

# Report of the South-East Asia Regional Vaccine Prioritization Workshop

*Bangkok, Thailand, 11-13 May 2009*





SEA-Immun.- 56  
Distribution: General

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Printed in India

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## **Abbreviations**

AEFI	Adverse Events Following Immunization
EPI	Expanded Programme on Immunization
GAVI	Global Alliance for Vaccines and Immunization
HIV	Human Immune Deficiency Virus
HPV	Human Papillomavirus Vaccine
IPV	Inactivated Polio Vaccine
ITAG	Immunization Technical Advisory Group
JE	Japanese Encephalitis
MDG	Millennium Development Goals
NCIP	National Committee on Immunization Practices
NIP	National Immunization Programme
SAGE	Strategic Advisory Group of Experts on Immunization





# 1. Introduction

The basic antigens included in the national immunization programme (NIP) of most Member States of the South-East Asia Region of WHO are BCG, OPV, DTP, and measles. Several Member States have expanded the list to include additional vaccines in their NIP in recent years. With support from the Global Alliance for Vaccines and Immunization [GAVI] Alliance, all Member States have added Hepatitis B, and Bangladesh, Bhutan, India, Nepal, and Sri Lanka have now either included or are poised to include the *Haemophilus Influenzae* type b (Hib) vaccine. In addition, Member States endemic for Japanese Encephalitis (JE), that is, India, Nepal, Sri Lanka, and Thailand, have also added the JE vaccine. With the rubella vaccine included by Bhutan, the Maldives, Sri Lanka and Thailand, the total Expanded Programme on Immunization (EPI) antigens being used in the Region are nine. There are many more new vaccines that are already available in the market, or will soon be available.

With the availability of a plethora of vaccines, countries have begun to feel the need for a more focused approach and a better-defined strategic framework to support the decision in choosing vaccines for inclusion in their respective NIP. Inevitably, there are interest groups who often attempt to encourage countries to make choices that may not necessarily be in the interest of these countries. Therefore, it is vital to have a list of priority vaccines relevant to the Region for countries to consider and select for introduction, depending on the disease epidemiology and national public health priorities. This workshop brought together key technical experts and policy makers from Member States in the Region to discuss and agree on a priority list of new and under-utilized vaccines and to develop a strategic framework to assist them in decision-making for the introduction of new vaccines.

## 1.1 General objective

The general objective of the workshop was to arrive at a consensus on a prioritized list of vaccines and a strategic framework for decision-making on new vaccine introduction.

## **1.2 Specific objectives of the workshop**

The specific objectives were:

- (1) To examine the available data on vaccine-preventable diseases for which vaccines are already available or for which new vaccines are soon to be available
- (2) To examine the efficacy, safety and cost effectiveness profiles of each of the available vaccines
- (3) To discuss and agree on a set of criteria that will be used to objectively judge the appropriateness of any new vaccine within the regional context
- (4) To agree on a list of vaccines of priority for consideration by countries for introduction in their NIPs

Dr Maureen Birmingham, WHO Representative to Thailand, delivered the Regional Director's message at the opening session. In the message, the Regional Director highlighted two important issues, among many others, that need consideration as countries move forward with plans to introduce more new vaccines. "While many countries have a robust immunization system, others continue to struggle with stagnation or deterioration of the same. Despite improvement in many countries, the SEA Region lags behind other regions in routine immunization as measured by the DTP3 coverage," said the Regional Director. Emphasis on the importance of a strong routine immunization programme in these countries is of paramount importance for successful introduction of a new vaccine. Second, The Regional Director cautioned, "A vaccine may be highly cost-effective but not necessarily affordable to the country concerned." The Regional Director advised the meeting, "While a country may be keen to introduce new vaccines, it also has to ensure that it is a sustainable introduction."

Following the opening session, the business session included presentations, a panel discussion and group work. The key outcomes of the panel discussion and group work are presented below.

