Global Commission for the Certification of Poliomyelitis Eradication (GCC)

Report from the Sixteenth Meeting

Paris, France, 4-5 July 2017
Introduction and background

The 16th meeting of the Global Commission for the Certification of Poliomyelitis Eradication (GCC) was held in Paris, France, on 4-5 July 2017.

The meeting was chaired by Prof David Salisbury, Chair of the GCC and also Chair, Regional Certification Commission (RCC), European Region, and attended by each RCC Chair as GCC members:
- Dr Supamit Chunsuttiwat, South East Asian Region
- Prof. Rose Leke, African Region
- Dr Arlene King, Region of the Americas
- Prof Yagoub Al-Mazrou, Eastern Mediterranean Region
- Dr Nobuhiko Okabe, Western Pacific Region.

The agenda and list of participants are included in the appendix.

The meeting was convened with the following objectives:
- to review and discuss certification reports from the six Regional Certification Commissions;
- to review and endorse the proposed oversight of global poliovirus containment by the GCC supported by the newly convened GCC Containment Working Group (GCC CWG);
- to discuss standardizing and improving the review and risk assessment work of National Certification Commissions (NCCs), RCCs and the GCC.

Session 1: Global polio update and progress towards regional and global certification

1.1 Global Update
- There are only three remaining countries considered to be endemic for polio. Considerable progress has been observed in 2017, with only two cases in Pakistan, four in Afghanistan and none in Nigeria year to date (as at 4 July 2017). However, the number of wild virus environmental isolates in Pakistan has remained high and the geographical spread wide. Most concerning, inaccessibility remained a major issue in north-eastern Nigeria, leading to considerable uncertainty whether transmission of WPV has ceased, even though no case has been detected for nine months. Outbreaks of cVDPV2 have occurred in the Democratic Republic of Congo (DRC) and Syria in 2017.
- All but 18 countries have introduced IPV although 17 others face supply disruptions, and the supply will remain tight throughout 2017. Type 2 Sabin viruses, Sabin-like viruses and VDPVs were detected post OPV2 withdrawal in 2016, mostly in countries where mOPV2 was used.
- Thirty countries are proposing to host 86 Poliovirus Essential Facilities (PEFs), but only 18 of these countries have formed National Authorities for Containment. The GCC has been tasked with oversight of Member States’ compliance with GAPIII, supported by the new seven person Containment Working Group. A Containment Advisory Group reporting to the DG WHO on technical issues has also been formed.
Transition of the GPEI into other service providers is receiving high level attention, with many streams of work.

GPEI priorities for the next six months are to:
- interrupt WPV and cVDPV transmission;
- implement high quality surveillance in endemic and recently endemic countries and provide special attention to access compromised areas in countries such as Syria, Somalia and South Sudan;
- manage finances to ensure sufficient budgets until 2020, with $300 million still to be raised;
- accelerate containment efforts and engage a broader constituency in Transition planning.

1.2 Eastern Mediterranean Region (EMR)
Current epidemiology was reviewed and information was presented on surveillance gaps and country reviews, including surveillance for primary immunodeficiency as a risk factor for VDPV, and also polio outbreak simulation exercises. Key elements of the surveillance improvement plan include country capacity building, desk and field reviews, risk assessment and guideline development. An in-depth analysis of surveillance in Afghanistan and Pakistan concluded maintaining sensitive surveillance in areas with access and security issues was achievable by constant quality improvement, regular analysis for corrective action and innovation.

1.3 African Region (AFR)
An overview of polio eradication and surveillance activities was presented, including the expansion of environmental surveillance (ES), IPV introduction, and containment and certification activities. All countries in the region have active NCCs, supported by expert committees and containment taskforces. Challenges include halting transmission and the current outbreaks, the risk of missing transmission both in sub-national areas with persistent surveillance gaps and in polio free countries where surveillance system performance has declined. Certification issues include irregularity of NCC meetings, late submission of reports, and case classification. Priorities include strengthening surveillance, accelerating transmission interruption with high quality responses, and supporting countries to document achievement of eradication.

1.4 European Region (EUR)
The region conducts regular risk assessments, scoring countries as high, medium and low risk, based on surveillance, immunization, response preparedness and other factors. Ukraine, Romania and Bosnia Herzegovina remain high risk with few signs of programmatic improvement. Special risks in the region include containment breaches particularly from IPV manufacturers and the high influx of migrants and refugees in recent years. Polio Outbreak Simulation Exercises (POSE) continue nationally, between countries and in collaboration with EMRO.

