Progress has been made in immunization activities in the South-East Asia Region since the last ITAG Meeting held in April 2013. Two notable milestones include the RC resolution to eliminate measles and control rubella/CRS by 2020 which was endorsed in September 2013, and the certification of the region as polio-free in March 2014. The countries in the Region are well positioned to take the lessons learned and apply best practices to their respective national immunization programmes. Given these, the SEAR 2014 ITAG makes the following recommendations.

1. **Quality of Immunization Data**
   The ITAG takes note of the emphasis placed by SAGE on the importance of accurate data on immunization system performance and the prevalence or incidence of vaccine preventable diseases for evidence-informed policy and operational support and for monitoring progress towards national, regional and global goals.

   ITAG reiterates the position of SAGE that improvement of data quality should be one of the highest priorities in the early part of the Decade of Vaccines.

   The ITAG took note of several issues related to the quality of immunization data, including but not limited to: (1) the inadequate recording and reporting of immunization data; (2) the low availability of home-based records for immunization and variable quality of institutional (retrievable) records; (3) uncertainties on the size and distribution of the populations targeted for immunization; and (4) the discrepancies between household surveys and administrative data.

   The ITAG considers data to be of high quality if it is fit for purpose at all administrative levels for making policy and/or operational decisions, and monitoring performance, in terms of delivering services (coverage, supply, temperature monitoring) as well as in controlling the targeted diseases. This would require that data are complete, have internal and external consistency, and are available in a timely fashion at all levels of the systems with sufficient detail to allow informed decision-making and effective planning and monitoring.

   **ITAG recommends that:**

   a. The SEAR Member States:
      i. Improve data quality through making appropriate financial and human resource investments. Introduce measures to improve data quality, specifically: (1) conduct annual desk reviews to assess data quality; (2) conduct periodic in-depth data quality assessments; and (3) periodic household surveys to validate coverage in addition to collection of data on determinants of immunization coverage.
      ii. Share national and sub-national level immunization coverage data and surveillance data with SEARO according to the agreed timelines and processes.
      iii. Use in-country independent resources (e.g. academia, professional associations) to ensure the quality and independence of the data quality assessments.
      iv. Develop, implement and monitor data quality improvement plans in response to the results of the assessments.
      v. Engage National Immunization Technical Advisory Groups to participate in monitoring the progress on implementing the strategies for improving data quality.

   b. WHO SEAR supports the Member States to improve data quality by:
i. Developing and publishing guidelines for assessing data quality and preparing data quality improvement plans.

ii. Facilitating technical support to Member States for analysing and interpreting immunization data and translating the results to develop relevant policies and data quality improvement plans.

iii. Organizing a Data Quality Meeting including a review of the JRF, just before 2015 ITAG meeting.

2. Polio

The SEAR ITAG congratulates Member Country EPI teams and their national governments for achieving polio-free certification and maintaining polio-free status. The ITAG recognizes the hard work done by the front-line health workers, vaccinators, supervisors, and managers for polio eradication and immunization programmes. The ITAG also recognizes the generous support and guidance by the donors and partners, and the important contributions of the National Certification Committees for Polio Eradication (NCCPE) and the Regional Certification Commission for Polio Eradication (RCCPE).

Despite this enormous achievement, the ITAG is concerned about the persistently low OPV3 coverage through routine immunization in Indonesia and Myanmar with resulting immunity gaps in children less than 5 years, and the persistent sub-optimal non-polio AFP rate in Sri Lanka and all AFP surveillance indicators in Timor-Leste. The ITAG notes that India, Indonesia, Myanmar and Timor-Leste are considered high risk, and Nepal and Thailand medium risk for polio outbreaks following importation based on the current regional risk assessment. The ITAG urges all countries in the Region to avoid complacency and re-commit to implementing certification-level polio eradication programmes including strong routine immunization delivery.

The ITAG commends the Government of India for implementing polio vaccination of travelers to/from polio infected countries to mitigate the risk of transmission following importation, and notes that other Member Countries are considering similar risk mitigation policies.

