Section A: Overview

1. Executive Summary

1.1 This report sets out recommendations for membership in the Independent Review Committee (IRC).

2. Recommendations

2.1 The Gavi Alliance Governance Committee recommended to the Gavi Alliance Board that it:

(a) **Extend** the terms of the IRC members listed in Annex A, Table 1 of Document 02b for a further three-year term from 1 April 2017 until 31 March 2020;

(b) **Ratify** the emergency appointment of seven IRC members by the Chief Executive Officer in concurrence with the Chair of the Programme and Policy Committee (PPC) under Article 5.1.1 of the By-Laws, whose names are listed in Annex A, Table 2 to Doc 02b, for a term effective 14 October 2016 until 31 March 2019;

(c) **Appoint** as new IRC members the individuals listed in Annex A, Table 3 to Doc 02b for terms effective immediately until 31 March 2019.

Section B: Content

3.1 Under the Gavi By-Laws, the IRC is an independent, impartial group of experts that serves to guarantee the integrity and consistency of an open and transparent funding process. The current IRC pool was formed in 2014 when the Secretariat requested an executive recruitment firm, Korn Ferry, to conduct a transparent and systematic search in order to refresh and replenish the membership. Existing members were invited to re-apply, and additional experts were recruited in order to provide deeper expertise in the areas of gender and equity, logistics and cold chain, and inactivated polio vaccine (IPV). In order to avoid having to refresh or recruit the entire pool at the same time, the end dates of members’ terms were staggered:
existing members were appointed to two-year terms, and the other new members were appointed to three-year terms.

3.2 According to the IRC Terms of Reference (approved by the Executive Committee in November 2013), IRC members may be appointed for a term of up to three years, and this term may be renewed for another period of up to three years.

3.3 In view of the large number of countries applying for support under the new Cold Chain Equipment Optimisation Platform (CCEOP), additional supply chain experts are required. Due to the large number of CCEOP applications expected in the November 2016 IRC round, the CEO, in concurrence with the Chair of the PPC, appointed on an emergency basis five IRC members with cold chain and logistics and measles expertise. In addition, a large number of applications were expected following the newly-approved measles and rubella strategy, and two additional experts were appointed on an emergency basis. These names, listed in Annex A, Table 2, are to be ratified by the Board. As they are already IRC reviewers, following the emergency appointments, their term is proposed to run until March 2019.

3.4 As continuing demand for Gavi support under the CCE Optimisation Platform is expected, additional cold chain and logistics experts are required. These individuals, proposed by stakeholders and partners, are listed in Annex A, and their terms are proposed to run until March 2019.

3.5 With the extensions of members’ terms and the addition of new members, the 49-member pool maintains its geographical diversity: 33% are from Africa, 18% from Asia, and 34% are from North America and Europe. There are fifteen cold chain and logistics experts and five gender and equity experts. The gender split is 63% male and 37% female. There are 17 French speakers and three Spanish speakers.

Section C: Risk implication and mitigation and Financial implications

4.1 The original IRC pool was constituted in 2014 through an open and transparent process and has evolved to align with changing Gavi needs (for example, IPV). To help mitigate the risk of gaps in expertise among the IRC members, the new pool includes a balanced set of expertise and language skills, including an increase in the number of individuals with expertise in cold chain and logistics and measles.

4.2 There are no financial implications.

Section D: Implications

5. Impact on countries

5.1 The new IRC includes representation of Gavi-eligible countries and contains an appropriate constellation of skills to best assess country
applications. Twenty-three members (47%) are from Gavi-eligible countries.

6. Impact on Gavi stakeholders

6.1 The new IRC pool will help to enable continuing the robust review of applications for Gavi support.

7. Impact on Secretariat

7.1 The refreshed IRC pool will allow the Secretariat to identify appropriate members to participate in each IRC meeting.

8. Legal and governance implications

8.1 There are none to note beyond those listed throughout this paper.

9. Consultation

9.1 The identification of additional members has been undertaken upon close consultation with partners and other stakeholders.

10. Gender implications

10.1 The Board gender guidelines call for a minimum of 40% women Board members and alternate members. Although the Board guidelines do not mention the composition of the IRC specifically, the Secretariat has applied Board gender guidelines to the IRC. The proposed IRC pool of a total of 49 members has 31 men (63%) and 18 women (37%). The Secretariat will draw from this pool in such a manner to ensure appropriate gender balance, to the extent possible, in each IRC meeting.

Annexes

Annex A: List of IRC members

Annex B: Biographies of new IRC members
Annex A: List of IRC members

Table 1: IRC members whose terms are proposed for extension

<table>
<thead>
<tr>
<th>Name</th>
<th>Proposed Term</th>
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<tbody>
<tr>
<td>Emmanuel Addo-Yobo</td>
<td>Until 31 March 2020</td>
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<tr>
<td>Salah Al Awaidy</td>
<td>Until 31 March 2020</td>
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<tr>
<td>Rafah Salam Aziz</td>
<td>Until 31 March 2020</td>
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<tr>
<td>Christopher John Clements</td>
<td>Until 31 March 2020</td>
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<td>Dora Curry</td>
<td>Until 31 March 2020</td>
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<tr>
<td>Jean Marie Edengue Ekani</td>
<td>Until 31 March 2020</td>
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<tr>
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<td>Miloud Kaddar</td>
<td>Until 31 March 2020</td>
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<tr>
<td>Arletty Pinel</td>
<td>Until 31 March 2020</td>
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<tr>
<td>Mario Stassen</td>
<td>Until 31 March 2020</td>
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<td>Shamsa Zafar</td>
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Table 2: List of emergency appointments (expertise required for review of CCEOP and measles/rubella applications)

