Development of the Polio ‘Eradication and Endgame’ Strategic plan

SAGE Meeting

6 November 2012

Overview

- Process, Consultations, Development

Eradication and Endgame

- Outcomes and Activities

Legacy

- Planning

Next Steps

- Further development and finalization

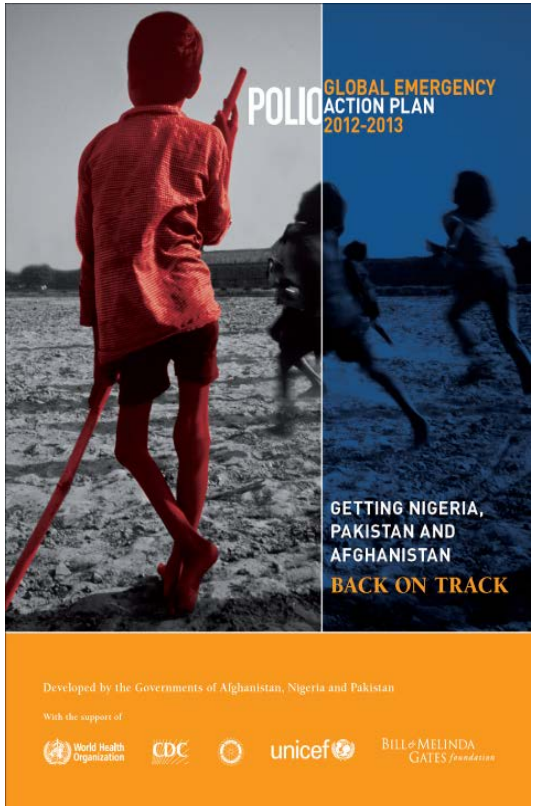
Overview

World Health Assembly

"DECLARES polio eradication an emergency for global public health…

…requests DG to rapidly finalize a comprehensive polio endgame plan, with tOPV-bOPV switch".

25 May 2012



Statement of Intent

To complete the eradication & containment of all wild, vaccine-related and Sabin polioviruses, such that no child ever again suffers polio.

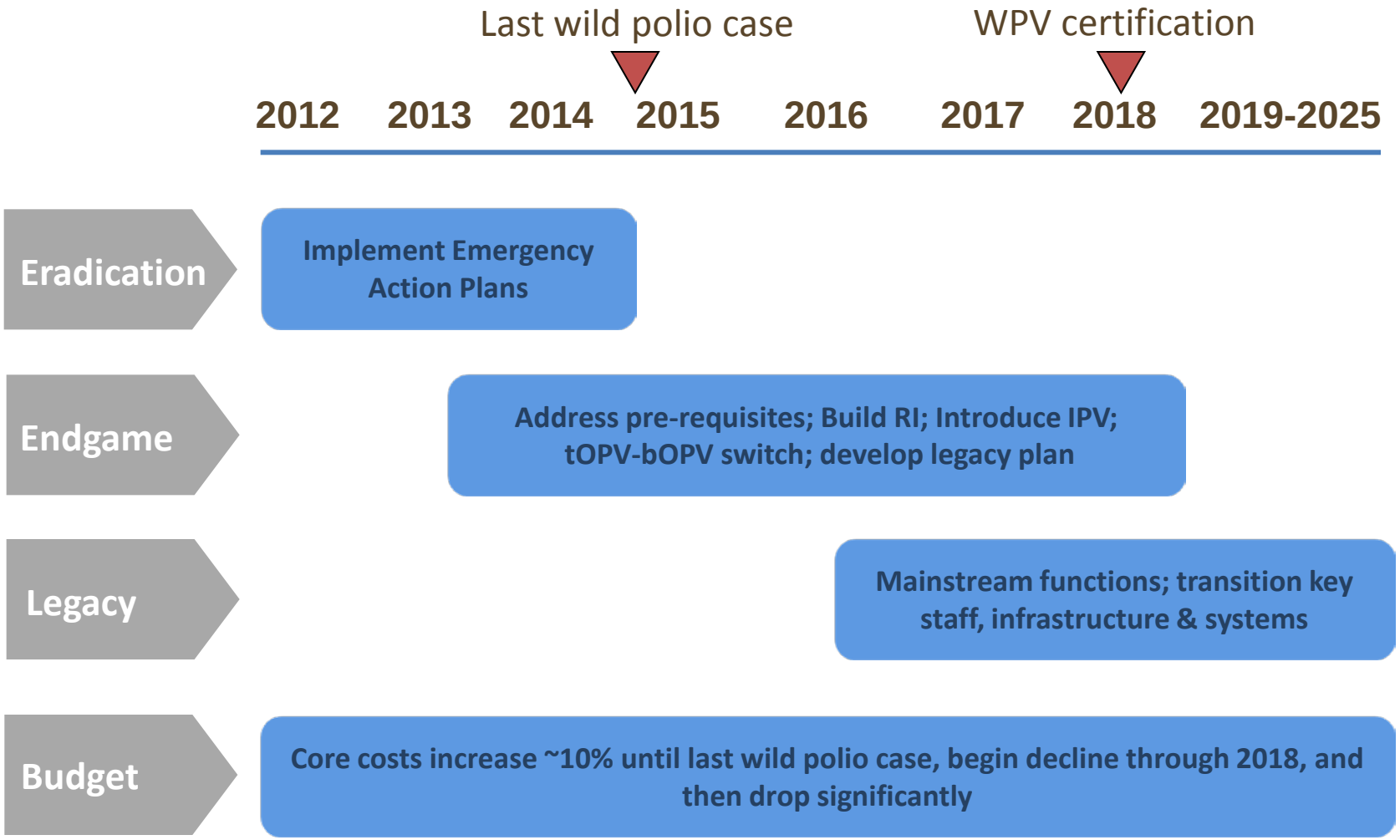
Ongoing consultations

- **Endemic Countries**
- **Partners**
  - The GPEI Spearheading Partners
  - WHO Regional Technical Consultations
  - Broader Partnership
- **Review and input from polio advisory bodies**
  - Regional Advisory Groups
  - IMB (29-31 October)
  - SAGE (6-8 November)
- **WHO Executive Board**
  - January 2013

