESR capacity in accordance with WHO IHR Annexes I and II; and to promote harmonized sub-regional collaboration mechanisms for surveillance and response to epidemic outbreaks of national and international concern. It also promotes coordination and collaboration between the three countries in improving surveillance and early warning systems.

In the last two years the project has participated in surveillance and response using the WHO Protocol (June-Oct 2006) and organized planning workshops (November 2006). The plans have been further reviewed, and approved by the respective MoHs (December 2006-March 2007). Currently, administrative systems and technical assistance for full implementation of ESR workplans are being set up (April 2007).

The experiences to date indicate that planning and strengthening of national surveillance systems need to take into account the country context, including health delivery systems, and the roles and responsibilities at various levels. Likewise, any programme to strengthen epidemiological surveillance needs to have an investment in supporting laboratory services.

4.4 Core capacity at points of entry

Regional perspective

According to Article 5 of IHR (2005) Member States are required to develop, strengthen and maintain, as soon as possible but not later than five years from entry into force, the capacity to detect, assess, notify and report events as stipulated in Annex 1. This includes developing and maintaining capacities at designated airports, ports and ground crossings. Such capacities include those required at all times and during emergencies.

Required capacities at all times for designated ports of entry include those for medical and diagnostic services, management and care of ill patients, human resources, equipment and physical facilities, for inspection of conveyances. Additionally, there is a need to have adequate, safe facilities and services for travellers (food and drink and public conveniences), trained staff for vector control, and safe and healthy environment near points of entry.

During emergencies designated ports of entry require to have facilities for assessment and care of affected travellers or animals including isolation/treatment and other support services. A public health emergency contingency plan and optimum space for assessment and quarantine must be ready. Moreover, the capacity to implement vector control and sanitation and other recommended public health measures must be in place.

As stated in the above findings from the country assessment missions, the capacity at designated ports of entry in many Member States remains limited. Thus, there is a need to scale up efforts to strengthen and maintain such capacities as required in the Regulations.

Country perspective: India and Indonesia

India has 21 international airports, 12 ports and three major land crossings. There are many more borderland crossing points due to the porous nature of the frontiers. Air travel is increasingly becoming a popular option with 2006 estimates indicating 17 million international passengers from India for the year. There is also a significant increase in import and export of livestock products India over the years. This increasing travel and trade creates favorable conditions for the quick and easy spread of infectious diseases across geographical boundaries. As observed during the recent

experiences with SARS and influenza outbreaks, there is a growing interdependence of health security among Member States.

Considering these concerns, the Government of India has taken important and vital action to strengthen core capacities required at ports of entry. Recently, it has reviewed copies of public health rules for aircraft and ports and amended them in accordance with the provision of IHR (2005). In June 2006, it identified designated airports, ports and ground crossings. In December 2006, policy decisions were made on the provision of health services at designated ports of entry. Plans are finalized to strengthen facilities, train port/airport health officers and arrange for the necessary logistics and supplies.

Indonesia has an integrated disease surveillance system involving central, provincial, district and the peripheral village health posts. The municipal health system is an integral part of the health system. Following the adoption of IHR (2005) Indonesia has conducted socialization and advocacy measures for port health authorities and staff. To improve the capacity to implement IHR (2005) at the ports of entry, Indonesia also conducted training, orientation and simulation exercises for port health staff. It has also improved funding, logistics, and infrastructure at Port Health Offices. Further activities to strengthen core capacity at designated ports of entry are planned.

An IHR implementation team is established for better coordination and to follow up progress. The IHR National Focal Point is the secretariat of the IHR implementation team.

A number of international partners are supporting disease surveillance and capacity development projects, including the AusAID (avian influenza), US CDC (influenza surveillance), CIDA and EU (training including TOT and FETP), and WHO, which is providing support in many areas.

5. Next steps for implementation of IHR (2005)

Global and regional perspectives to be considered for implementation of IHR (2005) were presented. Member States are required to conduct assessment of structures and resources within the next two years and to develop all capacity requirements within five years of the Regulations coming into force. Some of the key challenges in the process include

moving from vertical structures to integration, limited capacity and shortage of resources. Other main challenges at the country level include competing interests of major stakeholders, adjustment of domestic legislative and administrative arrangements, and developing appropriate SOPs for port health, quarantine, isolation and social distancing for affected population.

