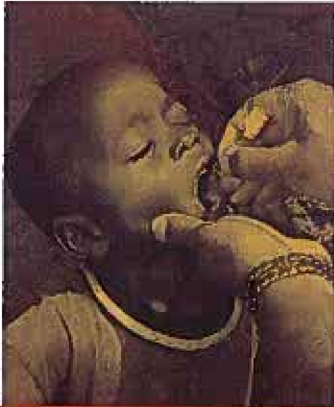

Global Polio Eradication Initiative

Financial resource requirements 2008 - 2012

as of August 2008

Partners in the Global Polio Eradication Initiative

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Acronyms and Abbreviations

ACPE	Advisory Committee on Poliomyelitis Eradication
AFP	Acute Flaccid Paralysis
CDC	US Centers for Disease Control and Prevention
DPT	Diphtheria-pertussis-tetanus vaccine
GAVI Alliance	Global Alliance for Vaccines and Immunization
GCC	Global Commission for the Certification of the Eradication of Poliomyelitis
GIVS	Global Immunization Vision and Strategy
GFIMS	Global Framework for Immunization Monitoring and Surveillance
GPEI	Global Polio Eradication Initiative
IFFIm	International Finance Facility for Immunization
IHR (2005)	International Health Regulations (2005)
IPDs	Immunization Plus Days
IPV	Inactivated polio vaccine
mOPV	Monovalent oral polio vaccine
NGO	Non-governmental organization
NIDs	National Immunization Days
OPV	Oral polio vaccine
SAGE	Strategic Advisory Group of Experts on Immunization
SIAs	Supplementary Immunization Activities
SNIDs	Subnational Immunization Days
UNICEF	United Nations Children's Fund
VPDs	Vaccine-preventable diseases
WHO	World Health Organization

Executive Summary

In November 2007 the Advisory Committee on Poliomyelitis Eradication (ACPE), the independent advisory body to the Global Polio Eradication Initiative, highlighted the progress achieved in 2007 and re-affirmed the feasibility of polio eradication in the near-term, noting in particular:

- the headway in curbing type 1 poliovirus transmission globally, with an 81% decrease in such cases over the previous year;
- the absence of type 1 polio cases in western Uttar Pradesh, India, for more than 12 months;
- the reduction in 'missed' children in northern Nigeria, as the proportion of children who have never been immunized was halved in 2007;
- the recent improvements in accessing children in southern Afghanistan, despite the ongoing insecurity; and,
- the further restriction of polio in the four remaining endemic countries (Nigeria, India, Pakistan and Afghanistan) to specific, geographically-limited areas.

The progress achieved in 2007 was the result of the intensified polio eradication effort launched in February 2007 at an urgent stakeholder consultation, convened by the World Health Organization's (WHO) Director-General Dr Margaret Chan. Key to ultimate success is the continuation of the intensified effort, and to urgently curb a new type 1 polio outbreak in northern Nigeria which is affecting the country in 2008.

To implement the intensified eradication effort, traditional development partner financing had to be substantially complemented by domestic financing from the Government of India, as well as a one-time re-programming of International Finance Facility for Immunization (IFFIm) funds previously earmarked for a post-eradication vaccine stockpile. In a vote of confidence in the intensified eradication effort, Rotary International and the Bill and Melinda Gates Foundation in November 2007 announced a partnership that will inject US$ 200 million into the Global Polio Eradication Initiative over the next four years.

The ACPE recommendations for the further intensification of the eradication effort targeting the interruption of type 1 and type 3 polio transmission by end-2008 and end-2009 respectively, entail:

1) increasing substantially the quantity of supplementary immunization activities (SIAs) in the four endemic countries with a mix of monovalent and trivalent oral polio vaccines (mOPVs and tOPV);
2) increasing further the quality of SIAs to reach every child, particularly in northern Nigeria; Bihar, India; southern Afghanistan and parts of Pakistan;
3) strengthening surveillance for acute flaccid paralysis (AFP) at the subnational levels, to rapidly close remaining surveillance gaps in central Africa and parts of Asia; and,
4) protecting polio-free areas, by continuing to conduct preventive SIAs in high-risk areas and rapidly implementing outbreak response activities.

These recommendations have significant budgetary implications, significantly increasing earlier budget estimates. Key to success is multi-year funding commitments by development partners, to protect the gains of 2007.

At the request of development partners, this Financial Resource Requirements document summarizes the five-year Global Polio Eradication Initiative budget through 2012, the target year for certification of interruption of wild poliovirus transmission in all six WHO Regions.

As of August 2008, the funding gap for 2008-2009 intensified polio supplementary immunization and surveillance activities stands at US$ 355 million, with US$ 90 million needed in 2008. These latest, revised figures reflect both generous new contributions by development partners – including US$ 150 million by the Bill and Melinda Gates Foundation – and an increase in required resources for 2008 of US$ 57 million. The budgetary increase reflects costs related to emergency outbreak response activities due to the new type 1 poliovirus outbreak in 2008 in northern Nigeria, which is threatening to spread internationally. (See 'Nigeria' section on page 11, for more information.)

In her address to Global Polio Eradication Initiative stakeholders on 28 February 2007, WHO Director-General Dr Margaret Chan said: *"As an international community, we have few opportunities to do something that is unquestionably good for every country and every child, in perpetuity"*. The world now has a unique opportunity to ensure that no child need ever again know the pain of poliomyelitis. Success, through the full completion of the intensified eradication effort in the four remaining endemic countries, now requires an intensified financial effort by donors.