Eradication and Endgame Strategic Plan

Eradication and Endgame Strategy & Legacy Overview

Based on best available data, polio eradication can be certified by 2018



Objectives and Milestones

OBJECTIVES	MILESTONES
INTERRUPT WPV TRANSMISSION	END-2014 – LAST WPV CASE
OPV2 WITHDRAWAL	2015/2016 – tOPV-bOPV Switch
CONTAINMENT OF ALL WILD AND SABIN TYPE 2 VIRUSES	2018 - GLOBAL CERTIFICATION
LEGACY	2013 - INITIATE PROCESS AND CONSULTATIONS

Objective 1: Interrupt Transmission

Outcomes:

- **Endemic Countries:** Raise and maintain population immunity to stop transmission
- **High-Risk Countries**: Raise immunity to prevent outbreaks

Key Activities:

- Intensive Schedule of SIAs
  - Targeted SIA quality improvements
- Outbreak Response
- Strengthen Surveillance

SIA Plans for 2013-2018

		More campaigns			Fewer campaigns	
WHO OPV CAMPAIGN DATA	2013	2014	2015	2016	2017	2018
ENDEMIC COUNTRIES						
Afghanistan	5.2	5.2	3.2	2.6	2.6	2.6
Pakistan	5.4	5.4	3.2	2.6	2.6	2.6
Nigeria	4.1	4.1	3.8	3.2	3.2	3.2
India	4.0	3.5	2.8	2.8	2.8	2.8
COUNTRIES WITH RE-ESTABLISHED TRANSMISSION						
Chad	4.0	4.0	2.0	2.0	2.0	2.0
DR Congo	3.0	3.0	2.0	2.0	2.0	2.0
Angola	3.0	3.0	2.0	2.0	2.0	2.0
Sudan	3.0	3.0	2.0	2.0	2.0	2.0
S. Sudan	4.0	4.0				
COUNTRIES WITH RECURRENT IMPORTATIONS						
West Africa						
Niger	4.0	4.0	2.0	2.0	2.0	2.0
Guinea	3.0	3.0	2.0	2.0	2.0	2.0
Cote d'Ivoire	3.0	3.0	2.0	2.0	2.0	2.0
Mali	3.0	3.0	2.0	2.0	2.0	2.0
Liberia	3.0	3.0	2.0	2.0	2.0	2.0
Burkina Faso	3.0	3.0	2.0	2.0	2.0	2.0
Sierra Leone	3.0	3.0	2.0	2.0	2.0	2.0
Benin	4.0	4.0	2.0	2.0	2.0	2.0
Mauritania	2.0	2.0	2.0	0.0	0.0	0.0
Ghana	2.0	2.0	2.0	0.0	0.0	0.0
Senegal	2.0	2.0	2.0	0.0	0.0	0.0
Gambia	2.0	2.0	2.0	0.0	0.0	0.0
Guinea Bissau	2.0	2.0	2.0	0.0	0.0	0.0
Togo	2.0	2.0	2.0	0.0	0.0	0.0
Cape Verde	2.0	2.0	2.0	0.0	0.0	0.0
Horn of Africa						
Kenya	0.7	0.7	0.0	0.0	0.0	0.0
Yemen	2.0	2.0	2.0	2.0	2.0	2.0
Somalia	3.0	3.0	2.0	2.0	2.0	2.0
Uganda	0.7	0.7	0.0	0.0	0.0	0.0
Ethiopia	2.0	2.0	1.0	1.0	1.0	1.0
Djibouti	2.0	2.0				
Eritrea	2.0	2.0	0.0	0.0	0.0	0.0
Central Africa						
CAR	3.0	3.0	0.0	0.0	0.0	0.0
Congo	2.0	2.0	0.0	0.0	0.0	0.0
Cameroon	1.0	1.0	0.0	0.0	0.0	0.0
Gabon	0.0	0.0	0.0	0.0	0.0	0.0
Burundi	0.0	0.0	0.0	0.0	0.0	0.0
Rwanda	0.0	0.0	0.0	0.0	0.0	0.0
Zimbabwe	0.0	0.0	0.0	0.0	0.0	0.0
OTHER IMPORTATION-AFFECTED COUNTRIES						
Southeast Asia						
Nepal	2.0	2.0	2.0	0.0	0.0	0.0
Bangladesh	2.0	2.0	2.0	0.0	0.0	0.0
Myanmar	0.0	0.0	0.0	0.0	0.0	0.0
Europe						
Tajikistan	1.0	1.0	0.0	0.0	0.0	0.0
Uzbekistan	1.0	1.0	0.0	0.0	0.0	0.0
Georgia	1.0	1.0	0.0	0.0	0.0	0.0
Kyrgyzstan	1.0	1.0	0.0	0.0	0.0	0.0

<u>Planned SIAs</u>

SIA plans as per the FRR and based upon UNICEF and WHO long-term projections.

