#	RECOMMENDATION	OWNER	STATUS/UPDATES
PAKISTAN & AFGHANISTAN			
1	All partners in the GPEI, and the Afghanistan government, should work with the greatest possible urgency to establish an Emergency Operations Centre (EOC) in Afghanistan that has a level of functionality equivalent to the comparable Centre that has been transformational in Nigeria.	Afghanistan TT	National and 3 regional EOCs (Kandahar, Jalalabad, Herat) now established. EOC Incident Manager, Dr. Maiwand, and two deputies have been assigned. MOH and Partners are supporting full implementation of the NEAP and enhancing data management support for national and provincial EOCs. BMGF is providing full operational contract support for EOCs. Full functionality of EOCs still evolving, including assuring availability of dashboards showing real-time data for improving SIAs in Low Performing Districts (LPDs). Data management in Regional EOCs lags behind national EOCs; national EOCs now beginning to visit and monitor Regional EOCs. Accountability monitoring is in the process of being implemented. There has been incremental improvement in quality of SIADs, but 7-10% children still being missed in 5 key provinces.
2	Non-Governmental Organisations that contribute to polio eradication in Afghanistan should be full members of the new Emergency Operations Centre.	Afghanistan TT	Proposal being considered to have Grants and Commissions Management Unit (MoH GCMU, manages the Basic Package of Health Services partners) represented in the EOC also. Partners are engaging the International Federation of Red Cross and Red Crescent Society/ Afghan Red Cresent Society (IFCR) to assist with negotiating and working in inaccessible districts and other high risk LPDs.
3	The GPEI partners and the government of Afghanistan should rapidly review and redesign leadership, accountability and coordination arrangements for the polio programme in the country to establish a new sense of direction.	Afghanistan TT	WHO Afghanistan and UNICEF Afghanistan have designated new team leads (Dr. Hemant Shukla and Melissa Corkum). Both team leads and their team members are working closely together to support the government in implementing the NEAP and EOC functions. Both country offices are scaling up capacity in key areas at national and sub national levels, particularly in low performing districts.

			WHO has 100 new staff assuming positions in these districts. Leadership of Afghanistan EOC is also now in place (Dr. Maiwand, and two deputies). NEAP tasks with timelines, responsibilities and accountability established and being tracked, implemented and monitored.
4	The GPEI partners should help the governments of Pakistan and Afghanistan to establish a joint executive and planning body to instigate cross-border polio prevention and control; this should not only address the border crossings but take account of the need to cover communities at some distance from the border itself. One option would be to set up a joint governmental Emergency Operations Centre but leaders of the programme must ensure that the organizational model is much superior to the ineffectual arrangements of the past.	EMRO (Chris M) in coordination with Pakistan & Afghanistan teams	**Improved Coordination**: WHO EMRO, in consultation with GPEI, assigned two Medical Officers as advisors to Pakistan and Afghanistan to assist joint planning and coordinate activities across common corridors of transmission; Peshawar-Nangarhar corridor and Quetta-Kandahar block, respectively. Coordination has significantly improved between the FATA and eastern Afghanistan teams with monthly in person meetings and video conferences since November 2015. A video conference was convened between the national teams on 6th January. National in-person meeting planned for 9th March in Kabul. **Improving cross border operations:** ▪ Mapping of bordering villages at Khyber – Nangarhar border completed. ▪ The transit vaccination strategy revamped by Pakistan on Torkham border between Khyber & Nangarhar. ▪ Reassessment of the vaccination posts and supervisory mechanisms followed by substantial rise in the number of teams & supervisors (almost four fold). As a result, the monthly coverage at Torkham border increased from an average of 40,000 to almost 100,000 in December 2015 & January 2016. In addition, the age group for transit vaccination at the border crossings increased up to 10 years.