To address the above challenges, it is important to apply an integrated approach which utilizes existing national structures and resources. Implementation plans should be harmonized, and where available, be made an integral part of existing national surveillance and response plans.

The Asia-Pacific Strategy on Emerging Diseases (APSED) is a useful framework, and can serve as a roadmap, for building core competencies. The document identifies five main strategic areas for capacity development. These include surveillance and response, laboratory, emerging zoonoses, infection control and risk communication.

To facilitate the process of implementation, the following stepwise approaches were discussed and suggested as a way forward:

- (1) Policy and coordination
 - Designate and provide all required support for IHR National Focal Points.
 - Review existing rules and laws for any constraints for implementation of IHR (2005), and amend where required.
- (2) Assess structures and system
 - Assess existing capacity and structure in each Member States, the process should involve national partners to ensure that the findings and recommendations are owned.
 - Include laboratory capacity, ports and airports health services.
- (3) Develop plan based on assessment findings
 - Develop/harmonize time-bound implementation plan. This should include activities to further strengthen coordination, surveillance, laboratory, response, case management and infection control, communication, and capacities at ports of entry.

- Develop contingency plans to respond to risk and PHEIC. This needs to be developed along with plans to strengthen core capacities at various levels.
 - Include resource mobilization and advocacy into the plan.
 - Set specific targets as benchmarks to monitor progress.
- (4) Prioritize implementation
- Implementation could follow a phased approach, depending on the current capacity and resources in each country. For example, the first phase can focus on strengthening capacity for early detection, reporting, verification, notification, response and containment of risks or Potential Public Health emergencies of international concern (PHEIC).
 - Mobilize resources required for implementation of IHR (2005) including advocacy for national, regional and global partners.
- (5) Monitor and document
- Based on benchmarks included to the plan to track progress of implementation and document progress.
 - Review experiences and lessons on a regular basis, and adjust implementation of activities as required.

As some Member States have already executed some of the steps above, it is necessary to consider the country context and adapt implementation of activities as appropriate. However, it is essential to scale up efforts at all levels to strengthen and maintain core capacities needed for implementation of IHR (2005).

6. Conclusions and recommendations

In conclusion, there has been encouraging progress in Member States. All Member States have actively participated in the revision and adoption of IHR (2005) and have designated their IHR focal points. Assessment of existing structures and systems is finalized in eight countries. National surveillance systems and public health rules favourable for communicable disease control do exist. There are Rapid Response Teams in all countries at varying levels and of different strengths of the health system.

However, there are areas for further improvement. There is a need to provide more support to ensure that the designated institutions/focal points are fully functional. Overall capacity to detect, verify and notify an unusual event, particularly when and if it occurs at peripheral levels, requires improvement. Laboratory capacity in most Member States needs improvement, through referral networking at national, regional and global levels and other means. Infection control practices and standard operating procedures need to revise.

Following the above presentations and group discussions in major areas (advocacy and legal aspects, core capacities, ports of entry, and alert and response), key activities and recommendations for follow-up by Member States and WHO were identified to be as follows:

6.1 Activity for Members States

- Review existing laws/regulations for consistency and update if required for IHR 2005 compliance.
- Continue sensitization on the implications of IHR (2005) and advocacy for intersectoral partners, especially in the animal health sector, at all levels keeping in mind that they entered into force on 15th June 2007
- Enhance human resource through standard and tailor-made trainings, in particular for the field epidemiology, laboratory (human and animal), infection control and port health officials, in accordance with IHR (2005) Annexes I & II.
- Update all relevant certificates issued by ports, and bolster port health facilities, particularly those for screening and quarantine, and referral to designated hospitals/facilities in accordance with IHR 2005. Also develop SOPs for notification and communication of PHEIC at different levels.
- Upgrade laboratories, establish sub-national laboratory networks and test established specimen transport/transfer procedures.
- Develop an action plan for IHR implementation that is linked with PH emergency plans
- Mobilize resources, especially in public-private partnerships.

