

An abstract painting in teal, orange, and brown tones. It depicts a woman in profile, looking down at a child she is holding. The woman wears a teal garment, and the child is wrapped in a yellow and orange cloth. The background is a textured, layered composition of these colors.

**Eighth
Report**

OCTOBER 2025

The lost art of future-proofing

Polio transition's continuing struggles

POLIO TRANSITION
INDEPENDENT
MONITORING BOARD

Polio Transition Independent Monitoring Board

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ORIGINS AND INDEPENDENT STATUS

The Transition Independent Monitoring Board (TIMB) was created in 2016 by the Global Polio Eradication Initiative (GPEI) to monitor and guide the process of polio transition planning. It has produced seven reports, and this is the eighth. Following the World Health Organization (WHO) taking over the leadership and management of polio transition planning from the GPEI, the TIMB was reconstituted.

The TIMB works closely, and has a common chair, with the Independent Monitoring Board (IMB) that has been evaluating the process of polio eradication since 2011 and has published 24 independent reports.

The TIMB's reports are entirely independent. No drafts are shared with WHO or other organisations prior to finalisation.

Timeliness and accuracy



The TIMB reports make reference to a wide range of country contexts and areas of global health beyond polio. In the entire scope of this work, there are diverse sources of evidence and data. Accuracy and interpretations of them may vary.

The TIMB is always pleased to consider making changes to the online version of the document when recipients of the report wish to highlight points of accuracy.

In between the TIMB's meeting and the publication of its report there will always be subsequent developments in polio epidemiology, in policy-making decisions and in the operating environment of polio transition countries. Where changes are major, they can lead to post-meeting work to take account of them.

TIMB meeting in July 2025

The TIMB was asked by the GPEI to make its 24th meeting, in July 2025, a joint meeting with the IMB. This report deals only with the TIMB's monitoring responsibilities. The IMB has recently produced its 24th report *The Glass Mountain: only fresh thinking will deliver a polio-free world*. Readers of this TIMB report are encouraged to look at the 24th IMB report to understand the overlaps and synergies in the strategic and operational aspects of the polio eradication and polio transition programmes.

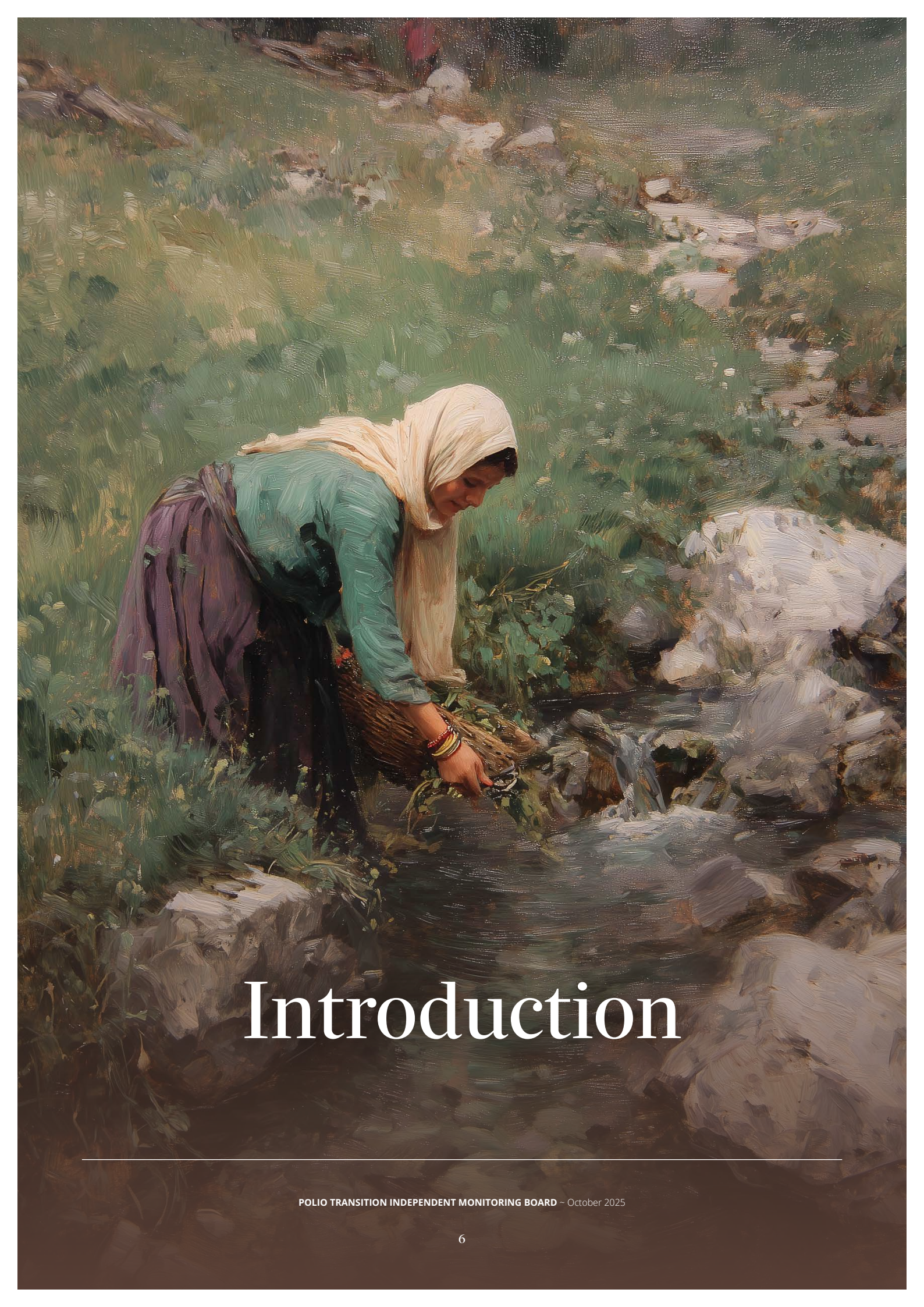
The IMB/TIMB meeting itself comprised over 30 hours of detailed discussions with many valuable points and insights about the Polio Programme made by almost 100 people. In addition, through the year before the meeting, the TIMB's chairman and its small secretariat have had numerous discussions with individuals and groups who are involved in planning, delivering and funding the polio transition programme, as well as those who closely follow its progress.

To avoid the cumbersome terminology of calling the July 2025 meeting "the IMB/TIMB meeting", it is simply referred to in this report as "the TIMB meeting" for consistency with the scope and subject matter of the report.



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Introduction

POLIO TRANSITION INDEPENDENT MONITORING BOARD – October 2025

Introduction

From its inception in 2016, the Transition Independent Monitoring Board (TIMB) has navigated an evolving and often turbulent landscape. The Board was established to provide an independent assessment of the Global Polio Eradication Initiative's (GPEI) plans to “transition” — the process of preserving, repurposing, or handing over the extraordinary human, financial, and institutional assets built up over more than three decades of polio eradication work.



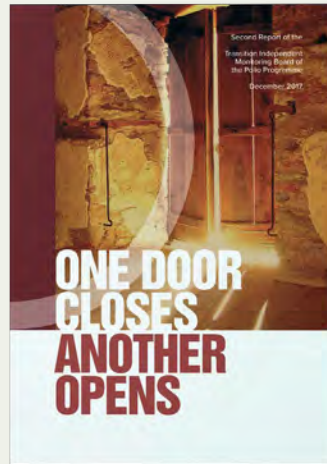
The overall aim was clear: safeguard eradication gains while using the hard-won infrastructure, skills, and networks to strengthen health systems for the future. The execution, however, has been anything but straightforward.

The story so far is one of ambition constrained by reality: a technically sound concept repeatedly buffeted by epidemiological setbacks, geopolitical upheavals, and systemic weaknesses. As the GPEI edges toward its eventual wind-down, the core challenge remains: how to turn transition from a contested, ambiguous process, into a confident, country-led continuum that secures a polio-free world and strengthens health security for generations to come.

The eighth TIMB Report enters at a moment when the tension between urgency and capacity is at its highest. The historical narrative makes clear that the success or failure of polio transition will be judged not only by the absence of poliovirus, but by the presence — or absence — of stronger, more resilient health systems in its wake.

Early clarity, early warnings (2017-2018)

The first two reports – *The End of the Beginning* (July 2017) and *One Door Closes, Another Opens* (December 2017) – framed the stakes in stark terms. The GPEI footprint was immense: tens of thousands of staff, a vast global surveillance network, and close operational links to the poorest and most fragile health systems in the world. Many of these systems had come to depend heavily on GPEI resources, with polio funds cross-subsidising routine immunisation, outbreak response, laboratory capacity, and even humanitarian relief.



The TIMB warned that a poorly managed transition could cause more damage than the disease itself: collapsing immunisation programmes, gaps in disease surveillance, and a dangerous shortfall in global health security.

The early vision assumed a relatively smooth, sequential handover – eradication first, transition second – but even in 2017, the TIMB saw the dangers of allowing transition planning to lag behind. At the same time, complacency and denial were evident in some countries and partner agencies. National ownership was patchy, key decisions on governance and funding were deferred and global awareness of the urgency of polio transition was low outside polio's immediate leadership circles.

By the third report, *A Debt of Honour* (December 2018), it was clear that the eradication timetable was slipping badly. Wild poliovirus transmission had not been interrupted, outbreaks of vaccine-derived poliovirus were proliferating and some endemic areas were showing signs of regression. The World Health Assembly in May 2018 approved both a Polio Post-Certification Strategy and a Five-Year Strategic Action Plan for Polio Transition, but these were entering a difficult operational context. The TIMB stressed that the health security benefits of polio assets were irreplaceable and that delay or drift in transition planning would squander them.



From parallel tracks to intertwined struggles (2019–2021)

As the epidemiological situation worsened in 2019, the comfortable notion of “parallel tracks” — eradication on one side, transition on the other — became obsolete. The same assets were required, urgently, for both. In some respects, polio transition planning was forced to take a back seat to outbreak response. Then COVID-19 struck, with devastating consequences: vaccination campaigns halted, surveillance systems weakened, and polio staff were redeployed to pandemic response.

The fifth report, *Building Stronger Resilience* (December 2021), captured the reality of a programme adapting on the run. WHO had taken over leadership of polio transition from the GPEI. It restructured governance, and articulated “seven strategic shifts” — from risk-based country prioritisation to stronger integration with the broader health agenda. Timelines were revised to something more realistic, coordination between global, regional, and country levels was tightened and belated efforts were made to engage civil society. Yet, the pandemic had

deepened underlying fragilities, stretched health systems thinner, and complicated the already-complex political and financial contexts in many transition priority countries.



Complexity, ambiguity, and uneven ownership (2022–2023)

By the sixth report, *Ambiguities and Certainties* (July 2023), the TIMB was blunt: the early, linear vision of transition was gone. Large wild poliovirus outbreaks in Afghanistan and Pakistan, widespread circulation of vaccine-derived polioviruses across 20 countries, and the lingering after-effects of



COVID-19 meant that transition and eradication were now inseparably bound.

The TIMB recalled its original “seven tracks of work” — from sustaining polio functions to benchmarking progress toward Universal Health Coverage — and noted how incompletely these had been pursued. WHO’s 2018–2023 Strategic Action Plan had brought some structure, but monitoring frameworks were weak, ownership by national governments inconsistent, and many health ministers were disengaged. In several countries, the very concept of transition was poorly understood, often equated with looming job losses rather than system strengthening.

Hard truths and a reframed challenge (2024)

The seventh report, *The Struggle for Progress* (October 2024), reflected on accumulated lessons. The fundamental challenge was no longer just technical — sustaining polio-essential functions in a post-GPEI world — but conceptual. Too many stakeholders still viewed transition as an “exit strategy” rather than a maintenance and sustainability strategy. The ambiguity in purpose and messaging had bred confusion and, in some cases, resistance.

The TIMB argued for a reframing: transition should be a continuum, ensuring that immunisation, surveillance, outbreak response, and primary healthcare systems progressively take on the GPEI’s functions without abrupt loss of capacity or funding. Yet, readiness remained uneven. Many transition priority countries, especially in sub-Saharan Africa and South Asia, were not yet equipped to manage these functions independently. Vaccine-derived poliovirus caused more paralytic disease globally than the wild poliovirus, emphasising the danger of underestimating post-eradication risks.



The enduring themes

Across all the TIMB’s reports, certain themes have persisted:

- **The interdependence of eradication and transition** — they cannot be sequenced neatly; both must be managed in tandem.
- **The fragility of national health systems** in many transition priority countries, and their heavy reliance on polio-funded infrastructure.
- **The danger of complacency and denial** — in governments, partner agencies, and donors — about the permanence of funding withdrawals and the risks of asset loss.

- **The gap between strategic intent and operational delivery**, often driven by weak governance, inadequate national ownership, and insufficient integration with wider health agendas.
- **The transformative potential** of polio’s legacy assets — if fully harnessed — to accelerate progress toward universal immunisation, stronger surveillance, and resilient health systems.
- **The need for a multi-agency global coordinating body** has been repeatedly emphasised by the TIMB. It has warned about the planned abandonment of the GPEI, a unique management structure with ceded powers, without a convincing replacement that keeps the vital coordinating mechanisms, and oversight combined with provision for modern project management.

The reports have also identified four persistent barriers. Financing remains the most obvious. Donor pledges to polio transition have grown episodic, and domestic fiscal capacity is squeezed by debt and competing emergencies. Even when global funds exist, country budget rules often prevent seamless transfer of polio line-items into routine-immunisation envelopes.

The second barrier is institutional inertia. Decades of vertical programming have forged strong identities, performance metrics, and funding streams that resist merger. Many polio staff see integration as career limiting rather than progression. Essential immunisation managers fear polio's crisis-driven tempo will disrupt their annual planning cycles.

Third is the political risk calculus. Ministers borrow political credit from highly visible polio days and campaigns, whereas steady, behind-the-scenes surveillance earns few headlines. Convincing them to bankroll an invisible safety net is a hard sell.

The fourth barrier is technical bandwidth. Countries asked to craft transition plans are

simultaneously battling vaccine-derived poliovirus flare-ups, COVID-19 patient backlogs, measles resurgence and broader health-system reform. Polio transition gets too easily crowded out by the tyranny of the urgent.





Response to 7th TIMB report recommendations

POLIO TRANSITION INDEPENDENT MONITORING BOARD – October 2025

Response to 7th TIMB report recommendations

The Transition Independent Monitoring Board's seventh report presented eight critical recommendations addressing fundamental organisational issues within the polio transition work. The Polio Programme's response to these recommendations, as presented by WHO leadership, reveals a pattern of partial engagement that falls short of the transformational changes required to address the TIMB's core concerns about programme sustainability and effectiveness.



Strategic framework integration and governance reform

The response to the TIMB's call for amalgamating polio transition and post-certification planning demonstrates acknowledgement of the issue without delivering the fundamental restructuring required. While claims of “close linking” and “alignment” between workstreams suggest awareness of coordination deficiencies, the response lacks specificity about how these separate processes will be genuinely integrated rather than simply coordinated. The continued existence of parallel planning mechanisms indicates that the underlying organisational fragmentation identified by the TIMB remains largely unaddressed.