## **2. Conclusions of the panel discussion on new vaccine introduction and EPI policies, gaps and future strategies**

- The topics for consideration in the panel discussions were to reflect on the current process of decision analysis for the introduction of new vaccines, particularly focusing on the role of national authorities in the decision process and to comment whether the process of new vaccine introduction is perceived as an externally driven one. The panel then looked at the existing gaps in EPI policies and reflected on some key strategies to strengthen the ability of countries to take advantage of the opportunities that new vaccines offer.
- The panelists included Dr. A.K.F. Mojibur Rahman (Bangladesh), Dr. Shyam Upreti (Nepal), Dr. Naresh Goel (India), Dr. Sudath Peiris (Sri Lanka), and Dr. Nyoman Kandun (Indonesia). The panelists were first asked to comment on each topic, which was then opened to the floor for additional comments.
- A summary of the key conclusions from these discussions are presented below:
  - There was a general acknowledgment that vaccine manufacturers do have an interest and right to promote their products. The best way to counter pressure from this or any other quarter, if deemed inappropriate, is to put in place systems that can generate evidence to aid policy decisions and support the establishment and independent functioning of a competent technical advisory body at the country level. The National Committee for Immunization Practices (NCIP) in each country could guide governments to make evidence-based policy decisions.
  - Countries felt that new vaccines currently available in the markets as well as those that are likely to be available in future do have a place in the fight against diseases of importance to both public health and to countries. Within the context of their own national priorities, countries must and will make efforts to take advantage of the benefits that new vaccines can bring.

- Vaccine manufacturers and other interest groups promote new vaccines in developing countries irrespective of the capacity available in the respective countries. This puts pressure on the already overburdened immunization programme due to lack of adequate resources and weak infrastructure. Such vaccines are often of public health value although the population may not be aware and there is hardly any demand from their side, except in an epidemic. Therefore, the public health value, disease burden, and needs of the population should be taken into consideration when making a decision on introducing new vaccines. Decision-makers should use the opportunity of new vaccine introduction to strengthen the NIP and help overcome the “pressure” that may be felt by these programmes.
- Having made the above conclusions, the panel discussion also highlighted several areas that need attention in order to strengthen country capacity for evidence-based decision-making process. These key areas are explained below:
  - Data on disease burden and impact of vaccination, as well as their cost-effectiveness are essential for evidence-based decisions on the introduction of new vaccines. Therefore, investments are necessary to strengthen vaccine preventable disease surveillance systems to generate such evidence.
  - It is important to develop vaccine policies, both at the regional and country levels, to aid future decisions on new vaccines.
  - As more and more communicable (and non-communicable) diseases become vaccine preventable, strengthening the capacity of immunization staff at the national level to match this need is a priority in many countries that requires urgent attention.
  - Closer linkages with the private sector need to be promoted as the private sector provides substantial quantities of vaccines in many countries, particularly in large metropolitan cities.
  - Sustainability will continue to be a major issue for many countries for new vaccines, and in several countries even the affordability of existing traditional vaccines is questionable.

Therefore, countries need to explore innovative financing, including cross-subsidies, where feasible.

- There is an urgent need to strengthen the strategic planning capacity in NIPs, including the strengthening of capacity for risk communication.
- Adverse events following immunization (AEFI), if poorly handled, can cause untold damage to EPI programmes. Therefore, it is important to strengthen national AEFI surveillance systems and ensure that a competent and functional National AEFI Committee is established and involved in all AEFI investigation and response.

### **3. Technical presentations**

Technical presentations were made on those vaccines that have been in the market for some time and are still under-utilized, as well as those that are new, or soon to become available. These presentations made by recognized experts on the specific topics provided exhaustive background information on disease epidemiology and the potential benefits of use of vaccines against these diseases. The technical papers focused on the safety, efficacy and affordability of vaccines, and the programmatic challenges, advantages and disadvantages of integrating these vaccines into a NIP.