6.2 Activity for WHO

- Provide expert guidance on the legal aspects of IHR.
- Facilitate functional national, regional and international laboratories, surveillance alert and response networks, and network of national IHR focal points.
- Develop and help field-test guidelines/tools/ checklist for implementation of Annex 1 and 2 of IHR 2005; and for specimen sharing. Make these available on the website.
- Standardize and coordinate trainings in epidemiology, risk communication, clinical management and infection control, port health and laboratory services, and facilitate adaptation to country contexts.
- Assist resource mobilization.
- Support research and development on diagnostics, innovative Surveillance, Information and communication technologies for EWARS, and intersectoral approaches to respond to pandemics.

7. Closing session

The session was concluded Dr Abdul Azeez Yoosuf, Deputy Minister of Health, Republic of Maldives, who expressed appreciation for the fruitful discussions. He said that the recommendations made were both focused and feasible. The feedback from a representative of a participating country observed that the suggested step-wise implementation approach will be useful to countries in their efforts to further strengthen core capacities for implementation of IHR (2005). Finally, the WHO Representatives for Maldives thanked the workshop organizers, particularly the Department of Public Health and the Ministry of Health of the Government of Maldives for their diligent efforts and cordial support to the success of this workshop.

8. Acknowledgements

The workshop was organized with the support of the Department of Public Health, which is also the designated National Focal Point for IHR, of the

Ministry of Health of the Government of Republic of Maldives. The WHO Representative of Maldives provided administrative assistance. Officials and staff of the Department of Public Health, the Ministry of Health and the Airport Health Services also offered administrative, logistical and technical support.

The National IHR Focal Points and delegates from Member States and partner agencies shared experiences, discussed progress and recommended strategic actions to implement IHR (2005). Members of the workshop secretariat were also instrumental in facilitating the workshop.

The contributions of all the above are gratefully acknowledged.

Annex 1

Speech by Honorable Minister of Health, Government of Maldives, Mr Ilyas Ibrahim at the opening session of the First Regional Workshop on implementation of International Health Regulations (2005) Hulhule' Island Hotel, Male, 23 April 2007

Distinguished guests, invitees, participants, ladies and gentlemen,

It is indeed a great honor for me to address you at this significant meeting, the First Regional Workshop on Implementation of International Health Regulations (2005), here in the Maldives.

Let me welcome you all to Maldives and this very beautiful island venue.

Invitees, participants, ladies and gentlemen,

Today, we live in a world where threats to health arise even from the speed and volume of air travel, the fashion in which we produce and trade food, the way we use and misuse antibiotics, and the manner in which we manage our environment. It is evident that in the last decades of the 20th Century, new diseases began emerging at the unprecedented rate of one or more per year. As many as 39 infectious agents capable of causing diseases in humans were identified between 1973 and 2000. Infectious diseases can spread quickly across national borders, as evidenced by the recent SARS outbreak. The World Health Organization and scientists across the world are predicting that human influenza pandemic from bird flu is imminent. Hence, strengthening collaborative activities of the World Health Organization (WHO), other relevant UN agencies including the Food and Agriculture Organization (FAO) of the United Nations, developmental partners, national governments and others is critical. In this regard, the revised International Health Regulations (2005) is a step forward to strengthen our collaborative efforts to improve the monitoring and surveillance mechanisms within our Region and in the world. The effectiveness of the Regulations will depend on our ability to build systems, capacity and infrastructure that support their application. A number of emerging diseases such as Nipah virus, Severe Acute Respiratory Syndrome

(SARS) and avian influenza (H5N1) have had huge impact on public health and economic development in many nations. These outbreaks remind the international community of the continued threat posed by infectious diseases to human health and well-being. The recent outbreak of Chikungunya in this Region has also had a conspicuous impact on the health systems of the countries and on national productivity.

Invitees, participants, ladies and gentlemen,

Health development and global security are inextricably linked. As for multilateral cooperation, strengthening preventive and response capabilities such as disease surveillance and detection, as well as reporting, not only at the national but also at the international level is paramount. We owe it to the people of the world to be prepared for global threats and to do everything possible to minimize or eliminate them. This meeting is our opportunity to fulfil that obligation. We are very pleased that the Maldives is hosting the very first such meeting in the Region.