5	The GPEI and the government of Pakistan should give top priority to stopping polio transmission in Peshawar and surrounding regions. This should include urgently addressing the mismatch between the "epidemiological" geography of polio and the "planning and coordination" geography in this part of the country. Serious consideration should be given to reconfiguring the regional Emergency Operations Centre arrangements to address this. Support to these regions should include expert technical assistance in managing and using data at the local level; the GPEI senior leadership should help to design the essential data flow.	Pakistan TT	Government of Khyber Pakhtunkhwa has given the status of one region to settled districts and FATA Agencies / FRs bordering Peshawar and Nowshera and Charsadda districts. A committee chaired by Commissioner Peshawar has been established with the objective to treat the whole area as one region for operational and security purposes. This committee meets before each round (4 times to date) and includes representative of HQs 11 Corps; Deputy Commissioner Peshawar (for Peshawar districts and FR Peshawar); Political Agent (for Khyber Agency); DIG Peshawar; Assistant Political Agent (for FR Kohat); District Health Officer Peshawar; Agency Surgeon Khyber; Agency Surgeons FR Peshawar and FR Kohat; representatives of Mohmand Agency, districts of Charsadda and Nowshera and partners' staff in Peshawar district, Khyber Agency, FR Peshawar and FR Koha. To date all the UCs of Peshawar and the villages on FATA side on the borders have been clearly mapped. Micro-plans of the bordering UCs / areas have been field validated and all the ambiguities have been removed. Joint trainings for the Area In-Charges and polio teams were organized. The activities on both sides have been synchronized (starting on the same day). Data use in KP/FATA is quite comprehensive, with the NEOCs supporting analysis of data on a daily basis of LQAS, PCM, ICM, and Market Surveys. ICM, PCM and LQAS is now possible in every UC of Town 4 in Peshawar, and the LQAS pass percentage in the Peshawar corridor has risen to 84% pass (86% in Town 4).

			An IPV campaign was conducted in Khyber and FR Peshawar achieving 93% administrative coverage. Permanent transit points have been strengthened at the Pakistan-Afghanistan Border. CCPV have been scaled up in Khyber and HR surge in Khyber has been institutionalized. The Prime Minister's Focus Group discussed the importance of this region during its meeting in December 2015. The Prime Minister Office has assured the KP and FATA teams of any additional support from the Federal Government and law enforcement agencies to effectively tackle the risk in Khyber – Peshawar Conveyer Belt. WHO has appointed one Short Term Consultant (STC) for this region; and two High Risk Coordinators, one each in KP EOC and FATA EOC. WHO has appointed two senior staff members as Common Reservoir Coordinators. A one-day Afghanistan-Pakistan Coordination meeting on common WPV reservoirs will be held on 9 March in Kabul. Despite the progress, the LQAS for Khyber-Peshawar is indicating sub-optimal quality. There is continued need to identify, vaccinate and track underserved high risk populations and improve microplans and SIA operations in areas where the continuous community protected vaccination strategy is not being implemented and SIA quality remains sub-optimal.
6	The CDC should conduct an urgent special review of the pattern and genetic features of the positive environmental samples in different geographical areas of Pakistan. The primary aim of the	CDC Pakistan lab	An analysis and a presentation were provided to Pakistan and Afghanistan prior to February TAG meetings.

	review should be to identify possible pockets of population that may have been missed in previous microplanning. It is essential that this work is completed in time to be able to inform the current low season vaccination rounds.		Using the nucleotide sequences of VP1 capsid coding region from AFP cases and environmental samples for 2013–2015, phylogeographic inference was made from genetic data and associated temporal and geographic records. Inferred transmission pathways and genetic diversity plots were based on statistical and evolutionary models. Genetic diversity analysis included data from 2012 to 2015. WPV1 genetic diversity fell substantially during the 2015 high season; previously it had sharply risen as each high season progressed. The most intense transmission is Khyber-Peshawar-Nangarhar, forming a common epidemiologic block. Inferred transmission between the identified isolates includes areas that already are considered as high risk (Khyber agency). Most transmission in Nangarhar is local, and it has served as an independent reservoir to seed Peshawar in 2014–2015. Quetta Block has had reintroductions from multiple directions with sustained transmission. Continuous circulation in Karachi remains a major concern and has served as a source for wild poliovirus found in multiple other locations throughout Pakistan. Southern Afghanistan has remained a stable reservoir. Secondary analysis beyond IMB recommendation is being considered which will further overlie some epidemiologic and access data to see if that provides any further insight. *Note*: Pakistan National Institute of Health published an article on 28 Oct, 2015 in *Clinical Infectious Diseases Journal*, “Genomic Surveillance Elucidates Persistent Wild Poliovirus Transmission During 2013-2015 in Major Reservoir Areas in Pakistan.”