Figure 1: Global Polio Eradication Initiative, Annual Expenditure, 1988-2007, Financial Resource Requirements, Contributions, Funding Gap, 2008-2012

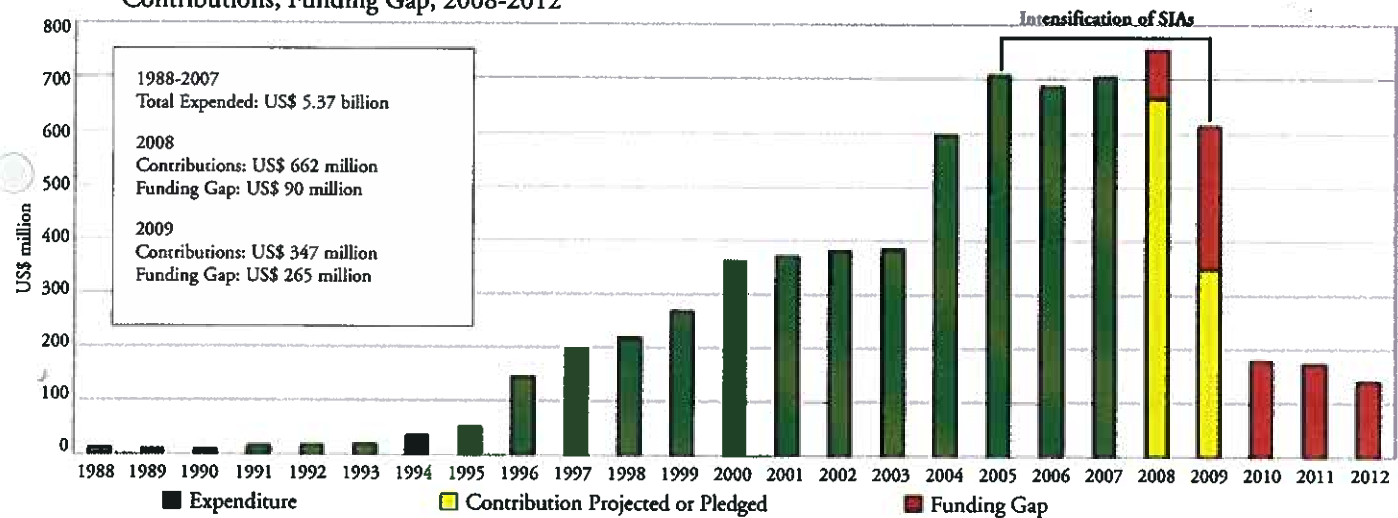


Figure 2: Districts with Active Transmission of Wild Poliovirus in 2008 (as of August 2008)

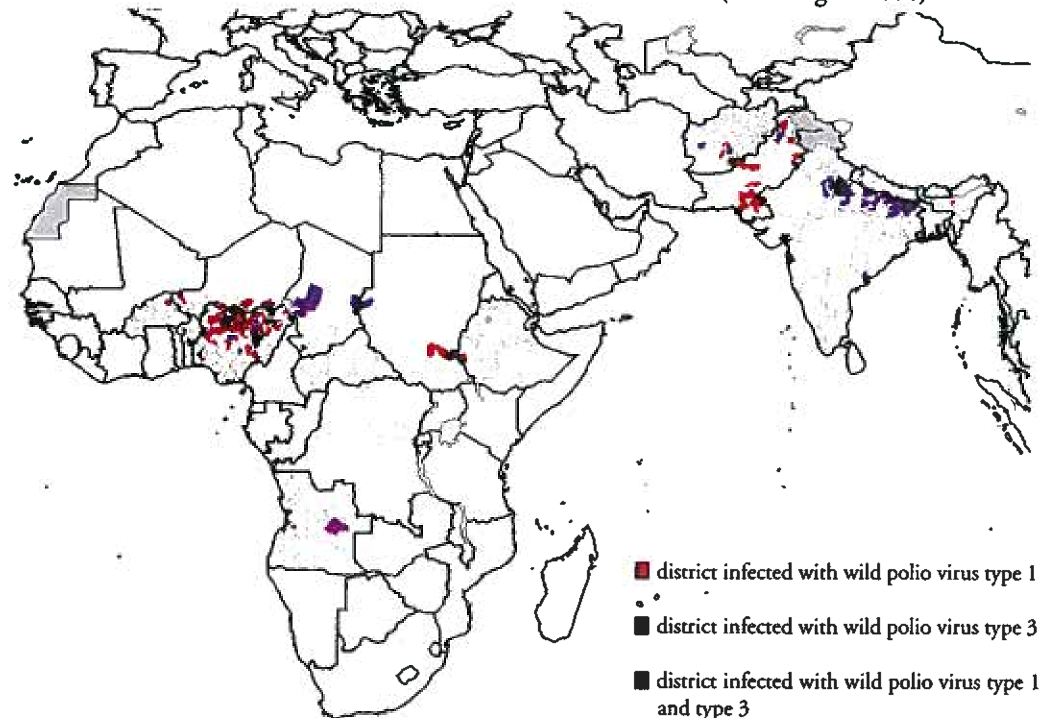


Table 1: Summary of External Resource Requirements by Major Category of Activity, 2008-2012 (all figures US$ millions)

Activity Category	2008	2009	2008-2009	2010-2012
Oral polio vaccine	$ 277.00	$ 182.34	$ 459.33	$ -
NIDs/SNIDs operations*	$ 299.27	$ 171.64	$ 470.91	$ -
Emergency response/ mOPV evaluation	$ -	$ 45.00	$ 45.00	$ 95.00
Surveillance**	$ 66.07	$ 57.89	$ 123.96	$ 138.87
Laboratory	$ 8.18	$ 8.26	$ 16.44	$ 20.61
Technical assistance***	$ 96.03	$ 81.79	$ 177.82	$ 191.78
Certification and containment	$ -	$ 5.00	$ 5.00	$ 30.00
Product development for OPV cessation	$ 8.45	$ 8.45	$ 16.90	$ 15.00
Vaccine for post-eradication era stockpile (finished product and bulk)	$ -	$ 49.22	$ 49.22	$ -
Subtotal	**$ 755.00**	**$ 609.59**	**$ 1 364.59**	**$ 491.26**
Contributions	$ 662.67	$ 347.07	$ 1 009.74	$ 2.56
Funding gap	**$ 92.33**	**$ 262.52**	**$ 354.85**	**$ 488.70**
Funding gap (rounded)	**$ 90.00**	**$ 265.00**	**$ 355.00**	**$ 490.00**