Investment in health is a cornerstone of economic growth and development, and a prerequisite for meeting many of the Millennium Development Goals. We in the Maldives have achieved many health goals in reducing infant mortality, maternal mortality and under-five mortality through huge investment in integrated maternal and child health programmes. High vaccination coverage and a strong surveillance mechanism have also facilitated those achievements in the country.

Health security needs to be provided through coordinated action and cooperation between and within governments, the corporate sector, civil society, the media and individuals. No single institution or country has all the capacities needed to respond to international public health emergencies caused by epidemics, natural disasters or environmental emergencies, or by new and emerging infectious diseases.

The revised International Health Regulations, which take effect from June 15, 2007, represent a milestone in the world's efforts to build and reinforce effective mechanisms for disease outbreak alert and response at the national and international levels. In this respect, this workshop is a huge step forward in achieving this goal. It is essential that every country fully implements these regulations. Effective communications, coordination and collaborations among different sectors such as entry ports, customs and travel authorities are vitally important for efficient application of the

regulations. For effective implementation of these Regulations, we in the Maldives need to further enhance our human resources in order to achieve the best results. I hope the deliberations of this workshop will address those challenging issues for countries in implementing the Regulations. We in the Maldives will fully cooperate in implementing the regulations and am confident that all Member countries of WHO will comply with them in our quest for a better healthier generations.

I sincerely hope that this workshop will help us to know the status of country preparedness for implementing IHR (2005) and that a strategic framework on implementation will be agreed upon.

Before I conclude, allow me to thank WHO, and the Regional Office in particular for hosting this workshop in the Maldives and for the very generous support we receive in achieving Health For All. I also thank all the officials who have painstakingly laboured to make this workshop a reality.

I wish you all every success and officially declare this first regional workshop on implementation of International Health Regulations (2005) open. I also wish all the visiting delegates a very pleasant stay in the Maldives.

Thank you.

Annex 2

Address by Dr Samlee Plianbangchang Regional Director, WHO, South-East Asia Region (Delivered by WR Maldives)

Distinguished Participants, ladies and gentlemen,

On behalf of the Regional Director of the WHO South-East Asia Region, I have the pleasure to welcome you to this important workshop and convey his greetings and best wishes for its success. The Regional Director would have indeed liked to be present for this important workshop. However he was unable to do so, due to prior commitments. In the Regional Director's absence, it is my honour and privilege to deliver his inaugural address.

And I quote:

"This first Regional Workshop on Implementation of International Health Regulations (2005) or IHR (2005) is taking place at a very critical juncture, just a few months before the entry into force of the Regulations. Therefore, I take great pleasure in welcoming you all to this important workshop and wish you success in your deliberations on outstanding and vital issues. In your capacity as National IHR Focal Points and officials responsible for the implementation of IHR (2005) in your respective countries, I believe that you are the most important stakeholders in our Region.

The International Health Regulations, major revisions to which were effected way back in 1969 and which were subsequently revised in 1973 and 1981, were originally intended to help in the monitoring and control of six serious infectious diseases, namely cholera, plague, yellow fever, smallpox, relapsing fever and typhus. Subsequently, only cholera, plague and yellow fever remained in the list of notifiable diseases under IHR.

Increased globalization and international travel and trade during the latter part of the 20th and beginning of the 21st Century resulted in the rapid spread of a number of serious emerging and re-emerging infectious diseases, such as SARS and avian influenza H5N1, across international

boundaries. Their spread caused tremendous economic loss and social disruption in many countries of the world. These public health threats also demonstrated clearly the vulnerability of the global community in terms of the rapid spread of these diseases from one part of the world to another within a matter of just a few days or even hours.

It soon became quite clear that the IHR in their earlier form were rather inadequate to deal effectively with these new and emerging public health threats. It also became apparent that when confronted with public health emergencies, Member countries can resort to unilateral imposition of excessive protective measures, in the form of trade and travel restrictions, which have negative consequences for the affected countries. Such reactions are sometimes not based on scientifically justifiable reasons but rather on threat perceptions and can often be counterproductive because they trigger countermeasures which could be equally damaging. Without a mutually agreed code of conduct based on valid and scientifically approved premises dealing with how each Member country should act during a specific situation (in terms of maximum measures permissible) there would always be a risk of over-reaction.