<u>Complementary SIAs</u>

Additional activities (not shown in this calendar) concentrated in 2013-15 in endemic and high-risk countries.

WHO POLIO SUPPLEMENTARY IMMUNIZATION ACTIVITIES PLANNED FOR 2013

World Health Organization

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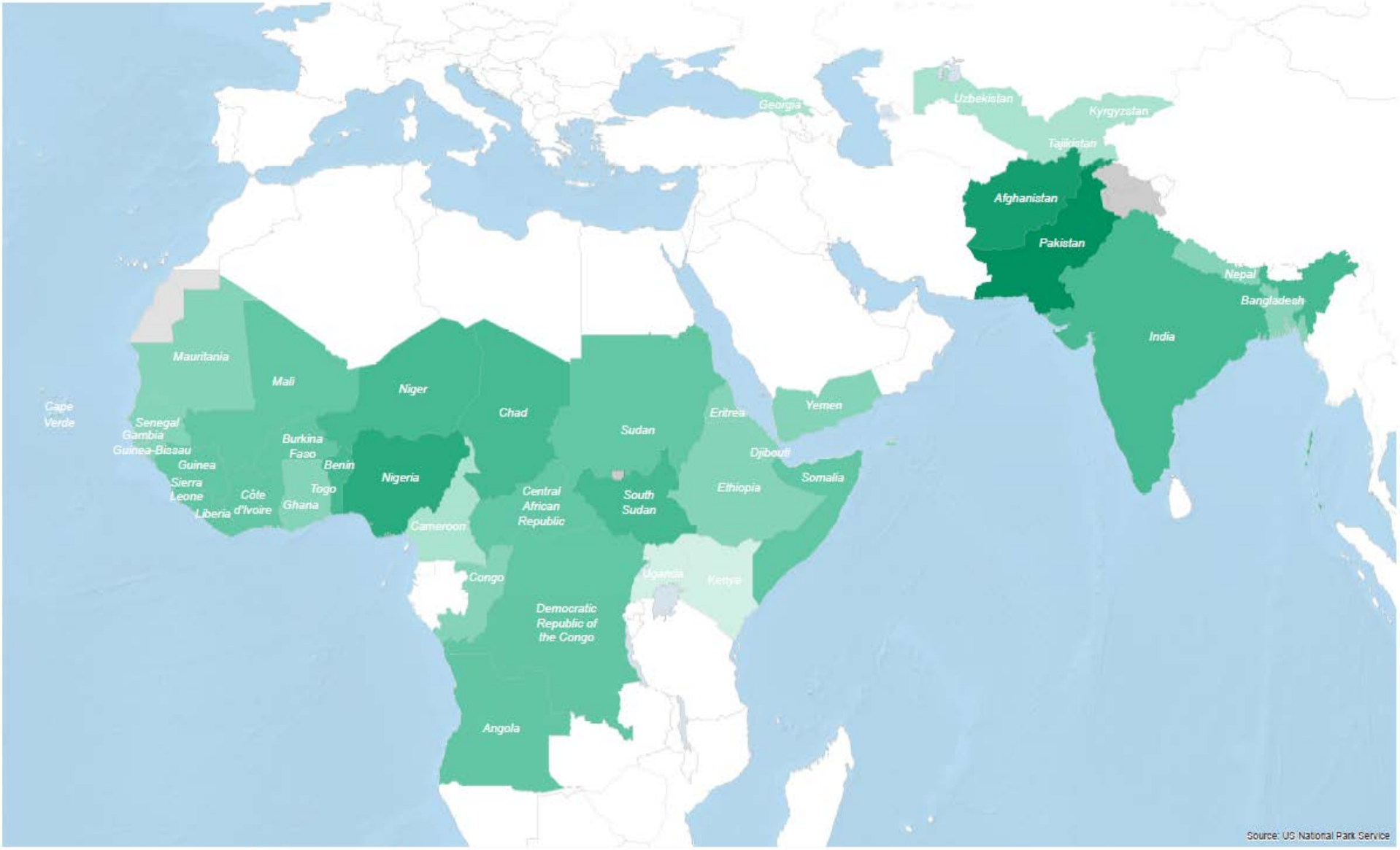
MAP DATE: 06 November 2012, Version 1.0



Source: US National Park Service

Map Scale - A3: 1 cm = 350 km

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree

Data Source:

Admin. Boundaries: World Health Organization
Base Map:ESRI
Map Production: Public Health Information and Geographic Information Systems (GIS)
World Health Organization
Data as on 06 Nov 2012

Legend:

5.0+ — 0

More campaigns — Fewer campaigns

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Endemic Countries:
Specific Plans To Improve Coverage

Leadership:	for whole of gov't/society approach
Oversight:	for program/partner performance
Microplanning:	for missed children
Vaccine teams:	to institutionalize best practices
Surge:	for worst-performing areas
Social Mob:	for community demand

Marked Step-up in Outbreak Response

- Minimum 5 rounds – Increase in number
- Short interval (1st 2 rounds)
- Increase age group (1st 2 rounds)
- Joint National/International Assessments at 3 & 6 months

Objective 2: Sabin 2 Cessation

Outcome: For all OPV-using countries

- Replacement of tOPV with bOPV

Key Activities

- Strengthen routine immunization
- Stop cVDPV2 outbreaks
- Introduce at least one dose of IPV into routine immunization
- tOPV-bOPV switch
- Optimize surveillance for Sabin 2 viruses (including environmental)