* *Operations costs include manpower and incentives, training and meetings, supplies and equipment, transportation, social mobilization and running costs.*

** *Country-level surveillance and laboratory summary for 2008 provided in Table 5.*

*** *Technical assistance includes the cost of human resources deployed through UN agencies. Country-level breakdown for 2008 provided in Table 6.*

Overview of Global Polio Eradication Initiative Financing

The 20-year Global Polio Eradication Initiative, a public-private partnership spearheaded by WHO, Rotary International, the US Centers for Disease Control and Prevention (CDC) and UNICEF, includes governments of countries affected by polio; donor governments (i.e. Azerbaijan, Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Iceland, Hungary, Iceland, Ireland, Italy, Japan, Kuwait, Liechtenstein, Luxembourg, Malaysia, Malta, Monaco, the Netherlands, New Zealand, Norway, Oman, Portugal, Qatar, the Republic of Korea, the Russian Federation, Saudi Arabia, Singapore, Spain, Sweden, Switzerland, Turkey, the United Arab Emirates, the United Kingdom and the United States of America); the European Commission; private foundations (e.g. the Bill and Melinda Gates Foundation, United Nations Foundation); development banks (e.g. African Development Bank, the World Bank); humanitarian and non-governmental organizations (e.g. the International Federation of Red Cross and Red Crescent Societies), and corporate partners (e.g. British Airways, De Beers, Sanofi Pasteur, Wyeth).

INTERNATIONAL FINANCING OF THE GLOBAL POLIO ERADICATION INITIATIVE

Global Polio Eradication Initiative funding provided through external sources (including both multilateral and bilateral contributions) total US$ 6 billion since 1988. Forty-five public and private sector donors have contributed more than US$ 1 million each to polio eradication. Of these, 28 have contributed US$ 5 million or more. Table 2 highlights contributions/pledges by major donor to the Global Polio Eradication Initiative for 1988 to 2012; figure 3 summarizes external contributions since 1988, as well as the 2008-2009 funding gap. All funders highlighted in this figure have contributed more than US$ 25 million to the global polio eradication effort.

In November 2007, spearheading partner Rotary International and the Bill and Melinda Gates Foundation announced a partnership to provide an additional US$ 200 million for the intensified push to eradicate polio. Rotary International has already contributed more than US$ 650 million towards polio eradication, and this contribution will increase this figure to more than US$ 850 million by the time the world is certified polio-free.

As additional signs of confidence in the intensified eradication effort, in July 2008, the Bill and Melinda Gates Foundation announced an additional contribution of US$ 150 million for the Global Polio Eradication Initiative. And G8 leaders, meeting in July 2008 at their annual Summit in Toyako, Japan, stated: "To maintain momentum towards the historical achievement of eradicating polio, we will meet our previous commitments to maintain or increase financial contributions to support the Global Polio Eradication Initiative, and encourage other public and private donors to do the same." G8 leaders first placed polio eradication on their agenda at their Summit in Kananaskis, Canada, in 2002, and have discussed it every year since then, including in Gleneagles, Scotland, where – in 2005- the G8 vowed to support polio eradication through "continuing or increasing" their contributions for 2006-2008. However, action to fulfil the G8 commitments has been uneven across its membership.

Table 2: Donor Profile for 1988-2012

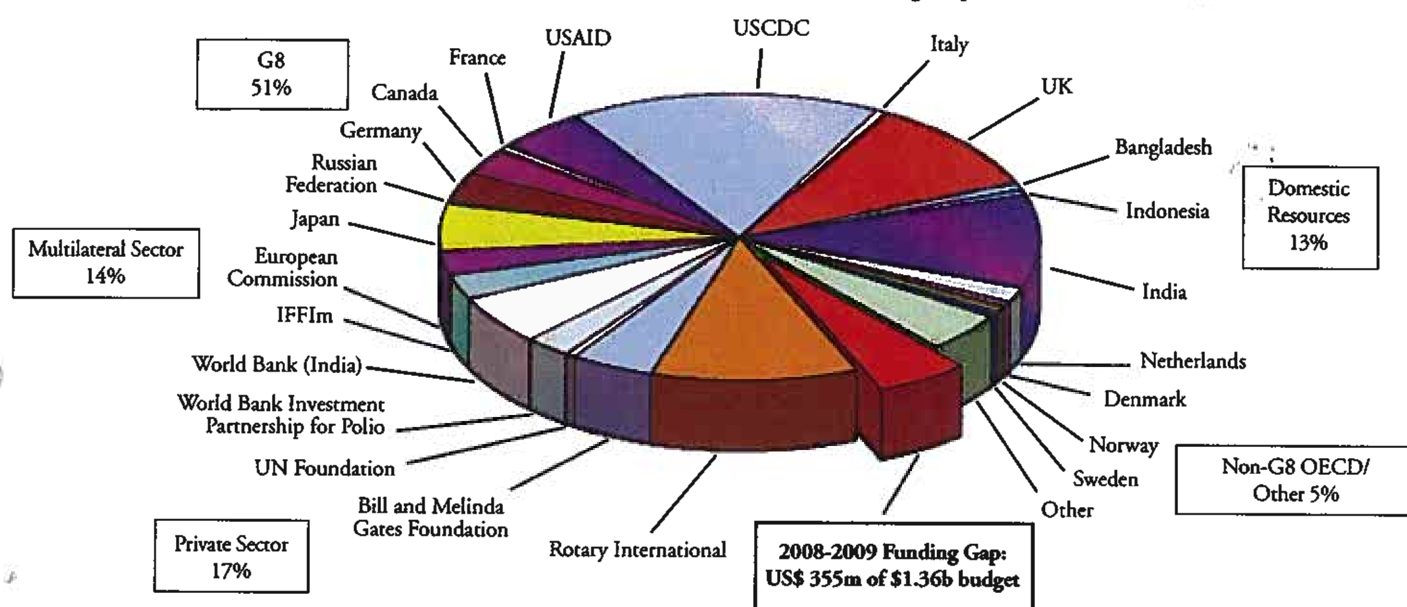
Contribution (US$ million)	Public Sector Partners	Development Banks	Private Sector Partners
> 1,000	USA		
500 - 1,000	United Kingdom		Rotary International
250 - 499	Japan	World Bank	Bill & Melinda Gates Foundation
100 - 249	European Commission, Canada, Germany, Netherlands, GAVI/IFFIm		
50 - 99	Norway, UNICEF Regular Resources, WHO Regular Budget		
25 - 49	Denmark, France, Italy, Russian Federation, Sweden		United Nations Foundation
5 - 24	Australia, Ireland, Luxembourg, Spain		American Red Cross, Sanofi Pasteur/IFPMA, UNICEF National Committees, Oil for Food Programme
1 - 4	Austria, Belgium, Finland, Kuwait, Malaysia, New Zealand, Saudi Arabia, Switzerland, United Arab Emirates	Inter-American Development Bank, African Development Bank	Advantage Trust (HK), De Beers, International Federation of Red Cross and Red Crescent Societies, Pew Charitable Trust, Wyeth, Shinnyo-en