The commitment to establish what the TIMB called “a modern and dependable entity”, through the Polio Oversight Board’s external governance review is a promising development. Yet, at the time of the WHO polio transition team’s response to the TIMB report, the timeline and scope remained inadequately defined. The observation that “key GPEI partners will remain likely involved” seems to reflect institutional caution rather than a determination to move to governance approaches necessary for post-eradication sustainability. The TIMB understands that a decision is to be made, at the December 2025 meeting of the Polio Oversight Board, on what will replace the GPEI role and the functions that will still need global leadership and management in securing a polio-free world.

An adequate response to the TIMB’s concern about the post-GPEI world, also needs to show evidence of binding commitments or resource allocation from potential future stewards.

Immunisation coverage and child protection

The response to the TIMB’s call for an emergency initiative for inactivated polio vaccine coverage reveals a disconnect between the urgency of the recommendation and the measured tone of the Polio Programme’s actions. While citing integration activities through the Big Catch-Up initiative and inactivated polio vaccine introduction across 151 countries demonstrates activity, these programmatic responses do not address the urgent nature of the TIMB’s judgement about continuing harm to children. The response that evaluation of vaccine usage in outbreaks will be “on a case-by-case basis” suggests continued ad hoc decision-making rather than the systematic emergency approach the TIMB deemed necessary.

The IMB, in its two most recent reports on polio eradication, has also called for strong and urgent action on this same point.

Gender-specific considerations

The Programme’s response to recommendations regarding age- and sex-disaggregated data collection acknowledges existing capabilities while promising enhanced guidelines for country implementation. However, the response does not address the TIMB’s broader concerns about data utilisation for strategic decision-making or the systematic patterns of missed populations that these data should inform. The promise to develop guidelines is a technical response to what the TIMB identified as a strategic implementation challenge.

Action to address gender-based violence through strengthened security measures and zero-tolerance policies demonstrate recognition of the issue’s importance. The Pakistan Listening Project and Women Frontline Initiative are concrete programmatic responses, though the impact assessment and scalability of these interventions remain unclear. The emphasis on training and oversight mechanisms suggests a compliance-focused approach that may not address the underlying power dynamics that enable such violence.

The recently published 24th IMB report has covered gender extensively and emphasised a range of considerations and actions that are essential to polio eradication. Most are equally vital to the progression of polio transition. Much more commitment is needed by the Polio Programme in this area.

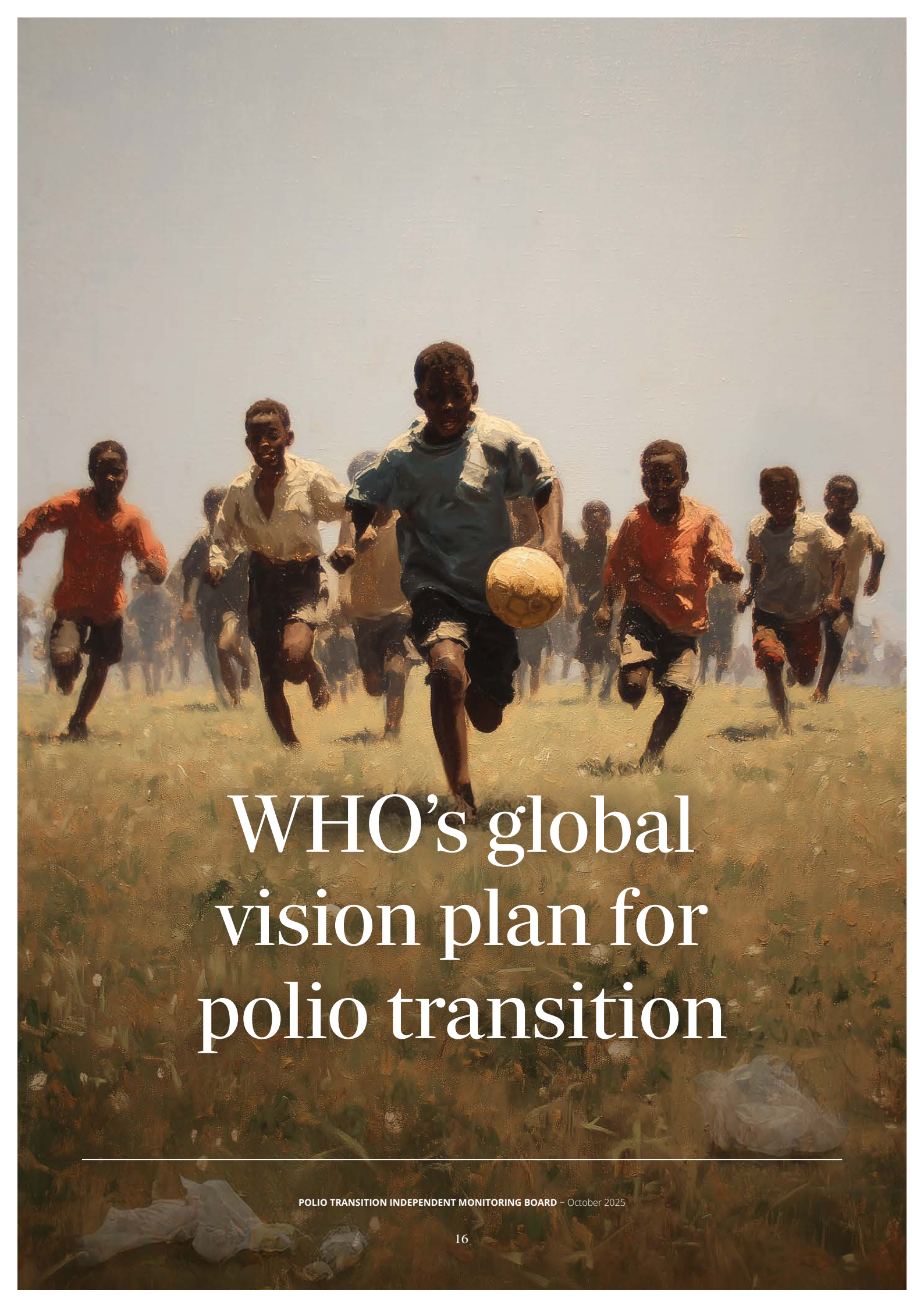
Technical and operational challenges

The response to the TIMB’s recommendation regarding the need for population immunity measures acknowledges the complexity of immunisation data quality while emphasising modelling improvements and strategic use of sero-surveillance. However, this response does

not address the TIMB's fundamental concern about the absence of reliable measures for population protection levels, which undermines evidence-based decision-making for outbreak response and resource allocation. The recognition of "operational limitations due to delays in results" effectively concedes the TIMB's point about current measurement inadequacy.

The coordination between containment and research activities through high-level meetings and joint planning is a procedural response to the TIMB's concerns about balancing competing priorities. The establishment of the Polio Research and Analytical Group and utilisation of the Vaccine Security Framework suggests institutional mechanisms for coordination, but the response does not make clear how research priorities have been modified to support containment objectives or vice versa. The TIMB has provided further information on this in a later section of the present report, having received further clarity from WHO's polio containment team.



A group of children are running across a grassy field. In the center, a boy in a blue shirt is running towards the viewer, holding a yellow soccer ball. He is surrounded by other children, some in orange shirts and others in white shirts, all running in the same direction. The background is a hazy, open landscape under a clear sky. The overall tone is bright and hopeful.

WHO's global vision plan for polio transition

POLIO TRANSITION INDEPENDENT MONITORING BOARD – October 2025

WHO's global vision plan for polio transition

Engagement on polio transition, in contrast to its programmatic counterpart, polio eradication, has been strong on analysis and weak in execution.



The publication of WHO's Global Vision for polio transition in 2024 marked a watershed moment in what had been, by the organisation's own admission, a poorly defined and inadequately understood enterprise.

The Global Vision plan emerged as WHO's attempt to impose order, offering a comprehensive framework built around three impact goals: maintaining polio-free status, eliminating vaccine-preventable diseases, and rapidly detecting and controlling outbreaks. Yet, as the first systematic evaluations under this framework demonstrate, the fundamental question remains whether this amounts to genuine strategic clarity.

Self-assessment of progress

Global Vision's monitoring and evaluation report aims to present information on its three goals as well as a systematic assessment of progress across 21 priority countries toward achieving the strategic outcomes and operational milestones. The results for quarter one of 2025 (Q1 2025) were disappointing. Across the three impact goals, performance was uneven at best, with several indicators suggesting that the transition was proceeding more slowly and with greater difficulty than originally envisioned.

This self-assessment showed that progress toward operational independence demonstrated concerning patterns of sustained dependency across multiple functional areas. The intermediate transition milestone, covering basic safeguarding of essential functions through WHO partnership support, pointed to variable achievement, correlating with funding availability rather than technical capacity development. Several countries have ongoing funding challenges after reductions in international donor support. To a concerning extent, polio transition timelines are determined more by external resource cycles than by country readiness or strategic planning.

While seven countries have reported completed country plans, several acknowledged limited government ownership. Worse, multiple plans remained outdated since they were developed in 2021. This pattern suggested that planning exercises are performed as compliance activities rather than strategic management tools for delivering polio transition goals.

There was persistent reliance on external partners across all functional areas. Indeed, most countries depended heavily on WHO support for surveillance activities, and partner organisations for immunisation and outbreak response functions. If accurate, reports of infrequent polio transition management

meetings in most African countries, despite their transition priority status, suggested limited government engagement with required planning processes.

The establishment of a “watch list” mechanism for countries that have exited priority status is an acknowledgement that polio transition achievements may prove reversible without sustained monitoring. This three-year observation period for previously prioritised countries illustrates institutional recognition that declared progress toward sustainability

requires validation through unabated performance rather than momentary achievement of benchmark indicators.

The milestone indicators provided an even starker picture of polio transition readiness. The progression from M1 (“intermediate transition” with WHO safeguarding functions) through M4 (predictable domestic financing) revealed a trajectory that extended well beyond the timelines originally envisioned for the GPEI wind-down.



Most telling was the financing data: across the Africa and Eastern Mediterranean regions, countries exhibited high dependence on external funding sources, with only a handful crossing the 40% domestic financing threshold for core polio functions. This was not simply a matter of insufficient time for polio transition planning; it reflected deeper structural realities about fiscal capacity, political prioritisation, and the true cost of sustaining polio-essential functions at the level required to maintain global polio-free status.

The architecture of ambition

The Global Vision's articulation of purpose—"a world in which polio investments are sustained and used to build strong, resilient and equitable health systems"—is both inspiring and imprecise in equal measure. It positions polio transition not merely as an operational handover but as a transformative opportunity to leverage decades of polio infrastructure investment for broader health system

strengthening. This is undeniably appealing, particularly in an era when health systems in many low- and middle-income countries remain fragile and under-resourced. Can polio transition still hold this somewhat idealistic position in the face of serious financial constraints and uncertainties as well as geopolitical turbulence?

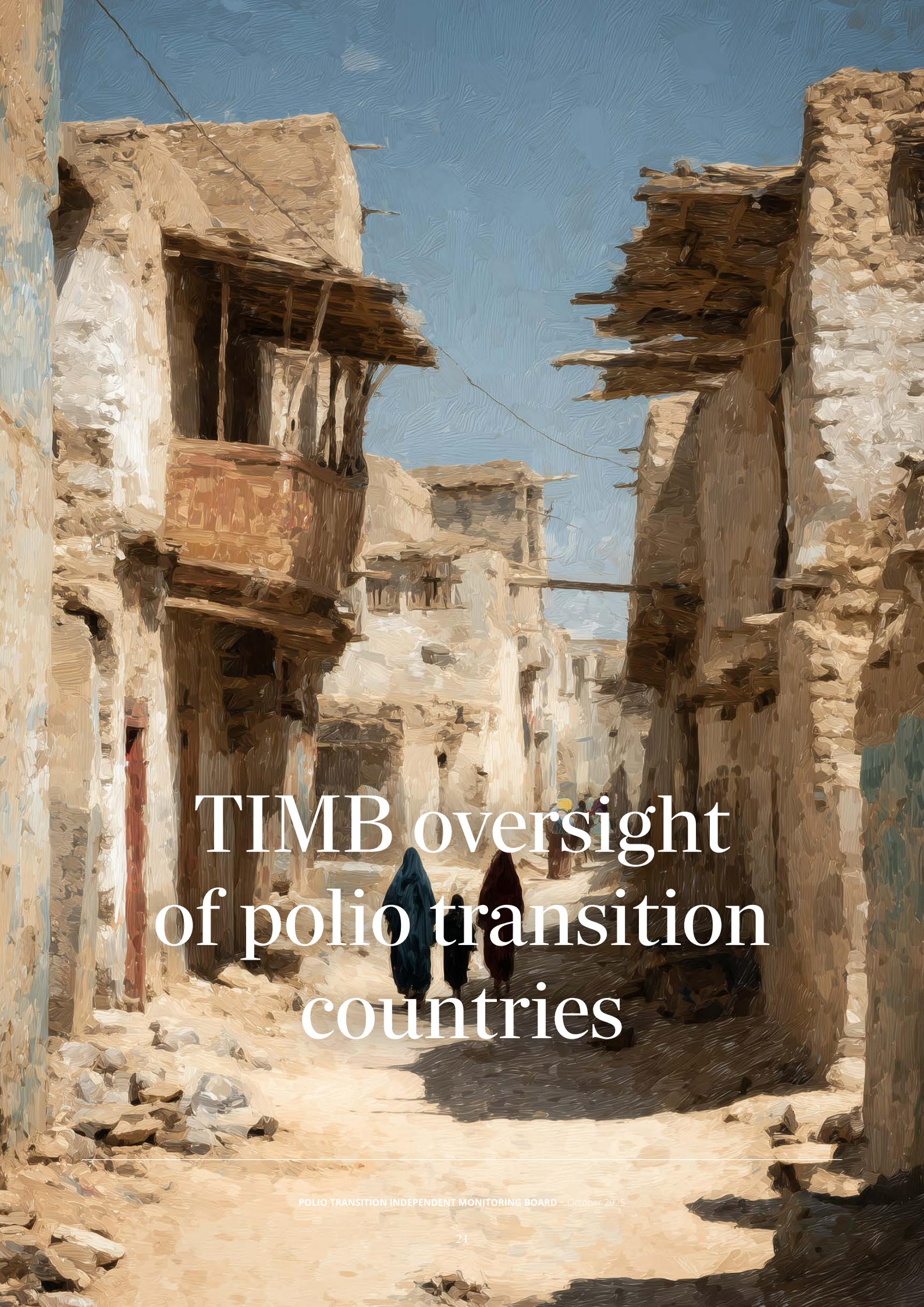
The polio transition framework's relationship with the Post-Certification Strategy is a more complex reality. While WHO characterises the Global Vision as defining "the how" to Post-Certification Strategy's "the what", this division of labour is less clear in practice than in theory. Both frameworks address technical standards for sustaining polio-essential functions. Both concern themselves with governance, financing, and implementation mechanisms. Both operate across similar geographic and temporal scales. Neither truly explores the complexity and realities in a pragmatic way to establish what is achievable and on what timescale. The risk is not that these frameworks contradict each other, but that they create parallel streams of planning, reporting, and coordination that compete for the finite attention and resources of already-stretched national health systems.