Increasing Routine Coverage

Based on GVAP Objectives

- In particular objectives 2, 3, and 4

Two-Pronged Approach

- Cross-Cutting: (1) Increase community demand and acceptance; (2) enhance monitoring, surveillance and data quality/use
- Key Geographies: direct technical support in microplanning and monitoring, including new strategies to tackle inequities

IPV Introduction

(pending SAGE decisions)

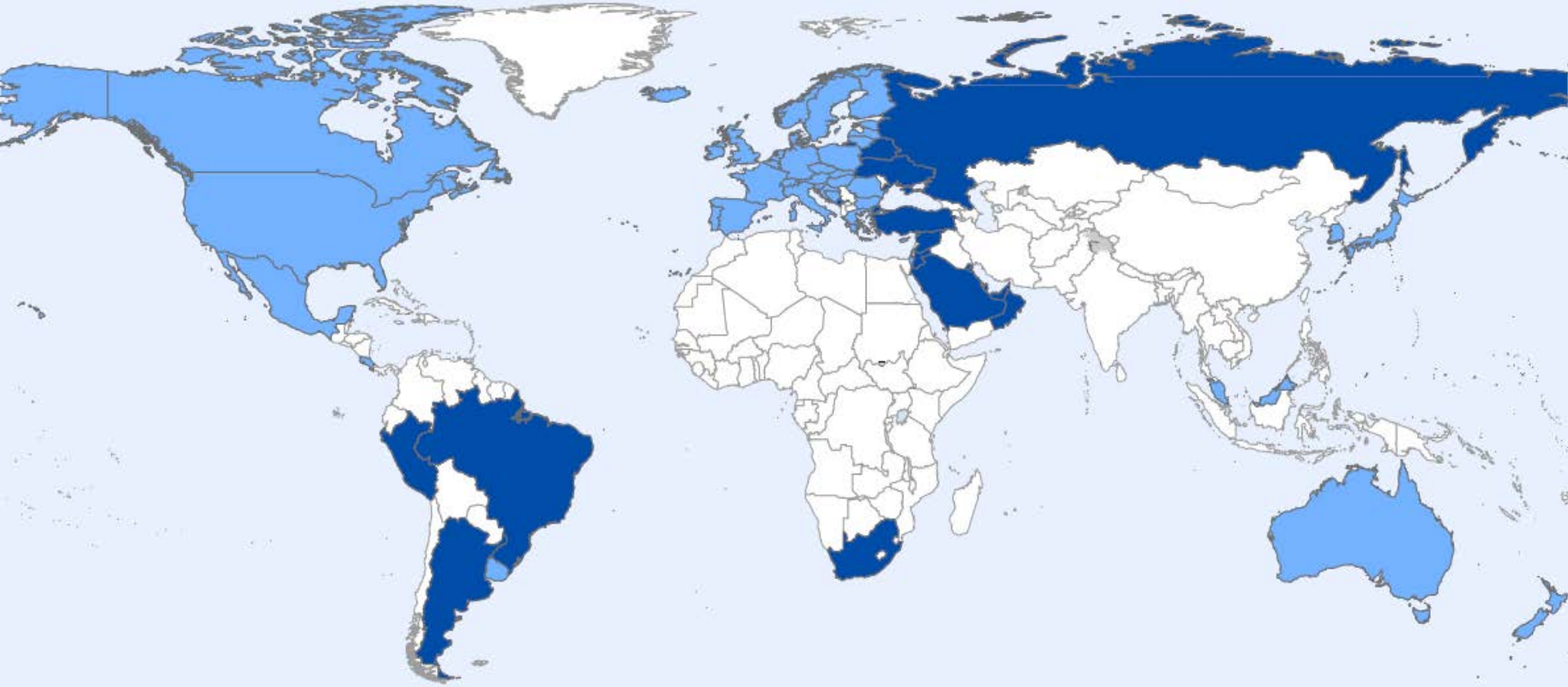
- Number of IPV doses ('at least 1')
- Target date of introduction (2015-2016)
- Proposed duration of use (at least 5 years after bOPV cessation – through 2024/5)
- Strategy for early introduction: Volume purchasing of whole dose, Intradermal *and* adjuvanted IM
- Risk Mitigation in High-Risk Areas

Geographic Scope of Work – 130 OPV using countries

World Health Organization

Routine polio vaccination policy (OPV only, IPV/OPV sequential or IPV only) by country, as of November 2012*

MAP DATE : 05 November 2012, Version 2.0



Map Scale- A3 : 1 cm = 926 km

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree

Data Source:

Admin. Boundaries: World Health Organization
Base Map:ESRI
Map Production: Public Health Information and Geographic Information Systems (GIS)
World Health Organization
* Either reported to WHO or announced

Legend:

- COUNTRIES WITH IPV ONLY
- COUNTRIES WITH IPV / OPV (SEQUENTIAL)
- COUNTRIES WITH OPV ONLY

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Optimizing Surveillance

- Targeted environmental surveillance (*15-20 additional countries, to document type 2 disappearance*):
  - tOPV national producers
  - cVDPV emergent areas (e.g. MOG; MAD)
- AFP surveillance strengthening: particular emphasis on certified regions for 2015 'switch'.