NATIONAL AND IN-KIND CONTRIBUTIONS AND FINANCING

External contributions to national polio eradication efforts have been complemented by in-country resources, including both financial expenditures and non-monetary, in-kind contributions such as the time spent by volunteers, health workers and others in the implementation of SIAs. Funds are expended by governments, the private sector and non-governmental organizations at national, state/province, district and local community levels to cover petrol, social mobilization training and other costs, and are estimated to have had a dollar value approximately that of international financial contributions.

Of particular note has been the financial commitment of the endemic countries in 2007. The Government of India in February 2007 committed US$ 290 million in domestic resources for its 2007-2008 national polio eradication efforts. The Government of Nigeria in 2007 announced its intention to contribute US$ 32 million towards it national polio eradication programme, and as at August 2008 had contributed US$ 14.82 million of this. And the Government of Pakistan has committed US$ 11.54 million in domestic financing for OPV for SIAs in the first half of 2008, while working out the modalities to provide additional OPV funding for the second half of 2008, as well as for 2009-2010. Although the domestic contributions in both Nigeria and Pakistan are still being finalized, these are encouraging statements of domestic support for the intensified global eradication effort.

Figure 3: Financial Contributions since 1988 (US$ 6.38 billion) and Funding Gap for 2008-2009



Note: Donor contributions of US$ 25 million or more are represented in the pie chart
'Other' includes: the Governments of Angola, Austria, Australia, Azerbaijan, Belgium, Brunei, Czech Republic, Cyprus, Finland, Hungary, Iceland, Ireland, Kuwait, Liechtenstein, Luxembourg, Malaysia, Malta, Monaco, Namibia, New Zealand, Nigeria, Oman, Pakistan, Portugal, Qatar, Republic of Korea, Saudi Arabia, Singapore, Spain, Switzerland, Turkey, the United Arab Emirates; African Development Bank; Advantage Trust (HK), AG Fund; American Red Cross; British Airways, Dangote Foundation, De Beers, Inter-American Development Bank, Central Emergency Response Fund (CERF), International Federation of Red Cross and Red Crescent Societies, Oil for Food Programme, OPEC Fund, Pew Charitable Trust, Sanofi Pasteur/IFPMA; Saudi Arabian Red Crescent Society, Shinnyo-en, Smith Kline Biologicals, UNICEF National Committees, UNICEF Regular and Other Resources, United Arab Emirates Red Crescent Society, WHO Regular Budget and Wyeth.

THE ECONOMICS OF POLIO ERADICATION

The economic justification for polio eradication is compelling. A study published in 2003 showed that over a 40-year period, polio eradication would be highly cost-effective for all countries, regardless of income level, and under most scenarios would be cost-saving. Even were long-term immunization with inactivated polio vaccine (IPV) to continue after interruption of wild poliovirus transmission, the cost-effectiveness ratio for eradication would be impressive.*

New research conducted by Harvard University in 2007 re-affirmed the benefits - both in economic and humanitarian terms - of completing polio eradication.** The study demonstrated that attempting to control polio (by maintaining low numbers of polio cases) would cost significantly more in the long-term than completing the job of eradication. The completion of polio eradication was also found to remain more cost-effective than any control-option; if the polio eradication initiative were stopped, hundreds of thousands of children would again be paralysed by this disease over the coming years and billions of dollars would be spent on outbreak response activities and rehabilitation/treatment, as well as through the associated loss of productivity.

* *Aylward R, et al, Politics and practicalities of polio eradication, Global Public Goods for Health. Health Economic and Public Health Perspectives, eds Smith R, Beaglehole R, Woodward D, Drager N, Oxford University Press, 2003.*

** *Thompson KM, Tebbens RJ, Eradication versus control of poliomyelitis: an economic analysis. Lancet, 2007, April 21; 369 (9570): 1363-71.*