7	The most senior members of the GPEI should work with the leaders of the polio programmes in Pakistan and Afghanistan to plan a precisely targeted series of campaigns of IPV alongside OPV. The IMB has repeatedly stressed the immunity benefits of this but it is essential, given limited vaccine supply, that it is used to prioritise, through microplanning and microcensuses, hard-to-reach and persistently missed children.	EOMG/Brent	The EOMG worked closely with country teams, with input from a senior consultant, to define IPV needs in both Pakistan and Afghanistan. Based on this work. the Strategy Committee of GPEI endorsed updated guidelines for use of IPV in campaigns in Pakistan and Afghanistan in the context of a very limited global IPV supply, agreed on additional IPV allocations for use in SIAs in Afghanistan (496,960 doses) and Pakistan (740,220 doses), and allocated 400,000 doses as global emergency stock, to be shipped out based on emerging needs and in strict adherence with the global guidelines on IPV use in SIAs. This decision was communicated to countries on 6 December 2015. There was an emphasis on the need for country teams to ensure IPV SIAs are implemented to achieve at least 80% coverage or pass rate from independent monitoring/LQAS or a clear trend of consistent coverage improvements. Operational plans are being finalized for the IPV+OPV SIAs in high-risk areas during March to May 2016 and both country teams are expected to review their current stocks and utilization and submit any request for additional IPV supply needs by mid-March for the Strategy Committee to consider.
NIGERIA			
8	The GPEI leadership should work with the Emergency Operations Centre in Nigeria to strategically review the range and adequacy of data streams to monitor the country's resilience to polio transmission becoming reintroduced. From this, a Polio Resilience Dashboard should be constructed that would become the main vehicle for directing vaccination strategy.	Michael	A polio dashboard is 'live' and tracks a set of indicators used to assess program and management performance; the national emergency plan includes a set of activities designed to close loopholes in surveillance and implementation that would increase 'resilience'. The Abuja Commitments were updated and signed by President and Chair of Nigeria Governors' Forum in January 2016. It will be important to track whether the Presidential Task Force meets quarterly to

			track all of this work.
9	A new Director of Polio Legacy should be appointed to lead legacy planning in Nigeria and to ensure that programme staff and leaders are not distracted from the task of building resilience to keep the country and the rest of Africa free of polio until official certification.	Michael	While a Polio Legacy Working Group has been established and has full-time consultancy support (Dr. Boubacar Dieng), the appointment of a NPHCDA Director has not yet been made – although this is under consideration after the recent Expert Review Committee (Feb 10, 2016) endorsed the recommendation of the IMB. Additionally, the working group is housed within the EOC and does not regularly engage stakeholders beyond the EOC. An asset inventory is nearing completion. Much work remains to develop an adequate legacy plan, including close engagement with all key stakeholders.
10	The GPEI should conduct a new social mobilization and communication campaign to raise awareness amongst parents and health professionals that polio vaccination is still necessary to protect children from the disease.	Michael	The NEAP will list a requirement for new messaging around the continued need for polio vaccination and other issues as informed by Harvard polling data. While the messaging will largely focus on the bigger issue of child health and associated bundle of services, with an emphasis on establishing supportive norms and habits for routine immunization, the need to continue taking polio drops during vaccination campaigns will be stressed. The messaging will be different from last year in that it will emphasize maintaining the sense of risk and will stress that polio could still be circulating, including in neighboring countries. The EOC communications group has started working on a comprehensive messaging framework for various participant groups (parents, health professionals, decision makers, etc.). The communications strategy for various participant groups will take advantage of all existing channels and forums (VCMs at community level, traditional leadership, media, etc.)