<table>
<thead>
<tr>
<th>Name</th>
<th>Proposed Term</th>
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<tbody>
<tr>
<td>Alejo Bejemino</td>
<td>Until 31 March 2019</td>
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<td>Aleksandra Caric</td>
<td>Until 31 March 2019</td>
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<td>Thierry Copois</td>
<td>Until 31 March 2019</td>
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<td>Ranjit Dhiman</td>
<td>Until 31 March 2019</td>
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<tr>
<td>Abdoulaye Oumar Djigo</td>
<td>Until 31 March 2019</td>
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<td>Osman Mansoor</td>
<td>Until 31 March 2019</td>
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<td>Benjamin Nkowane</td>
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Table 3: List of proposed new members (expertise required for review of CCEOP applications)

<table>
<thead>
<tr>
<th>Name</th>
<th>Proposed Term</th>
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<tbody>
<tr>
<td>Amos Chweya</td>
<td>Until 31 March 2019</td>
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<tr>
<td>Modibo Dicko</td>
<td>Until 31 March 2019</td>
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<tr>
<td>Shaikh Humayun Kabir</td>
<td>Until 31 March 2019</td>
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<td>Kabelwa Kagaruki</td>
<td>Until 31 March 2019</td>
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<tr>
<td>Claude Mogabo</td>
<td>Until 31 March 2019</td>
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<td>Bhimsen Raut</td>
<td>Until 31 March 2019</td>
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### Table 4: List of entire IRC pool

<table>
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<tr>
<th>Name</th>
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<tbody>
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<tr>
<td>Linda O’Neal Eckert</td>
<td>Until 31 March 2019</td>
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<tr>
<td>Jean Marie Edengue Ekani</td>
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<tr>
<td>Abdul Wali Ghayur</td>
<td>Until 31 March 2019</td>
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<td>Ulla Kou Griffiths</td>
<td>Until 31 March 2019</td>
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<tr>
<td>Terence Hart</td>
<td>Until 31 March 2019</td>
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<td>Elsie Le Franc</td>
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<td>Philippe Jaillard</td>
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<tr>
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<td>Frank Nyonator</td>
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<td>Zeenat Patel</td>
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<td>Bob Pond</td>
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<td>Kshem Prasad</td>
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<tr>
<td>43</td>
<td>Diana Rivington</td>
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<td>Mario Stassen</td>
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<td>Ousmane Amadou Sy</td>
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<td>46</td>
<td>Michael Thiede</td>
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<td>47</td>
<td>Beena Varghese</td>
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<td>48</td>
<td>Charles Shey Wiysonge</td>
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<td>49</td>
<td>Shamsa Zafar</td>
</tr>
</tbody>
</table>
Annex B: Biographies of new IRC members

Annex B.1: Biographies of IRC members for whom an extension is proposed

Emmanuel Addo-Yobo

Current position:
Associate Professor and Head of Child Health at the School of Medical Sciences, College of Health Sciences, Kwame Nkrumah University of Science and Technology, and Consultant Paediatrician at the Komfo Anokye Teaching Hospital (KATH), Kumasi, Ghana, where he is also the Head of Quality Assurance and Patient Safety Unit of the Hospital.

Previous positions and experience:
He has worked in collaboration with the Ministry of Health, Ghana on many national committees on child health and development such as School Health Policy Review, Job Aids for New-born Care, Integrated Management of Childhood and Neonatal Illness (IMCNI), Under-5 Child Health Policy for Ghana, and also with regional (Ashanti) monitoring team for National Immunization Days for Poliomyelitis immunization. He contributed to the development of the Pre-service curricula for the Expanded Programme on Immunization (EPI) for Medical and Nursing /Midwifery Training institutions in the African Region. He has been a regular facilitator of Regional Vaccinology Courses for the African Region for high level immunization practitioners and provided technical assistance to a number of African countries.

Areas of expertise: He is a clinician, educator and researcher with primary clinical and teaching interests in paediatric pulmonology as well as childhood immunization and child survival.

Education and degrees:
He graduated as a medical doctor in 1984 from the School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, and undertook postgraduate studies in the Universities of Liverpool, London, and Manchester (UK) and also with the West African and Ghana Colleges of Physicians.

Additional information:
He is a member of the National Poliomyelitis Expert Committee (NPEC, 2002), West African Rotavirus Advisory Board (WARAB -2008) and site coordinator for WHO-supported Rotavirus, Congenital Rubella and Enteric Fever surveillance activities.

Salah Al Awaidy

Current position: Advisor at the Ministry of Health, Oman, on communicable diseases, EPI, cold chain, surveillance and elimination and eradication of communicable diseases
Previous positions and experience: He was formerly the Director of Communicable Disease Surveillance and Control at the Ministry of Health, Oman, for several years.

Areas of expertise: Vaccine preventive diseases programming, vaccination and vaccinology, vaccine cold chain, communicable diseases surveillance, control and eradication and elimination programs.