- Dr. Uli Fruth from WHO Headquarters (WHO HQ) provided the rationale, process and outcome of WHO's Global Vaccine Prioritization Project.
- Dr. Thomas Cherian presented the global burden of morbidity and mortality due to pneumococcal infection and the potential impact of new and improved pneumococcal vaccines on reducing childhood mortality. This was supplemented with a presentation by Dr. Brent Burkholder on the impact of conjugate pneumococcal vaccine (PCV7) use in the United States where vaccinating of children has not only benefited them, but also those in the age groups that are not immunized.
- Rotavirus is an important public health issue and there are now two new vaccines against it. Dr. Margaret Cortese from the CDC, USA, presented the global burden of the rotavirus disease with a focus on South-East Asia and the challenges and opportunities presented by the availability of new rotavirus vaccines.

- Dr. Leon Ochiai provided a broad landscape of typhoid epidemiology and the work done by the International Vaccine Institute, Seoul, Korea, in promoting the need to address diseases of the most impoverished, with a focus on the feasibility of the use of typhoid vaccine and its impact. This was followed by a presentation on cholera by Dr. Anna Lopez.
- Dr. Cherian presented, on behalf of Dr. Peter Carrasco, who could not attend the meeting due to the H1N1 outbreak, the global epidemiology of seasonal influenza and the need to expand seasonal influenza vaccine use to improve the base for increasing vaccine supply in preparation for pandemic influenza. In most Asian countries, seasonal influenza is not considered a significant public health issue. This was proved wrong when a prospective surveillance study in Thailand showed that seasonal influenza is an important public health problem; often it is the lack of evidence that is taken as evidence of absence of the disease. Dr. Piyanit Tharmaphornpilas presented the policy decision process for inclusion of the use of seasonal influenza vaccine in the Thai National Immunization Programme.
- Dr. Bruce Aylward provided the challenges and progress in the search for an inactivated polio vaccine that developing countries can afford and potentially use in the post-polio eradication period.
- Dr. Cherian presented a brief update on the introduction of the human papillomavirus vaccine (HPV). Although it is an expensive vaccine which is currently being used only in the Americas and European countries, there is increasing demand from other countries as well for this vaccine. Therefore, it is important that all countries evaluate their cervical cancer disease burden, cervical cancer prevention programmes, and the benefit that this vaccine can bring.
- Mr. Stephane Guichard provided an update on the current situation of adverse events following immunization (AEFI) surveillance and response capacity in the Region. As diseases become rare, even minor AEFIs tend to raise many questions and it is important that national immunization programmes strengthen their capacity to respond effectively to any reports of AEFIs. That can only happen if a robust and functioning AEFI surveillance system is in place.

- Dr. Raymond Hutubessy made a detailed presentation on the nuances of interpreting cost effectiveness data for new vaccines.

Following the technical presentations, Dr. Pem Namgyal provided a decision analysis framework to guide countries in their decision analysis to introduce a new vaccine (see Annexure).

This was followed by group work where the groups considered the essential criteria for the evaluation of any vaccine for inclusion into national immunization programmes, and then developed a priority list of vaccines that are considered relevant and important to address public health concerns in the South-East Asia Region. The results of the group work are summarized in the following sections.

## **4. Outcome of the group work**

The participants were divided into three groups and were requested to look at two areas: (i) the most important criteria for evaluating each antigen planned for inclusion in a national immunization programme, and (ii) list, in order of priority, the vaccines considered relevant for the SEA Region and for inclusion in the countries' immunization programmes.<sup>1</sup>

To facilitate the discussion, the participants were provided several background papers which included:

- Report of the WHO categorization of Vaccine Preventable Diseases Project: Overview, Methods and Results, Report of the Strategic Advisory Group of Experts on immunization [SAGE] Meeting, 6–9 November 2007 at Geneva, Switzerland
- Vaccine Introduction Guidelines: Adding a vaccine to a national immunization programme; decision and implementation, WHO/IVB/05.18
- Vaccine position papers on various new and underused vaccines

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<sup>1</sup> This list is not expected to be country specific as each country will have its own national priorities. This list is intended to serve only as a broad guiding framework. Further, the group work is done with the clear understanding of seeking professional opinions and does not, in any way, represent country policy imperatives