The emergence of what the TIMB earlier referred to as the “funding cliff”—the sharp decline in GPEI funding beginning in 2027—adds urgency to questions about the Global Vision’s strategic clarity and implementation timeline. The withdrawal of the United States from WHO, with its funding having historically provided approximately 15% of the organisation’s budget, and substantial bilateral support to many transition priority countries, further compounds these pressures. So too does the abolition of USAID that provided many kinds of support essential to the polio transition process.

In this context, the Global Vision’s value proposition becomes more difficult to sustain. If the framework cannot demonstrate measurable progress toward genuine national ownership and domestic financing sustainability within its own timeline, it risks becoming what the TIMB has previously warned against: an activity that consumes scarce management capacity while failing to address the fundamental challenge of polio transition.



TIMB oversight of polio transition countries

TIMB oversight of polio transition countries

The TIMB is not funded by the Polio Programme to make country assessment visits. Nor is it funded to bring delegations from priority countries to attend its meetings.



Therefore, it gathers information on the countries through the use of published data and other material as well as utilising a wide range of contacts, some with knowledge of strategic matters, some operating at field level and others with in-depth understanding of the complex geopolitical and national political situations affecting countries.

Taking countries from WHO's latest polio-transition roster, the TIMB has examined each through the lens of:

- a. domestic capacity to finance and deliver polio-essential functions (essential immunisation, surveillance, outbreak control);
- b. its operating environment (fragility, conflict, humanitarian pressure, poverty).

Pakistan and Afghanistan

A full assessment of capacity, capability and performance of polio essential functions and the operating environments of the two wild polio endemic countries can be found in the recently published 24th IMB report.

After the 24th IMB report's publication, a volatile situation with armed border conflict between these two nations has emerged. Although a ceasefire has subsequently been agreed, these hostilities are a palpable reminder of the fragility of peace in the region, highlighting risks to cross-border polio cooperation in this vital geography.

areas experiencing disrupted services and nutrition crises linked to violence and forced movement. Funding shortages have hampered humanitarian response, threatening continuity of lifesaving interventions for sexual and reproductive health, psychosocial care, and youth services. Escalating protection risks, particularly for women

and children, are compounded by poverty, inflation, and spreading insecurity across northern and central regions.

A detailed assessment of performance of Nigeria's polio essential functions can be found in the recently published 24th IMB report.

Nigeria

Given Nigeria's position as the largest exporter of type 2 vaccine-derived poliovirus, its complex humanitarian operating environment is of deep concern. In 2025, it is still shaped by entrenched armed conflict, massive displacement, and recurrent climate disasters. The northeast—especially the BAY states of Borno, Adamawa, and Yobe—continues to face persistent threat from Boko Haram and other armed groups, driving ongoing insecurity, record levels of civilian casualties, and widespread displacement, including over two million internally displaced persons. Mass killings, frequent improvised explosive device attacks, and gender-based violence are on the rise, while severe flooding in Niger State has displaced thousands and destroyed key settlements. Essential infrastructure—including health and education facilities—remains under constant threat, with populations in affected



Democratic Republic of the Congo (DRC)

The Democratic Republic of the Congo has faced a humanitarian emergency driven by armed conflict, widespread displacement, epidemic outbreaks, and soaring food insecurity. Fighting between government forces, M23, and other armed groups displaced

seven million people—many of them multiple times—forcing civilian populations into extreme deprivation, danger, and loss of livelihoods. Clashes persisted across the eastern provinces—Ituri, North Kivu, South Kivu, and Tanganyika—where violence, attacks on health facilities, and looting disrupted access to healthcare and education, while millions were driven to take dangerous survival measures. Grave violations against children and women were common, alongside rising gender-based violence and

widespread destitution. Epidemic outbreaks of mpox, cholera, measles, malaria, and vaccine-derived polio surged amidst the breakdown of health systems in these areas. Hunger reached record levels: 28 million people faced acute food insecurity and four million experienced emergency-level shortages, with catastrophic impacts for children in conflict zones. Humanitarian responders in such situations face severe logistical challenges, funding gaps, and threats to staff and supply chains, leaving millions in urgent need.

A recently brokered high-level peace settlement holds hope of amelioration of the situation in the east, but it is regarded as fragile.

Performance of polio functions in accessible parts of the country has been very good. A detailed assessment of the Polio Programme's performance in this country can be found in the recently published 24th IMB report.

Somalia

Somalia grapples with a multifaceted crisis characterised by persistent armed conflict, recurrent climate shocks, and protracted humanitarian needs. Al-Shabaab insurgency remains the dominant security threat, with the group demonstrating renewed tactical sophistication through improvised explosive





device attacks targeting senior officials, including a March 2025 assassination attempt on the country's President that killed at least 10 people. Despite government counter-offensive operations, al-Shabaab has resurged, reclaiming territory in central regions and intensifying attacks on Mogadishu. The security landscape is further complicated by ongoing military operations between Somali National Army forces and various militant groups in Hiiraan and Middle Shabelle regions, displacing over 100,000 people since June 2025. Environmental emergencies exacerbate the

crisis, with alternating cycles of severe drought and devastating floods characteristic of Somalia's increasingly volatile climate patterns. Flash flooding in April and May 2025 killed 17 people and affected over 84,000 others, destroying critical infrastructure and displacing thousands already weakened by prolonged drought conditions. The humanitarian situation remains dire, with six million people requiring assistance in 2025, representing 31% of the population affected by conflict, disease outbreaks, and climate-induced population movement.

The government has a very high dependence on partners for essential immunisation, surveillance and campaigns; third dose diphtheria, pertussis and tetanus (DTP3) coverage is often less than 70% at national level with significant sub-national gaps; polio acute flaccid paralysis and environmental detection networks exist but access and stability issues impede timeliness. Domestic financing is minimal.

Yemen

In Yemen, over 19.5 million people require assistance in 2025 following a decade of continuous conflict. The Houthis-controlled northern territories maintain de facto governance while engaging in escalating Red Sea shipping attacks that resumed in July 2025 after a seven-month hiatus. These maritime operations have disrupted global shipping routes and drawn international military responses. The conflict's humanitarian toll is compounded by systematic restrictions on aid delivery, arbitrary detention of humanitarian workers, and severe constraints on women's rights including travel restrictions requiring male guardian approval. Economic collapse has intensified, with over 80% of the population living in poverty. Unprecedented cuts to international funding forced the closure of 54 health facilities and 10 women's safe spaces following withdrawal of United States support in March 2025. Disease outbreaks including cholera, which resulted in 861 reported deaths among 250,000 suspected cases in 2024, continue to strain the healthcare system. The detention, since May 2025, of dozens of United Nations staff and civil society workers, combined with attacks on civilian infrastructure, severely constrains humanitarian operations.

There is health system fragmentation, cold chain and supply unpredictability, with vaccination campaigns only feasible through uneven negotiated access. Surveillance can detect events but laboratory and testing logistics often require external facilitation. Domestic financing is negligible given the crisis economy.

Ethiopia

Ethiopia confronts multiple overlapping humanitarian emergencies driven by internal armed conflicts, climate-related disasters, and epidemic outbreaks affecting an estimated 10 million people requiring assistance in 2025. Ongoing conflict in Amhara region, alongside instability in western Oromia and Gambella, continues to impede humanitarian access and displace civilian populations. The May 2025 escalation of armed violence in border areas between Oromia and Benishangul-Gumuz regions displaced over 11,000 people, highlighting persistent ethnic and political tensions. Tensions in Tigray have resurged dramatically in 2025, with violent clashes between Tigray People's Liberation Front (TPLF)-aligned forces and the federal Tigray Interim Administration threatening to reignite conflict and destabilise regional relations with Eritrea.

The risk of extreme drought is projected to increase significantly in north western Ethiopia by 2050, while flooding already displaces hundreds of thousands of people annually. Disease outbreaks compound the crisis. Ethiopia reported 4,565 cholera cases and 44 deaths by May 2025, alongside ongoing measles outbreaks affecting vulnerable populations. The country hosts over 1.1 million refugees, primarily from Sudan, South Sudan, Somalia, and Eritrea. This strains already limited resources.

Some recovery is evident; essential immunisation services are rebounding in many places in the country, but sub-national equity gaps and supply interruptions persist. Surveillance platforms are present; outbreak response capacity exists but is stretched in conflict-affected and remote zones. On financing, there is a growing domestic share available for essential immunisation, but funding polio-specific surges remains donor-dependent.

South Sudan

South Sudan has an acute humanitarian and security crisis with 9.3 million people—70% of the population—requiring humanitarian assistance in 2025. Armed conflict has escalated since February 2025. Renewed fighting between government forces and opposition groups has displaced over 165,000



people and killed at least 75 civilians. The deployment of Ugandan forces in March 2025 to support the government has heightened regional tensions. The opposition has expressed concerns about violations of a 2018 peace agreement. Violence against civilians has reached record levels, with 1,607 victims documented in the first quarter of 2025. This represents an 86% percent increase from the previous quarter. Inter-communal violence is the predominant threat, accounting for 66% percent of civilian casualties with community-based militias and civil defence groups responsible for most attacks.

The economic crisis has intensified due to threats to oil pipeline operations which contribute most government revenue. Facility shutdowns could trigger an economic collapse. Severe flooding affects over 350,000 people annually, destroying agricultural production and disrupting essential services. Climate-related displacement compounds existing vulnerabilities, with over 76,000 people displaced by late 2024 flooding and 53,000 losing crops and livestock. There are perpetual threats of waterborne diseases and malnutrition. The humanitarian situation is further complicated by the arrival of

over one million refugees and returnees fleeing Sudan's conflict.

There is extremely high dependence on international partners for all polio-essential functions. Essential immunisation coverage is very low in many counties; surveillance coverage is improving but access and logistics impede timeliness. The government's domestic fiscal base is insufficient for sustained self-finance.

Mozambique

Mozambique's operating environment in 2025 is characterised by the convergence of armed insurgency, climate disasters, food insecurity, and humanitarian constraints. Armed groups have intensified attacks in Cabo Delgado, causing mass displacement and civilian trauma: over 95,000 people fled insecurity in the year to July 2025 alone. This contributed to a total of 1.3 million uprooted by violence, cyclones, and social unrest. Attacks often target civilian infrastructure, including education and health centres, severely disrupting local livelihoods and basic service provision. In some districts, all schools and nutrition centres have been shut for months. Humanitarian access is increasingly limited by insecurity, funding shortfalls, and fragmented response systems. Recurrent cyclones, severe flooding, and rising food prices have fuelled a triple crisis of violence, extreme weather shocks, and economic fragility. Nearly five million Mozambicans are experiencing critical levels of hunger, with over 900,000 at emergency thresholds. Protection risks for displaced populations, especially women and children, are acute—including gender-based violence, family separation, and lack of documentation—while humanitarian assistance reaches less than one-fifth of those in need.



Essential immunisation coverage is variable. Northern insecurity and cyclone damage disrupt delivery. Surveillance functions operate with partner support. Outbreak responses are feasible, but supply and logistics constraints sometimes delay first-round vaccination campaigns.

Syrian Arab Republic (Syria)

Fourteen years into crisis, Syria remains engulfed by record-level humanitarian need, conflict-induced displacement, and

economic devastation. In 2024, 16.7 million Syrians—over 65% of the population—required humanitarian aid as hostilities persist in the north-east, infrastructure remains destroyed, and access to essential services is severely limited. The removal of subsidies and global cuts to humanitarian funding have exacerbated poverty, which engulfs 90% of Syrians and leaves nine million food-insecure. Humanitarian organisations report constrained operational capacity, with communities unable to access aid across much of the country. Competition over housing, land, and property rights impedes reintegration

for returnees, while school infrastructure and curricula remain in urgent need of reconstruction. Rising informal labour, exploitation, and child labour reflect a severe lack of economic opportunity. Access to water, sanitation, electricity, fuel, and healthcare remains far below minimum standards, hampering both daily survival and prospects for recovery.

International partners underpin nearly all surveillance and campaign work. Domestic finance is severely constrained. Cross-border operations remain critical to sustain poliovirus immunity and detection.

Angola

Angola's humanitarian situation in 2025 is sustained by disease outbreaks, climate shocks, and inadequate health infrastructure. A countrywide cholera outbreak that began in January 2025 has spread rapidly to 18 out of 21 provinces. By July 2025 over 27,000 had contracted the disease and 750 had died. Many of the cases were children under five years. Poor sanitation, limited access to clean water, and population density in informal urban settlements have accelerated spread. Oral cholera vaccine campaigns have been a centrepiece of the emergency response.

Climate-related droughts and below-average rainfall in southern provinces have threatened food security. This has heightened vulnerabilities by impeding access to health and nutrition services. Humanitarian assistance is focused on hygiene kits, reproductive health, HIV prevention, and responding to gender-based violence. Action to mitigate the outbreak and scale-up water and sanitation interventions has continued but with acute constraints in infrastructure and service delivery.

Essential immunisation coverage has recovered to some degree but remains unevenly distributed, with continuing sub-national gaps. Domestic budgets fund essential immunisation operations, but partner support is still important for cold-chain reliability and surge response. Surveillance is established, though timeliness varies by province.

Burkina Faso

Burkina Faso is in a worsening humanitarian crisis with armed violence and widespread insecurity. It is one of the Sahel's most neglected areas with widespread population movement and service access denials. More than two million people—nearly 10% of the population—are internally displaced. Around one in

four people have required humanitarian assistance amid protracted conflict, climate shocks, and recurrent attacks against civilians. Armed groups and security operations have fragmented communities, blocked cities, and restricted access to basic services, food, and essential supplies. This is particularly so in hard-to-reach northern and eastern regions. Blockades and direct targeting of humanitarian workers and supply routes have accentuated risks, including family separation, child recruitment, and psychosocial distress. Civilian attacks and human rights abuses have become more frequent as has violence in urban and rural centres. Extreme weather events—including periods of drought, flooding, and violent winds—aggravate existing vulnerabilities and disrupt agricultural livelihoods, intensifying food insecurity and hampering humanitarian response.

The crisis is persistent and multi-dimensional. Public health service delivery is heavily constrained by access. Essential services (including vaccination) are disrupted in blockaded and contested areas. Domestic finance is limited for outreach beyond stable zones and is reliant on international partners for vaccination rounds as well as some surveillance operations.

Cameroon

Cameroon faces a protracted crisis driven by intersecting armed conflict, population displacement, extreme weather events, and epidemic outbreaks. Over 3.3 million people need protection and humanitarian assistance, amid violence in the anglophone northwest and southwest, the Lake Chad Basin, and far north regions. Armed separatists and government forces continue to clash in English-speaking

regions, resulting in mass human rights violations and severe disruption of education and humanitarian operations.

More than half a million people have fled internally, and tens of thousands have crossed into neighbouring countries amid ongoing violence and intimidation. The far north faces recurrent extremist attacks (including from Boko Haram), floods, and repeated cholera outbreaks. These factors pose formidable risks to public health and food security.