Education and degrees: Dr. Al Awaidy is a medical doctor, obtaining his medical degree from the Arabian Gulf University in Bahrain in 1990. Masters in Epidemiology from King Saud University, Saudi Arabia, 2005

Additional information: He has been a part of several WHO advisory groups, including EMRO’s Regional Network of Experts on Infection Prevention & Control the Advisory Group on Immunisation (SAGE), WHO Strategic TB Advisory Board (STAG), AIDS EMR Regional Advisory Group (ARAG), Member of IHR Emergency committee on MERS CoV and Polio and Global Strategic Advisory Group on Vaccine and Store Management Training Courses, including as a manager and trainer of the course on global “Vaccine Store and Vaccine Management Training Courses” at the WHO collaboration center (WHO/GTN).

Rafah Salam Aziz

Current position: Dr. Aziz, Independent Consultant, currently serves as an independent expert member of the Horn Of Africa Technical Advisory Group supporting the Global Polio Eradication Programme.

Previous positions and experience: Dr. Aziz is a former Senior Health Advisor (retired) at the Programme Division UNICEF HQ NY USA and Medical Doctor Specialist Senior Pediatrician (Retired), Baghdad, Iraq. She has over 40 years of experience in Pediatrics (Clinical and academic) and Public Health. During her over 15 years of work as an International (UNICEF) Officer, served globally as the head of the Health and Nutrition teams in several UNICEF country offices in emergency and non- emergency situations in Asia and Africa. She led several studies and assessments on Maternal and Child mortality, Barriers in immunization, coverage surveys, Nutrition and HIV/AIDS.

As her last posting prior to her retirement in 2007, she was the Liaison Officer for Global Polio Eradication Initiative/ Senior Health Scientist at UNICEF HQ out-posted at WHO HQ Geneva, Switzerland. Dr. Aziz received the Austrian “Albert-Schweitzer award” and silver medal for her services for the Iraqi Children /1992.

Areas of expertise: Her areas of expertise include Maternal and Child Health and Programme management. Her current focus is on Routine Immunisation and Polio Eradication, Child Survival, Evaluation of maternal, newborn, and child health (MNCH) interventions; analysis of health system level in MNCH; and support developing initiatives to address equity in immunisation.
**Christopher John Clements**

*Current position:* Independent consultant and Associate Professor in the School of Population Health, Faculty of Medicine and Dentistry, University of Melbourne and Honorary Associate Professor at Monash University.

*Previous positions and experience:* Previously, Dr. Clements was part of the global leadership team of the World Health Organization’s programme for infant and childhood immunisation in Geneva headquarters. He provided leadership by developing global policies on immunisation and vaccine safety and by extensive travel to developing countries where he interacted with national programme managers in the Ministries of Health.

*Areas of expertise:* Routine immunisation services in developing countries.

**Dora Curry**

*Current position:* Senior Advisor for Monitoring, Performance Improvement and Learning in CARE-USA’s Sexual, Reproductive and Maternal Health team. Ms. Curry drives CARE-USA’s program improvement and data utilization efforts related to sexual, reproductive and maternal health, supporting both data analysis for learning and routine data collection and utilization, with a particular focus on design of routine monitoring systems that prioritize technologically appropriate, open source HMIS systems designed with ease of end use and data utilization in mind. Her current work covers programming in family planning, maternal and child nutrition, maternal health and childhood immunizations.

*Previous positions and experience:* Previously, Ms. Curry provided technical leadership for the global CORE Group Polio Project, a multi-partner initiative to coordinate non-governmental and community-based organizations’ support to the Global Polio
Eradiation Initiative, and implemented child health programming at the community and primary care levels in Latin America and southern Africa, culminating in her leadership of a USAID Child Survival Grant child health and HIV/AIDS project. She has worked in a wide range of settings including rural and per-urban areas, migrant and conflict-affected populations and fragile states. She has had the privilege to work in close partnership with leaders, health workers and communities in Venezuela, South Africa, Chad, Pakistan, Ethiopia, India, Nepal and Angola, as well as in underserved rural and migrant populations in the United States.

Areas of expertise: Front line health worker support and quality improvement, data systems at community and primary care level, data utilization for program improvement, Civil society organizations, community-based primary health care

Education and degrees: Ms. Curry holds a Master’s of Public Health from Emory University

Additional information: Ms. Curry has published several peer-reviewed articles. She serves as co-chair for the CORE Group’s Monitoring and Evaluation Working Group. She is actively engaged in mentoring graduate and undergraduate students from Atlanta-area universities through guest lecturing, practical learning experiences and research.

Jean Marie Edengue Ekani


Previous positions and experience: He has over 15 years of experience in health systems management and immunisation programs. His primary areas of interest are in planning, organizing and implementing routine immunisation activities, new vaccines introductions and mass immunisation campaigns in several countries including Cameroon, Benin and Central African Republic among others, as well as EPI program review. Previously, he was the Chief of the Regional Unit of the Expanded Program Immunisation for the Ministry of Public Health for 10 years. He was the National Coordinator of Gavi-AMP's technical assistance mission for immunization coverage improvement, HSS and new vaccines introduction in Cameroon for 3 years.

Areas of expertise: Immunisation, health systems and health programs management, epidemiology, monitoring and evaluation.

Education and degrees: Dr. Edengue is a medical doctor, having received his Doctorate in Medicine from the University of Yaoundé and his MBA from the University of Douala, MPH from The University of Paris Dauphine.

Additional Information: Dr. Edengue participated in the technical consulting group put in place by Gavi Secretariat for the elaboration of country by country tailored approach
policy in 2012. He is Gavi IRC member since 2014. He is one of the founding members of Cameroon Association of Epidemiology (CaSE).