Objective 3:

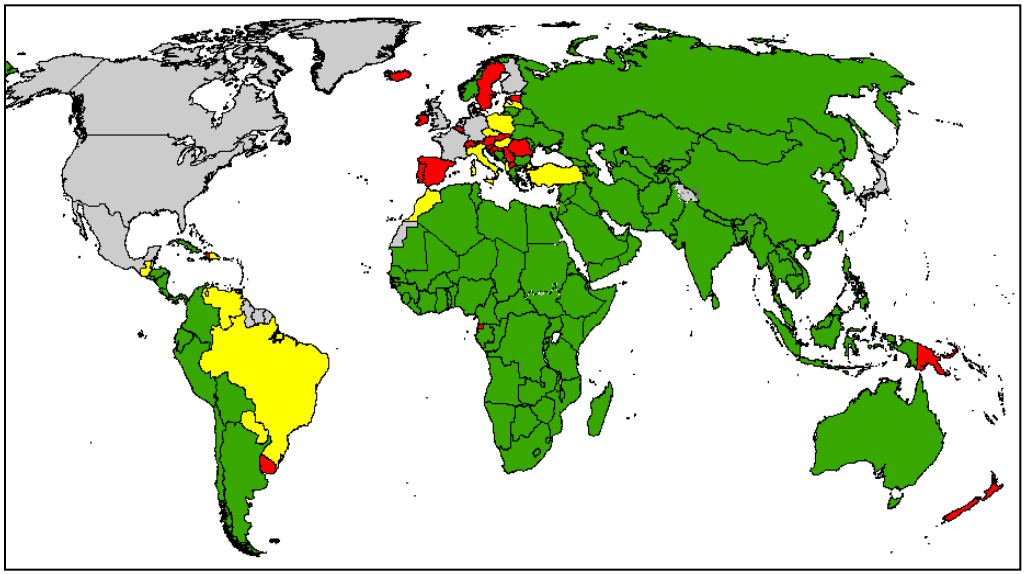
Global Containment and Certification

Outcome: For all countries

- Certification of interruption of WPV transmission, and containment of all residual WPVs

Key Activities

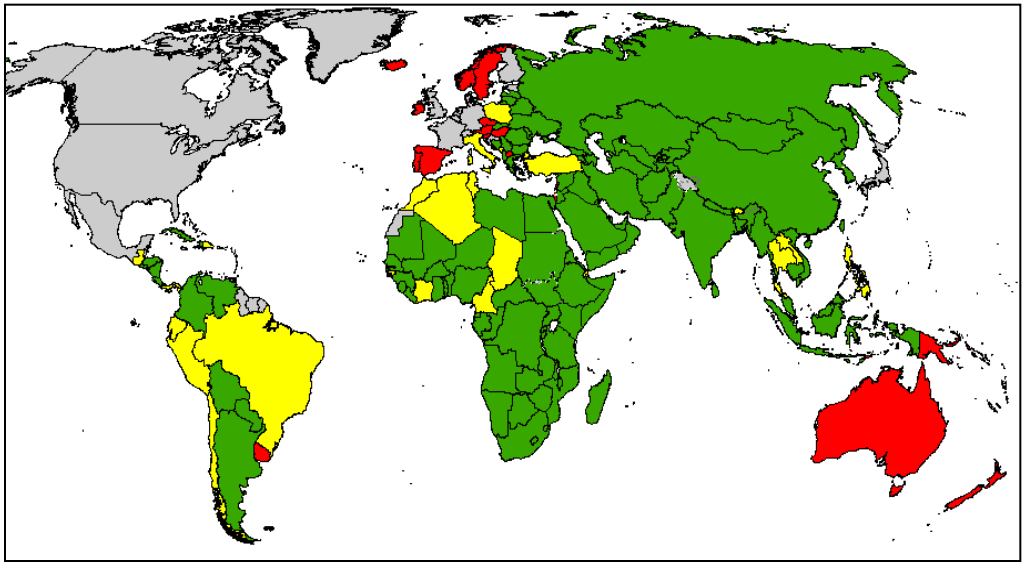
- Close surveillance gaps
- Reach international consensus on biocontainment requirements
- Implement certification processes