- A decision-making framework for the introduction of new vaccines into a National Immunization Programme, a working paper on progress, opportunities and challenges for new and underused vaccines introduction in SEAR
- (1) The six most important criteria the groups agreed to assess prior to inclusion of any new or underutilized vaccine into immunization programmes are:
  - (a) Disease burden (incidence/prevalence, absolute number of morbidity /mortality, epidemic/pandemic potential)
  - (b) Efficacy of the vaccine in consideration
  - (c) Safety of the vaccine
  - (d) Affordability (sustainability)
  - (e) Programme capacity to introduce a new antigen, including cold chain capacity
  - (f) Availability of domestic or regional vaccine production capacity
- (2) Based on the criteria considered above, the groups undertook different approaches to assess the relevance of a specific vaccine with regard to the SEA Region and came up with recommendations prioritized as “immediate”, “in the near future”, and the “in the distant future” categories. These are as follows:
  - (a) For the “Immediate” priority list (for consideration to be introduced within the next 3–5 years), the vaccines are:
    - (i) Rubella
    - (ii) Haemophilus influenzae type b (Hib)
    - (iii) Conjugate pneumococcal
    - (iv) Typhoid
    - (v) Seasonal influenza
    - (vi) Rotavirus
    - (vii) Cholera



- (b) For the “In the near future” priority list (for consideration to be introduced within the next 5–10 years), the vaccines are:
  - (i) Mumps
  - (ii) New and improved JE\* vaccines
  - (iii) Human papillomavirus
  - (iv) Rabies
  - (v) Hepatitis A
  - (vi) Meningococcal vaccine (against *Meningococcus A*)
- (c) For the “Distant future” (for consideration to be introduced in 10 years), the vaccines are:
  - (i) HIV
  - (ii) IPV (following successful eradication of poliomyelitis from the world)
  - (iii) Dengue
  - (iv) Hepatitis E
  - (v) Tuberculosis

In addition to making the above lists, the groups also came up with several pertinent suggestions on how to strengthen the Regional and national capacities for improving access to new and underutilized vaccines to enhance the scope of preventing diseases for which vaccines are available. Some of these suggestions are:

- At the Regional and national levels, there is a need to update immunization policies to integrate the currently available new vaccines and technologies.
- The perceived dichotomy of choosing between scaling up use of existing vaccines in routine immunization and introducing new vaccines must be overcome in favour of strengthening immunization programmes in all countries that can best utilize the opportunities provided by the availability of new life-saving vaccines for achieving disease control as part of the health-related millennium development goals (MDG).

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\* 4 of the 11 Member States in SEAR have already introduced the JE vaccines that are available at present.

- It is an important exercise for the Region as well as individual countries to have a rational and comprehensive approach to the introduction of new vaccines rather than addressing each new vaccine individually.
- The importance of a national technical advisory body to guide national policy makers is recognized and endorsed as essential. The recent establishment by most Member States of a National Committee for Immunization Practices (or NCIP) was fully supported and Member States were encouraged to use the technical capacity of such a body to assist evidence-based decision-making regarding immunization and vaccines.

## **8. The next steps**

- The report of this workshop, after a thorough in-house review, will be circulated to the participants. The report will be finalized and presented to the SEA Region ITAG for endorsement and subsequently, if deemed necessary, will be presented to the Region's policy forums, such as the Regional Committee for endorsement.
- The decision making framework for vaccine prioritization and introduction of new and underused vaccines will be further refined and finalized for dissemination.

## **Annex 1**

# **Message from Dr Samlee Plianbangchang, Regional Director, WHO South-East Asia Region at the Regional Workshop on Vaccine Prioritization, Bangkok, Thailand, 11-13 May 2009**

(Delivered by Dr Maureen Birmingham- WR-Thailand)

Distinguished participants, representatives of the national immunization advisory committees, members of the South-East Asia Regional Technical Advisory Group, colleagues, ladies and gentleman,

I bring you greetings from Dr Samlee Plianbangchang, Regional Director, WHO South-East Asia Region. Please allow me to welcome you to this beautiful city.