1.5 Western Pacific (WPR)
Gaps in surveillance and population immunity exist in several sub-national areas, with the recent outbreak of cVDPV1 (Lao PDR) an example. The region conducts regular risk assessment also, categorizing countries and sub-national areas as low, medium or high risk. Priorities include achieving and maintaining high level population immunity, improving AFP and expanding environmental surveillance, and continuing work on poliovirus containment.
1.6 Region of the Americas (AMR)
The region has a target of one AFP case per 100,000 population under 15, and, as a whole, has met this target since 2012. Regional risk assessment has recently recommenced, using indicators of immunization coverage, surveillance, and other indicators. The four categories used are low, medium, high and very high risk, with two countries in the latter category (Guatemala and Haiti). Actions being taken to improve surveillance include country profiles, advocacy to countries not meeting surveillance indicators and an AFP bulletin. The GCC acknowledged the reinvigoration and intensity of activity of the RCC in anticipation of global certification.

1.7 South East Asian Region (SEAR)
AFP surveillance continues in all countries, regional performance quality indicators meet required standards and environmental surveillance is being expanded. Still, challenges to the Regions polio-free status include surveillance quality gaps in several countries and at subnational levels often impacted by growing complacency, clinicians not being familiar with polio, small countries not having polio laboratories and limited human resources and reduction in external support for surveillance networks. The regional risk assessment methodology is about ten years old and requires updating. Risk mitigation measures include visits by RCC members to countries, EPI and VPD surveillance reviews, monitoring implementation of ITAG recommendations and expanding HR capacity at the RO, especially for data management. Fractional dose IPV use is happening in four countries to address immunity gaps and the global IPV shortage.

1.8 GCC Conclusions: Eastern Mediterranean Region
- Good AFP surveillance continues in most countries of the Region.
- There are a decreasing number of WPV cases from Afghanistan and Pakistan, but environmental surveillance shows ongoing transmission in multiple areas of Pakistan.
- The new cVPDV2 outbreak in Syria is a major concern, as the virus circulated undetected for a long time.
- Conflict and access issues present the most important challenges to eradication / surveillance, but are regularly assessed and mitigation activities are implemented.

**Recommendation 1**
GCC encourages ongoing efforts to assess, validate and enhance surveillance in EMR, particularly in Afghanistan and Pakistan, and in conflict-affected, access-limited areas of six EMR countries (Syria, Iraq, Yemen, Libya, Somalia and Sudan).

1.9 GCC Conclusions: African Region:
- The levels of WPV transmission in the African Region are very low.
- However, there is evidence of gaps in surveillance (long-term undetected PV transmission in Lake Chad of WPV1, cVPDV2, and in DRC of cVDPV2).
- These gaps could have an impact on global certification, unless addressed urgently.
- There are low levels of immunity in many areas.
Polio teams at all levels are increasing efforts to strengthen surveillance and improve immunity in conflict-affected areas and areas with low population immunity, where many children remain unreached.

**Recommendation 2**

GCC urges the African Region to continue to further strengthen efforts to assess, validate and enhance surveillance, particularly in conflict-affected areas and in populations in at least eight AFR countries (Ethiopia, Cameroon, Central African Republic, Chad, Niger, Democratic Republic of Congo, South Sudan, and Mali).

**1.10 GCC Conclusions: Maintaining quality surveillance in certified Regions**

**SEAR:** remains polio-free three years post regional certification; good responses were made to VDPV2 events in India (2016-17) and a cVDPV outbreak in Myanmar 2015. However, surveillance and immunity gaps were noted in several countries, with risk of continued VDPV emergence / outbreaks

**EUR:** regular systematic regional risk assessment identifies continued risks, including those due to containment breaches (vaccine manufacturers), and related to large influxes of migrants / asylum seekers and insufficient or unknown quality of risk mitigation arrangements by national authorities

**WPR:** a good response interrupted cVPDV1 transmission in Lao PDR; however, both immunity and serious surveillance gaps exist in several countries

**AMR:** the RCC has concentrated on containment but recently provided support to country risk assessments, which clearly identify several countries with considerable immunity and increasing surveillance quality gaps

**Recommendation 3**

High priority should be given to regular and detailed risk assessments in all regions in order to highlight key issues for attention.

**Recommendation 4**

Efforts to strengthen surveillance and fill surveillance and immunity gaps must urgently continue in all certified WHO Regions to prepare for eventual global certification.