Humanitarian access remains hampered by insecurity, movement restrictions, and poor infrastructure, with acute risks to women and girls due to the high occurrence of gender-based violence, unmet reproductive health needs, and disruption of services.

Funding shortages persist, threatening care continuity and leaving at risk critical interventions for maternal and child health, nutrition, and violence prevention.

Essential immunisation infrastructure exists and benefits from UNICEF and partner upgrades (e.g. cold chain, “Big Catch-Up” zero-dose focus). Domestic financing covers core essential immunisation, but international partner funding is important for surveillance expansion and vital rapid vaccination campaign rounds.

Central African Republic

The Central African Republic contends with a fragile and volatile operating context, where conflict, displacement, and climate extremes severely limit humanitarian access and population resilience. Armed incursions along border regions, cross-border attacks, and sporadic clashes between factions and state forces in



both urban and rural areas have killed and displaced thousands, including deepening protection risks for women and girls. Localised flooding in June 2025 compounded the crisis—destroying homes and disrupting vital services, mainly affecting female-headed households and those already displaced. More than 2.4 million people—38% of the population—require humanitarian assistance, with over 460,000 internally displaced and surges in cross-border movement straining host communities. Food insecurity remains acute, with nearly two million expected to experience high levels of hunger.

There has been long-term low essential immunisation performance. A very high dependence on international partners continues for vaccination campaigns, surveillance, and laboratory logistics.

Chad

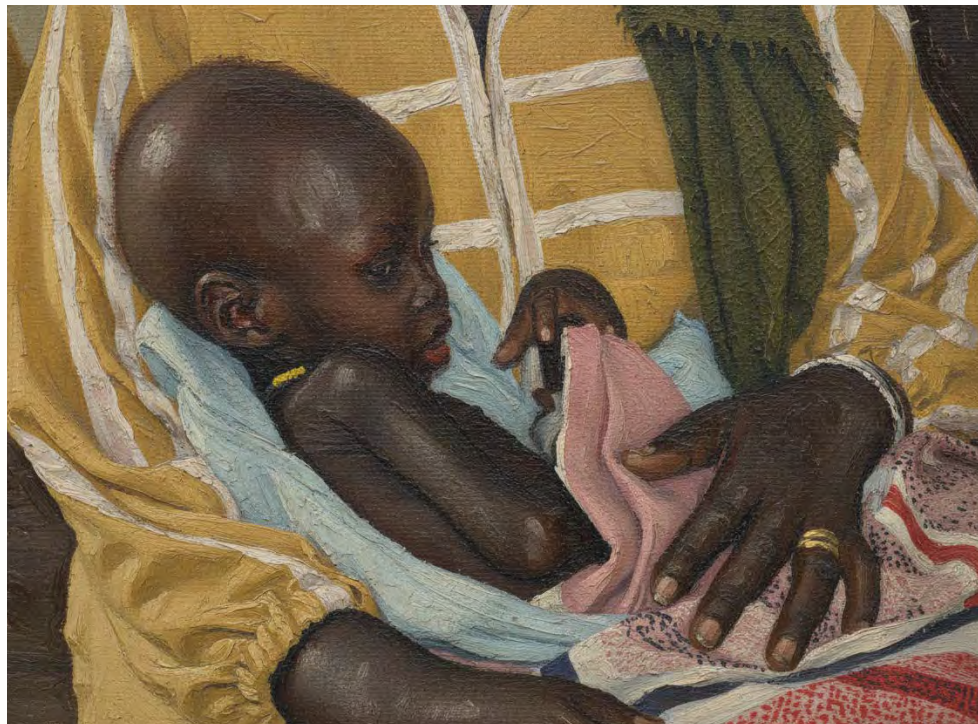
Chad faces complex, overlapping humanitarian emergencies driven by regional conflict. The crisis in neighbouring Sudan has propelled over one million refugees into Chad, overwhelming border health facilities and severely straining already limited resources. Seven million people—almost half the population—need humanitarian aid, with 1.3 million forcibly displaced, and over 500,000

children experiencing severe acute malnutrition. Catastrophic flooding has affected 1.9 million, destroying cropland and aggravating a state of emergency declared over food shortages and malnutrition. Epidemics such as measles, malaria, and hepatitis E frequently burden public health capacity. Intercommunal violence and instability in the Lake Chad Basin drive further displacement and restrict humanitarian access, while ongoing food and nutrition crises risk fuelling future unrest and insecurity.

Essential immunisation coverage in Chad remains low, with data-quality problems acknowledged. Domestic co-financing is very modest.

Guinea

Guinea's operating environment in 2025 is shaped by recurrent disease outbreaks, flooding, chronic food insecurity, and persistent socioeconomic vulnerabilities. More than half of the population live in poverty, while 2.9 million people face food insecurity—6% of children under five years suffer acute malnutrition and nearly a quarter are stunted. Rural communities are especially vulnerable. Seasonal and urban flooding, such as recent deadly events in Conakry, compromise shelter and exacerbate waterborne diseases and mosquito-borne illnesses.





Guinea also experienced a rapid upsurge in mpox cases between June and July 2025, prompting robust response measures, including vaccination campaigns and regional coordination involving neighbouring countries.

Essential immunisation services are delivered but equity gaps persist. Partner help remains important for surveillance sensitivity and vaccine campaign logistics. Domestic budgets are under pressure and this limits rapid national surge capacity in response to outbreaks.

Madagascar

Madagascar's situation in 2025 has been shaped by acute weather events: five cyclones struck within the first half of the year. This displaced tens of thousands of people, disrupted agriculture, damaged infrastructure, and jeopardised livelihoods nationwide. In the south, years of drought have driven persistent hunger and malnutrition, while the back-to-back storms have decimated staple food and cash crops, triggering market disruptions and spiralling food prices. Widespread destruction of schools and health facilities hampers access to essential services.

Government systems run essential immunisation services, but there are repeated disruptions due to extreme weather events and malaria surges. Surveillance networks function with partner support. Vaccination round timing has slipped in the past due to supply and logistics shocks, but recent success in eliminating type 1 vaccine-derived poliovirus has been impressive. Madagascar has maintained zero detections for five consecutive quarters, demonstrating sustained elimination through high-quality campaign implementation and good surveillance.

Mali

In 2025, Mali's operating environment is defined by entrenched armed conflict, political instability, and escalating humanitarian needs. More than a quarter of the population—6.4 million people—need urgent assistance as violence surges in northern and central regions, causing record levels of displacement and exposing civilians, particularly women and girls, to increased risks of violence and diminished access to essential services. Humanitarian interventions are restricted and critical funding gaps undermine response capacity in blockaded and insecure areas. At least

1.2 million Malians are in desperate circumstances, with acute hunger and malnutrition widespread in conflict-affected communities and among displaced populations. A deteriorating economic outlook characterised by inflation and trade barriers further exacerbates food insecurity.

Essential immunisation and surveillance continue to operate in government-held areas. Access limits outreach and timeliness elsewhere. Domestic health budgets are constrained, with international partners filling key gaps in environmental surveillance and outbreak response.

Niger

In Niger, attacks by non-state armed groups in border and rural regions have displaced more than half a million people internally and driven a similar number of refugees and asylum seekers into the country. The humanitarian landscape has further deteriorated with the suspension of activities by the International Committee of the Red Cross, following government measures and allegations of irregular contact with armed groups—a move that sharply constrains humanitarian access and protection for vulnerable communities. Severe flooding since June 2025 has compounded the crisis.

Delivery platforms exist but were strained by sanctions and the fiscal shock that followed a 2023 coup. Domestic financing is very limited and international partner support remains crucial for vaccine supply chains, surveillance and response.

Sudan

In Sudan, the civil war between Sudanese Armed Forces and Rapid Support Forces has entered its third year. Almost 13 million people have been uprooted—making it the world's largest population displacement crisis. Famine and persistent hunger affect half the population—24.6

“The story so far is one of ambition constrained by reality: a technically sound concept repeatedly buffeted by epidemiological setbacks, geopolitical upheavals, and systemic weaknesses.”

million people. One in three children under five years is affected. Decimated health infrastructure leaves millions exposed to surging disease outbreaks; more than 60,000 cholera cases and over 1,600 deaths have been reported since mid-2024. Ongoing violence, targeted attacks on civilians, and ethnic cleansing have killed tens of thousands of people, while humanitarian access remains critically restricted by insecurity, blocked supply routes, and insufficient funding. The fragmentation of governance and continuing militarisation of society leave Sudan facing a dearth of essential services and diminishing protection for the most vulnerable populations.



A near-collapsed health system is the situation in many areas. Essential immunisation services, surveillance and outbreak control depend on exceptional international partner operations. Timeliness is hamstrung by access, staff losses and supply ruptures.

Myanmar

Myanmar's operating conditions in 2025 remain critically unstable due to armed conflict, escalating attacks, and restrictions on humanitarian access. Nearly 20 million people—one third of the population—now require humanitarian aid, with 3.5 million internally displaced and 1.1 million living as refugees in neighbouring countries. Since the

military coup of February 2021, operations have intensified, displacing civilians with airstrikes, shelling, and village destruction, particularly in Rakhine State where both anti-military groups and Rohingya armed factions clash. A devastating earthquake in March 2025 left 4,000 killed and six million in desperate need, and there have been over 600 military strikes, including attacks on schools, religious sites, and civilian infrastructure, since then.

As recently as October 2025, daily air strikes remained a feature of this ongoing civil war.

Humanitarian aid delivery has become increasingly dangerous, with violence against aid workers. Infrastructure collapse and

ongoing economic deterioration leave millions facing acute food and water shortages, health emergencies, and limited access to basic services, with disease, trafficking, and malnutrition risks rising across displaced and host communities.

Essential immunisation services and surveillance operate unevenly amid widespread system fragmentation. Government financing is constrained. International partners support vaccine delivery, environmental surveillance and vaccination rounds where access is possible.

Strategic consequences

Across the 21 polio transition countries assessed in 2025, the prevailing operating environments are marked by a convergence of complex emergencies: armed conflict, political instability, displacement, humanitarian crises, and recurrent climate disasters. These drivers have collectively undermined the stability, public health infrastructure, and financial security needed to advance the polio transition agenda and achieve country self-sufficiency.

The conflict and insecurity, deeply entrenched in a majority of the polio transition countries, causes massive population movements, disrupts essential services—including immunisation and surveillance—and places health workers and facilities at persistent risk. Political fragility and civil strife have led to frequent interruptions of vaccination campaigns, unreliable disease reporting, and difficulties in sustaining high coverage rates, particularly in areas experiencing active hostilities or governance gaps.

Health funding in polio transition priority countries

3/4

depend on GPEI funds for
over 60% of polio functions

2/3

rely on GPEI to fund over 10%
of total health expenditure

All

use some external source
to fund over 10% of total
health expenditure

Includes officially classified polio transition priority countries but excludes the two endemic countries and those that did not submit progress reports.
Source: Derived from WHO Polio Transition Progress: Monitoring and Evaluation Report Q1 2025.

Widespread humanitarian emergencies, from sudden-onset disasters to persistent hunger and disease outbreaks, absorb the attention and resources of national systems, limiting capacity for integration of polio assets and impeding progress towards robust health system strengthening. Chronic underfunding and international aid cuts exacerbate these challenges, with many countries unable to reliably finance transition functions or maintain progress without continued external support.

Climate shocks—droughts, floods, cyclones—are now regular features, driving cycles of displacement, food insecurity, and health vulnerability, further compounding operational difficulties.

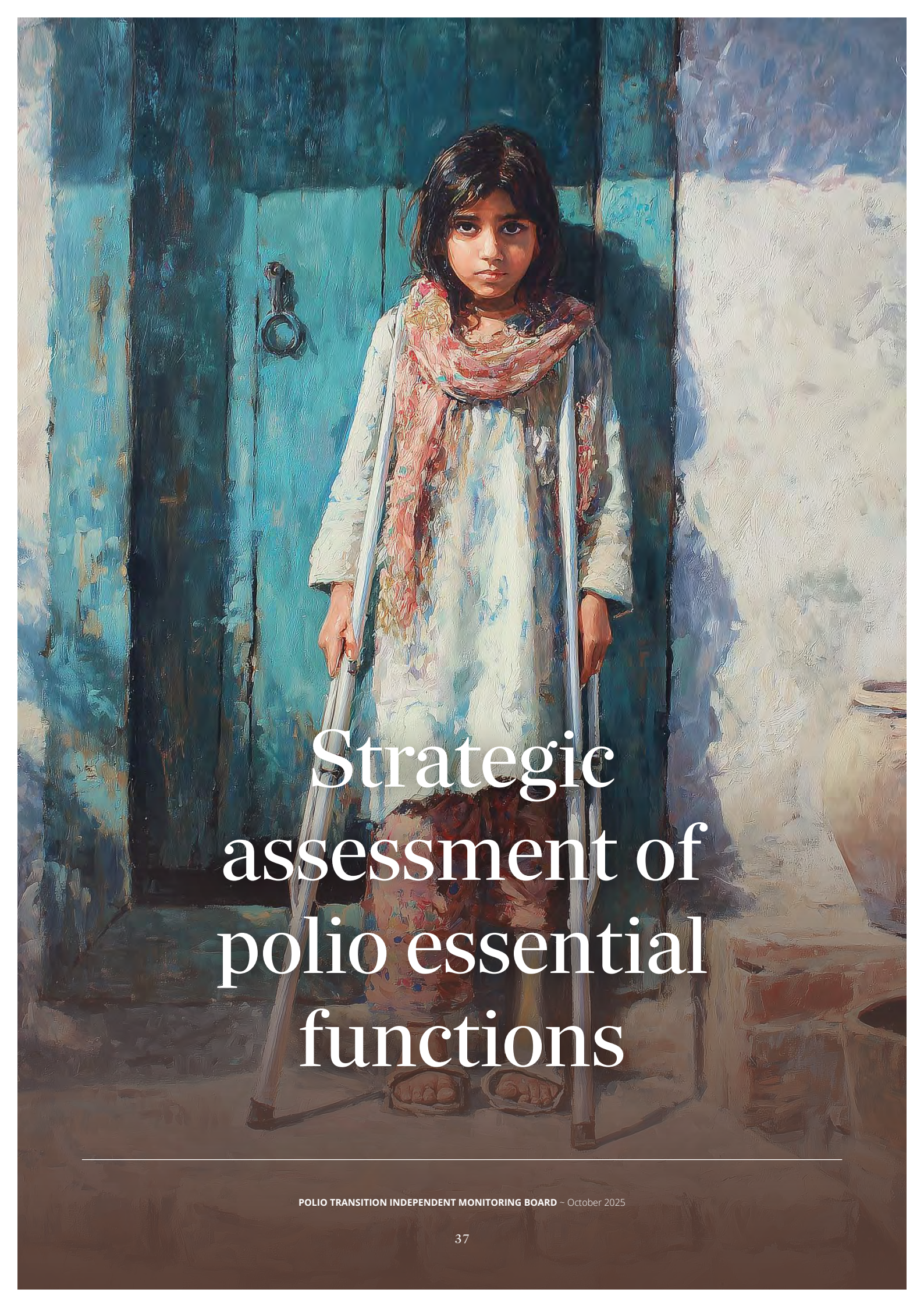
The aggregate impact is that most polio transition countries face extended timelines for achieving the technical and financial benchmarks required for country-led, sustainable delivery of immunity, surveillance, outbreak response, and post-certification functions.