Financial Requirements for 2008-2012

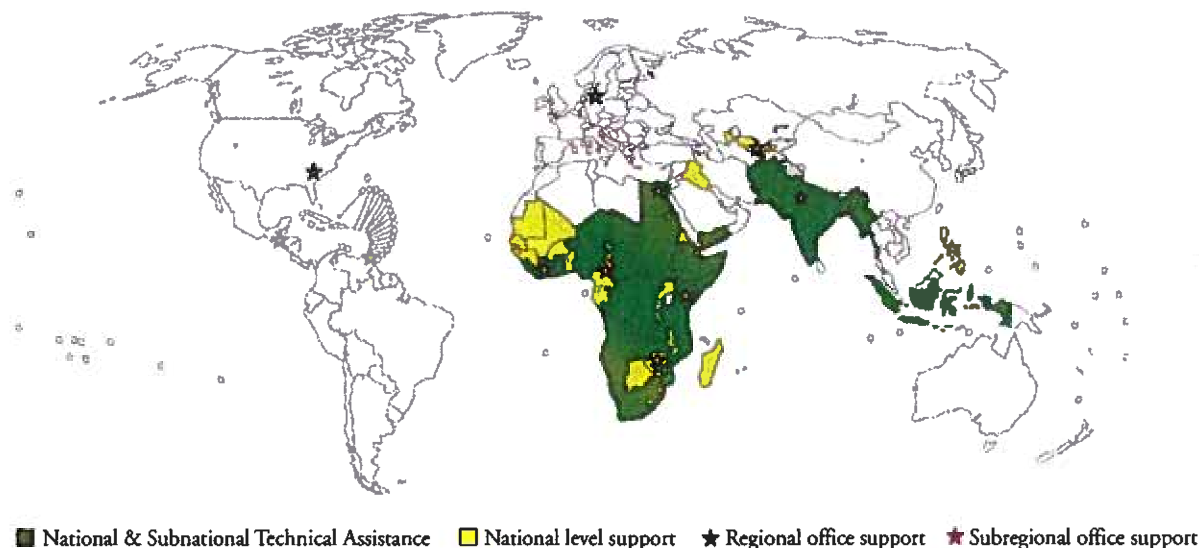
CONTEXT

Global situation:

The Global Polio Eradication Initiative saw important progress towards the goal of a polio-free world in 2007. Polio is now restricted in the four remaining endemic countries to specific, geographically-limited areas. Transmission of type 1 poliovirus (the most dangerous of the two remaining serotypes due to its higher rate of paralysis and propensity for geographic spread) decreased globally by 81% over the previous year, making 2007 the lowest incidence year ever recorded for this serotype. Of particular note is the reduction in type 1 poliovirus cases in some of the most historically-important type 1 reservoirs, including western Uttar Pradesh, India. However, a new outbreak of type 1 poliovirus in northern Nigeria in 2008 is threatening the progress achieved in 2007, as the risk of renewed international spread of the disease increases. Rapidly interrupting type 1 poliovirus transmission remains the overriding strategic priority of the Global Polio Eradication Initiative, followed by the interruption of type 3 poliovirus transmission.

In 2007, more than 2.3 billion doses of OPV were administered to more than 400 million children, during 164 SIAs in 27 countries. Countries around the world maintained active surveillance for polio (ie surveillance for AFP), including 78 countries in polio-endemic regions, which required substantial technical assistance (see figure 4). New diagnostic methods decreased the time needed to confirm poliovirus infection by 50%.

Figure 4: Polio-funded Technical Assistance by Country



■ National & Subnational Technical Assistance □ National level support ★ Regional office support ★ Subregional office support

India:

By the start of 2007, endemic virus transmission had already been restricted to key high-risk areas of Bihar and Uttar Pradesh, with almost all cases occurring among children aged less than two years. To overcome the remaining immunity gap in very young children, large-scale immunization campaigns with type-specific mOPVs were conducted on average every six weeks throughout 2007, with particular focus on the high-risk areas in these two states. Strategies were further refined to track newborn children and immunize young infants. As a result, no indigenous type 1 polio cases had occurred in Uttar Pradesh since August 2007, and in the highest-risk districts of western Uttar Pradesh, no cases due to this virus had occurred in more than 18 months (since October 2006). However, confirmation of two type 1 cases in western Uttar

Pradesh in mid-2008 – both genetically linked to ongoing low-level transmission of this serotype in access-compromised areas of central Bihar – underscores the risk this particular virus continues to pose to polio-free areas everywhere. Specific strategies to reach all populations in access-compromised areas of Bihar continue to be implemented, in efforts to rapidly interrupt the remaining low-level indigenous type 1 transmission. At the same time, strategic use of mOPV3 continues in response to type 3 polio cases in both Bihar and Uttar Pradesh, with the result that outbreaks in both states have been controlled.

Nigeria:
In northern Nigeria, the Immunization Plus Days (IPDs) launched in mid-2006 to offer additional health interventions to OPV, such as measles and diphtheria-pertussis-tetanus (DPT) vaccination, de-worming tablets and insecticide-treated bed-nets, continued throughout 2007 and resulted in a significant reduction in the number of 'missed' children during campaigns. Throughout the north, the proportion of 'missed' children was cut nearly in half (18% of children were missed by end-2007, down from >30% in 2006). Throughout Nigeria, the incidence of type 1 polio was down 90% in 2007 over previous year, and overall cases declined by 75%. Despite these gains in 2007, the proportion of 'missed' children continued to allow transmission of poliovirus and in 2008, northern Nigeria is experiencing a new outbreak of type 1 polio, associated with an increased risk of renewed international spread of the disease. As a clear sign of growing international concern, the World Health Assembly (WHA) in May 2008 specifically and explicitly called on Nigeria to reduce this risk by rapidly stopping the outbreak. Through the International Health Regulations (2005) mechanism, WHO has informed its Member States of this risk. To address the outbreak, the Government of Nigeria has set up new mechanisms in July 2008 to hold states and Local Government Areas (LGAs) accountable to increasing the quality of polio eradication efforts.

Afghanistan and Pakistan:
In Afghanistan and Pakistan, indigenous transmission of polio is now being sustained primarily by cross-border population movements and limited areas of insecurity, where access to all populations during SIAs is hampered. Consequently, the two countries coordinated SIA and surveillance activities throughout 2007. Tailored strategies were introduced to focus on reaching children in high-risk areas, identify and map mobile populations, and increase the involvement of all parties – including government, anti-government elements, the military, non-governmental organizations and tribal leaders – to allow safe passage of polio vaccinators. Case numbers in both countries declined in 2007 over the previous year (16 compared to 31 cases in Afghanistan; 31 compared to 39 cases in Pakistan); more significantly, the geographic distribution of cases was further restricted. In 2008, efforts are also focusing on addressing key operational challenges which continue to adversely affect quality of activities in Sindh, Pakistan (where an increase in new cases has been seen in 2008), as well as to implement a newly instigated Short Interval Additional Dose (SIAD) strategy on both sides of the border, to deliver an extra dose of OPV to communities living in known transmission zones in insecure areas, as and when opportunities arise in between large-scale subnational and national immunization days.