The ITAG notes the growing recognition of the importance of environmental surveillance to supplement AFP surveillance through early detection of imported WPVs and emerging VDPVs, and as a tool to monitor Sabin virus circulation after cession of OPV. The ITAG also notes the Region’s progress towards achieving the four objectives of Polio Endgame Strategic Plan 2013-2018 including plans for IPV introduction, tOPV to bOPV switch, and ensuring the legacy of polio eradication by utilizing polio-related resources for eliminating measles and controlling rubella/CRS, strengthening routine immunization, and improving epidemiologic and laboratory surveillance for other vaccine-preventable diseases.

The SEAR ITAG supports the recommendations of the SAGE, SEA RCCPE and the Global Polio Laboratory Networks.

*ITAG recommends that for the Member Countries:*

a. All NCCPEs should remain active until global certification. Certification activities should continue as per recommendations by the Regional Certification Commission (SEA-RCCPE). All member countries should continue their efforts to sustain certification-level AFP surveillance and polio immunization performance.

b. Indonesia, Myanmar, and Timor-Leste should urgently address the issue of persistent low polio immunization coverage through routine immunization. These countries should conduct at least two rounds of sub-national polio SIAs in 2015 targeting high risk populations and areas. Nepal and Thailand, as medium risk countries, should seriously consider conducting polio SIAs in 2015. Bangladesh, though low risk, should consider conducting appropriate supplemental polio immunization activities in high risk populations/areas. India and other countries should follow guidance from their respective national level expert advisory bodies.
c. In view of the persistent sub-optimal non-polio AFP rate in Sri Lanka and all AFP surveillance indicators in Timor-Leste, both countries should conduct EPI and VPD surveillance reviews in 2015.

d. In view of the continued transmission of polio in Nigeria, Pakistan, and Afghanistan, and the consequent potential for polio importation to the Region, all countries should conduct regular risk assessments and risk mitigation activities.

e. To reduce the risk of importations, all countries should carefully consider introducing polio vaccination for travelers to/from polio infected countries in line with recommendations by the Polio Emergency Committee under IHR and WHO’s International Travel and Health Guidelines.


Recommendations for WHO-SEARO:

a. WHO SEARO to support countries to register IPV, bOPV and other EPI WHO prequalified vaccines, using the “WHO Guidelines on Expedited Approval of WHO PQ Vaccines” by September 2015.

b. WHO-SEARO should continue to regularly share regional risk assessments with countries, assist countries with sub-national risk assessments, and monitor country risk mitigation activities.

Recommendations for Partners:

a. Partners should work with countries to review IPV introduction plans and ensure vaccine availability in line with recommendations for polio vaccination in 2015 and the tOPV – bOPV switch.

3. IPV Introduction

The ITAG applauds the continued commitment of Member States to initiate the Polio Endgame Strategies including the introduction of inactivated polio vaccines (IPV) during 2015. ITAG recognizes that ten countries already have introduction plans. Thailand is currently in the process of finalizing their plans. ITAG notes that in order to synchronize with the April 2016 expected timing of the global switch from tOPV to bOPV, all the countries will be required to introduce IPV by September 2015.

ITAG recommends that:

a. WHO SEARO should provide countries with technical assistance for the timely introduction of IPV.

b. WHO SEARO to provide additional support and guidance on the issue of IPV and bOPV registration and licensing.

4. Measles and rubella surveillance and immunization

The ITAG is encouraged by the countries’ commitment to the Regional goal of Measles Elimination and Rubella/CRS Control by 2020. The ITAG concludes that all countries are making efforts to put in place the necessary programme components leading to this goal, including building laboratory capacity, putting in place systems to conduct case-based reporting, and implementing data feedback mechanisms. ITAG clearly recognizes that with the integrated measles and rubella strategy, and the use of a combination vaccine (MR or MMR) that rubella/CRS will also be eliminated.