Non-polio AFP Rate

Sep 2011 – Aug 2012

< 0.5	0.5 - 0.99
≥ 1	No AFP Surveillance/data

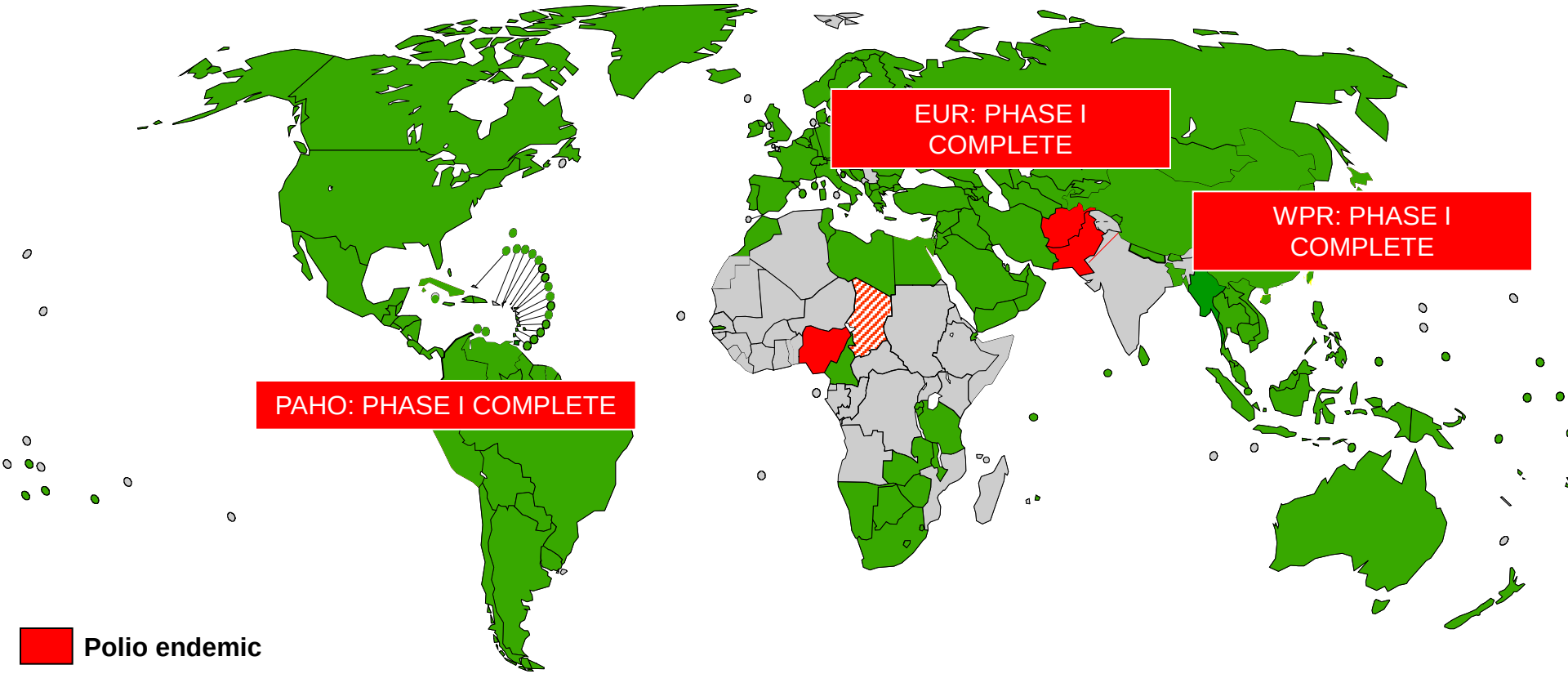


Adequate Stool Collection Rate

Sep 2011 – Aug 2012

< 60%	60% - 79.99%
≥ 80%	No AFP Surveillance/data

Status of Implementation of Phase I containment (national survey and inventory)



Polio endemic

Polio reestablished

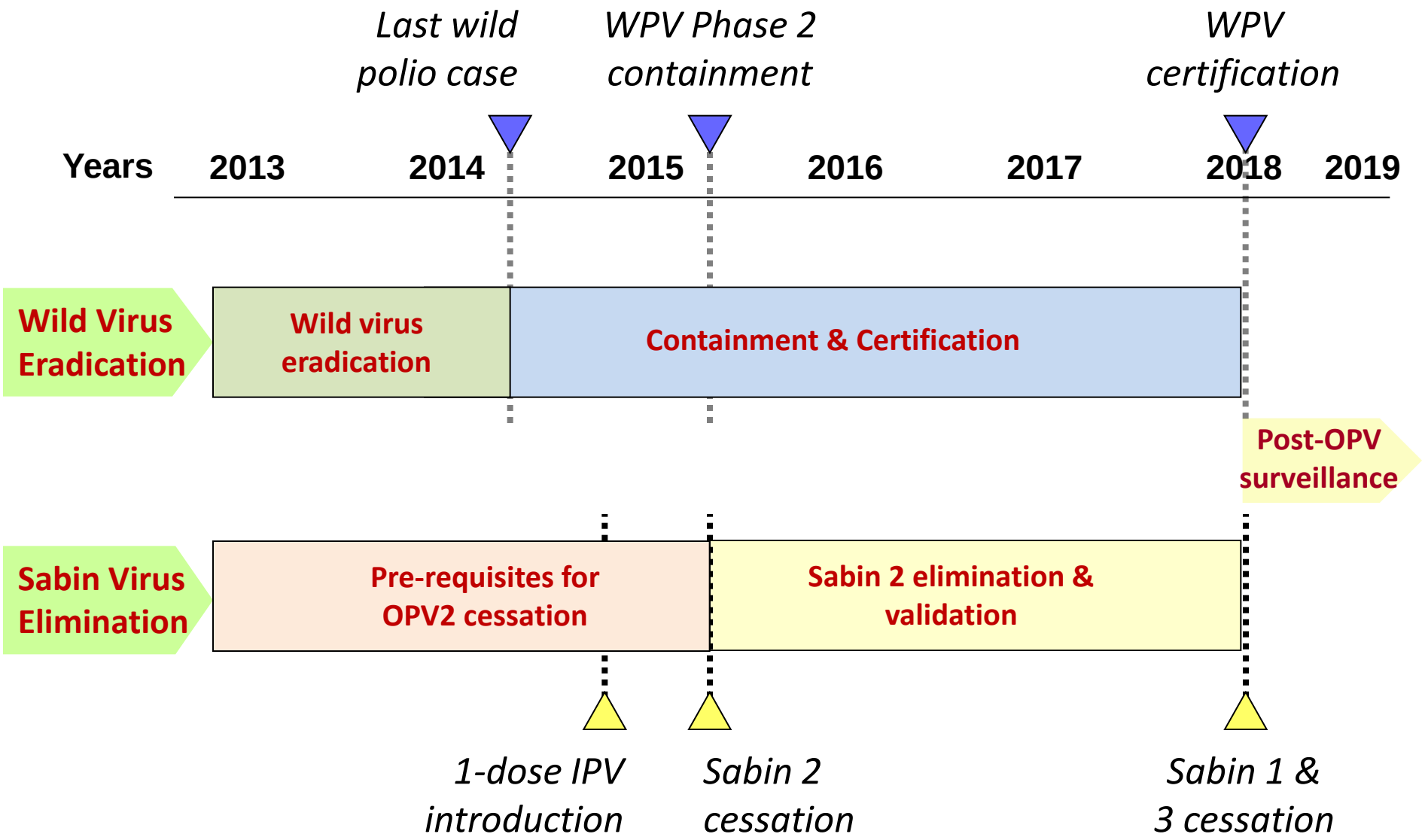
Reporting completion of survey & inventory

Certification and Containment

- **Certification:** GCC will consider 'concluding' type 2 eradication based on 10+ years & surveillance; requires near-term reconstitution of RCCs and GCC.