In practical terms, the prospect of achieving the core goals of polio transition—strong, resilient, and self-sufficient national health systems capable of sustaining polio-free status—remains distant for many countries. Unless there is a substantial and sustained increase in domestic and international



investment, accompanied by intensified political will and support for public health capacity building, achievement of self-sufficiency is likely to be incremental and protracted, with several high-risk environments requiring support well beyond current planning horizons.

The documentation of ongoing epidemiological risks alongside weak health system performance indicates that polio transition planning may be proceeding without adequate attention to the enabling environment necessary for success.



Strategic assessment of polio essential functions

POLIO TRANSITION INDEPENDENT MONITORING BOARD – October 2025

Strategic assessment of polio essential functions

In addition to the country-level assessment of the adequacy of planned progress to deliver effective polio essential functions, the TIMB has examined the current status of these functions strategically to provide global judgements of their capacity, capability and overall readiness to deliver what is required of them.



Essential Immunisation: the incomplete foundation for building polio immunity

The relationship between polio eradication and routine (essential) immunisation has evolved from outright tension to reluctant integration, but fundamental questions about this partnership remain unresolved.

At its core lies a strategic paradox: for polio to be eradicated, strong essential immunisation systems are required. Yet, the Polio Programme's design, approach to implementation and its comparative funding abundance have consistently undermined developing these functions to the full.

The 1988 World Health Assembly resolution called for polio elimination through strengthening routine immunisation and primary health care. At some point in the Programme's evolution, this framing shifted from eliminating polio, the disease, to eradicating the poliovirus—a subtle distinction with important operational implications.

Had the “framing” of the Polio Programme goal remained true to its origins, the method of elimination would have placed more emphasis on building robust immunisation systems capable of maintaining high coverage indefinitely. Instead, the focus on stopping the poliovirus as an imperative drove implementation to a highly vertical campaign-based approach optimised for speed and intensity rather than sustainability.

There has also been a longstanding concern about the disproportionate levels of funding that went exclusively to hunting down the poliovirus versus building sustainable immunity levels. Campaign strategies succeed through “hit-and-run” tactics, but the moment this intensity eases—as has happened with many GPEI-funded preventive campaigns—immunity wanes and circulation resumes.

Building systems that can maintain high coverage without continuous external support requires different approaches, different timelines, and different indicators of success.

The slow cultural shift toward integration visible in recent years may represent recognition of this reality, but it arrives late and remains incomplete. The Polio Programme’s resistance to integration for decades stemmed from fears it would dilute focus,

slow down impact, and would even be seen as breaking the polio eradication “promise”. The recent proliferation of vaccine-derived polioviruses in countries without sustained campaign coverage demonstrates the adverse consequences of this way of thinking.

Thus, the relationship between polio eradication and routine immunisation was supposed to work differently. The Polio

Programme was meant to strengthen the foundation while pursuing elimination, leaving behind robust systems capable of sustaining gains independently. Instead, it built temporary scaffolding optimised for a specific target, and as that scaffolding is removed—through funding withdrawals, reduced campaign intensity, and transition of responsibility—the gaps in the underlying foundation become increasingly visible.



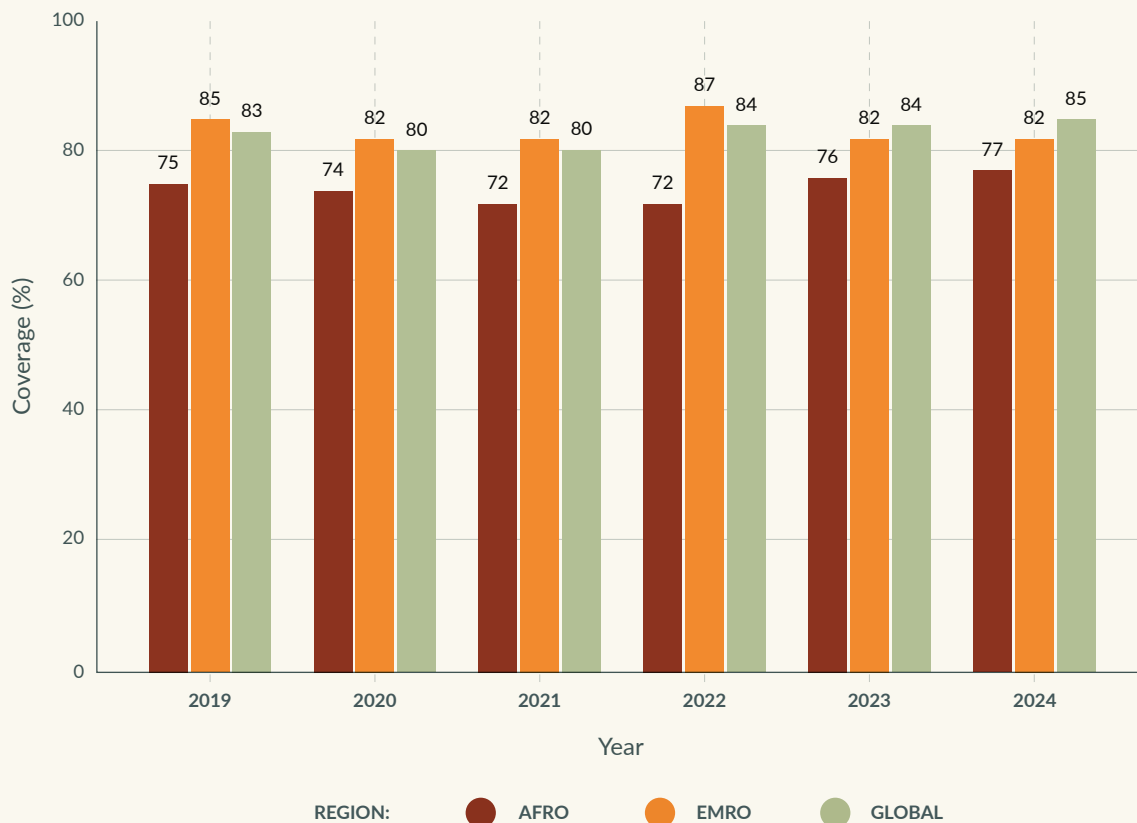
Potential loss of momentum

Polio insiders speak wistfully of the momentum that characterised the Polio Programme a decade ago when they felt that “everything was possible”. This energy and optimism has dissipated leaving a hard-edged reality.

This more pessimistic programmatic mood is playing out against a recent backdrop of institutional fragility. The factors involved are

many, but include the repeatedly missed deadlines for interrupting poliovirus circulation, the scale and persistence of outbreaks of vaccine-derived poliovirus, crucial variability in the quality of polio essential functions delivery, the reality of countries that once prioritised polio within their national agendas now facing competing demands in resource-constrained environments, the slow recovery of essential immunisation coverage after the impact of the pandemic, and the growth of the anti-vaccination movement.

Trend of first dose inactivated polio vaccine (IPV1) coverage pre- and post-COVID19



AFRO = WHO Africa office; EMRO = WHO Eastern Mediterranean office.

Source: WHO and UNICEF estimates of national immunization coverage (WUENIC).

This is compounded by recent changes in the United States government's policies and funding decisions on global health. USAID has been abolished, the government is withdrawing from WHO (which has made drastic staffing cuts and restructured as a result), and CDC's position as a principal polio partner is in doubt.

In key WHO regional immunisation departments, staff reductions are approaching 40% through a combination of

budget constraints, retirements, and the loss of external support. The technical agencies (WHO, UNICEF, Gavi, CDC), expected to guide countries through polio transition, are themselves navigating organisational disruption and funding cuts, limiting their capacity to provide sustained support.

Countries now face the challenge that the polio transition programme was supposed to solve: maintaining population immunity against

polio through routine systems that remain inadequate to the task, in fiscal and political environments far less favourable than a decade ago.

The question now is not whether routine immunisation can theoretically sustain polio-free status—the epidemiology is clear that it can, given sufficient coverage and equity—but whether the Polio Programme is creating the right conditions that make this achievable in practice.



The coverage challenge

Five years after the COVID-19 pandemic hit global immunisation systems, vaccine coverage rates have not fully recovered. Some regions remain below 2019 baseline levels, with the Americas exhibiting particular volatility—gaining ground only to lose it again.

The number of zero-dose children—those who receive no vaccines at all—stood at 14.3 million in 2024, down from the pandemic peak of 17.7 million in

2021. It still falls far short of the Immunization Agenda 2030 goal trajectory, targeting 50 million lives to be saved by 2030.

These aggregated figures mask extensive sub-national variations, with the majority of unreached children concentrated in fragile and conflict-affected settings. The persistent inability to find and reach these populations is the most disappointing outcome from a systems perspective, reflecting not merely operational challenges but fundamental weaknesses in health infrastructure and governance.

Many polio transition priority countries struggle with these routine system weaknesses including vaccine stockouts, inadequate cold chain networks, insufficient trained vaccinators, and poor community demand.

Traditional intensive outreach campaigns—involving five (sometimes more) oral polio vaccination rounds annually with house-to-house contact—is the most effective approach for achieving high immunity levels in populations when there are intractably weak routine systems. However, this

Quality of routine immunisation at district level in polio transition priority countries, 2025*

On track

Central African Republic, Chad, Democratic Republic of the Congo, Ghana, Madagascar, Mozambique, Niger, South Sudan, Pakistan

At risk

Burkina Faso, Ethiopia, Afghanistan

Off track

Angola, Cameroon, Mali, Nigeria, Syria, Yemen, Myanmar

Benchmark for being on track is having four fifths of districts above 80% coverage for third dose of Diphtheria Tetanus and Pertussis vaccine (DTP3).

Source: Derived from WHO Polio Transition Progress: Monitoring and Evaluation Report Q1 2025.

*Excludes two countries where data not reported.

intensive operational model requires sustained financing, extensive workforce deployment, sophisticated logistics, and political commitment that most countries cannot maintain without external support. Countries without active outbreak threats or immediate wild poliovirus risks typically do not prioritise or resource these preventive campaigns, creating immunity gaps that leave populations vulnerable to vaccine-derived poliovirus emergence.

The harsh assessment expressed to the TIMB by a senior Polio Programme manager was that many vulnerable countries “don’t have the capacity to do very much” regarding intensive

preventive campaigns, unless, of course, they face immediate polio threats or are experiencing active outbreaks on a regular basis. This creates a dangerous dynamic where countries vulnerable to importations or vaccine-derived virus emergence do not do enough vaccination to protect their populations, while countries already managing outbreaks exhaust their operational capacity and resources on response rather than prevention across broader geographies.

Even now, there are still new lessons to learn about improving immunisation coverage. For example, the Big Catch-Up initiative, designed to retrospectively immunise children in the 2019-2021 birth

cohorts, who missed vaccines during COVID-19 disruptions, has demonstrated both the value and the limitations of such back-filling approaches.

The initiative was resource-intensive, creating systems that did not previously exist to track and vaccinate children who had been missed earlier. Results suggest approximately 11 million additional children were immunised who would otherwise have remained unprotected—valuable but below country aspirations, and certainly not a transformative breakthrough.

The critical lesson from the Big Catch-Up is to move from episodic initiatives to sustained policy change: embedding the practice of enabling the immunisation of children up to age five years within routine national programmes, rather than maintaining age-two years cut-offs that turn away older children. This shift from catch-up initiatives that eventually end, to rolling catch-up policies that become permanent features of immunisation systems, is the difference between temporary fixes and structural strengthening.

The measles mirror

If the polio eradication process fails to achieve the breakthrough needed within a period of years or if funding flows start to falter, difficult decisions will have to be made about what happens next.



It is worth a reflective sidestep to draw comparisons. The measles context is that, despite the disease being a core essential programme of immunisation, a tracer for equity, and an extremely contagious agent requiring high coverage to prevent outbreaks, elimination has never received resources or political commitment at a level comparable to polio.

For years, the global measles programme relied almost entirely on CDC expertise and funding. The current United States government's withdrawal has created a \$22 million annual gap just to maintain the Global Measles Rubella Laboratory Network—the surveillance infrastructure upon which broader viral tracking depends. Bridge funding may sustain operations through mid-2026, but no clear pathway exists to fill the structural deficit thereafter.

This asymmetry exposes a fundamental flaw in global health architecture: assessed contributions from WHO member states never backed measles elimination to the degree that voluntary contributions supported polio eradication. When major bilateral donor funding is withdrawn, core funding is not enough and an entire global programme can collapse.

The half-in, half-out integration dilemma

When countries commit to strengthening essential immunisation, while maintaining polio as a priority, what actually changes in practice? The question exposes realities about programmatic trade-offs and resource allocation. For polio specifically, implementation centres on two elements: establishing high inactivated polio vaccine coverage through routine systems and leveraging opportunities for integrated campaigns that combine oral polio vaccine with measles or other antigens to reduce fixed costs and gain greater community acceptance.

Integrated campaigns combining polio vaccines with measles, vitamin A supplementation, and other interventions achieve operational efficiencies and may improve coverage through multiple opportunistic offerings. However, sustaining integration requires careful planning, adequate financing, and coordination across programme divisions that may have competing priorities and separate funding streams. Operational complexity increases substantially, and some countries lack the capacity and logistics expertise to reliably execute large-scale, regular, high-quality integrated campaigns.

“Integration cannot occur when the receiving system lacks the foundation necessary to support what is being integrated.”

The COVID-19 period paradoxically accelerated a cultural shift toward integration, as countries sought ways to deliver essential packages of services more efficiently. Polio vaccines became add-ons to measles campaigns or broader health interventions, reaching populations that routine systems alone could not access. This was progress in operational thinking, but it still leaves a significant immunity gap.

Many countries have lost the base of population immunity that periodic oral polio vaccine campaigns provided, creating conditions for transmission when vaccine coverage through routine systems proved insufficient. The correlation between funding withdrawal and the proliferation of circulating vaccine-derived polioviruses, particularly across Africa, has proven a very sensitive and agitating subject for the Polio Programme leadership to discuss, awakening memories of the 2016 oral polio vaccine “switch” and a series of events that compounded the inadequate levels of immunity.

Perfect polio protection would require the combination of high inactivated polio vaccine coverage, full activation of all integrated campaign opportunities, and intensive oral polio vaccine outreach—a trifecta that few countries now deliver.