			proven to be effective in reaching various audiences and will be rolled out during the second quarter of 2016. The communications strategy will focus on communicating positive polio/RI messaging during the weeks leading up to the African Vaccination Week and beyond before the May SIAs (April-May). Overall, continuing strong messaging on the need to continue polio vaccinations/RI and implementing high quality polio campaigns to key strategic audiences will be a high priority for the new UNICEF polio team lead arriving in early April. Additionally, there has been an increase in media coverage of various high level advocacy efforts that have been implemented in Q1 of 2016 (Presidential taskforce, Governor's Forum, renewal of Abuja commitments with LGA Chairmen) to reinforce the need for continued efforts in polio and RI.
UKRAINE			
11	The government of Ukraine should ask the GPEI to assist it by establishing an independent international panel to advise on dealing with its polio situation and also to assist with investigating cases of alleged adverse reactions to polio vaccine, an issue that has damaged past public confidence in vaccination. The panel would also be a credible source of public information untainted by vested interests.	SC	In December, Ukraine's Three Month Outbreak External Assessment was conducted which assessed the outbreak response activities and provided recommendations to guide the country on their way forward. Chairman of the European Regional Certification Commission for Poliomyelitis Eradication (RCC) EURO (David Salisbury) also attended the debriefing and recommendation session. The Six Month External Assessment is scheduled for 16-29 April. Also in December 2015, Ukraine re-constituted its national AEFI (adverse events following immunization) Commission and conducted its first meeting after nearly 6 years. With

			ongoing technical support by a senior expert from WHO EURO, the Commission has formally met three times as of March 2016 and reviewed cases with suspicion of post OPV association with AEFI. Following each review, public messaging was provided de-linking AEFI cases from polio vaccination. Given the focused and comprehensive external advice provided by Ukraine's 3 month and planned 6 month assessments and the ongoing EURO technical support to strengthening AEFI, the relevant recommendation made by the IMB is satisfactorily addressed.
12	The International Health Regulations Emergency Committee should be asked to declare the situation in Ukraine a public health emergency. It is strongly recommended that the rules be changed to allow vaccine-derived polio viruses, to fall within the scope of the regulations.	WHO	On 10th November 2015 and 12th February 2016, the IHR emergency committee included Ukraine on the list of polio infected countries in its revised recommendations. The Ukraine MoH presented its report to the committee in November. The IHR EC included cVDPV in scope for committee review going forward. The recent February assessment of the EC is that the current situation continues to constitute a Public Health Emergency of International Concern (PHEIC), both for countries affected by wild poliovirus and countries affected by circulating vaccine-derived polioviruses (cVDPVs).
REFUGEE AND MIGRANT COMMUNITIES			
13	The GPEI, working through the WHO EMRO and EURO offices, should conduct a more detailed risk assessment around polio immunity in migrant and refugee communities from conflict in the Middle East – including those not housed within formal structures. Further supplementary immunization activities should be considered in Jordan, Lebanon, and Turkey and on	EMRO EURO	High level meeting of ministers of health of European States held on 23rd to 24th November 2015 to discuss issues related to refugee / migrant health, including Polio. EMRO representatives and countries affected by the migration attended the meeting.

	migratory routes into Europe, depending on their findings.		Additional targeted campaigns planned in Turkey and Lebanon - 2 rounds each. NIDs discussed for Jordan and agreement reach to hold them in Q1 of 2016.
14	Middle Eastern countries with refugees from Syria should advertise free vaccination for children without the need for official registration or identity checks.	EMRO	According to UNHCR estimate, there are 3.4 million Syrian refugees in various countries of the Middle East (Jordan, Lebanon, Egypt and Iraq). Turkey also hosts more than 2.5 Syrian refugees. All of these countries are already offering free vaccination to Syrian refugees except for Iraq, where there has been a recent shift in policy and a fee charged for services. This applies to the whole population, and is not specific to refugees. Generally, Syrians participate in routine immunization and campaigns and are also thought to have a good immunity profile and good health seeking behavior when it comes to vaccines.
PROGRAMME-WIDE POLICY AND ACTION			
15	The GPEI should introduce, as a matter of policy, a "Golden Rule" that in all security compromised areas a single integrated plan (incorporating both programmatic and security elements) should be produced before every vaccine round or other polio-related activity in an area. This would have the purpose of tightly coordinating security arrangements with planned polio technical activity. It would be agreed by all parties and communicated to all teams.	Anand & Access and Security	Conducting Security Risk Assessments (SRAs) are an integral part of programme planning in both polio-endemic countries and those suffering outbreaks. SRAs, developed through close engagement of WHO/UNICEF Security Officers (at global and national level), UN Department of Safety and Security –UNDSS, and local Law Enforcement Authorities (LEA) help provide a context for ensuring the safety of all staff, and vaccination teams during polio SIAs. Security briefings are also provided to the Outbreak Response Team as part of the initial assessment and response. Security officers are integrated into outbreak response assessments, and also conduct special missions to review security concerns – as was done in Madagascar and South Sudan recently.