- **Containment:** secondary safeguards for Sabin-IPV are to be aligned with SAGE 'at least 1 dose' policy recommendation.

TIMELINE FOR MAJOR OBJECTIVES



Major Challenges

Interrupting wild virus (WPV)

- stopping endemic transmission
- preventing new national/int'l spread

Globally synchronizing OPV2 cessation

- bOPV & 'affordable' IPV supply
- logistics, communications, programmatic work

WPV certification, VDPV verification, containment

- surveillance gaps in infected *& certified* areas
- consensus on post-OPV2 outbreak management
- managing transition to full biocontainment

Managing Risks

- Operational
- Political
- Financial
- Societal

Financial Requirements

Projected:

- US$ 5.5 billion
- covers 2013 – 2018

Financial Resource Requirements 2013 to 2018

by Endgame Strategy Outputs

	Total 2013 - 2018	% of direct
HIGH POPULATION IMMUNITY		
Planned OPV Campaigns	$ 1,790,871,721	34.47%
Complementary OPV Campaigns	$ 215,184,481	4.14%
IPV in Routine Immunization	$ 274,110,550	5.28%
Sub-Total	**$ 2,280,166,751**	**43.89%**
SURVEILLANCE AND RESPONSE CAPACITY		
Surveillance and Laboratory	$ 448,777,457	8.64%
Environmental Surveillance	$ 25,000,000	0.48%
Emergency Response	$ 441,000,000	8.49%
Stockpiles for Emergency Response	$ 24,600,000	0.47%
Sub-Total	**$ 939,377,457**	**18.08%**
POLIOVIRUS CONTAINMENT		
Surveillance and Lab enhancement for certification	$ 18,699,061	0.36%
Containment and Certification	$ 55,000,000	1.06%
Sub-Total	**$ 73,699,061**	**1.42%**
CORE FUNCTIONS AND INFRASTRUCTURE		
Ongoing quality improvement, surge capacity, endgame risk mgmt, OPV cessation, additional innovations & programmatic adjustments	$ 416,600,000	8.02%
Technical Assistance	$ 1,029,835,222	19.82%
Community Engagement and Social Mobilization	$ 395,022,131	7.60%
Research and Product Development	$ 60,000,000	1.16%
Sub-Total	**$ 1,901,457,353**	**36.60%**
Subtotal Direct Costs	**$ 5,194,700,621**	
Indirect costs	*$ 343,993,075*	
GRAND TOTAL	**$ 5,538,693,697**	
India (GOI) Planned OPV Campaigns	**$ 1,153,280,401**	
India (GOI) IPV in RI	**$ 75,127,970**	
ANNUAL TOTAL w/GOI	**$ 6,767,102,068**	