**1.11 GCC Conclusions: Importance of risk assessment**

- The GCC considers it essential to raise the priority of polio risk assessment by NCCs and RCCs as an essential tool to prepare for global certification.
- NCC Annual Update reports and country Final Documentation must include a risk assessment in addition to a statement of the absence of polio transmission. NCC reports need to identify country specific risks (importation, spread and response capacity; emergence of cVDPVs; containment breaches) and their mitigation strategies. Each WHO Regional Office should brief their respective NCCs promptly on this new format for their annual reports.
RCCs at their meetings should concentrate on NCC risk assessments and relevant responses.

The GCC notes that all Regions and RCCs continue to use polio risk assessments; recent efforts in the European Region to make submission and analysis of annual updates to the RCC available electronically may be usefully shared with other Regions.

However, some regional risk assessment methods are outdated and not easily comparable among Regions or standardized for use at the global level.

Recommendation 5
*NCCs should change the content of their Annual Update reports to include a risk assessment relevant to their country circumstances. This practice needs to be implemented promptly.*

Recommendation 6
*RCCs and GCC should work with their respective Secretariats to adopt and utilize a more comprehensive approach to assess risks and the impact of risk mitigation activities.*

Recommendation 7
*WHO Regions should update their polio risk assessment methodologies, including considering new risks (e.g. iVDPVs, breaches of containment).*

Recommendation 8
*In order to allow the GCC to compare risks across countries and WHO Regions, the approach to risk assessment should be harmonized across Regions, and implemented in an electronic data collection tool that will facilitate review of the evidence by the GCC.*

Recommendation 9
*The GCC secretariat should work on and submit a new harmonized approach to risk assessment to GCC for review at its next meeting.*

**Session 2: Certification Standards and Other Technical Issues**

**2.1 Certification issues for countries with conflict-affected, access-limited areas**

The detection of long chain viruses (ie with genetic evidence of prolonged circulation) WPV1 and cVDPV2 transmission in Nigeria in 2016, and cVDPV2 in Syria in 2017, raises serious questions about conflict and access affected areas for Certification Commissions. These questions include:

- How can we be confident that surveillance quality in conflict and access affected areas is adequate to detect transmission of WPV or cVDPV if it occurs?
- Are our current measures of AFP surveillance sensitivity and quality relevant for conflict and access affected areas?
- Whether or not they are relevant, are there additional surveillance activities that could be undertaken in these areas?
After the detection of the transmission in Nigeria, the EMRO polio team initiated an in-depth desk review of EMR conflict-affected polio-free countries to assess the risk of potential missed poliovirus transmission, the potential for an outbreak should poliovirus be re-introduced or cVDPV develop, and the current/future mitigation measures. This review is currently repeated quarterly and informs Regional planning and work with countries on mitigation measures. Issues for surveillance include:

- Are basic AFP surveillance indicators being met?
  - If so, the main issue is the veracity of data, at all levels:
  - Where geographically do AFP cases actually have onset and is this being verified?
  - Is the basic case investigation information correct (e.g. date of onset, age, immunization status, etc)?
  - Are specimens really timely and ‘adequate’?

Further issues to consider with additional surveillance activities include:

- Surveillance reviews, if feasible.
- Environmental surveillance:
  - Is environmental sampling physically possible?
  - Is it possible to identify sites that have a good probability of detecting polioviruses if they are present in the community?
  - Are there simple ES methods that can facilitate sampling in difficult situations?
- Contact sampling – is it feasible, will it increase sensitivity?
- Healthy child sampling
  - Under what circumstances should healthy child sampling be undertaken?
  - Is such sampling physically possible?
- Is there a role for additional surveillance in adjacent areas or populations?

Areas/populations affected by conflict and access clearly present significant challenges for eradication and certification. It will be essential during the certification process that additional information on these areas is made available, including adequate investigations of surveillance quality and potentially additional surveillance activities. A regular assessment and risk analysis process for these areas is essential for eradication as well as certification. Certain key questions need to be addressed very soon, including the possibility and utility of environmental surveillance in conflict affected areas, and sampling of healthy children.

### 2.2 GCC Conclusions: Surveillance in countries and areas affected by conflict

- Detection of wild poliovirus and circulating vaccine derived poliovirus in some conflict affected areas (e.g. wild poliovirus type 1 in Nigeria in 2016, and circulating vaccine derived poliovirus type 2 in Syria in 2017) with genetic evidence of prolonged undetected circulation), raise serious questions about the capacity to detect transmission in some settings.
- Limited completeness of data from conflict and access-limited areas and populations may have significant implications for the certification process.
- The GCC will take especially careful note of the risk assessment information (surveillance, immunity levels, population movement) from conflict-affected areas with access limitations, and adjacent areas.