The Regional Director draws our attention to the important task at hand related to the availability of new vaccines and the choices governments must make in making these available to the masses. That task is to examine the available information on vaccine preventable diseases; the currently available and future vaccines, including technologies for vaccine delivery; and to evaluate the contribution of these vaccines in reducing the disease burden, cost implications, and the capacity of national programmes to successfully introduce and sustain immunization with these vaccines. Where relevant, people in the South-East Asia Region should benefit from the use of these vaccines in their national immunization programmes, the Regional Director says.

Dr Samlee Plianbangchang is pleased to learn that the participants to this workshop comprise experts from national advisory committees on immunization, senior policy-makers from the ministries of health, and the members of the South-East Asia Region Immunization Technical Advisory Group.

Most people would agree that vaccination is the most cost-effective public health intervention known to mankind today. Nonetheless, children

in developing countries still do not have adequate access to life-saving new vaccines. However, funds made available by the Global Alliance for Vaccines and Immunization have provided the opportunity for children in the poorest countries to be protected from common diseases such as hepatitis B, pneumonia and meningitis due to infections with *haemophilus influenzae* Type B, and yellow fever.

Accelerated efforts at developing vaccines have produced a host of new vaccines such as rotavirus, pneumococcal, and human papilloma virus. Some such as rotavirus and HPV vaccines are already in the market, and others are in the pipeline, such as improved pneumococcal conjugate and tissue culture-based JE vaccines.

Dr Samlee feels it is encouraging that over the last few years, hepatitis B vaccine has emerged as an integral component of routine immunization in all countries, except India where it is still being phased in. Several countries have introduced a vaccine against Japanese encephalitis. Sri Lanka introduced Hib vaccine in January 2008, Bangladesh in February and Nepal in April 2009. Bhutan will launch the same in July this year. Clearly there is an encouraging movement to take advantage of the new and under-utilized vaccines by the countries of our Region.

These developments do come with challenges that must be addressed in a forum such as this. While many countries have a robust immunization system, others continue to struggle with stagnation or deterioration of the same. Despite improvement in many countries, the SEA Region lags behind other regions in routine immunization as measured by the DTP3 coverage. Bangladesh, Indonesia and India lead the world in terms of their number of unimmunized children. Of these three countries, India is home to the largest number of unimmunized children. According to WHO/UNICEF estimates, more than nine million children in India do not receive routine immunization annually. Therefore, introducing a new vaccine does not alone guarantee high coverage, though it does provide opportunities to address systems issues.

The Regional Director says WHO is particularly in a position to support countries transparently to make appropriate public health intervention choices based on genuine need, and prioritization, and which can be sustained by them. We have to recognize that a vaccine may be highly efficacious but the disease it prevents may not necessarily be the public health priority of the country. A vaccine may be highly cost-effective

but not necessarily affordable to the country concerned. While a country may be keen to introduce new vaccines, it also has to be ensured that it is a sustainable introduction. It is not very practical to have a donor or an alliance pay for an expensive vaccine and provide it to countries at a fraction of the cost for a limited time period without any clear indication that the price of the vaccines will be affordable later when developing countries have to meet the costs.

Further, Dr Samlee wishes to share, the traditional vaccines in the EPI have many decades of post-marketing surveillance data to prove their safety. However, this cannot be said of the new vaccines, as long-term side-effects are not yet known, given the short period of their use. He emphasizes the need to strengthen country system on AEFI surveillance and response.

The Regional Director expects that this forum will examine the needs of the countries of our Region without being influenced by interest groups and disease-specific champions and agree on new vaccines for consideration by countries, and a rational framework to guide countries for their introduction in the national immunization programme in the most scientific and transparent manner. He wishes this workshop all success.