Phlippe Jaillard

Current position: Program Director: Health technologies and Logistics

Previous positions and experience: Mr. Jaillard has been with AMP since 2001. He has over two decade of experience providing strategic and managerial guidance/technical support to developing countries, especially in Francophone Africa, to strengthen their immunisation systems. He coordinates field studies to assess impact and acceptability of vaccine delivery devices and immunization technologies. He set up and managed the LOGIVAC Center, a reference center for health logistics for Central and West Africa.

Previously, he spent several years working with emergency aid organizations and was temporary consultant for WHO.

Areas of expertise: vaccine delivery, cold chain equipment management, injection safety and waste management; human resource assessment, training needs assessment and training design; new vaccines introduction, new technologies for vaccine delivery in developing countries; Supply chain management; field study design and implementation.

Education and degrees: Mr. Jaillard holds a master in public health from the University of Nancy and a post-graduate degree in project management from the University of Bordeaux II, France.

Miloud Kaddar

Current position: Independent consultant

Previous positions and experience: Mr. Kaddar is a senior health economist with more than twenty five years of experience in international health, social protection and development. He worked as a group leader and senior adviser for WHO from 2002 to December 2013. His principal assignments included global and field work on vaccine procurement strategies and vaccine pricing issues, immunization costing, planning and financing, health system development, financial sustainability issues, middle income and graduating countries. He has supported national immunization programs and health system development initiatives in more than 60 countries. Prior to joining WHO, he served as senior adviser to the Ministry of Health in Morocco in implementing an EU-supported project on health sector reform. He also worked for Abt Associates in Bethesda (USA), the International Children Centre in Paris, UNICEF, WHO, UNDP, the World Bank, the EU and GIZ. He has served on the economics faculties of various universities. He was member of the GAVI task teams on immunization financial sustainability and health system strengthening. He is an active member of the International Health Economics Association (IHEA), the African Health Economics and
Policy Association (AfHEA) and of RESSMA (North Africa Health Economics and Health System Network).

Areas of expertise: Health economics, economics of vaccines and immunization, health system development and financing, UHC, project and policy evaluation, equity, sustainability, policy dialogue, stakeholder analysis and governance.

Education and degrees: Mr. Kaddar has a Public Health Diploma from the University of Nancy, an M.A. from the University of Grenoble, and a postgraduate degree in Health Economics from the University of Oran.

Additional information: He is the author of more than 25 articles and other publications on immunization financing, health system management, economics of pharmaceutical and vaccine market, capacity building in public health and health management.

Marina Madeo

Current position: Independent consultant

Previous positions and experience: Dr. Madeo is a medical doctor and public health professional with over 20 years’ experience in providing technical support to health programmes in developing countries, including fragile contexts. As a physician she organized and delivered clinical services and primary health care programmes (1993-1998 in Somalia, Ghana, Zimbabwe). She worked in programme management and public health issues at national and international levels, most recently in Ethiopia, Somalia and Kenya. She contributed to joint efforts in health sector development, in collaboration with multilateral agencies, global initiatives, local and international civil society, and a priority commitment on technical assistance to health authorities in partner countries.

Areas of expertise: health systems strengthening, technical coordination, health sector governance.

Education and degrees: Dr. Madeo received her advanced degree in medicine from the University of Rome “La Sapienza” and later postgraduate qualifications from Pavia University (Italy) and Liverpool University (UK).

Additional information: Dr. Madeo currently serves as senior public health expert in the Health Advisory Service to the European Commission, International Cooperation and Development – DG DEVCO, Health Team.

Kapil Maithal

Current position: Vice President and Head-Research and Development at Indian Immunologicals Limited (IIL), Hyderabad, India.
Previous positions and experience: Before joining IIL, Dr. Maithal worked as Director-Program Management with International AIDS Vaccine Initiative (IAVI), where he provided strategic guidance for developing, monitoring and evaluation of the R&D objectives/ programs of the organization. Prior to IAVI, he worked in various organizations including Dabur Pharma, ARA Healthcare and Panacea Biotec. Dr. Maithal has a deep understanding of global regulatory practices and IP management issues and has been associated with a number of government departments as an expert.

Areas of expertise: Conceptualizing, managing, strategizing and execution of development of vaccines for global use; vaccine advocacy and preparedness.

Education and degrees: Dr. Maithal has a PhD in Chemistry from the University of Delhi and has also completed the Advanced Course of Vaccinology (ADVAC) program from Fondation Mérieux, France and Université de Genève, Switzerland. He has also done an Executive education program in Project Management from Indian Institute of Management, Ahmedabad.

Amani Mustafa


Previous positions and experience: Prior to her current role, she worked as a Director General for Planning, Monitoring and Research Directorate, National Medicines and Poisons Board, Sudan (NRA), Director General for Policy, Planning, and Monitoring Directorate (FMOH), National Immunization Programme Manager; Maternal & Child Health Deputy; National Nutrition Programme Manager and Deputy Manager of Health Economics Department for the Khartoum state Ministry of Health

Areas of expertise: Immunisation, new vaccines, campaign management, cold chain and health system planning and monitoring.

Education and degrees: Dr. Mustafa has MBBS Degree from Lady Hardinge Medical College, Delhi University, India and a Fellowship in community medicine from Sudan Medical Specialization Board.