**Recommendation 10**

*During the certification process it will be essential for additional information on conflict and access affected areas and populations be made available, over and above basic surveillance indicators, including the results of additional surveillance activities and on the quality of surveillance.*
Recommendation 11
Conflict affected WHO Regions are strongly encouraged to carry out quarterly detailed risk analysis and assessments for these areas and populations, which will greatly facilitate the work of National Certification Committees, of Regional Commissions as well as of the GCC.

Recommendation 12
The Secretariat should define and facilitate the implementation of potential supplementary surveillance activities in conflict and access affected areas, including environmental surveillance, sampling of healthy children, and other innovative methods, wherever possible.

Recommendation 13
The Secretariat should summarize and disseminate best practices from countries maintaining effective surveillance in conflict and access affected areas (e.g., Afghanistan, Somalia).

2.3 Performance Standards and Quality Indicators for Enterovirus Surveillance

The ultimate goal of surveillance is to detect poliovirus circulating in a population. The standard for wild poliovirus detection is surveillance for acute flaccid paralysis (AFP). AFP surveillance systems have many components and the sensitivity of each component contributes to the overall sensitivity. Surveillance for circulating polioviruses may be event-driven (AFP surveillance, aseptic meningitis surveillance) or non-event-driven (sewage sampling, stool surveys, routine diagnostic sampling).

Non-polio enterovirus surveillance (NPEV) surveillance has a wide range of possible sensitivities, depending on the incidence of polio-infected individuals in the population. In the worst case, it is equivalent to random stool surveys but in the best case it is as good as aseptic meningitis surveillance (and potentially better). Enterovirus surveillance in support of polio eradication depends on the proportion of the population covered, the incidence of clinical illnesses covered, and the virological testing and quality assurance.

Random stool surveys have no practical value as a routine method of surveillance but can have value if targeted to at-risk populations without adequate AFP surveillance. The same demographic information is important for interpretation i.e. population size and characteristics such as age.

Interpretation of Supplementary Surveillance Data requires:
• characterization of the surveillance system, which is critical;
• complete information on demographics of sampled populations;
• description of factors in the system which could affect specimen sensitivity (sample collection, transport, testing).

2.4 GCC Conclusions: Performance standards and quality indicators of enterovirus and other supplementary poliovirus surveillance

• Measuring the sensitivity of supplementary enterovirus (EV) surveillance strongly depends on characterizing key components of EV surveillance, such as:
  o describing the population under surveillance;
  o defining criteria for collection of specimens;
quantification of sampling frequency and representativeness of the specimens; and
- validation of methods and a quality assurance system for the laboratory testing of specimens.

The GCC notes that EV surveillance has largely been used so far in countries with well-performing health and immunization systems where polio has been absent for many years; experience is lacking to determine the sensitivity of this method in polio affected countries to establish its ability to detect silent transmission when it is occurring.

- Formal EV Surveillance Guidelines using these principles were developed at WHO EURO to assist with assessment of EV surveillance data provided by some countries.

**Recommendation 14**
The approaches and guidelines developed for EV surveillance could be applicable to assessing other supplementary surveillance data, such as environmental surveillance and contact sampling. Countries that are using EV surveillance that meets the key components as specified above should maintain such surveillance and submit the results to their respective NCCs.

### 2.5 Environmental Surveillance (ES) of Poliovirus

Standards and indicators include:
- Aggregated data such as number of cities and sites in the country, number of sewage specimens collected by month, year and geographical area (city/district/catchment area) and number of SIA conducted by year and geographical area (catchment area/district).
- Site-based data such as population (number and characteristics) within the catchment area, AFP indicators in the catchment area/district, and findings/site characteristics at monthly reviews.
- Specimen-based data such as geographical area, date, time and method of collection, date received at ES Laboratory and condition of specimen at receipt, etc.

While Environmental Surveillance (ES) of poliovirus is useful, efficient, representative, flexible, and simple, there needs to be rationalization of future ES expansion during the polio endgame, with definition of criteria for assessing the effectiveness of ES, and clearer definition of ES as a certification and/or containment tool and the role of ES post-certification.

### 2.6 GCC Conclusions: Relevance of environmental surveillance (ES) for global certification

GCC notes considerable progress in expanding the number of priority countries using ES for supplementary poliovirus surveillance.