## Annex 2

### Programme

#### Monday, 11 May 2009

08:00 – 08:30	Registration
08:30 – 09:00	Opening Session
09:00 – 09:30	Group Photo/Tea/Coffee
09:30 – 09:45	Review of the current EPI policies in relation to new vaccines introduction in countries of the SEA Region – Namgyal
09:45 – 10:05	Introduction of new vaccines in SEAR countries, progress, challenges and opportunities – Abeysinghe
10:05 – 11:30	Country perspectives, particularly in relation to new vaccines introduction, and future EPI policies for countries of the Region, a panel discussion on the policy gaps and strategic needs of the Region
11:30 – 12:00	The need to develop a strategic framework in the context of rapidly changing priorities for EPI: the WHO's Global Vaccines Prioritization Project as a first step – Fruth
12:00 – 12:30	Discussion
12:30 – 13:00	AEFI Surveillance and vaccine safety issues: progress and challenges in SEA Region – Guichard
14:00 – 17:30	Benefits, opportunities, and challenges from the new and under-utilized vaccines on mortality reduction towards attainment of MDG4 Goals-examining the evidence

#### Tuesday, 12 May 2009

08:30 – 09:00	Benefits, opportunities, and challenges from the new and under-utilized vaccines on mortality reduction towards attainment of MDG4 Goals- examining the evidence.. <b>contd/</b>
09:00 – 10:30	From evidence to policy, example of seasonal influenza surveillance and seasonal influenza vaccine introduction in Thailand - Piyanit
11:00 – 11:30	New polio vaccines, role of IPV and availability and impact on IPV combination vaccines (whole cell pertussis or acellular pertussis component) -Aylward
11:30 – 12:00	Economic evaluations of vaccines, the benefits and pitfalls of such studies – Hutubessy
12:00 – 12:30	Regional Policy Framework for a rational decision making process for introducing a new vaccine -Namgyal

12:30 – 13:00	Discussion
14:00 – 17:30	Group Work on Regional Policy Framework and on Vaccine Prioritization Group 1: Group 1: Group 3:
16:30 – 17:30	Group work continued
17:30	Close for the day

**Wednesday, 13 May 2009**

08:30 – 10:30	Group Work Continued
11:00 – 13:00	Group Work Presentation 08:30 – 08:45            Group 1 08:45 – 09:00            Group 2 09:00 – 09:15            Group 3 09:15 – 10:00            Discussions
14:00 – 15:30	Plenary: Arriving at a consensus on (i) Regional Policy Framework for rational decision making on introduction of new vaccine into the national immunization schedule (ii) Regional Vaccine Priority list
15:30 – 16:00	Close, followed by TEA/COFFEE

### Annex 3

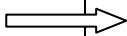
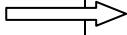
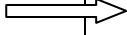
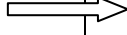
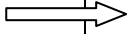
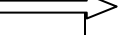
## A decision-making framework for the introduction of a new vaccine into a national immunization programme

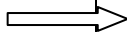
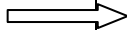
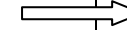

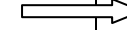
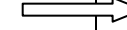
**NOTES:**

- It is not necessary to view the series of questions as sequential; they can also be viewed independent of other questions
- It is also not necessary that all questions have to be answered YES before a decision is made about the need of a vaccine in the NIP; there may be other considerations that can override all others
- Sustainability and affordability are long term issues that merit detailed (and across sectors) discussions prior to any decisions to add a new antigen to a NIP
- Programmatic and capacity issues can be addressed relatively easily if the long term issue of sustainability is addressed adequately

<p><b>IS THERE SUFFICIENT EVIDENCE TO SHOW THAT THE PROPOSED VACCINE PREVENTABLE DISEASE IS A PRIORITY PUBLIC HEALTH CONCERN?</b></p>	<p>YES →</p> <p>NO →</p>	<p>➤ Evaluate the quality of data to ensure that the assessment is correct. If satisfied, then move to consider other issues</p> <p>➤ Consider establishing disease burden for evidence by setting up special surveillance; DELAY DECISION to Introduce</p>
<p><b>IS THERE AN ALTERNATIVE PREVENTION TOOL OR STRATEGY OTHER THAN VACCINES, AND HAS IT BEEN USED OPTIMALLY?</b></p>	<p>YES →</p> <p>NO →</p>	<p>➤ Is it more effective and does it have noticeable impact? Is it cheaper compared to what it would cost to use a vaccine? Is it easier to administer? If YES to all: DELAY DECISION to introduce a new vaccine</p> <p>➤ Assess other aspects of the vaccine and vaccine introduction with possible intent to introduce</p>