Curbing outbreaks in previously polio-free areas:
Strong progress was also achieved in curbing outbreaks in polio-free countries. Of 27 countries re-infected since 2003, six continued to report polio cases in the second half of 2007 (Angola, Chad, the Democratic Republic of the Congo, Nepal, Niger and Sudan). Of note – Somalia, which had already eradicated the disease in 2002 before being re-infected in mid-2005, has not reported a case since March 2007. Somalia joins other recently re-infected areas to have eradicated polio a second time, including Bangladesh, Indonesia and Yemen, the last two of which had suffered the largest, single-country epidemics of recent years in 2005-2006. However, in 2008, imported polio transmission remains active in countries such as Angola, the Democratic Republic of the Congo and Chad, and new importations of virus of Nigerian origin into countries such as Benin and Burkina Faso underscore the risk this disease continues to pose to polio-free areas everywhere.

The research agenda on long-term poliovirus risks

Given the progress towards achieving the goal of a polio-free world, the Global Polio Eradication Initiative also further intensified its programme of research to reduce and manage the long-term risks of polio following interruption of wild poliovirus transmission globally. This work focuses on minimizing the risks of polio re-introduction or re-emergence, as well as the consequences of such an event. The research agenda includes work to further characterize the long-term risks of vaccine-derived polioviruses, and to coordinate risk management strategies for the long-term (e.g. appropriate biocontainment conditions, cessation of routine immunization with OPV, establishment of international stockpile). The Global Polio Eradication Initiative also continued its work to explore affordable options for the use of IPV in any country that perceives that the medium-term or long-term risks of reintroduction of poliovirus and re-emergence of poliomyelitis warrants continued routine immunization against polio once, as anticipated and recommended by international expert groups such as the Strategic Advisory Group of Experts on Immunization (SAGE) and the ACPE - a goal endorsed by the World Health Assembly in May 2008 - routine immunization with OPV is eventually stopped in a synchronized manner. Further information on this research is available at www.polioeradication.org/content/fixed/opvcessation/opvcessation.asp.

PRIORITIES AND ACTIVITIES

2008-2009:

The ACPE endorsed the Global Polio Eradication Initiative's strategic priorities to stop transmission of type 1 polio globally by end-2008, and type 3 polio globally by end-2009. Key recommendations included:

1) substantially increasing the number of SIAs conducted in the remaining four endemic countries, to exploit the new tools and tactics being applied in the current intensified eradication effort;
2) closing the remaining immunity gaps in the endemic countries, by concentrating SIAs in high-risk areas and improving operations to ensure every child is reached with appropriate mOPV or tOPV;
3) rapidly responding to potential outbreaks by fully implementing APCE recommendations on outbreak response;
4) protecting polio-free countries and polio-free areas within endemic countries (such as southern India and southern Nigeria) by continuing appropriate routine OPV immunization and AFP surveillance activities;
5) rapidly building up the capacity of all of the Global Polio Eradication Initiative network laboratories to incorporate new diagnostic tools that confirm poliovirus infection 50% more rapidly; and,
6) closing any subnational surveillance gaps by continuing to strengthen the AFP surveillance network through further increasing provision of technical support and conducting of subnational surveillance reviews.

At country-level, a number of key operational challenges must be overcome to ensure a sufficient number of children are rapidly reached to interrupt all chains of poliovirus transmission. In particular, in northern Nigeria, southern Afghanistan and semi-autonomous areas of Pakistan, a substantial proportion of children continue to be 'missed' during SIAs, due to gaps in SIA microplanning (in northern Nigeria) and hampered access due to insecurity (in southern Afghanistan and parts of Pakistan). In Bihar and Uttar Pradesh, India, efforts must continue to limit the further spread of type 3 poliovirus, while maintaining the pressure on type 1 poliovirus.

2010-2012:

The longer-term 2010-2012 plan reflects requirements set forth by expert bodies such as the Global Commission for the Certification of the Eradication of Poliomyelitis (GCC) and the ACPE, to achieve certification of all WHO Regions and ongoing surveillance following eradication. Key activities for 2010-2012 include:

1) maintaining the global surveillance infrastructure to demonstrate the absence of wild poliovirus necessary for certification, and to detect and respond to any circulating vaccine-derived polioviruses (cVDPVs);
2) maintaining emergency outbreak response capacity;
3) continuing to strengthen routine immunization, supplemented by limited SIAs as needed to maintain population immunity against polio in key high risk areas;

4) preparing for the management of the residual risks of polio following interruption of wild poliovirus transmission, including implementation of appropriate containment activities and the completion of the research agenda that guides the further refinement of the strategies to reduce the long-term risks of polio; and,
5) further aligning the Global Polio Eradication Initiative with the long-term roadmaps for the control of vaccine-preventable diseases (VPDs) and of disease surveillance worldwide (the Global Immunization Vision and Strategy - GIVS, the Global Framework for Immunization Monitoring and Surveillance - GFIMS, and the International Health Regulations (2005)).

FINANCIAL RESOURCE REQUIREMENTS 2008-2012

With the near-term feasibility of polio eradication re-affirmed by the ACPE, this *Financial Resource Requirements* document provides a five-year budget through 2012. The budget focuses on two periods:

1) The 2008-2009 intensified eradication period:

- Result: interruption of transmission of type 1 polio globally by end-2008 and of type 3 polio globally by end-2009.
- Major cost-driver: full implementation of intensified SIAs, the schedule of which is summarized in table 3 (with detailed, planned costs by country available in annex 1, table 4).
- Financial Resource Requirements: US$ 1.3 billion. Against this, there is a funding gap of US$ 355 million, of which US$ 90 million must be filled for activities in 2008.