In addition to the threat from emerging and re-emerging infectious diseases, the potential risk from accidental or deliberate use of chemical, biological and radionuclear substances has assumed a new significance with regard to global health security issues.

Distinguished participants,

It is because of these very challenges and emerging needs that Member countries of WHO embarked upon the ambitious task of revising the International Health Regulations. It has been a long and time-consuming task for both the Secretariat as well as the Member States of the World Health Organization. It was resolution WHA 48.7 adopted by the Forty-eighth World Health Assembly in 1995, which triggered the revision process. The resolution requested the Director-General of WHO to take necessary steps to revise and broaden the scope of the International Health Regulations. The process of revision of the Regulations took a decade and was completed with the adoption of the International Health Regulations (2005) by the Fifty-eighth World Health Assembly in May 2005.

Ladies and gentlemen,

Many of you have personally contributed to the revision process, at the global, regional and country level. Therefore, almost none of us need to be convinced any further about the importance of IHR (2005) today, and indeed, in the coming years for all Member countries. We all appreciate that this is a unique, internationally-binding and comprehensive legal instrument to protect ourselves against Public Health Emergencies of International Concern (PHEIC), irrespective of their origin.

One of the prerequisites for implementation of International Health Regulations (2005) is that Member countries must have adequate core capacity in terms of disease surveillance and response at all levels. Also, there should be the necessary core capacity at designated airports, ports and ground-crossings. These core capacity requirements and the timeframe for building them up have been clearly defined in the Regulations.

In view of the serious risk to human health, including the possible emergence of a pandemic virus, arising from ongoing outbreaks in poultry of avian influenza, the World Health Assembly, through its resolution WHA 59.2 in 2006, called upon Member States to comply immediately, on a voluntary basis, with the provisions of IHR (2005) they considered to be relevant to the risk posed by avian influenza and pandemic influenza pending the formal entry into force of the Regulations.

In our Region, an assessment of the existing core capacities has been undertaken by Member countries with technical support from the Regional Office. The findings of these assessments will help participants of this workshop to determine the existing situation in this regard in the Member countries. The issues you identify may be related to the suitability of the existing legal framework, resource constraints, and existing gaps in the area of core capacities for surveillance and response or at different levels. You may also find that in many countries of our Region and indeed other regions as well, the core capacities at designated airports, seaports and ground-crossings — which would play a critical role in prevention and control of infectious diseases across international boundaries — would need to be further strengthened.

The International Health Regulations (2005) visualized these possible scenarios. Adequate provisions have therefore been made in the Regulations to address these issues. We must find suitable answers within the scope of Regulations.

Many important and challenging tasks need to be accomplished, by this Workshop. I am confident that at the end of the workshop you will have a well-defined roadmap, with important milestones to guide us in our efforts to achieve the important goals and objectives which will facilitate the timely and effective implementation of the International Health Regulations 2005, in our Region.”

UNQUOTE

Ladies and gentlemen,

I will, of course, apprise the Regional Director about the outcome of this meeting. On his behalf, I wish you fruitful deliberations and every success in achieving its objectives.

Thank you.

Annex 3

Programme

Monday, 23 April 2007

08:30-09:00	Registration
09:00 -09:40	Agenda I: Inaugural session Welcome and opening remarks by Hon'ble Deputy Minister of Health, Maldives. Dr Abdul Azeez Yoosuf Message from the Regional Director, WHO/SEARO Opening Remarks by Hon'ble Minister of Health, Maldives Mr Ilyas Ibrahim Group Photograph
10:00 – 10:30	Plenary session Introduction of participants Objective and major highlights of the meeting by Dr Khanchit, RA-CSR/SEARO Announcements
10:30-11:30	Agenda II: Progress towards implementation of IHR since 2005 Chairperson: Dr Abdul Azeez Yoosuf, Deputy Minister of Health, The Republic of Maldives Co-chairperson: Dr Apichart Mekmasin Rapporteur: Dr Megan Counahan International perspective (Dr Emmanuel Jesuthasan, WHO HQ) (Presentation– 20 minutes) Regional perspective (Dr. Khanchit, WHO SEARO) (Presentation–20 minutes) Country perspective <ul style="list-style-type: none">• Myanmar (Presentation – 10 minutes) Discussion
11:30-12:30	Agenda III: Legal aspects of IHR (2005) implementation Chairperson: Dr Indriyono Toroto