<p><b>IS THE AVAILABLE VACCINE EFFICACIOUS?</b></p>	<p>YES </p> <p>NO </p>	<p>➤ Assess the quality of efficacy data and ascertain whether the data reflects your country situation. If satisfied, move to consider other aspects of the vaccine with possible intent to introduce</p> <p>➤ A lower efficacy of a vaccine may be acceptable for a disease that has high burden or has high mortality. If the disease is neither highly endemic nor does it cause high mortality, a low efficacy vaccine would be less desirable, DELAY DECISION to introduce the new vaccine</p>
<p><b>IS THE VACCINE BEING CONSIDERED SAFE?</b></p>	<p>YES </p> <p>NO </p>	<p>➤ Assess the quality of safety data and ascertain whether the data reflects your country situation. Check to see if there is an opinion on its safety from the WHO Global Advisory Committee on Vaccine Safety (GACVS). If satisfied, move to consider other aspects of the vaccine with possible intent to introduce</p> <p>➤ DELAY DECISION till better safety data is available</p>
<p><b>DOES THE NIP HAVE A FUNCTIONING AEFI SURVEILLANCE SYSTEM IN PLACE?</b></p>	<p>YES </p> <p>NO </p>	<p>➤ Evaluate the quality of the AEFI Surveillance System to ensure that it has the capacity to pick up an AEFI when it occurs. Examine annual collated data on AEFIs and see how robust the surveillance system is.</p> <p>➤ Consider setting up or strengthening the national AEFI Surveillance system prior to a decision to introduce a new vaccine</p>

<p><b>IS THE VACCINE BEING CONSIDERED AVAILABLE IN SUFFICIENT QUANTITIES?</b></p>	<p>YES </p> <p>NO </p>	<p>➤ Decide whether procurement will be through UNICEF or through director procurement. Consider the logistics and the time that may be required for each shipment to reach the country, including cost.</p> <ul style="list-style-type: none"> <li>• DELAY DECISION till there is promise of sufficient supplies of the vaccine being considered</li> </ul>
<p><b>IS THE AVAILABLE VACCINE AFFORDABLE?</b></p>	<p>YES </p> <p>NO </p>	<ul style="list-style-type: none"> <li>• Who is going to pay, national resources or donor partners? If donors, how long will they support and, can the country take over the cost once donors wear off?</li> <li>• If the sustainability of funding for the new vaccine is in doubt, and if there are no donor partners willing to commit to support (relatively long term), DEFER DECISION to introduce the vaccine</li> </ul>
<p><b>DOES YOUR NIP HAVE ADEQUATE COLD CHAIN SPACE?</b></p>	<p>YES </p> <p>NO </p>	<ul style="list-style-type: none"> <li>• Has there been a recent review? If not consider conduct a rapid review, jut to be sure.</li> <li>• Can the country enhance the cold chain capacity well ahead of the proposed date of introduction? Does the government (by itself or through donor partners) have the necessary resources to purchase the hardware required to increase cold chain space? If NO, DELAY DECISION to introduce the vaccine</li> </ul>

## Annex 4

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The Regional Workshop on Vaccine Prioritization for the South-East Asia Region was held in Bangkok from 11-13 May 2009. The meeting provided an important forum in the Region to share experiences, agree on common policies and chalk out strategies to prioritize the introduction of new vaccines and technologies in Member States. It also provided an opportunity for experts from the Member States, region and outside the region to interact with each other for discussions on common issues.

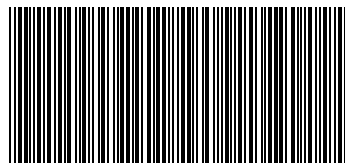
This report contains the essence of the key topics discussed, the criteria to be used for prioritizing vaccines, a decision making frame work and a list of new and underutilized vaccines as “immediate”, “in the near future”, and “in the distant future” categories for consideration in prioritizing vaccines by the Member States in the Region.



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SEA-Immun-56