The ITAG will monitor a number of milestones that must be met to ensure that the Region remains firmly on track for measles elimination and rubella/CRS control by 2020.
ITAG recommends, and will monitor, the following operational milestones:

(1) By the end of 2014:
   a. Regional surveillance guidelines and national action plans will be in place.
   b. All countries will have initiated case-based reporting of measles/rubella.
   c. Finalize plans to achieve, maintain and verify at least 95% population immunity against both measles and rubella in all age cohorts.
   d. Individual case-based data should be reported monthly to the WHO country office and WHO SEARO in line with reporting requirements.

(2) By the end of 2015:
   a. Case-based surveillance for measles and rubella will be fully operational in all countries except for India and Indonesia which will be expanding case-based surveillance (see 3.c.).
   b. All countries will have initiated sentinel surveillance for CRS.
   c. Susceptibility profile of populations to measles and rubella in all countries will have been described.
   d. A Regional Verification Commission will have been established and a National Verification Committee established in every country.
   e. All countries will have adequate access to an accredited national and reference laboratory (ies).

(3) By the end of 2016:
   a. All countries in the Region will have an optimal two-dose measles-rubella containing vaccine schedule.
   b. All countries will have conducted high quality wide age-range immunization campaigns against both measles and rubella.
   c. India and Indonesia will have fully operational nationwide case-based, laboratory supported measles/rubella surveillance with strong links to outbreak investigations and inclusion of line-listed cases from confirmed outbreaks in the case-based system.
   d. All countries to plan for evaluations of the impact of the nationwide wide age-range MR campaigns and plan for follow-up narrower age-range MR campaigns.

In addition, the ITAG urges Thailand to conduct a nationwide wide age-range serosurvey for measles and rubella at the provincial level or lower and report back to the ITAG at its next meeting the results of the serosurvey and its national plan to achieve the 2020 goals. Thailand should specify their plans to close any immunity gaps found and report back to the ITAG in 2015.

The ITAG understands that Indonesia has made significant progress decreasing measles and rubella cases through immunization, but significant challenges remain in achieving the 2020 measles elimination and rubella/CRS control goal. ITAG recommends Indonesia to determine the population immunity profile, develop plans for a nationwide wide age-range MR campaign by ITAG 2015, and conduct the SIA by 2016. Indonesia and the partnership should explore options to secure MR vaccine supply and operational costs.

The ITAG encourages Myanmar to implement a high-quality MR campaign as planned in early 2015, followed by MR vaccine introduction in routine, and a national coverage survey and to report back on EPI coverage at the 2015 ITAG meeting.

The ITAG is very pleased to note that India conducted a post introduction evaluation (PIE) of measles second dose (MSD) and is planning for MR introduction, with a campaign targeting children 9 months to <15yrs of age. The ITAG recommends that by the next ITAG in 2015, the country incorporate the recommendations of the PIE into their health plans and into the planning for MR introduction into routine. ITAG strongly recommends all that states give rubella vaccine
with both doses of measles vaccine. The ITAG would like to review at the 2015 meeting the plans for an expansion of the laboratory network as case-based surveillance is initiated in 2015.

The ITAG recommends that Timor-Leste introduce two doses of MR containing vaccine by 2015.

The ITAG recognizes the progress that Nepal has made and the high coverage reached by the MR campaign, and recommends the country introduce a second dose of MR vaccine into the routine vaccination schedule and expands the case-based surveillance system to cover all health facilities in the country.

The ITAG recognizes that DPR Korea has controlled measles well, perhaps already having eliminated measles. ITAG recommends DPRK conduct a nationwide serosurvey for rubella (across a wide age-range) and for measles, and to introduce a two dose schedule with a measles and rubella containing vaccine. Based on the results of the serosurvey, ITAG recommends DPRK conduct an MR campaign to close any immunity gaps. ITAG requests DPRK to complete the serosurvey and plans for MR introduction and campaign before the ITAG 2015 and report on these at the meeting.

The ITAG notes that Bhutan, DPR Korea, Maldives, and Sri Lanka may possibly have eliminated measles. These Member States should begin the process of verifying measles elimination and report back at the next meeting in 2015 on their progress to date.