Additional information: Dr. Mustafa is a member of the WHO SAGE Working Group on the Global Vaccine Action Plan, a member of WHO Immunization Practices Advisory Committee (IPAC), and an Advisory Board member of Better Immunization Data Initiative (BID) by PATH and BMGF.

She also served as a WHO & UNICEF consultant in Sudan as well as in many other countries. She participated as a reviewer with African Health Science and Vaccine series Journals.
Maryanne Neill

Current position: Independent consultant

Previous positions and overall experience: Ms. Neill is an international public health specialist with 30 years’ experience largely with immunizations and child survival programs through the Centers for Disease Control (CDC), World Health Organization and UNICEF. Based in francophone Africa for the first ten years of her career, she developed a practical monitoring and supervisory on-the-job training program that strengthened immunization and child survival health delivery systems. This system was modeled in other countries through the CDC.

Areas of expertise: Planning and management of measles campaigns, neonatal tetanus elimination activities, yellow fever control, routine immunization, new vaccine introduction, HIV/AIDS program training and evaluation, immunization coverage estimation, health information systems, malaria control, and commodity management and cold chain logistics.

Education and degrees: Ms. Neill received an MPH from Harvard University and an MBA from the American Graduate School for International Management.

Additional information: Ms. Neill has acted as technical focal point to develop several WHO and UNICEF documents.

Arlette Pinel

Current position: Independent consultant

Previous positions and experience: Dr. Pinel has 30 years of global experience in health systems strengthening, HIV/AIDS, sexual and reproductive health, and designing capacity development programs for governments and civil society to address socioeconomic determinants of health. She also provides expert advise to digital inclusion initiatives especially those aimed at accelerating the participation of women and persons with disabilities in the use of technology. As a senior consultant with UNICEF, Dr. Pinel has provided technical guidance in the preparation of GAVI HSS proposals and developing technical assistance plans to support them. As a founding Director for Latin America and Eastern Europe at the Global Fund To Fight AIDS, Tuberculosis and Malaria, and through other senior positions at the United Nations Population Fund (UNFPA), Family Health International (FHI), the International HIV/AIDS Alliance, and the Ministry of Health of Brazil, she provided extensive technical assistance and implementation support to field programs in most regions of the world. She is a member of several advisory committees such as the World Health Organization (WHO) Technical Working Group on Health Workforce Education Assessment Tools, and the Myanmar Health and Development Consortium; and has served as a member of several selection committees including the International AIDS Conferences (since 1989) and the Europeaid Prize in Innovation (Health).
Areas of expertise: health systems strengthening, HIV/AIDS, sexual and reproductive health, maternal health, capacity development, and eHealth

Education and degrees: Dr. Pinel has a medical degree with a specialization in psychiatry from the University of Sao Paulo in Brazil. In addition, she did her post-doctorate work at Cornell and Columbia Universities and earned a degree in Biology and Zoology from The George Washington University in the United States.

Additional information: She has travelled extensively to provide technical assistance, support implementation and supervise field programs in Africa, Arab States, Asia, Eastern Europe and Central Asia, and Latin America and the Caribbean.

Mario Stassen

Current position: Lecturer at the Faculty of Science, Department of Biopharmacy at University of Utrecht and Board member of the Edufarma Foundation, an education centre for pharmaceutical employees. He also works as an independent consultant for supply chain management, quality assurance, design & development strategies, risk management and patient safety for Health Systems & Life Sciences.

Previous positions and experience: Dr. Stassen held several senior positions in quality and supply chain management in the international public-private Healthcare and Life Science environment. He also served as Director Quality Affairs for a not-for-profit supplier (IDA Foundation) of essential medicines and medical supplies to developing countries.

Areas of expertise: Design of development strategies, risk management and patient safety

Education and degrees: Dr. Stassen holds a PharmD (1987) from the State University of Groningen, The Netherlands; a Master of Science (1986) in Mathematics and Natural Science/Pharmaceutical Technology and Formulation, State University of Groningen; and a Bachelor’s Degree of Business Economics (1994), Business School, Haarlem, The Netherlands.

Shamsa Zafar

Current position: Professor of Obstetrics and Gynaecology at Poonch Medical College and Head of the Centre of Excellence in Maternal Newborn and Child Health at the Health Services Academy in Pakistan

Previous positions and experience: Dr. Zafar has 20 years of clinical experience in reproductive health and more than 10 years of experience in public health and research, including formative research in the community and hospital-based clinical trials.
Areas of expertise: Maternal, newborn and child health, Gender and Maternal Newborn and Child Health related research, monitoring and evaluation

Education and degrees: Dr. Zafar has an MBBS from Rawalpindi Medical College; Fellowship in Obstetrics from College of Physicians and Surgeons Pakistan, Diploma in Obstetrics and Gynecology from Punjab University, Diploma in epidemiology from the London School of Hygiene and Tropical medicine and currently is a PhD scholar at the University of Liverpool.

Additional information: She has taught and conducted research in Maternal Newborn and Child Health with a gender focus and also has experience in monitoring and evaluation. In addition to the research work and more than 30 publications, she has written reports and has been involved in various program evaluations in Pakistan, that were funded by various donor organizations. She is also Country Director Child Advocacy International, Pakistan.
Annex B.2: Biographies of IRC members who were appointed under Article 5.1.1 of the By-Laws

Alejo Hinayan Bejemino

Current position: independent consultant for Cold Chain Logistics, Supply Chain and Vaccine Management

Previous positions and experience: He has more than 37 years work experience, and has worked as a consultant with various UN agencies, including WHO and UNICEF. He also taught at the Technological University of the Philippines, worked as Training Specialist with ILO/UNDP, as Project officer with UNICEF-Pakistan and Afghanistan, and conducted PQS work with WHO Geneva.