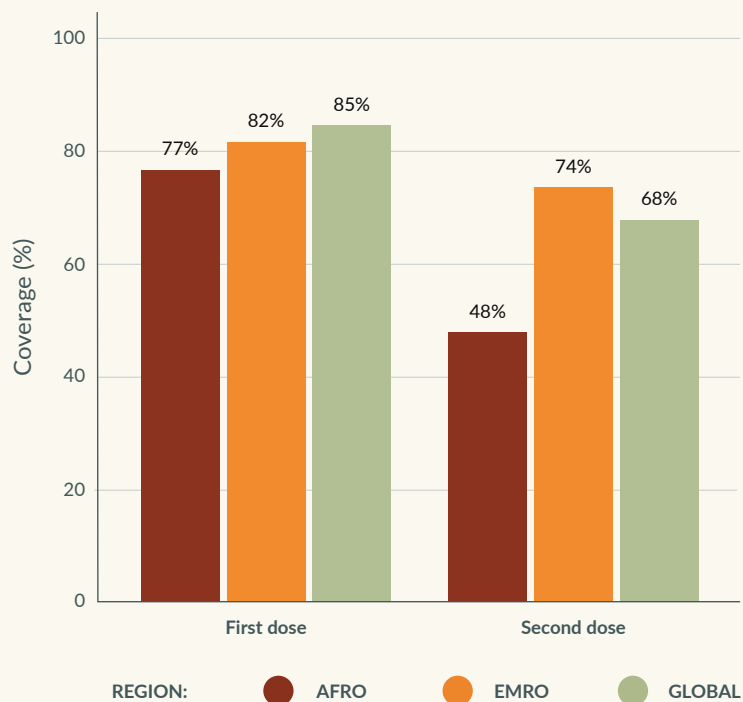
The hexavalent hope and its limitations

The introduction of hexavalent vaccine—combining six antigens including inactivated polio vaccine into a single injection—has generated optimism as a potential solution to multiple challenges. The vaccine simplifies schedules, improves acceptance (by offering what are perceived as more sophisticated products equivalent to those used in

industrialised nations), needs fewer injections, and ensures inactivated polio vaccine protection is bundled with other essential antigens.

Yet, viewing the new hexavalent vaccine as a “magic bullet” reflects linear thinking that oversimplifies complex realities. The vaccine will not fundamentally transform the ability to reach zero-dose children; coverage will likely float

Inactivated polio vaccine (IPV) coverage, 2024



AFRO = WHO Africa office; EMRO = WHO Eastern Mediterranean office.

Source: WHO and UNICEF estimates of national immunization coverage (WUENIC).

at whatever levels a country is achieving through its existing combined vaccination systems. What hexavalent vaccine may accomplish is ensuring that when remote populations are reached, the opportunity for at least some polio protection is not missed. Supply and funding constraints are likely to persist, maybe for years; the price differential compared to current vaccine combinations remains substantial.

Middle-income countries might face an additional risk: under Gavi's 6.0 plan, contributions to inactivated polio vaccine could decrease, further jeopardising the financial sustainability of polio vaccination coverage in environments where resources are tightening.

There is a much fuller analysis of the role of hexavalent vaccine set out in the 24th IMB report derived from discussions at the joint IMB-TIMB meeting in July 2025. Therefore, it is not reiterated here.

Integrated surveillance: capturing a global public good

When the TIMB began its work, dealing with a more visionary, idealistic and optimistic Polio Programme, it sought to answer a question fundamentally

different from the IMB's straightforward mandate of tracking poliovirus elimination.

To provide focus, the TIMB identified two potential global public goods that might emerge from the Polio Programme's four-decade investment: first, polio eradication itself, and second, the creation of a comprehensive surveillance system for communicable diseases that would serve global health far beyond polio's narrow parameters.

The second was deliberately expansive. The TIMB envisioned a system uniting fragmented surveillance mechanisms for HIV, tuberculosis, emerging pathogens, and vaccine-preventable diseases into an interoperable whole—a modern platform maximising digital approaches, incorporating routine genomic profiling, and providing comprehensive data integration across disease programmes and geographic boundaries.

Some specialists in other disease areas responded enthusiastically, recognising the value of escaping vertical programme constraints. Leading technical experts at CDC and WHO began articulating this vision as a Global Integrated Communicable Disease Surveillance System. All seemed to be on track for something truly transformational and for placing a jewel in the crown of the polio legacy.



The TIMB viewed the rate-limiting factors as surmountable: achieving interoperability across existing platforms and navigating national preferences for established working methods. At the time, even financing it seemed manageable given that the global health security imperative and its powerful incentives, including mitigating the savage impact of pandemics on national economies, created a strong case for national investment in disease detection infrastructure.

From grand vision to alternative vision

What has actually occurred over the years is neither explicit rejection nor systematic implementation. The ambitious vision contracted through initial organisational drift in the focus of polio transition, the absence of sustained institutional ownership and COVID-19 displacement. No single entity immediately assumed responsibility for the complex coordination, cross-disciplinary problem-solving, and engagement with diverse scientific and digital expert communities that such transformation required.

The initiative fragmented.

When the TIMB subsequently requested progress updates on integrated surveillance development, reports thereafter

only focused on childhood vaccine-preventable disease surveillance—impressive technical work, but representing significant scope reduction from the original vision. The broader aspiration of building comprehensive, integrated capacity addressing the full communicable disease spectrum had given way to more limited objectives centred on preserving and building upon polio surveillance assets and those elements that provided incidental surveillance coverage of other diseases.

The galvanising effect of IA 2030

Meanwhile, work was proceeding within WHO to develop a formal Global Strategy on Comprehensive Vaccine-Preventable Disease Surveillance. This strategy, which complements the Immunization Agenda 2030 (IA 2030), provides precisely the kind of structured framework that the TIMB had advocated for, though focused specifically on vaccine-



preventable diseases rather than the entire communicable disease landscape that the TIMB originally envisioned.

The strategy presents a clear aspiration: that all countries possess comprehensive, high-quality, sustainable vaccine-preventable disease surveillance systems, supported by strong laboratory networks. The aim is that such systems should detect and confirm cases and outbreaks. They should capture actionable data so as to guide outbreak prevention and response, optimise immunisation programmes, and provide the basis for vaccination policy decisions.

This is substantial conceptual and technical work. The strategy intends that comprehensive vaccine-preventable disease surveillance in country, regional and global systems should meet WHO-recommended standards for priority diseases—as each country defines them—with integration of surveillance functions across diseases wherever feasible. The term “comprehensive” signifies that surveillance for all priority vaccine-preventable disease, whatever form it takes, should be integral to overall surveillance and vaccine programme strategy.

What comprehensive surveillance provides

The strategy articulates multiple critical surveillance purposes. Systems should rapidly identify outbreaks of epidemic-prone vaccine-preventable diseases—polio, measles, meningococcus, cholera, typhoid, yellow fever, diphtheria, and pertussis—enabling immediate action, including reactive vaccination campaigns. Surveillance should identify unreached and under-immunised populations through triangulation with vaccination coverage, vaccine supply, and clinical administrative data, informing targeted delivery strategies and programme improvement.

For diseases under elimination or eradication mandates—polio, measles, rubella, and neonatal tetanus—surveillance monitors progress toward global and regional goals. For vaccine introduction decisions, surveillance determines disease burden and epidemiology, particularly important for pneumococcus, rotavirus, and future vaccine programmes. Surveillance identifies circulating pathogen strains and tracks strain changes after vaccine introduction, guiding vaccine choice and development.

Surveillance generates evidence on vaccine impact and guides optimal vaccine use, including defining high-risk groups and

modifying vaccine schedules as disease epidemiology changes with programme implementation.

A practical framework: four-tier approach

Recognising that countries differ markedly in surveillance capacity, disease burden, resources, and income levels, the strategy proposes a tiered framework providing both realism and common direction.

Tier 1 encompasses countries with limited surveillance capacity, high communicable disease burden including polio, low- or lower-middle income status, and often fragile contexts. These countries should achieve minimum surveillance standards for at least five vaccine-preventable diseases—including polio, measles and neonatal tetanus. They require high levels of external financing and technical assistance.

Tier 2 countries possess some surveillance capacity, face high disease burden and risk, and have lower-middle income status. They should achieve minimum standards for at least seven vaccine-preventable diseases with moderate external support.

Tier 3 countries demonstrate stronger surveillance capacity, face moderate disease burden requiring support for specific vaccine-preventable diseases, and have upper-

middle income status. They should implement minimum or enhanced standards for all priority vaccine-preventable diseases—at least 10—with low external support needs.

Tier 4 countries possess high surveillance capacity, face low disease burden and risk, and have high income status. They should maintain national systems beyond minimum standards—at least 15 vaccine-preventable diseases—coordinating with other communicable disease surveillance and supranational entities, requiring minimal or no external support.

Within this framework, countries determine their own priorities, selecting which vaccine-preventable diseases warrant surveillance based on a wide range of considerations including: epidemic potential, International Health Regulations requirements, disease burden and endemicity, severity and case fatality, potential for emergence of virulence or changing disease patterns, social and economic impact, public perception of risk, and logistical feasibility.

Integration as efficiency, not uniformity

The strategy emphasises integrated surveillance not as an end in itself but as a means to strengthen and broaden systems through streamlined processes and efficiency gains across

multiple diseases. It recognises the economic opportunity gained by establishing horizontal links between historically vertical programmes. Integration occurs through surveillance support functions rather than forcing uniform approaches to disease-specific surveillance.

These support functions span eight domains:

- **Governance** includes standards, guidelines, policies, laws, mandates, roles and responsibilities, and funding;
- **Programme management** encompasses budget creation, resource mobilisation, financial management, sustainability, infrastructure and equipment management, human resources, and external surveillance assessments;
- **Workforce capacity** involves training at all levels and staff for core functions—case detection, notification, investigation, reporting, and response, plus epidemic preparedness;
- **Laboratory integration** includes specimen collection kits, reagents, supplies, equipment, physical space, training, personnel, expansion and diversification of networks, shared procurement processes, and quality management systems;

- **Field logistics and communication** covers airtime and internet for notification and reporting, specimen collection and transport, and feedback of results;
- **Supervision** involves supportive visits, work plans, and checklists;
- **Data management and use** encompasses information system development, data harmonisation, implementation, and use for performance improvement;
- **Coordination** links surveillance programmes to relevant stakeholders for data review, dissemination and use, improvement planning, and positioning surveillance strengthening as core to the International Health Regulations implementation function including rapid response teams and Emergency Operations Centres.

The strategy explicitly acknowledges differential disease requirements. Polio eradication demands extraordinary depth—every sample tested, every case intensively investigated, weekly case-level reporting. Measles and rubella require priority attention for elimination commitments, but not polio's granularity. Yellow fever merits substantial investment in endemic regions but not global intensive surveillance.

This resource-conscious approach rejects the notion that integration means applying uniform standards regardless of programmatic need or feasible resource allocation.

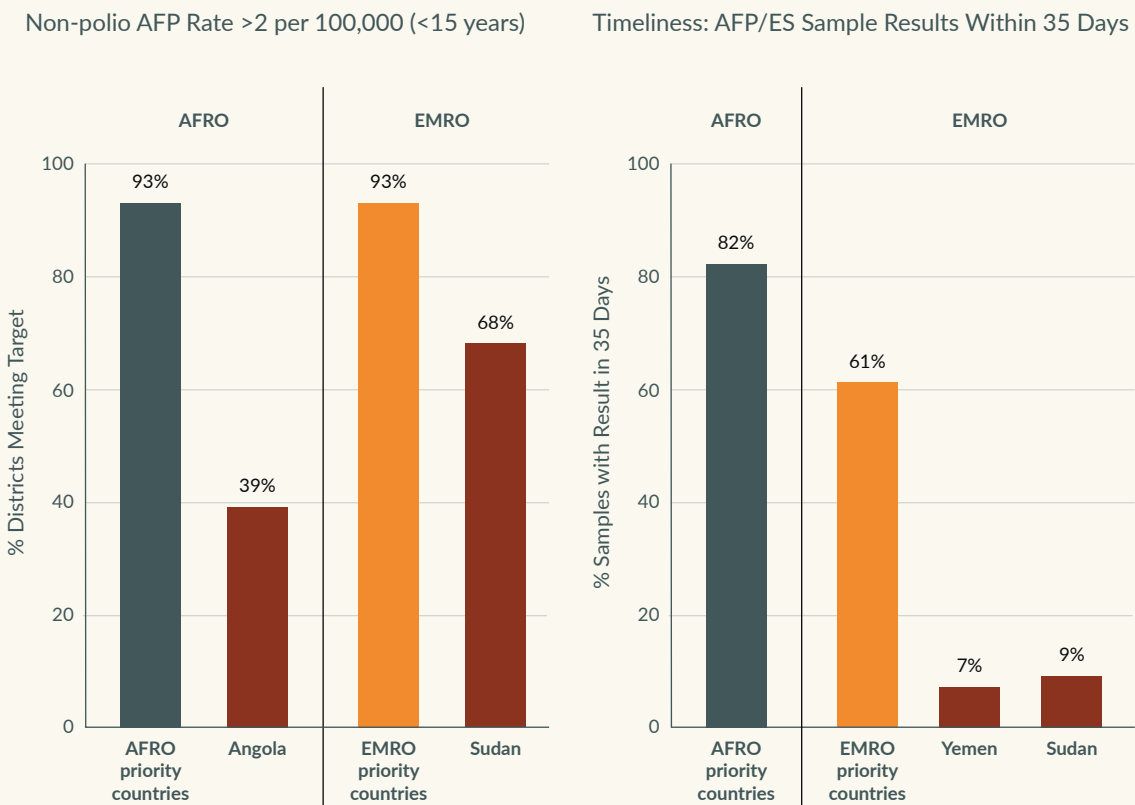
The strategy articulates five main objectives, each with specific priority activities that countries and partners should pursue.

The sustainability challenge pervades all aspects: workforce retention as external salaries disappear, laboratory equipment maintenance after emergency funding ends, continued operation of reporting systems without incentive payments, and preservation of coordination functions as vertical programme support contracts. The strategy emphasises domestic

financing, but the pathway from current heavy external dependence to sustainable domestic ownership remains uncertain for many countries, particularly in lower-income tiers.

Several critical actions would strengthen prospects for successful implementation. First, establishing clear mechanisms for countries to assess their

Polio surveillance performance in priority countries, showing outliers



AFP = Acute flaccid paralysis; ES = Environmental surveillance; AFRO = WHO Africa office; EMRO = WHO Eastern Mediterranean office.
Source: Derived from WHO Polio Transition Progress: Monitoring and Evaluation Report Q1 2025.

tier placement and access corresponding technical assistance and financing support. Second, creating transparency around implementation progress through regular reporting on the global indicators and additional metrics assessing workforce adequacy, laboratory capacity, data system functionality, and financing sustainability. Third, ensuring donor coordination to avoid siloed funding that undermines integration while providing adequate total resources for countries that cannot yet fully finance their surveillance systems. Fourth, addressing the human capital sustainability challenge through

mechanisms that enable countries to retain experienced surveillance personnel as external programme compensation ends.

Implementation experience: Africa

The WHO Africa Region has an example of integrated surveillance through the Integrated Disease Surveillance and Response system. Created as a strategy before COVID-19, but implemented around 2000, it has been adopted by 46 of the 47 WHO African Region member states, with only Algeria operating outside the framework.

The Integrated Disease Surveillance Response system seeks to achieve genuine integration at operational level. Healthcare workers at facility level receive training in standardised case definitions for all priority diseases simultaneously—acute flaccid paralysis in polio, measles, yellow fever, and numerous other conditions. These definitions are consolidated into single reference documents available in consultation rooms. Case detection uses unified registers. A single reporting stream carries information from facility to district level regardless of disease. Detection and reporting functions are genuinely harmonised.