**Recommendation 15**
To rationalize the further expansion of ES, eligibility criteria to recommend ES implementation in priority countries for global certification should be further reviewed and agreed.
Recommendation 16
The main driver for expanding the use of ES in a country should be the ability to detect polioviruses, through the generation of quality ES data. It is recommended to develop ES performance indicators to monitor ES data quality.

Recommendation 17
The role of ES as a certification tool, as well as its role post-certification, should be further reviewed and a consensus expert view sought.

Recommendation 18
In countries conducting ES, all available data, including ES performance indicators, should be reported in full as part of the NCC reports to the RCC.

2.7 Considerations related to declaring global eradication of WPV1 and WPV3

The probability of undetected WPV circulation after the apparent cessation of transmission has been reviewed in many scientific publications. In the recent example of events in north-eastern Nigeria, insecurity/access issues resulted in immunity gaps from insufficient tOPV use and surveillance quality issues. Indicators were thought to be strong, however systematic errors in data collection and assessment had occurred, obscuring the almost complete lack of information from inaccessible districts. High-quality surveillance at district level is essential for certification, and the most challenging places to stop transmission due to poor program performance are also likely to face challenges with surveillance quality and give rise to the lowest confidence about the ability to detect circulation.

Factors that favor prolonged undetected circulation include:
- AFP surveillance gaps.
- Long intervals between paralytic cases, which may indicate population immunity is close to the threshold required, a low paralysis to infection ratio, or possibly low population density rural areas that allow slow geographical spread.
- No or imperfect coverage of supplementary surveillance using environmental surveillance (true for all countries, except maybe Israel).

It appears that a three-year event free period (no poliovirus detected) in the presence of high quality AFP surveillance and high population immunity is sufficient for WPV1 and WPV3 certification of eradication, although a longer time may be required to reach the same level of confidence of no probability of undetected circulation for WPV3 than for WPV1, due to the lower clinical attack rate of WPV3. This raises the question of whether the process for WPV3 certification should begin now. Extended undetected circulation is possible in the context of surveillance gaps and low-level transmission, so maintaining high-quality AFP surveillance is critical, and ES is not likely to significantly increase confidence in all locations/countries/areas.
2.8 GCC Conclusions: Polio-free interval to certify WPV eradication

- Modeling suggests that in the presence of high quality AFP surveillance and high population immunity, a period of three years without detection of both WPV types 1 and 3 provides high confidence (95%) for concluding the eradication of both types; with good surveillance, this level of confidence may be reached even earlier.
- However, confidence will be lower in the context of gaps in surveillance quality and population immunity, which raises the possibility of extended, undetected circulation requiring longer periods of surveillance before interruption of transmission can be assumed.

**Recommendation 19**
The GCC affirms that a minimum of three years following the last detection of WPV1 is required for global certification, and notes that almost five years have already elapsed without detecting WPV3.

**Recommendation 20**
The GCC reviewed the evidence from Borno where both wild and vaccine-derived poliovirus were found to have circulated undetected for several years; the GCC concluded that the experience in Borno would still support the use of an interval of three years between last virus isolate and certification.

**Recommendation 21**
The GCC did not favour separating the conclusion of eradication of WPV3 from that of WPV1. The interval between making these conclusions could be short and therefore not justify the duplication of effort; a consequential move to monovalent vaccination would also not be worthwhile. The GCC noted that the risk of the emergence of type 3 cVDPVs from continuation of bivalent vaccine would be very small.

2.9 GCC Conclusions: Increase confidence in PV surveillance results

- The GCC will be certifying WPV eradication once it is convinced that the quality of surveillance is sufficient, population immunity is sufficiently high, and that PV containment and preparedness for outbreak response are at appropriate levels.
- The GCC acknowledges efforts everywhere to obtain high quality surveillance data; however, the overall sensitivity of surveillance as indicated by AFP quality indicators in some areas would be insufficient to allow regional and global certification in the future.

**Recommendation 22**
GCC urges all WHO regional and country teams to conduct and share analyses of surveillance challenges, clearly identifying gaps and steps taken to address these gaps.

**Recommendation 23**
In conflict or difficult to access areas, traditional surveillance indicators should be supplemented by assessments ‘beyond the indicators’ to increase the confidence of RCCs and the GCC in the quality and completeness of surveillance.
Recommendation 24

WHO should set up an online repository of RCC findings and recommendations to improve risk assessment and the transparency of the global certification process.