2) The 2010-2012 certification and post-eradication preparation period:

- Result: certification of interruption of wild poliovirus transmission in all six WHO Regions.
- Major cost driver: maintenance of the global surveillance infrastructure and management of the long-term risks of poliovirus.
- Financial Resource Requirements: US$ 492 million.

The budgets presented in this document were developed by ministries of health, WHO and UNICEF, and are based on the costs of implementing polio eradication strategies at the country level and the costs of managing the Global Polio Eradication Initiative through the United Nations implementing agencies (WHO and UNICEF) at the country, regional and global levels.

Table 3: Supplementary Immunization Activities Required for Polio Eradication, 2008-2009, as of August 2008

Activity plan for 2008-2009
All Acrvities are expressed in percentage

NIDs: National Immunization Days
SNIDs: Subnational Immunization Days
IPDs: Immunization Plus Days

Activity

Region/ Country	Data	2008												2009											
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Polio Endemic																									
Afghanistan	% targeted	42	49	100	100		87		100		100		50		100	100	50	50			50	50	50	50	
India	% targeted	100	100	61	59	2	61	33	18	40		40			100	100	50	50			50	50	50	50	
Nigeria	% targeted	100	100		43	34		44	60			100	56		100	100	50	50			50	50	50	50	
Pakistan	% targeted	100		48	48	100	56	50/50	100		50	100			100	100	50	50			50	50	50	50	
Countries Bordering Polio-endemic Countries																									
Bangladesh	% targeted										100		100		100	100									
Benin	% targeted				100			24	35	24					100										
Cameroon	% targeted		1		44	100	100								50										
CAR	% targeted				100	100			100	100	100				50										
Chad*	% targeted	100					66	67	67		66	67	67		100	100									
Myanmar	% targeted		51								50	50													
Nepal**	% targeted		100	51	51					25			75		100	100									
Niger	% targeted		78		78	78	96	96			80	80			100	100									
Horn of Africa Outbreak Countries																									
Ethiopia	% targeted		5			10	3				30	30													
Somalia	% targeted	100		100				100	100						100	100									
Sudan	% targeted			100		100	100				100	100													
Southern Africa Outbreak Countries																									
Angola	% targeted			29	29	100	100	100			100	50													
Burkina Faso							20	20																	
Congo	% targeted					53	53																		
DR Congo	% targeted	10			3	45	45		35	35		35													
Mali							3	3																	
Namibia	% targeted						100	100																	
Uganda							20	20																	
Africa Countries combined with Measles and OPV																									
Mozambique	% targeted								100																
UR Tanzania	% targeted								100																

[1] Contingency activities are not included in the 2008-2009 budget and would represent additional cost of up to US $4.07 million in 2008 and US$ 111 million in 2009.

* Chad: January 2008 SNID included in 2007 budget
** Nepal: February 2008 NID included in 2007 budget

Annex 1: Details of Country-Level Funding Requirements for 2008-2009, as of August 2008

Table 4: Details of Funding Requirements in Polio-Endemic and Highest-Risk Countries, 2008-2009
(all figures US$ millions)

	2008				2009				2008 to 2009			
Country	NIDs/ SNIDs: OPV	NIDs/ SNIDs: Op Costs	AFP Surveillance	Total Costs 2008	NIDs/ SNIDs: OPV	NIDs/ SNIDs: Op Costs	AFP Surveillance	Total Costs 2009	NIDs/ SNIDs: OPV	NIDs/ SNIDs: Op Costs	AFP Surveillance	Total Costs 2008 to 2009
Polio-Endemic												
Afghanistan	$9.26	$14.34	$3.73	$27.33	$5.92	$9.25	$1.70	$16.87	$15.18	$23.59	$5.43	$44.20
India	$137.49	$93.84	$7.45	$238.78	$112.20	$85.51	$7.75	$205.46	$249.69	$179.35	$15.20	$444.24
Nigeria	$43.41	$72.84	$11.30	$127.55	$35.14	$56.85	$9.66	$101.65	$78.55	$129.69	$20.96	$229.20
Pakistan	$44.63	$29.11	$1.77	$75.51	$29.08	$19.68	$1.85	$50.61	$73.71	$48.79	$3.62	$126.12
Countries Bordering Polio-endemic Countries												
Bangladesh	$9.38	$2.01	$0.90	$12.29	-	-	$0.90	$0.90	$9.38	$2.01	$1.81	$13.20
Benin	$2.16	$1.04	$0.20	$3.40	-	-	$0.20	$0.20	$2.16	$1.04	$0.40	$3.60
Cameroon	$2.16	$2.03	$0.33	$4.52	-	-	$0.33	$0.33	$2.16	$2.03	$0.66	$4.85
CAR	$0.41	$1.05	$0.58	$2.04	-	-	$0.58	$0.58	$0.41	$1.05	$1.16	$2.62
Chad	$2.77	$8.52	$0.30	$11.59	-	-	$0.30	$0.30	$2.77	$8.52	$0.60	$11.89
Nepal	$2.80	$1.45	$0.49	$4.74	-	-	$0.32	$0.32	$2.80	$1.45	$0.81	$5.06
Niger	$3.24	$7.02	$0.66	$10.92	-	-	$0.66	$0.66	$3.24	$7.02	$1.32	$11.58
Horn of Africa Outbreak Countries												
Ethiopia	$1.53	$2.33	$3.73	$7.59	-	-	$3.73	$3.73	$1.53	$2.33	$7.46	$11.32
Somalia	$1.13	$3.36	$0.68	$5.17	-	-	$0.68	$0.68	$1.13	$3.36	$1.36	$5.85
Sudan	$5.94	$15.07	$1.58	$22.59	-	-	$1.58	$1.58	$5.94	$15.07	$3.16	$24.17
Africa Outbreak and Neighboring Countries												
Angola	$5.85	$9.90	$1.78	$17.53	-	-	$1.78	$1.78	$5.85	$9.90	$3.56	$19.31
Burkina Faso	$0.33	$0.76	$0.34	$1.43	-	-	$0.34	$0.34	$0.33	$0.76	$0.68	$1.77
Congo	$0.12	$15.15	$0.15	$15.42	-	-	$0.15	$0.15	$0.12	$15.15	$0.30	$15.57
DR Congo	$4.05	$14.53	$2.30	$20.88	-	-	$2.30	$2.30	$4.05	$14.53	$4.60	$23.18
Mali	$0.04	$0.41	$0.24	$0.69	-	-	$0.24	$0.24	$0.04	$0.41	$0.48	$0.93
Uganda	$0.03	$0.60	$0.44	$1.07	-	-	$0.44	$0.44	$0.03	$0.60	$0.88	$1.51