Areas of expertise: Cold Chain and Logistics Management, Supply Chain Management, Vaccine Management and Cold Chain Equipment Repair and Maintenance Training

Education and degrees: He is a licensed Mechanical Engineer and holds a Bachelor of Science in Mechanical Engineering degree from the University of the Philippines in Diliman, Quezon City, Philippines.

Additional information: He has hands-on training expertise on repair and maintenance of cold chain refrigeration and air conditioning equipment, including compression and absorption type vaccine refrigerators and freezers, and the installation, maintenance and repair of solar powered vaccine refrigerators and freezers.

Aleksandra Caric

Current position: Independent Consultant, Medical Doctor - General Practitioner

Previous Positions and Experience: As an independent consultant, Dr Caric has been working for WHO headquarters and regions for the Immunization, Vaccines and Biologicals, and Regulation of Medicines and Other Health Technologies Departments. Most recently she was extensively involved in writing and editing the Global Guide for Measles and Rubella Supplementary Immunization Activities. She has carried out vaccine safety reviews, AEFI field investigations and NRA assessments on behalf of WHO. Dr Caric served as the Director of Medical Programme and the Chief Administrative Officer for the International Rescue Committee in Croatia from 1992 to 2000 where she organized and implemented a number medical/dental services for refugee and displaced populations in Croatia and Bosnia, in particular during the time of conflict. She also provided technical and administrative assistance to the emerging non-governmental sector and multilateral agencies in the region.

Areas of expertise: Immunization – vaccine safety and regulation, programme management and administration
Education and degrees: Dr Caric obtained her Doctorate of General Medicine from the University of Zagreb, Croatia, where she received postgraduate training in Preclinical/Clinical Pharmacology and in Public Health.

Additional information: Subject matter expert for numerous WHO e-learning courses, significantly involved in their planning and design. Brighton Collaboration Working Group Member for AEFI case definitions development, reviewer for Vaccine and Sexual Health (2009/10).

Thierry Copois

Current position: Consultant for cold chain logistics

Previous positions and experience: Thierry Copois has more than 20 years work experience in the areas of technical, logistics and project management, in his home country France as well as in Africa and South Asia. He has worked for UN agencies, NGOs, Red Cross movement and the private sector as cold chain and logistics specialist.

Areas of expertise: cold chain logistics, including cold chain management in the humanitarian domain, capacity strengthening, proactive maintenance, and temperature monitoring

Education and degrees: He holds a bachelor degree in Maintenance Management, and is pursuing a master of Management of Innovation & Complex Projects at IAE Lyon.

Ranjit Dhiman

Current position: Independent consultant

Previous position and experience: Worked as a consultant for immunization supply chain and cold chain logistics with UNICEF (headquarter, Western Pacific Regional Office, Indonesia, India, Philippines and Nigeria Country offices) and range of assignments with WHO (Western Pacific Regional Office).

Areas of expertise: Cold chain logistics, Immunization supply chain, EVM assessments, Studies on temperature monitoring and vaccine wastage, setting up Remote Temperature Monitoring

Education and degrees: Graduate in office management with University of Delhi and pursuing Masters of Business Administration in health care management

Additional information: Author of a range of publications for UNICEF India (Technical handbook for repair and maintenance of cold rooms, cold chain assessment of India in 2008), Cold chain assessment of Nigeria 2013 and Comprehensive Effective Vaccine
Management Assessments and improvement plans for Cambodia, Democratic Republic of North Korea and Timor Leste. Setting up computerized temperature monitoring system in all cold rooms across 17 regions in Philippines, National and zonal store cold rooms of Nigeria, national and regional cold rooms in Indonesia, Cambodia and Lao PDR.

**Abdoulaye Oumar Djigo**

*Current position*: Consultant

*Previous positions and experience*: Mr Abdoulaye Djego has extensive experience as EPI Cold Chain and Logistics Consultant and has conducted work for UNDP, WHO, UNICEF, EU, JSI and PATH. Amongst other assignments, he assisted in the development of the EPI cold chain maintenance plan in Senegal, the EPI cold chain assessment and rehabilitation plan in Cape Verde, the EVM assessments and improvement plans in Guinea Bissau and Haiti, the routine immunization assessment in Nigeria, as well as the planning of the polio and measles campaigns in Madagascar. He has previously served as Chief of the Maintenance Services at the General Public Hospital of Saint-Louis, Senegal.

*Areas of expertise*: Management, Logistics in Health Sector, Engineering (Cold Chain, Biomedical equipment, industrial sector, Energy Efficiency, Environment), Trainings (Cold Chain, Vaccines Management)

*Education and degrees*: Mr Abdoulaye Djego holds a Master degree in engineering with a specialization on refrigerating and air conditioning from the High Technical Fishery Industry Institute Astrakhan, Russia, as well as a Master in Business Administration from the CESAG Business School, Dakar, Senegal.

*Additional information*: From 1994 he was General Secretary of the Senegalese Engineers and Technicians Refrigerating and Air Conditioning Association. He is also a member of the Senegalese Association for Energy Efficiency, created in December 2013.