Session 3: Post-certification strategy and GCC role in implementing GAP III

3.1 Implementation of GAP III: progress and challenges

Containment is critical to maintaining polio eradication, and is a complex global programme involving all 194 WHO Member States & 21 non-member countries & territories, and has a long time horizon. It is proposed that the GCC will:

- review applications to ensure that designated PEFs are eligible to be certified according to the CCS process;
- approve/endorse the process to award containment certificates;
- review and approve the National Authority for Containment assessments of PEFs’ containment activities;
- approve/endorse the issuance of the various containment certificates; and
- act as a global oversight body to confirm the global containment of polioviruses.

Currently 30 countries plan to retain PV2 in 86 designated PEFs. However, only 18 of these 30 have nominated a National Authority for Containment. The Secretariat presented the phased process for implementing GAP III and raised several questions:

- Should the completion of Phase I be formally acknowledged?
- When can/should Phase I for type 2 be declared completed?
- When should Phase I start for types 1 and 3?
- When can/should Phase II be declared as having started?
- What milestones should be achieved in terms of containment by the time of global certification of eradication?

3.2 GCC Conclusions: GCC role in containment

- Considerable progress has been made in containment, including numerous specialized training sessions, including the creation of a pool of trained auditors, the establishment of National Authorities for Containment (NACs) in 18 of 30 countries intending to host a Poliovirus Essential Facility (PEF) and in many countries, the destruction of all PV2 materials or transfer to facilities with higher biosafety/biosecurity levels.
- The GCC notes that, at the time of the meeting, no Certificate of Participation (CP), the initial step toward being certified as a PEF, has been issued.
- In view of the risk associated with PV retention, the GCC expressed concern about the large number of PEFs being proposed by countries. Countries wishing to host a PEF should understand that certification is complex and costly; such countries must also commit to maintaining high IPV coverage of all birth cohorts in the future for as long as a PEF is hosted.
- The GCC Containment Working Group will be responsible for assuring that certification of a PEF is compliant with GAP III.
• The GCC noted the requests from the WHO HQ Polio Department for the Commission to address specific technical guidance relative to Phase 1 and Phase 2 of GAP III implementation.

**Recommendation 25**
The GCC affirms the proposed roles and responsibilities for the GCC in the oversight of global PV containment and agrees to provide support as needed.

**Recommendation 26**
Due to the complexity of the subject, the GCC requests a special briefing package be made available for GCC members, and that a special GCC meeting dedicated to an in-depth discussion of its support for containment be held during the fourth quarter of 2017.

**GCC linkage to post-certification strategy (PCS)**

**GCC conclusion**
• The GCC notes that parameters for global certification established by the GCC will become key drivers to influence strategies and standards proposed by the PCS.
• Thus, the scope and type of activities in preparation for global certification (e.g. management of PV-positive environmental samples, positive contacts, VDPVs) will impact the:
  – PCS ‘protection strategies’,
  – readiness criteria for bOPV cessation,
  – outbreak response parameters, and
  – continuation and duration of key surveillance strategies.

**Recommendation 27**
The GCC recommends that the development and evolution of the PCS be closely coordinated with the GCC and reviewed before, at the time of, and after global certification.

**Session 4: GCC review: capacity building and guidance for NCCs**

Issues raised include:
• Late submission of reports from NCCs to RCCs, and incompletely or incorrectly filled reports (missed information).
• Inconsistency of data.
• Lack or inadequate description of population characteristics, especially mobile populations and other high risk groups.
• Lack of analysis about the potential risk of importation or spread.
• Lack of review of laboratory PV containment activities.
• Lack of updating of outbreak preparedness and response plans.
• Insufficient information on maintaining AFP and/or other forms of poliovirus surveillance in polio free countries.
To improve the quality of the NCC report, a possible mechanism would be to include a risk analysis by the NCC Chair. Some thought also needs to be given to ensuring the independence of the NCC from the polio program, but this can be hard to achieve in small countries with a limited pool of expertise, and even in some large countries where health institutions are largely publicly funded the NCC should be independent from those who have managerial responsibility for the implementation of the polio programme.

GCC conclusions: capacity building for NCCs

- The GCC notes ongoing efforts to build capacity in NCCs in all Regions, and reviewed relevant efforts in the EMR in more detail
- Efforts of the EMRO team and EMR/RCC, as well as AFR, to work with NCCs include
  - Updating of TORs for NCCs and/or
  - Workshops to build capacity of NCC, including on containment

Recommendation 28
In view of the increasing relevance of detailed risk assessments, the GCC recommends that the NCC chairperson’s report should include the deliberations of risk assessments (population immunity, surveillance, containment, outbreak preparedness and response).