Specifically related to the MR laboratory network, the ITAG recommends that:

a. Laboratories should be scaled up to be fully functional to meet the demands of greater number of tests and with a turnaround time within 4 days.

b. Timor-Leste should enhance its current laboratory to “proficient” status in order to support case-based surveillance.

c. Laboratory capacity should be enhanced to provide the genotype data for measles and rubella required to identify indigenous transmission, sources of infection and imported and import-related cases.

d. By 2016, for verifying interruption of indigenous transmission and to identify imported and import-related cases, measles virus genotypes should be characterized in at least 80% of chains of transmission.

e. By the end of 2015, all member states should share genotype information in timely fashion.

f. WHO SEAR should provide a training workshop on laboratory aspects of CRS in 2015.

The ITAG requests WHO-SEAR to provide an annual report on the progress towards reaching these milestones. The report will be provided to all ITAG members at least once a year prior to the annual ITAG meeting.

5. Assessing population immunity and defining susceptible populations for action

The ITAG recognizes that countries have the capacity and will need to commit to activities related to assessing population immunity, to identify susceptible populations (geographic, age groups, etc) and develop plans for MR vaccination activities. These vaccination activities, routine and campaign, are required between now and 2016 to ensure that the Region remains firmly on track for measles elimination and rubella/CRS control by 2020.

ITAG recommends that:

By 2015:

a. All countries should describe population susceptibility with the purpose of preventing outbreaks of measles and rubella and report back to ITAG 2015.
b. All countries should produce annual population immunity profiles and report to ITAG annually.

By 2016:
   a. Countries should identify their remaining susceptible populations following their nationwide wide age-range MR catch-up campaigns should conduct MR follow-up campaigns to achieve 95% immunity.

6. CRS Sentinel Surveillance
ITAG recognizes the countries’ commitment to the Regional goal of Measles Elimination and Rubella/CRS Control target by 2020. The ITAG acknowledges that Sri Lanka and Bangladesh already have CRS sentinel surveillance systems in place and have demonstrated that this is feasible. The ITAG concluded that all countries are making efforts to put in place the necessary components towards this goal, including building laboratory capacity, putting in place systems to conduct case-based reporting, and data feedback mechanisms.

ITAG acknowledges that the countries will need to commit to several actions between now and 2016 in order to ensure that the Region remains firmly on track for measles elimination and rubella/CRS control by 2020:

*ITAG recommends that:*

**By 2014:**
   a) For countries that have established CRS sentinel surveillance, a plan should be in place to conduct an evaluation of the surveillance system (may include retrospective review of data from the reporting sites).

**By 2015:**
   a) All countries should have initiated sentinel surveillance for CRS.
   b) For countries with established CRS sentinel surveillance, they should use CRS data in conjunction with case-based rubella data to monitor the progress of the rubella control programme.
   c) All countries with CRS sentinel surveillance should report data to the Regional office.

7. Japanese Encephalitis
ITAG recognizes that there has been significant progress in JE control and prevention in the last few years in the ten countries that have JE. Surveillance has been established or strengthened in several countries; vaccine introduction with campaigns in select high risk areas (India, Nepal) or nationwide vaccination (Sri Lanka, Thailand); countries with well-established vaccination programmes are piloting or switching to newer vaccines and are evaluating vaccine impact through surveillance or case-control studies; operational research has been carried out in the Region. New opportunities, including two WHO-prequalified JE vaccines, GAVI financing for eligible countries and a renewed support from partners, now exist to achieve even greater control of the disease.

ITAG also recognizes that the surveillance data are not yet sufficient (in volume, breadth, quality, and/or laboratory confirmation) in some countries; data on JE sequelae are not available. Guidance and tools to use country level data for designing policies and strategies including JE vaccine introduction are still required. While mosquito control can be part of JE control programme, vaccination against JE is essential.