Table 5: Surveillance and Laboratory Costs by Country and Region, 2008 (all figures US$ millions)

WHO African Region	2008
Algeria	$0.03
Angola	$1.78
Benin	$0.20
Botswana	$0.10
Burkina Faso	$0.34
Burundi	$0.18
Cameroon	$0.33
Cape Verde	$0.05
Central African Republic	$0.58
Chad	$0.30
Comoros	$0.05
Congo	$0.15
Côte d'Ivoire	$0.32
Democratic Republic of Congo	$2.30
Equatorial Guinea	$0.05
Eritrea	$0.02
Ethiopia	$3.73
Gabon	$0.12
Gambia	$0.10
Ghana	$0.48
Guinea	$0.15
Guinea-Bissau	$0.07
Kenya	$0.49
Lesotho	$0.06
Liberia	$0.30
Madagascar	$0.55
Malawi	$0.23
Mali	$0.24
Mauritania	$0.15
Mauritius	$0.02
Mozambique	$0.22
Namibia	$0.15
Niger	$0.66
Nigeria	$11.30
Rwanda	$0.28
Sao Tome and Principe	$0.01
Senegal	$0.28
Seychelles	$0.01
Sierra Leone	$0.30
South Africa	$0.10
Swaziland	$0.10
Togo	$0.20
Uganda	$0.44
United Republic of Tanzania	$0.30
Zambia	$0.45
Zimbabwe	$0.20
ICST (Central block)	$0.00
ICST (South/East block)	$0.00
ICST (Western block)	$0.00
Regional surveillance and laboratory	$5.24
Subtotal	**$33.66**

WHO Region of the Americas	2008
Regional surveillance and laboratory	$0.55

WHO Eastern Mediterranean Region	2008
Afghanistan	$3.73
Djibouti	$0.10
Egypt	$0.37
Iraq	$0.10
Pakistan	$1.77
Somalia	$0.68
Sudan	$1.58
Yemen	$0.18
Regional surveillance and laboratory	$1.10
Subtotal	**$9.60**

WHO South-East Asia Region	2008
Bangladesh	$0.90
India	$7.45
Indonesia	$1.07
Myanmar	$0.51
Nepal	$0.49
Regional surveillance and laboratory	$3.80
Subtotal	**$14.22**

WHO European Region	2008
Regional surveillance and laboratory	$0.65

WHO Western Pacific Region	2008
Regional surveillance and laboratory	$1.54

WHO/HQ	2008
WHO/HQ	$14.03

Global	2008
Total	**$74.25**

* *ICST= Inter-country Support Team*

Table 6: Technical Assistance, Country-Level Details 2008 (all figures US$ millions)

WHO African Region	2008
Angola	$3.96
Benin	$0.28
Botswana	$0.23
Burkina Faso	$0.13
Burundi	$0.04
Cameroon	$0.30
Central African Republic	$0.61
Chad	$1.26
Congo	$0.39
Côte d'Ivoire	$1.14
Democratic Republic of Congo	$4.88
Equatorial Guinea	$0.17
Eritrea	$0.06
Ethiopia	$1.85
Gabon	$0.25
Gambia	$0.03
Ghana	$0.07
Guinea	$0.02
Guinea-Bissau	$0.12
Kenya	$0.49
Lesotho	$0.08
Liberia	$0.38
Madagascar	$0.26
Malawi	$0.06
Mali	$0.24
Mauritania	$0.04
Mozambique	$0.18
Namibia	$0.21
Niger	$1.44
Nigeria	$19.43
Rwanda	$0.26
Senegal	$0.11
Sierra Leone	$0.34
South Africa	$0.39
Swaziland	$0.12
Togo	$0.13
Uganda	$0.38
United Republic of Tanzania	$0.41
Zambia	$0.29
Zimbabwe	$0.04
ICST (Central block)	$1.02
ICST (South/East block)	$1.04
ICST (West block)	$0.85
Regional Office	$1.53
Subtotal	**$45.52**

* *ICST = Inter-country Support Team*

WHO Eastern Mediterranean Region	2008
Afghanistan	$4.25
Djibouti	$0.00
Egypt	$0.10
Iran	$0.004
Iraq	$0.00
Pakistan	$6.97
Somalia	$2.60
Sudan	$4.45
Yemen	$0.25
Regional Office	$1.04
Subtotal	**$19.66**

WHO South-East Asia Region	2008
Bangladesh	$1.39
India	$9.42
Indonesia	$0.87
Myanmar	$0.42
Nepal	$0.72
Regional Office	$0.76
Subtotal	**$13.58**

WHO European Region	2008
Regional Office	$0.50
Subtotal	**$0.50**

WHO Western Pacific Region	2008
Cambodia	$0.10
China	$0.30
Fiji	$0.10
Lao PDR	$0.10
Philippines	$0.10
Papua New Guinea	$0.10
Viet Nam	$0.10
Regional Office	$0.70
Subtotal	**$1.60**

WHO/HQ	$8.17
UNICEF	$7.00

Global	2008
Total	**$96.03**