**Osman Mansoor**

*Current position*: Public Health Physician, Regional Public Health, Hutt Valley DHB, and independent consultant

*Previous positions and experience*: He was national policy lead on immunization for seven years in New Zealand at the Public Health Commission, and then at the Ministry of Health. He led the introduction of new vaccines to the schedule and helped to develop a model that predicted and partly prevented the 1997 measles epidemic. Following several consultancies for World Health Organization, he was New Vaccines Officer for the Western Pacific Regional Office in Manila for four years. He held the same for
UNICEF Headquarters in New York, where he rebuilt capacity in behaviour change communication and cold chain and logistics systems.

*Areas of expertise:* immunization programmes, pandemic planning, outbreak control, and population delivery

*Education and degrees:* Dr Mansoor initially trained and worked as a general practitioner, before training in public health medicine. He holds a medical degrees from the University of Cambridge, and MSc from the Imperial College, London, UK, a Postgraduate Diploma in Community Health from the University of Otago in New Zealand, and was a Fellow at the Australasian Faculty of Public Health Medicine and the New Zealand College of Public Health Medicine.

*Additional information:* Dr Mansoor has published extensively, including over twenty publications and a wealth of peer-reviewed papers.

**Benjamin Nkowane**

*Current Position:* Independent Medical Epidemiologist and public health consultant since retiring from WHO in 2014. Senior Lecturer in Community Health, University of Zambia School of Medicine (on leave).

*Previous positions and experience:* His public health career spans over a 35 year period starting as Medical Epidemiologist (EIS Officer) with the National Immunization Programme at CDC, Atlanta, USA; Illinois Department of Health, US; Senior Lecturer in Community Health and consultant physician, University Teaching Hospital, Lusaka, Zambia; Chief of Epidemiological Research, Global Programme on AIDS, WHO Geneva; and Medical Officer, EPI and Polio Eradication Programme, WHO, Geneva.

*Areas of expertise:* Infectious disease epidemiology, research, vaccine preventable disease programme development, implementation and evaluation especially in resource constrained settings, capacity building and management of technical health staff and health workers, implementation of mass vaccination campaigns and technical support for field operations in security risk areas.

*Education and Degrees:* Graduated as Medical Doctor (MB ChB) from University of Zambia, received postgraduate training in Public Health (MPH) and completed his Residency in Preventive Medicine at Yale University, New Haven Ct, USA.

*Additional Information:* Dr Nkowane has served on advisory bodies for HIV AIDS and Reproductive Health with the Ministry of Health in Zambia and WHO. While in EPI and Polio Eradication, his work focused on direct field technical support to priority countries. He served as secretariat team leader for the Inter-Regional Technical Advisory bodies for Polio Eradication. He also served as a member of the Global mid-term Review of the Measles and Rubella Initiative and Team Leader for the AFRO region Measles Elimination Mid-term Review.
Annex B.3: Biographies of new IRC members who are proposed for appointment

Amos Monari Chweya

Current position: Regional Immunization Logistics Technical Officer with JSI Immunization Centre in Kenya

Previous positions and experience: Mr Chweya’s previously provided technical and programmatic support for IPV activities at the WHO/AFRO office. Prior to that he held positions as Logistics and Procurement Technical Officer for a health care waste management project in Kenya; Immunization Technical Advisor; Influenza A H1N1 AFRO Immunization Logistics Technical Officer WHO/AFRO; Logistics and Procurement Advisor for Making Medical Injections Safer (MMIS), John Snow Inc. Kenya; and Logistics and Waste management Advisor with JSI MMIS. Furthermore, Mr Chweya has extensive experience as serving as Officer in charge for Vaccine Management at the Ministry Of Health EPI in Kenya.

Areas of expertise: public health logistician, specific emphasis on selection, quantification, procurement, warehousing and distribution of medical supplies and particularly vaccine cold chain equipment, vaccine forecasting for multiyear planning, vaccine supply chain sizing, procurement and logistics management of immunization activities.

Education and degrees: Mr Chweya holds a higher diploma in Medical Laboratory Technology and a certificate in Biological Products Technology (vaccine production and quality control), as well as a Master Degree in Public Health (MPH).

Modibo Dicko

Current position: Director of the “Informed Push Model” Project dealing with health supply chain management at the Senegal Office of Intrahealth International

Previous positions and experience: Prior to his current position, Mr Mobido Dicko worked as free-lance consultant in health supply systems, solar energy and scaling up of successfully pilot-tested innovations. He worked for several year with the WHO AFRO office exploring innovative solutions to existing and emerging challenges with health supply systems. Before joining WHO he was active in the private sector in Mali.

Areas of expertise: supply chain management, introducing innovative technologies, management systems and practices in health supply systems in low and middle income countries, management of vaccines, cold chain, transport, injection equipment and waste

Education and degrees: Mr Mobido Dicko holds a Doctor-Engineer’s Degree (PhD) in Thermodynamics and Energetics from the University of Perpignan, France
Additional information: Mr Mobido Dicko is founder and manager of his own consulting engineering company, AFRITEC Sarl. He also created SINERGIE SA, a solar energy and electricity company.