*ITAG recommends that:*
a. Countries without adequate JE/AIDS surveillance data should establish or strengthen sentinel surveillance;
b. Of the ten countries that have JE, those that are not vaccinating should establish disease burden to guide the development of a national policy for vaccination;
c. Countries should analyse available JE/AIDS data to inform national policies on vaccine use and to track progress with disease control;
d. Where it is not feasible to conduct vaccination in all affected areas at once, countries may consider a phased introduction;
e. All countries that have introduced JE vaccine should have mechanisms to monitor JE immunization coverage, to verify immunization status and to conduct surveillance or special studies to evaluate vaccine effectiveness/impact;
f. SEARO should develop Regional policy guidelines for JE control and prevention.

8. Maternal and Neonatal Tetanus Elimination
ITAG recognizes that the South-East Asia Region has achieved impressive results in validating MNT elimination in all countries except India and Indonesia, and that the Region has a strong chance of achieving MNT elimination goal by 2015.

ITAG acknowledges that after the validation of MNT elimination, countries will need to assess the status through an annual review in order to sustain MNT elimination.

ITAG recommends that:

a. India and Indonesia should verify elimination status by the end of 2015.
b. In order for countries to maintain elimination status, to conduct annual data reviews to assess MNT Risk status and to take action as appropriate.

9. Influenza Prevention and Control
The ITAG recognizes that there is evidence of significant year round seasonal influenza burden in this Region, and that Thailand is the only country in the Region that offers influenza vaccination through EPI. Furthermore, the ITAG recognizes the importance of delivering seasonal influenza vaccination to high-risk groups, in particular pregnant women and health care workers, to mitigate its health and economic impact in the Region. Furthermore, the ITAG notes the significance of the influenza vaccine for effectively responding to future influenza pandemics, as well as sustaining the Regional influenza vaccine manufacturing capacity. Predictable demand in the countries is required to sustain the flu vaccine manufacturing capacity in the Region.

ITAG recommends that:

a. The countries in the Region should develop national policies on seasonal influenza vaccines for high-risk groups: pregnant women, children aged 6 – 59 months, the elderly, individuals with specific chronic medical conditions and health care workers;
b. All countries in the Region should develop a plan for generating evidence or collating existing evidence for decision-making by the 2016 ITAG;
c. All countries should strengthen influenza surveillance, establish disease burden and share data with WHO SEARO.

10. Effective Vaccine Management
ITAG recognizes that high quality vaccine supply chain management can only be achieved if all of the components in the supply chain comply with recommended storage and distribution practices,
and that the Effective Vaccine Management (EVM) initiative provides the guidelines and materials to support countries to improve their supply chain performance.

**ITAG recommends that:**

- Countries conduct Effective Vaccine Management (EVM) assessments and prepare EVM Improvement Plans with clearly defined roles and responsibilities which address gaps identified and the plan for how monitoring will occur regularly, and report to ITAG annually.
- Countries use 30-Day Temperature Recorders at national and sub-national levels with properly trained personnel.
- Countries establish real-time monitoring systems using innovative tools for the availability of data (e.g. temperature, cold chain equipment functionality, vaccine stock level).

**11. Adverse Events Following Immunization**

ITAG recognizes that the South-East Asia countries have made significant progress to implement post-marketing vaccine safety surveillance. However, in order to increase detection and investigation capacity, countries need to further develop a training strategy to reach out to frontline healthcare workers and to enhance capacity at district and regional levels to detect and report AEFIs.

**ITAG recommends that:**

- Countries develop guidelines to plan and to conduct field investigation of serious AEFI and report back to 2015 ITAG.
- WHO-SEARO to explore the role of autopsies in detecting AEFIs and to bring in guidelines as to how to more effectively capture AEFI deaths.

**12. Pooled procurement mechanisms**

ITAG recognizes that the smaller countries (Bhutan, Maldives and Timor Leste) may need to review vaccine procurement policies to continue with UNICEF supplied vaccine (procurement service mechanisms) or procure vaccine directly in compliance with Good Procurement practices principles. In the meantime,

**ITAG recommends that:**

- Countries share procurement models to both enhance vaccine product and market knowledge, as well as guide policy makers in making informed decisions on their procurement policies.
- WHO-SEARO should provide guidelines and lessons learned from other pooled procurement experiences to share with relevant countries.

(The full report of SEAR-ITAG will be placed on IVD/SEAR website)