			Strict UNDSS guidelines are already included in planning the movement of staff to monitor and supervise activities in high-risk areas. More than 15 armoured vehicles have also been procured by WHO recently to support polio activities in Afghanistan, Pakistan and Somalia, especially to enable improved supervision of polio activities by staff. The proposed "Golden Rule" of integrating security and programmatic elements into one single plan cannot be implemented uniformly in all countries, and has to be modified according to the local political and security context. In Pakistan, LEAs and the Military are fully engaged in the EOCs, and the micro-plans now include the numbers of optimal security personnel needed in high-risk areas. However, there are still gaps in the numbers of security personnel requested by the programme, and the actual numbers available during the campaigns. Advocacy with local administrative officials, senior officials of the local LEA, and provincial political leaders have been conducted to ensure the optimal numbers of security personnel are made available for each polio activity. The review and updating of the micro-plans after every SIA will further ensure better security coverage. In countries such as Afghanistan, the programme has to maintain strict "neutrality" in its actions and hence cannot engage closely with LEAs and the Military. However, the SRAs help in establishing the dates and scope of the campaigns, in developing alternate vaccination modalities, and provide information that can be utilised in local and high-level negotiations with all parties. Third-party interlocutors,

			and other channels within the UN are also used to gain advance information of potential security incidents, and help the polio campaign take appropriate risk mitigation measures. Clear understanding of the underlying security context has greatly helped the programme develop alternate approaches to reaching and vaccinating children. This is based on the "Access Approaches" that have been endorsed by the Polio Oversight Board (POB). These include: 1) Strategies to enhance Community Acceptance (i.e., the CCPV initiative in high-risk areas of Karachi and Peshawar, Health Camps); 2) Opportunistic Vaccination Campaigns (i.e. Transit point teams, IDPs, Nomads, border posts); 3) Protected Campaigns (i.e., use of LEAs and para military to accompany vaccinators and provide safe zones in high-risk areas of Pakistan); 4) Access negotiations (i.e., highlight the neutrality of the health interventions like polio vaccinations and negotiate with all parties to a conflict to secure access to children for vaccinations). The programme has also used multiple opportunities to join with the global health and humanitarian community to strongly denounce any attacks on health workers or health facilities, and call for all parties to respect International Humanitarian Law.
16	The GPEI should deploy its most skilled leadership to organize the response to outbreaks of vaccine derived polio virus in countries other than the Ukraine (where a special initiative is recommended). Currently, these countries are: Madagascar, Lao PDR, Guinea, and South Sudan.	OPRTT	Ongoing. The Outbreak Preparedness and Response Task Team (OPRTT) reports regularly to the EOMG and SC, highlighting risks, bottlenecks and improvements to the outbreak response mechanism.

			All the countries mentioned in the recommendation now have an experienced outbreak coordinator. All the outbreak coordinators and communication officers are well trained and experienced health professionals. Some of the challenges encountered with implementing effective outbreak response based on recent experience included inconsistent government ownership and accountability, delays in deployment of capacity and sub-optimal SIA quality. The GPEI will be holding an outbreak response meeting from 23-24 March, giving partners the opportunity to discuss openly the challenges over the past year in outbreak preparedness and response. The meeting will also be a chance to address the post switch outbreak response protocols. Any polio outbreak/event will represent a major threat for the initiative and will need to be responded to in an effective and timely fashion. The VDPV outbreaks and events will follow a new protocol including use of IPV in response. It is critical that all preparations for the pre-switch phase are well-aligned and agencies and partners are well briefed and prepared to carry out post-switch outbreak response.