Recommendation 29
The NCC chair and NCC members must be independent of management of the polio programme and of Ministries of Health. Exceptions are only allowed in small countries where independent expertise does not exist.

Recommendation 30
The GCC suggests that the secretariat review NCC guidelines from all Regions, and produce a guidance document/template to better define and standardize the critical elements that should be contained in all NCC reports, with a focus on those from countries at the highest risk.
Other considerations

GCC conclusions: Communication strategy to support certification

- A communication strategy in support of certification activities is required to support the GCC and RCCs to communicate complex technical issues. Areas in need of communication expertise include:
  - the shift in surveillance from a focus on confirmed polio cases to include a broader focus on the importance of poliovirus isolates found from any source;
  - poliovirus containment;
  - the risk of cVDPV outbreaks following WPV certification.

Recommendation 31

The GPEI should assign a dedicated communications expert, to develop a specific certification communication strategy for and in close collaboration with the GCC and RCCs.

Important topics to discuss at subsequent GCC meetings

1. All aspects of GCC involvement in containment, through conducting a GCC meeting fully dedicated to this topic. This may include a session between the Chairs of the GCC and CAG, the GCC/CWG, and vaccine producers / vaccine industry representatives.
2. The best way to keep the GCC updated on Regional Risk Assessments prior to global certification, including the review and reporting of risk assessment status between levels (from NCC to RCC and from RCC to GCC), particularly for countries and Regions certified many years ago; this review should include an assessment of the possibility of undetected PV transmission, of surveillance quality and immunity levels, and of the status of containment.
3. The certification standards for polio surveillance (AFP, ES, supplementary methods), including the possibility of establishing different standards (e.g. for conflict-affected countries, recently endemic and certified Regions).
4. The review of existing TORs of RCCs in all Regions in order harmonize the work of RCCs to allow focus on the same key TOR components (e.g. prioritizing risk assessment versus monitoring other components of the polio endgame).
5. Discuss the intersection timelines for certification and for containment.
6. Linkage to other polio groups and committees– eg, SAGE Polio WG (SAGE), Cessation Risk Task Team (CRTT), CAG.
Appendix:
- Agenda of the meeting
- List of participants
Global Commission for the Certification of Poliomyelitis Eradication (GCC)

Hotel Meridien Etoile, Paris, France – 4 & 5 July, 2017

AGENDA

**Tuesday, 4 July**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Description</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00</td>
<td>Registration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08:15</td>
<td>Welcome remarks and objectives of the meeting</td>
<td>WHO HQ + GCC chair</td>
<td></td>
</tr>
<tr>
<td>08:30</td>
<td><strong>SESSION 1:</strong> Global polio update and progress towards regional and global certification</td>
<td>Current status of the GPEI</td>
<td>WHO HQ</td>
</tr>
<tr>
<td>09:00</td>
<td>Eastern Mediterranean Region: remaining surveillance challenges in Pakistan and Afghanistan and other conflict-affected countries</td>
<td>Chair, RCC EMR / J-M Olive</td>
<td></td>
</tr>
<tr>
<td>09:45</td>
<td>African Region: surveillance challenges in Nigeria, Lake Chad countries and in other conflict-affected countries in AFR</td>
<td>Chair, ARCC / WHO/AFRO</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td>Coffee break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>European Region: responding to risks of declining surveillance and presence of high-risk refugee populations</td>
<td>Chair, RCC / EUR</td>
<td></td>
</tr>
<tr>
<td>11:20</td>
<td>Western Pacific Region: responding to risks of declining surveillance and cVDPV</td>
<td>Chair, RCC / WPR</td>
<td></td>
</tr>
<tr>
<td>11:40</td>
<td>Region of the Americas: responding to risks of declining surveillance</td>
<td>Chair, RCC / AMR</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>South-East Asia Region: responding to declining surveillance and cVDPV</td>
<td>Chair, RCC / SEAR</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:30</td>
<td>Discussion session 1 - progress towards regional and global certification</td>
<td>GCC chair</td>
<td></td>
</tr>
<tr>
<td>14:00</td>
<td><strong>SESSION 2:</strong> Certification standards and other technical issues</td>
<td>PEI in countries with conflict-affected, access-limited areas</td>
<td>C. Maher</td>
</tr>
<tr>
<td>14:20</td>
<td>Performance standards and quality indicators of enterovirus surveillance</td>
<td>M. Pallansch</td>
<td></td>
</tr>
<tr>
<td>14:40</td>
<td>Performance standards and quality indicators for environmental surveillance</td>
<td>O. Diop</td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td>Coffee break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:30</td>
<td>Evidence base for the 'three year rule' (at least 3 years between last WPV isolate and certification)</td>
<td>K. Thompson</td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td>Discussion Session 2: defining 'certification-quality surveillance'</td>
<td>Chair, GCC</td>
<td></td>
</tr>
<tr>
<td>16:30</td>
<td>Closing - Day 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Wednesday, 5 July