Shaikh Humayun Kabir

Current position: Consultant for immunization supply chain management

Previous positions and experience: He started his career as a medical officer-disease control and immunization at a district level health office in Bangladesh, later joining the Polio Eradication Initiative of the World Health Organization. From 2010 to 2014, he assisted the polio and measles outbreak response activities and the strengthening of routine immunization including new vaccine introduction in the capacity of WHO medical officer/consultant in Kenya, India, Nigeria and Pakistan. He has also been working with the polio and Immunization Supply Chain Management (ISCM) teams in New York as a consultant.

Areas of expertise: Planning, monitoring & evaluation of immunization programme operation and vaccine preventable disease surveillance. Monitoring of vaccine management in immunization programs. Assessment and review of country cold chain and logistics capacity for immunization programme including its expansion plans and effective vaccine management. Vaccine preventable disease epidemiology including outbreak investigation and assessment of outbreak response activities.

Education and degrees: He graduated in medicine (MBBS) from the University of Rajshahi, Bangladesh and received a master degree (MPH) in epidemiology from the University of Dhaka, Bangladesh

Additional information: Member of STOP alumni. Experience of working in some of the world’s most marginalized and insecure geographical settings like Dadaab refugee camp of Kenya, Somalia, Northern Nigeria, Pakistan and Afghanistan. He is also contributor and author of a number of immunization resources and articles.

Kabelwa Gelase Kagaruki

Current position: Regional Immunization Technical Officer employed by John Snow Inc. (JSI-Tanzania) under the Maternal and Child Survival Program

Previous positions and experience: He is a retired Government employee. Initially recruited as Environmental Health Officer and then District Health Officer, he became the first Regional Cold Chain Operator (RCCO). He moved to a national position as Immunization Data Manager and was later appointed to be the National Cold Chain and Logistics Officer, overall in charge/responsible for EPI cold chain and supply chain country wide until his retirement.
Areas of expertise: general public health, in particular immunization logistics/supply chain and cold chain, i.e. EPI planning, budgeting, process ordering/procurement and distribution; EPI cold chain equipment (operating on different sources of energy) installation, maintenance and repair; EPI training; EPI supervision; and EPI monitoring and evaluation.

Education and degrees: He holds a diploma in Environmental Health Science from the University of Dar Es Salaam, Tanzania, a Diploma in Overseas General Management from Ramboll, Hannemann & Hojlund, Denmark, and attended various certificate courses, such as EPI Mid-Level Management; Absorption refrigeration repair and maintenance; Compression and solar refrigeration repair technician; Walk-In Coolers/Freezers repair technician; and CFC-Free refrigeration repair.

Claude Mogabo

Current position: Regional Advisor for Immunization Logistics and Supply Chain within the Agence de Médicine Préventive (AMP) at the Regional Office for Africa

Previous positions and experience: He has supported countries in the improvement of the vaccine supply chain, the conduct of EVM and cold chain assessments and the preparation of rehabilitation plans of cold chain equipment. He worked as a national EPI logistics officer in the DRC and as such he led 55 vaccine warehouses at the provincial level and a warehouse at the central level. During his career in the DRC, he contributed to the development of several multi-annual plans and operational plans of the EPI, he supported Gabon and Cameroon in the conduct of the GEV evaluations and the drafting of the RSS in the DRC.

Areas of expertise: Management of cold chain equipment and vaccine management; maintenance and installation of solar cold chain equipment.

Education and degrees: He holds a degree in Mechanical Engineering (BAC + 5) and has participated in several training courses on EPI management, MLM and logistics.

Additional information: Claude Mangobo is a trainer at the LOGIVAC center in Benin on the various short training programs organized by the LOGIVAC center. In the frame of the professional license in Health Logistics organized by the Regional Institute for Public Health in Benin (IRSP), Claude facilitates the modules on the management of the cold chain and the management of vaccines.

Bhimsen Raut

Current position: Independent consultant - immunization supply chain and logistics

Previous positions and experience: Cold chain and logistics specialist with UNICEF Liberia since 2012: supported country team (Ministry of health, UNICEF, WHO and other
health partners) to strengthen immunization supply chain and logistics to improve coverage and equity in immunization through system design, comprehensive effective vaccine management (cEVM) assessment, development and implementation of comprehensive improvement plan (cIP), development of costed immunization comprehensive multiyear plan (cMYP), Cold chain assessment, CCE rehabilitation and expansion plan, cold chain equipment including transport (CCE) selection, deployment, installation, operation and maintenance, vaccines and injection safety devices forecasting, coordination for procurement, design of distribution system, continuous temperature monitoring devices, advocacy for renewable energy, design and installation of solar power plants, proposals for new vaccine introduction support, health system and immunization strengthening proposal, cold chain equipment optimization platform application. Team leader, equipment inspection and logistics support verification with UN Mission in Liberia from 2008 – 2012: logistics supports plan for mission, logistics supports standard verification assessments, equipment inventory management. Technical officer with Nepal Government from 2001 – 2008: logistics support plans, establishment of engineering plants (general mechanical, generator and automobile plants), technical specification of different logistics equipment, equipment maintenance management.

*Areas of expertise:* Cold chain and logistics, vaccine management, equipment specification, installation and maintenance management, engineering design, solar energy technology

*Education and degrees:* Bachelor’s Degree in Mechanical Engineering in 2000, Master’s in Business Studies (2004, absent in certain papers), Master’s in Public Administration (on-going), UNICEF courses on immunization supply chain management, certification of humanitarian logistics (on-going)

*Additional information:* 15 years of working with national governments, UN mission and Agency in middle and low income countries