At district level, the system relies on designated surveillance officers—government employees with specific surveillance responsibilities rather than staff for whom disease reporting is an additional duty. These officers maintain reporting networks comprising health facility staff, specialists in secondary and tertiary hospitals, and community contacts. When cases are detected, the intention is that district rapid response teams will mobilise for investigation, drawing on both immunisation officers and surveillance personnel. National-level surveillance capacity tries to mirror this structure with dedicated surveillance departments or divisions staffed by designated officers.



Information flow from facility, through district to national level, follows unified pathways for all diseases under Integrated Disease Surveillance and Response coverage.

However, experience reveals sustainability challenges plaguing nominally integrated systems. During its first decade, when USAID provided substantial funding channelled through WHO, the system performed well. When that external financing ended, Integrated Disease Surveillance and Response performance reduced markedly. Countries are struggling with enhancing surveillance performance precisely because that infrastructure, while under national ownership in theory, depends on external resources in practice.

Implementation depth varies considerably, with a minority of countries achieving the target of at least 90% implementation coverage at peripheral levels—where disease detection first occurs. Critical gaps persist in event-based surveillance, data quality, laboratory linkages, and timely outbreak response.

Nor does the Integrated Disease Surveillance and Response system have the robust technical support necessary for high-quality disease surveillance. Consequently, some disease-specific programmes have established parallel surveillance systems rather than relying

entirely on Integrated Disease Surveillance and Response platforms. This creates precisely the fragmentation and duplication it was designed to eliminate.

For polio specifically, the requirements extend beyond passive case notification to encompass active acute flaccid paralysis surveillance with rigorous case investigation, stool specimen collection within 14 days of paralysis onset, environmental surveillance through systematic sewage sampling, and specialised laboratory networks providing viral isolation, intratypic differentiation, and genomic sequencing.

These intensive surveillance requirements, sustained over decades through dedicated Polio Programme resources and technical expertise, will not be able to easily transfer to the generic Integrated Disease Surveillance and Response platforms without substantial capacity building, sustained funding, and technical support mechanisms currently not reliably present in most of the implementation.

This experience suggests that successful surveillance integration requires not merely structural reorganisation but fundamental strengthening of core surveillance system capacities. The polio



transition pathway must ensure that polio's sophisticated surveillance capabilities—built painstakingly over decades—do not erode through premature integration into systems lacking the specialised technical support, laboratory capacity, and operational resources necessary to maintain surveillance quality standards essential for outbreak detection and eradication verification.

WHO's Africa regional office currently faces the challenge that a new terminology and framework—"collaborative surveillance" has recently been introduced. This risks disrupting systems countries have internalised over two decades. While the collaborative surveillance principles closely resemble the Integrated Disease Surveillance and Response's integrated approach, introducing new concepts creates confusion in countries that understand and implement the existing system.

Regional paradoxes and persistent challenges

The Eastern Mediterranean Region presents a contrasting picture. Integration of surveillance often correlates inversely with resource intensity. In countries where polio investment has been modest, surveillance systems tend toward greater integration by necessity. Governments lacking resources for separate teams create unified systems

that are more integrated even if less elaborate than structures in endemic countries.

Conversely, in countries receiving massive polio investment—Afghanistan and Pakistan—systems mostly operate separately. Polio acute flaccid paralysis surveillance infrastructure is largely independent of surveillance for hepatitis, measles, influenza, and other diseases. Were polio funding to cease tomorrow, these other surveillance functions would continue unaffected because they are entirely separate.

This creates a perverse dynamic: in some countries with the most advanced polio surveillance assets integration has been prevented by vertical programme design. Assets exist outside national health systems, supported by international funding, staffed by externally employed personnel, using independent reporting mechanisms and tools.

India's recent experience illustrates this challenge. As the government moves to take over polio surveillance systems—widely cited as a model for asset retention—the outcome reveals



the problem: government will use the system but cannot guarantee to employ the experienced personnel who operate it. Their compensation packages usually exceed government salary structures. The system survives; the human capital animating it may not.

Laboratory progress and limitations

At laboratory level, selective progress toward surveillance integration has occurred, driven by pragmatic necessity rather than strategic design. The measles laboratory network's rapid shift

to COVID-19 testing during the pandemic demonstrated that de facto integration capabilities existed before formal frameworks acknowledged them. Regional laboratory coordinators increasingly oversee multiple disease programmes simultaneously rather than focusing exclusively on single pathogens.

Current work focuses on identifying efficiency gains through consolidated laboratory approaches: joint or single accreditation visits covering multiple disease networks rather than separate inspections; aligned documentation and checklists

across disease programmes; coordinated capacity-building initiatives. These represent meaningful steps toward integration, though they remain incremental and somewhat ad hoc rather than components of a comprehensive strategic framework.

Molecular testing capacity in countries presents both opportunity and risk. Polio investments support PCR (polymerase chain reaction) machines and sequencers in numerous laboratories. COVID-19 response created additional molecular diagnostic capacity across much of the world. The challenge now is preventing these assets from becoming museum pieces—maintaining and utilising equipment after the emergency funding that procured it disappears. WHO laboratory networks work to preserve such capacity and expand its application to other diseases, but sustainability remains uncertain without committed national or international financing.

Environmental surveillance (wastewater and sewage sample testing) expansion beyond polio exemplifies the cautious, disease-specific approach now characterising integration work. While polio has demonstrated environmental surveillance value as an early warning system—particularly because only one in a thousand poliovirus



infections produces clinical disease—applicability to other pathogens requires careful assessment. For measles, where most infections in unvaccinated persons produce clinical disease, environmental surveillance may add limited value. For typhoid or other conditions, its utility remains under evaluation. The infrastructure exists but strategic decisions about optimal deployment continue to evolve.

The surveillance workforce as legacy and risk

Perhaps polio's most durable surveillance legacy is human rather than infrastructural. Numerous senior programme leaders began their careers as district-level surveillance officers in polio programmes. This career pathway created cohorts of surveillance professionals who contributed substantially to public health across disease areas. The value of this human capital deserves more recognition as a key component of the Polio Programme's legacy.

The surveillance officer role itself—particularly as developed in polio programmes—has been innovative in disease monitoring. High-income country systems rely on clinician reporting with predictable under-reporting. In contrast, polio surveillance officers actively maintain reporting networks, provide continuous reinforcement and

awareness-building, investigate cases immediately upon notification, arrange specimen collection and transport, and produce detailed case documentation. This active surveillance model generates granular data enabling not merely case counting but sophisticated understanding of transmission dynamics, risk factors, and intervention opportunities.

The IMB's own analysis of five years of acute flaccid paralysis case reports from surveillance officers—documenting that 89% of confirmed polio cases occurred in Pashtun

communities—demonstrated the value of comprehensive case investigation data for programme targeting. This finding was not identified by the Polio Programme's own data analysis. It illustrates both the richness of information available through intensive surveillance and the programme's epidemiologically-centric behaviour, marginalising human factors insights. The GPEI's failure to mainstream use of social surveillance data is inexplicable and one of the many lost opportunities for polio eradication.



Data systems: partial success, persistent obstacles

WHO has achieved partial success in global-level surveillance data aggregation through the WHO Immunization Information System, which links regional databases into a unified global platform—less detailed than the POLIS system for polio but providing a so-called “single source of the truth” for measles, rubella, and other vaccine-preventable diseases.

Sentinel site surveillance data flow quarterly or biannually, providing additional information on specific pathogens.

International Health Regulations mandate reporting of epidemic-prone diseases, creating another data stream. Multiple platforms thus exist, each serving particular purposes, but they operate semi-independently rather than as components of unified architecture.

The feasibility of a single, universal system appears increasingly doubtful. National governance frameworks impose legal constraints on where data can be stored and what information can be transferred internationally. Countries legitimately resist sharing all surveillance data globally, and WHO cannot compel disclosure

without specific International Health Regulation obligations.

Creating standardised systems across diverse national contexts risks breaking functional arrangements that work locally. Past attempts at universal platforms have typically resulted in double entry, extended time lags, and eventual abandonment.

The pragmatic alternative involves interoperability rather than uniformity—systems that differ nationally and regionally but translate outputs into compatible formats for aggregation at appropriate levels. This approach accepts heterogeneity as inevitable while ensuring essential information flows where needed. It lacks the elegant simplicity of a single system but may represent the only achievable path forward, if it remains an aspiration of global strategy.

When to activate the health emergencies function for polio outbreaks

One of the most fundamental questions confronting polio transition concerns the role of WHO's Health Emergencies Programme in absorbing outbreak response functions currently managed by specialised polio



teams. This, of course, was part of the plan for when wild poliovirus was eliminated and a new arrangement (after the GPEI had dissolved) had to be established for the path to the post-certification polio-free world. The failure so far to stop the wild poliovirus and the remarkable, unanticipated and prolonged surge in vaccine-derived poliovirus have put this plan on hold.

Yet it is a matter of when, not whether, teams within individual countries will assume responsibility and accountability for dealing with polio outbreaks with technical advice and support from WHO Health Emergencies teams at global and regional level.

Whilst there is a staffed health emergencies function in some countries, few, if any, as currently constituted, have the capacity, capability and resources to absorb the scale and scope of polio outbreak responses required. This reflects not organisational deficiency but an honest recognition of the complexity of the task, bandwidth limitations and operational realities facing emergency response teams already stretched across multiple vaccine-preventable disease outbreaks and other health crises.

Vaccine-derived poliovirus outbreaks present unique challenges distinct from both endemic wild poliovirus transmission and typical health emergencies. These outbreaks signify system failures—evidence

that routine immunisation has not maintained population immunity levels sufficient to prevent vaccine-derived poliovirus circulation.

Controlling such outbreaks demands sophisticated technical responses. They include: combining rapid case detection through sensitive acute flaccid paralysis surveillance, extensive environmental surveillance networks, specialised laboratory capacity for viral characterisation and genomic sequencing, and meticulously planned supplementary immunisation campaigns targeting appropriate age cohorts with the appropriate oral polio vaccine.

The operational intensity of outbreak responses varies enormously depending on outbreak size, geographical spread, population density, security conditions, and health system capacity. Controlling outbreaks in some countries requires resources far exceeding what a small, country-level integrated health emergency team could reasonably provide.

These settings demand:

- **Sustained field presence** maintaining operational coordination for extended periods rather than brief deployments;
- **Complex logistics management** ensuring cold chain maintenance, vaccine delivery to remote areas, and

coordination across multiple districts or provinces simultaneously;

- **Government engagement** at national and subnational levels requiring senior technical expertise and diplomatic skill to secure political commitment and resource allocation;
- **International partner coordination** managing relationships between organisations with distinct mandates and operational approaches;
- **Funding mobilisation** rapidly releasing financial resources and ensuring accountability across multiple funding streams;
- **Coordination** with neighbouring countries to cover larger geographical areas.

The stark reality is that current in-country health emergencies capacity, however skilled in crisis response, cannot simultaneously manage these sustained polio operations alongside ongoing responsibilities for other health emergencies.

The Polio Programme's preferred way forward seems to involve establishing closer collaboration mechanisms without premature functional transfer. WHO leadership has initiated discussions to develop templates and protocols for



seamless coordination between polio and health emergencies teams. However, this is an intermediate stage—not an immediate solution—requiring careful sequencing as wild poliovirus elimination progresses and outbreak response demands potentially diminish.

Poliovirus containment: a strategic victory being missed

Throughout the TIMB's monitoring period, containment has occupied an uneasy place in the polio transition

narrative: acknowledged as essential, technically sound in its framework, yet persistently marginalised in programme attention and country-level prioritisation. This positioning reflects a fundamental misunderstanding undermining the polio certification enterprise.

The containment challenge is straightforward but consequential. Even after wild poliovirus transmission ceases and vaccine-derived circulation is controlled, the poliovirus will persist in many facilities worldwide—research laboratories, vaccine manufacturing plants, and storage repositories across 21 countries. A large proportion is concentrated in high-income nations that eradicated polio

decades ago. The risks they pose will eventually be the only remaining pathway through which poliovirus could re-enter human populations.

Without systematic containment, the biological victory of eradication could be reversed by an institutional failure of biosecurity.

The 2022 Global Poliovirus Containment Strategy established three sequential goals designed to manage this risk.

Goal 1 addresses the continuous inventory of poliovirus-retaining facilities, a process that must persist as long as polio vaccines remain in use.

Goal 2 targets the certification of all designated facilities by 2026, requiring them to meet stringent biosecurity standards defined in the Fourth Edition of the WHO Global Action Plan for Poliovirus Containment (GAP IV).

Goal 3 encompasses post-certification maintenance arrangements that will operate indefinitely.

The parallel track opportunity

The polio containment strategy's most significant feature—and one that remains poorly understood even within the Polio Programme's leadership—is the independence of Goal 2 from polio eradication progress.

Unlike most polio transition functions that depend on achieving and maintaining polio-free status, facility certification can proceed regardless of wild poliovirus circulation in endemic countries or vaccine-derived outbreaks in previously polio-free areas.

The facilities requiring certification exist in countries far removed from current transmission zones: the United States with 22 facilities, France with 10, China with seven, the Russian Federation with seven, and smaller numbers across Europe and Asia.

This independence creates a strategic opportunity that the Polio Programme has largely failed to seize.

While eradication timelines repeatedly slipped and vaccine-derived poliovirus outbreaks multiplied, containment certification was consistently positioned with the potential to proceed on schedule, ready to deliver a tangible achievement that demonstrates programme competence and secures a critical component of the post-eradication architecture.

In the language that the IMB used in its September 2025 report, containment represents one of the few areas where the programme could genuinely resolve the morale-sapping position that it is “overdue another victory”.

The November 2024 recommendations from the Global Commission for Certification of Poliomyelitis Eradication emphasise the significance of the opportunity. The Commission clarified that containment certification is a prerequisite



for wild poliovirus eradication certification, extending this requirement to facilities retaining any poliovirus serotype—wild, vaccine-derived, or Sabin strains. Without containment success, there can be no certification of eradication success, regardless of epidemiological achievements in stopping transmission.

Progress and performance gaps

The current state of containment progress reveals a programme trajectory that virtually ensures failure to meet established milestones. As of October 2025, only two of the 71 facilities designated for certification have completed the process and received Containment Certificates. This is less than 3% achievement against the 2026 target, with the certification process typically requiring two to three years from initiation to completion. Several countries have not even commenced the certification process for their designated facilities.

The detailed facility inventory, compiled by WHO, documents the scale of the challenge. The 71 facilities currently designated globally include 49 laboratories, 17 vaccine production facilities and five storage-only facilities. Their distribution reflects historical patterns of polio research and vaccine production: 30 facilities in the European

Region, 24 in the Americas, 13 in the Western Pacific, three in South-East Asia, and one in the Eastern Mediterranean Region.

Progress varies dramatically across countries, revealing patterns that correlate neither with technical capacity nor with financial resources. Asian countries (Japan, the Republic of Korea), as well as Belgium, demonstrate the most consistent advancement, having reduced facility numbers dramatically through consolidation and also initiated certification processes systematically. Other European countries show mixed performance despite possessing robust biosecurity infrastructure.