Legacy Planning

Objective 4: Legacy - Planning

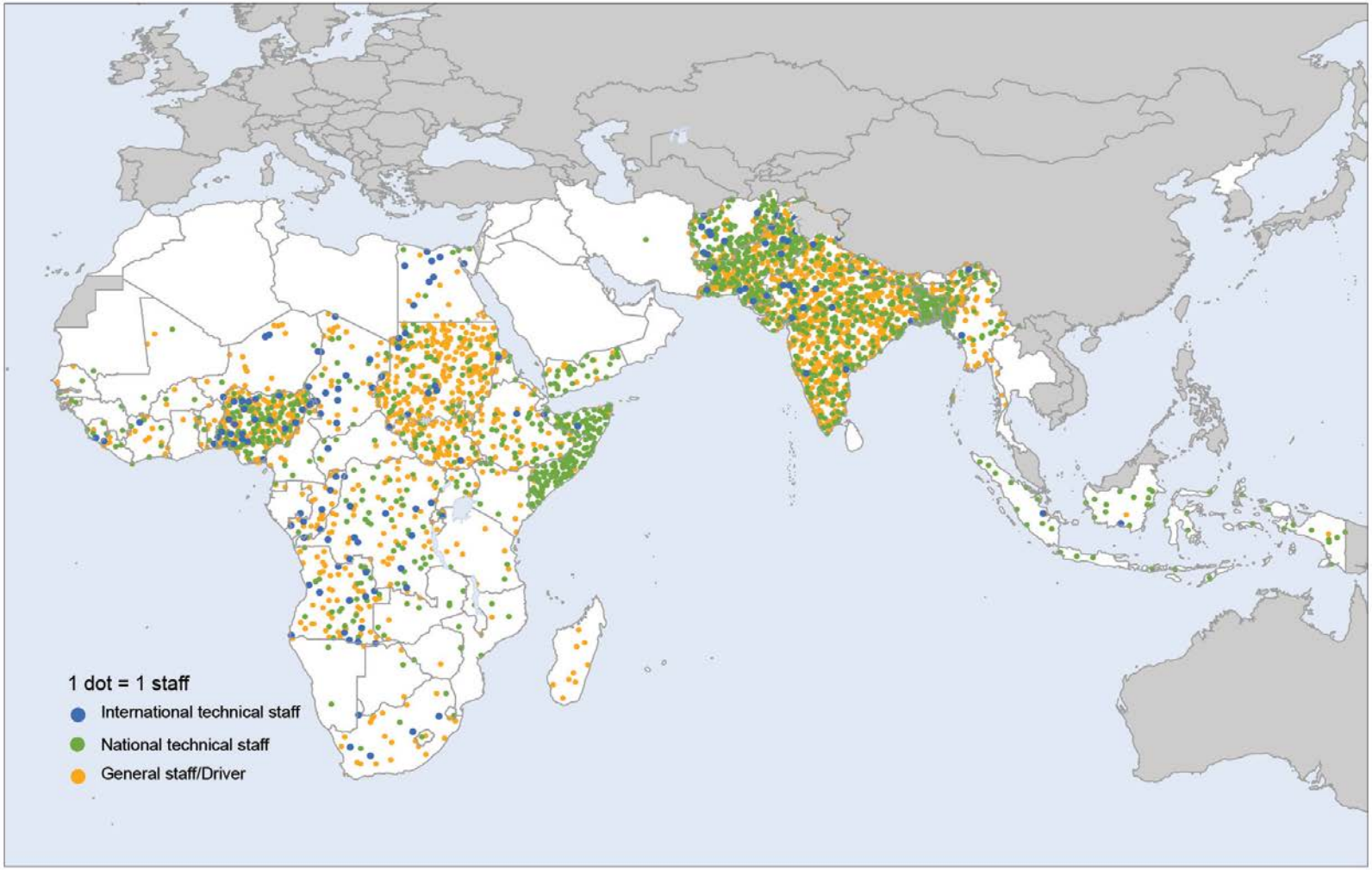
Planning for the post-Polio era

1. Mainstream Polio Functions
   - Immunization
   - Surveillance and Response
   - Containment

2. Ensure the knowledge, capacities, processes and assets created are utilized for other health initiatives

WHO – Polio Staffing (end-2011)

Geographic distribution of WHO technical assistance for polio eradication



Legacy - Planning

Process

1. Map Assets, Infrastructure, Contributions to health systems, other initiatives

2. Broad Consultations

3. Proposals Developed

4. Decision Making and Planning

Legacy - Planning

Proposed Timeframe

ACTIVITY	PURPOSE	TIMEFRAME
Map Assets	To have a full picture of the polio infrastructure	January – April 2013
Stakeholder Consultations	To understand risks/benefits	Throughout 2013
WHO Regional Committees	WHO Member State Input	Q3-Q4 2013
WHO Executive Board	Review Proposals	January 2014
World Health Assembly	Decisions on Legacy	May 2014

Next Steps

What's new about the plan?

2010-12 & 12-13 Plans		2013-18 Plan
Open-ended timeline	→	*Comprehensive Plan*
Wild virus focus only	→	*All polio disease (+ VDPVs)*
Geographic focus	→	*Global focus*
Intensified SIAs	→	*Routine EPI + SIAs*
GPEI partners	→	*GPEI + GAVI (& GVAP)*
OPV only	→	*OPV + universal IPV*
AFP surveillance	→	*AFP + env. sampling*

Based on latest donor, IMB and stakeholder input

The next version of the Strategic Plan will be restructured along the four major objectives:

- Interruption of Transmission
- Sabin 2 Removal
- Certification and Containment
- Legacy Planning

Evidence base for objectives and risk mitigation will be built-out

Next Steps

- **7,8 November 2012** – Polio Partners Group Meetings
- **End-November 2012** - Revised structure and content
- **December 2012** – Consultative Workshop
- **January 2013** – WHO Executive Board
- **End-January 2013** – Finalized plan

SAGE Input/Perspectives

- **Endorsement/Revision of the major strategic thrusts**
- **Guidance on the proposed restructuring**
- **Perspectives on Timeline and Process**

END

Cost Assumptions by Budget Category

Budget Category	Assumptions
IPV in routine	• Includes 1 dose annually for countries currently conducting SIAs with OPV, GAVI-eligible and GAVI graduate countries, and other OPV using countries starting with 50% uptake in 2014 and then 100% per year from 2015 to 2018.
Surveillance /Lab	• Maintain 2013 surveillance and lab as per Oct 2012 FRR through 2018
Environmental Surveillance	• Annual provision of $5M from 2014 to 2018
Outbreak Response	• $66M in 2013; $50M for operations & $25M for vaccine/year from 2014 to 2018
Stockpile	• Stockpile Projections for 2014 ($24.6m) based upon existing contract; funds already transferred to UNICEF • Fill/finish from OB response vaccine funds
Certification and Containment	• Enhancements that may be required to surveillance and lab capacity in preparation for certification. • Annual provision for regional and country level activities.
Ongoing quality improvements, surge capacity, risk management	• Surge capacity in endemic and high-risk countries to interrupt transmission • Unanticipated innovations to achieve and sustain interruption • Ongoing unanticipated risk management activities
Technical Assistance	• WHO AFR, EMR and SEAR based upon Sept 2012 planning exercise for 2013-18 ; other areas maintain tech asst. at 2013 levels through 2018 (as per Oct 2012 FRR)
Community Engagement / Soc Mob	• Ongoing social mobilization activities
Research/Prod Development	• Maintain $10 million per year from 2013-18