#### SESSION 3: Post-certification strategy and GCC role in implementing GAP III

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Post-Certification Polio Strategy</td>
<td>B. Burkholder (by tel.)</td>
</tr>
<tr>
<td>09:00</td>
<td>Implementation of GAP III: progress and challenges</td>
<td>N. Previsani</td>
</tr>
<tr>
<td>09:30</td>
<td>Update on the GCC Containment Working Group</td>
<td>Chair, GCC-CWG</td>
</tr>
<tr>
<td>10:00</td>
<td>Discussion - session 3</td>
<td>Chair, GCC</td>
</tr>
</tbody>
</table>

**10:30**  *Coffee break*

#### SESSION 4: Review of modus operandi of certification groups (internal mtg. of GCC with WHO secretariat)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>Updating RCCs to address key risks - review of RCC TORs and modus operandi</td>
<td>Chair, GCC</td>
</tr>
<tr>
<td>11:30</td>
<td>Capacity building for NCCs and focusing NCCs on detecting and addressing main risks</td>
<td>Chair, RCC EMR</td>
</tr>
<tr>
<td>12:00</td>
<td>Timeline towards global certification, GCC workplan and possible role of Certification Commission post-certification</td>
<td>Chair, GCC</td>
</tr>
</tbody>
</table>

**12:30**  *Lunch break*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>Discussion session 4 - reviewing and refocusing how certification groups</td>
<td></td>
</tr>
</tbody>
</table>

#### SESSION 5: Key conclusions and recommendations and final discussion

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>Discussion of key conclusions and recommendations following the 15th GCC meeting</td>
<td>Chair, GCC</td>
</tr>
</tbody>
</table>

**15:00**  *Coffee break*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:30</td>
<td>Final discussion - including on date + venue of next GCC meeting</td>
<td>Chair, GCC</td>
</tr>
<tr>
<td>16:30</td>
<td>Closing of GCC meeting</td>
<td>Chair, GCC</td>
</tr>
</tbody>
</table>
## LIST OF PARTICIPANTS

### GCC members
- David Salisbury - GCC Chair and Chair, RCC/EUR, London, United Kingdom
- Arlene King - GCC Member and Chair, RCC/AMR and Chair, GCC / CWG, Vancouver, Canada
- Nobuhiko Okabe - GCC Member and Chair, RCC/WPR, Kawasaki City, Japan
- Supamit Chunsuttiwat - GCC Member and Chair, RCC/SEAR, Bangkok, Thailand
- Yagob Al Mazrou - GCC Member and Chair, RCC/EMR, Ryad, Saudi Arabia
- Rose Leke - GCC Member and Chair, RCC/AFR, Yaounde, Cameroon

### Technical advisors
- Rudolf Tangermann, Technical Advisor GCC, Geneva, Switzerland
- Mark Pallansch, Technical Advisor GAPIII, Atlanta, US
- Kim Thompson, Technical Advisor, KidRisk, Orlando, US
- Jean-Marc Olive, Chair, Pakistan, Afghanistan and HoA Polio TAGs, Paris, France
- Deblina Datta, CDC

### WHO Regional Offices
- Koffi Kouadio, WHO/AFRO
- Pascal Mkanda, WHO/AFRO
- Chris Maher, WHO/EMRO
- Humayun Asghar, WHO/EMRO
- Patrick O’Connor, WHO/EURO
- Ana Chevez, WHO/PAHO
- Sigrun Roesel, WHO/SEARO
- Tigran Avagyan, WHO/WPRO

### WHO/HQ
- Michel Zaffran, Director, POL/WHO/HQ
- Roland Sutter, WHO/HQ
- Nicoletta Previsani, WHO/HQ
- Graham Tallis, WHO/HQ
- Zainul Khan, WHO/HQ
- Liliane Boualam, WHO/HQ
- Ousmane Diop, WHO/HQ

### Observers
- John Vertefeuille, CDC and Chair, EOMG,
- Brent Burkholder, Technical Advisor (participation by phone), Seattle, US