Co-chairperson: -

Rapporteur: Dr Rana Bardan Jung

Legislative, administrative and organizational aspects-
International perspective,(WHO HQ 20 minutes)

Mr Bruce Plotkin

Country perspective

- India (10 minutes) - Mr M.K. Sharma

Discussion

13:30- 14:45

Agenda IV: Core capacity for IHR (2005) implementation

Chairperson: Dr Ohn Kyaw

Co-chairperson: -

Rapporteur: Dr Sampath Krishnan

Findings of IHR (2005) assessment in SEAR countries,
current status, challenges ahead(15 minutes each) (WHO SEARO)

Dr. Ayana Yeneabat

Dr. Maureen Birmingham/

Alert and Response, Deployment of Rapid
Response Teams

- Myanmar (10 minutes) - Dr Kanokporn Coninx

National Preparedness Plans for PHEIC

- Thailand (10 minutes) Dr Kumnuan Ungchusak

Discussion

15:15-16:15

Agenda V: Core capacity at points of entry

Chairperson: Dr. Kumnuan Ungchusak

Co-chairperson: Dr A.M.J. B. Walallawala

Rapporteur: Mr Chawalit Tantinimitkul

Points of Entry (ports, airports and ground crossings)

Regional perspective...(SEARO) Dr. S. Abdullah (20 minutes)

Country perspective

- India (10 minutes) Dr Sampath Krishnan
- Indonesia (10 minutes) Dr Indriyono Toroto

Discussion

16:15-16:30 Strengthening Epidemiological Surveillance and Response for Communicable Diseases (ADB IETA 6305) -
A/Prof. Dr. Robert Bernstein

16:30 Recap of the days proceedings

Tuesday, 24 April 2007

09:00-11:00 Agenda VI: Next steps for implementation of IHR (2005)
Chairperson: Dr Hla Hla Aye
Co-chairperson: Mr Basilio Martins Pinto
Rapporteur: Ms Kanokporn Coninx
Building core capacity for implementation of IHR (2005) –
Dr E. Jesuthasan/HQ

Road map for implementation of IHR - Dr Khanchit

Issues for Discussion

- Advocacy, education and training
- Surveillance and response
- Resource mobilization
- Communication
- Inter-sectoral cooperation

Legislative, administrative and organizational aspects

- Country perspective – Nepal
Mr Rishi Rajbhandari

11:30-12:30 Agenda VII: Country work plan for implementation of IHR (2005)

Chairperson: Dr Manas Kumar Banerjee

Co-chairperson: Mr Tshering Dhendup

Rapporteur: Dr Margarita Ronderos

Broad outline for country work plans - Dr. Khanchit

Discussion

13:30-14:30 **Agenda VII: Group work**

Alert and Response

15:00-16:00 **Group work continues...**

16:00-17:00 Core capacity building
Group work continues...
Points of entry

Wednesday, 25 April 2007

09:00-10:30 Agenda VIII: Group presentation
Chairperson: Dr S.K.R .Amarasekera
Co-chairperson: Mr H. Musny Suriatmodjo
Rapporteur: -Dr Vason Pinyowiwat
Group presentation
Discussion

10:30-11:30 Tea/Coffee (Small group of draft recommendation)

11:30-12:30 Agenda IX: Conclusion and recommendations
Chairperson: Ms Geela Ali
Co-chairperson: Mr M.K. Sharma
Rapporteur: Dr Ayana Yeneabat
Presentation of draft recommendations
Discussion

12:30-13:00 Agenda X: Closing session
Chairperson: Dr Abdul Azeez Yoosuf
Co-Chairperson: Dr Sheena Moosa
Presentation of final recommendations
Feed back from a representative of participating country
Remarks by WR Maldives
Remarks by WHO SEARO
Vote of Thanks
Closing Remarks

Annex 4

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