The United States, France, China, and the Russian Federation—collectively accounting for 46 of the 71 facilities—record progress that ranges from steady to virtually stalled.

The gap between current achievement and 2026 targets has become sufficiently wide that the WHO leadership acknowledges that the milestone will require revision. However, this concession comes with the recognition that excessive timeline extension risks signalling to Member States that urgency has dissipated, potentially slowing already inadequate momentum further.



Worse, the Polio Programme's reputation has been damaged as a result of rolling forward other deadlines with no convincing rationale for how progress will be made and then missing the new ones that it has set. Wider credibility is at stake.

A political awareness deficit

The TIMB's view of containment implementation challenges is that they pose a problem fundamentally different from those afflicting other polio transition workstreams.

Unlike essential immunisation integration, which struggles with technical complexity and resource constraints, or surveillance sustainability, which confronts genuine capacity limitations in fragile health systems, containment faces a deficit of political awareness and prioritisation rather than lack of progress centring purely on capability or funding.

This distinction is crucial. The facilities requiring certification exist in some countries with sophisticated regulatory systems, advanced scientific infrastructure, and substantial fiscal capacity.

These are not all nations requesting external assistance to build containment capability. Many are high-income countries that have successfully eradicated polio from their territories and maintain world-class research and manufacturing facilities. Indeed, the laboratories and production plants in question already operate under stringent biosecurity protocols for multiple pathogens.

The containment challenge in these contexts is not technical compliance—facility operators understand biosecurity requirements and generally accept their validity. Nor is it financial—



countries are financing their own certification processes without seeking international donor support. The challenge is political prioritisation at the level where ministerial decisions enable or obstruct progress.

National Authorities for Containment (NACs), as technical bodies responsible for driving certification processes within countries, do not have much political leverage. This structural weakness creates a disconnect: the technical expertise exists, the regulatory framework is established, and the resources are available, but the political imperative to execute is absent.

Several country examples illuminate this pattern. China maintains seven designated facilities, including six vaccine manufacturers, one of which produces vaccines used by the global programme. The Chinese National Authority for Containment has been established and functions technically, but it seems to lack sufficient political authority to accelerate implementation across multiple ministries and state-owned enterprises that control facility operations. Despite evident capability, there appears to be systematic delay.

Romania has a different manifestation of the same structural problem. Its designated facility operates under the Ministry of Defence rather than the Ministry of Health.

This creates jurisdictional complications that technical representations from WHO, even at high level, have not yet resolved.

The United States of America is perhaps the most complex containment situation. Unlike virtually all other countries with designated facilities, the country lacks a national policy framework that can centrally regulate facility operations. This reflects the federal system's distribution of authority, resulting in the United States maintaining 20 designated facilities—more than any other country—spread across multiple states and operating under diverse regulatory arrangements. The CDC-led (Centers for Disease Control and Prevention) National Authority for Containment has worked systematically to encourage voluntary compliance, but in the absence of federal enforcement authority, progress depends too much on institutional self-motivation and concern about legal liability rather than regulatory requirement.

In addition, CDC now sits in a turbulent and uncertain period of United States global health policy, whereby the continuation of its important traditional international leadership role is in doubt.

The GPEI seems to have relegated containment to secondary status within programme communications. This creates a self-reinforcing cycle: limited emphasis from

global programme leadership signals to national governments that containment lacks urgency, which in turn justifies continued low prioritisation in programme planning and advocacy.

This dynamic contrasts sharply with containment's structural position within the certification architecture.

The research restriction debate

The TIMB's previous report noted concerns about potential tension between containment requirements and essential research activities, reflecting representations from certain members of the polio research community, particularly those based in North America. The investigation of these concerns reveals a more complex reality than simple regulatory obstruction.

The complaints originate primarily from researchers in the United States, where the absence of national containment policy creates uncertainty about facility requirements and timelines. Several United States-based laboratories have received private foundation funding for polio-related research but face institutional pressure to cease or relocate poliovirus work due to legal liability concerns rather than WHO containment policy requirements.

The distinction is significant: containment policy provides waiver mechanisms for essential research activities and has approved novel vaccine development work, including novel oral polio vaccine research that requires live poliovirus manipulation.

WHO's containment team reports no instances where certification requirements have prevented essential research from proceeding. Waiver mechanisms accommodate research activities judged necessary for programme objectives. The perception of restriction appears to reflect institutional risk management decisions within research organisations rather than WHO policy constraints, compounded by the fragmented United States regulatory environment that creates genuine uncertainty about compliance pathways.

This clarification does not dismiss research community concerns entirely. The lack of policy clarity in some jurisdictions, combined with extended timelines for certification decisions, creates legitimate planning challenges for multi-year research programmes.

Biosecurity challenges

A past Belgian facility incident referenced in an earlier TIMB report illustrates the consequences of failure to prioritise the containment part of the polio transition task. An accidental release of

concentrated poliovirus into a river occurred in an area where, downstream in the Netherlands, religious communities maintain low immunisation coverage for philosophical reasons. Whilst this is now regarded as a “near miss”, there is no doubt that there was a real and present danger at the time. A large outbreak of paralytic polio in a high-income country would be a major scandal and a big problem for the government of that country.

One difficulty may be the reluctance of some countries and their institutions to relinquish laboratory facilities and associated scientific capacities. Unlike the precedent set during smallpox eradication—where restricting virus retention to a small number of designated sites

was widely accepted—current geopolitical complexities and the global distribution of vaccine production infrastructure may make poliovirus stock reduction more challenging. There is a risk that some stakeholders will prioritise national biosecurity interests and technological capabilities over global containment goals, perpetuating high levels of poliovirus beyond necessary timeframes and hampering unified risk reduction.

The knowing-doing gap

The containment challenge exposes several themes that resonate across the TIMB's broader polio transition assessment. The gap between strategic articulation and



operational delivery, the prioritisation of process over outcomes, the weakness of accountability mechanisms, and the absence of genuine country ownership all manifest in containment implementation with particular clarity.

The pathway forward requires fundamental reframing of containment within the programme narrative and governance structure. It must be repositioned as an equal pillar of the certification enterprise.

This repositioning demands visible commitment from the highest levels of WHO leadership, systematic engagement with health ministers and heads of government in countries with designated facilities, and advocacy

mechanisms that connect containment requirements to global health security frameworks commanding political attention.

Preparing for withdrawal of oral polio vaccine

The final withdrawal of oral polio vaccines from routine immunisation schedules will be the culmination of the polio eradication enterprise, yet paradoxically it will also inaugurate the most hazardous period in the Polio Programme's history. This stage—when wild poliovirus transmission has been certified as interrupted, all vaccine-derived outbreaks

controlled, and the decision taken to cease oral vaccine use entirely—demands exceptional preparation, sustained financing, and irreversible political commitment.

Those not familiar with the goals of polio transition often assume that this oral polio vaccine cessation is a threshold to be crossed, after which surveillance can ease and programme intensity can diminish. Of course, the epidemiological and operational realities suggest otherwise: the post-certification phase requires intensified vigilance precisely when institutional momentum, donor attention, and financial resources are most likely to wane.

The greatest danger confronting post-certification arrangements may not be technical shortcomings but psychological—the inevitable erosion of vigilance once polio cases no longer generate headlines and political attention. Historical precedents from other disease elimination initiatives demonstrate how rapidly programme intensity dissipates once visible disease burden declines, even when risks of resurgence persist. Within the Polio Programme, the success of Nigeria in stopping wild poliovirus was followed by the country becoming the epicentre of transcontinental spread of the vaccine-derived poliovirus. Programme leaders in Nigeria have admitted that complacency was a major causal factor in this terrible occurrence.



For polio, the post-certification period will test whether global health governance can maintain indefinite commitment to functions that may generate no visible immediate benefit, but prevent catastrophic events.

The approaching cessation of bivalent oral polio vaccine differs fundamentally from the 2016 “switch”, when trivalent vaccine was replaced by its bivalent counterpart. That transition occurred while type 1 wild poliovirus remained endemic and type 2 vaccine-derived poliovirus outbreaks had not yet reached their current scale. Lessons from 2016’s implementation failures—documented extensively in an independent evaluation—revealed that insufficient pre-switch immunity, inadequate campaign quality in vulnerable countries, and premature withdrawal of preventive vaccination created conditions for explosive vaccine-derived poliovirus emergence across multiple continents.

The upcoming cessation confronts even more challenging circumstances. Population immunity in many transition priority countries has deteriorated further since 2016, essential immunisation systems remain fragile or dysfunctional in the highest-risk settings, and operational capacity to execute intensive preventive campaigns has contracted as Global Polio Eradication Initiative funding declines and partner agency capacity weakens.

Coordinated, intensive vaccination campaigns will be required across all vulnerable countries in the 18-24 months preceding cessation—targeting not only cohorts of children under five years but potentially extending to older age groups who experienced immunity gaps during years when preventive campaigns were not conducted due to outbreak response priorities or system weaknesses.

The operational scale will be staggering: multiple high-quality rounds reaching remote populations in conflict-affected zones, geographically isolated areas, and settings where routine systems chronically fail to deliver services.

Current polio transition planning provides no dedicated financing mechanism, no accountability framework, and no clear indication of how countries will receive the technical and financial support necessary for this pre-cessation immunity-building.

The stark reality is that perhaps 10-15 countries critical to global immunity protection will be unable to self-finance the intensive preventive campaigns required for safe cessation. These include both countries lacking fiscal capacity despite political commitment and those where authorities may not prioritise preventive vaccination sufficiently to allocate domestic resources even when fiscal space exists.

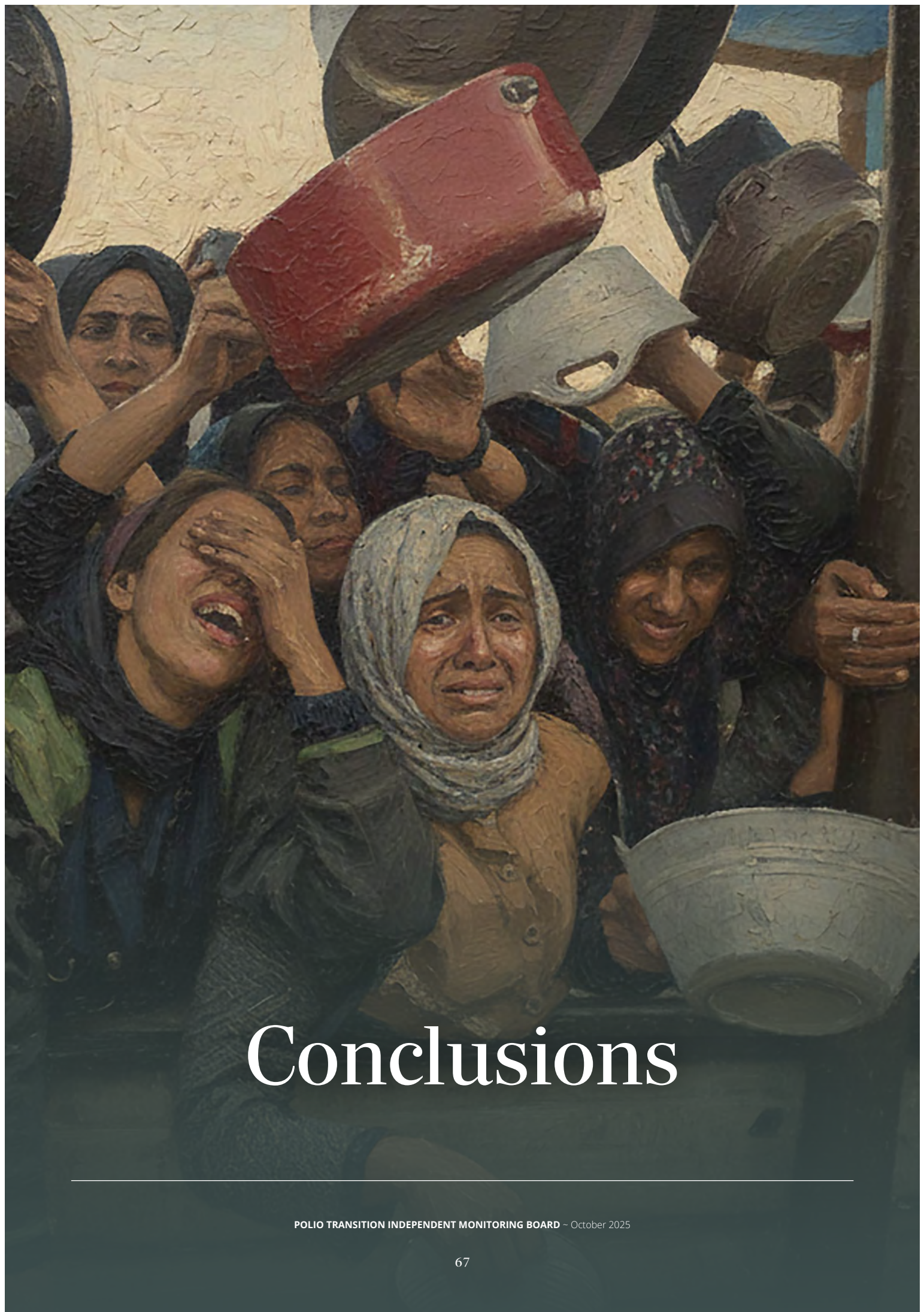




The technical and political feasibility of emergency-only oral vaccine strategies remains contested within polio technical advisory groups, with particular concern about response speed in fragile states lacking robust health infrastructure or facing security constraints that delay campaign implementation.

The TIMB's assessment is that current post-certification planning lacks the strategic clarity, institutional commitment, and financial architecture necessary to manage the extended period

between oral vaccine cessation and the distant future when poliovirus risks truly diminish to negligible levels. The planning documents acknowledge technical requirements yet provide insufficient detail on governance arrangements, resource mobilisation, and accountability mechanisms that would ensure sustained implementation.



Conclusions

Conclusions

Eight years into the Transition Independent Monitoring Board's mandate, the fundamental paradox of polio transition has become starkly clear: the Polio Programme was designed to build the foundation for its own obsolescence, yet it consistently prioritised speed over sustainability, vertical intensity over horizontal integration, and campaign efficiency over system strengthening.



The result is a polio transition process attempting to hand over assets that were never properly embedded in the structures meant to receive them.

This is not a failure of technical vision. The strategic frameworks exist, the monitoring mechanisms function, and the coordination structures operate. What persists is a failure of institutional clarity about what polio transition actually requires and how long genuine sustainability takes to achieve.

The gap between strategic articulation and operational reality, visible in the TIMB's first report in 2017, has widened rather than narrowed despite successive planning exercises, milestone revisions, and governance reforms.

The Global Vision: a framework seeking a path to transformation

The WHO's Global Vision for polio transition is a serious attempt by the Polio Programme to raise its game after repeated criticisms, including from within, that it lacks strategic clarity on its purpose, that it does not have a real-time nuanced understanding of the implications of polio transition country vulnerabilities, and that it is powerless to systematically drive change towards achievements of its goals.

The presentational products generated from working with the new framework are an impressive vehicle for demonstrating the direction of travel and laying out a self-assessment of the work of monitoring and evaluation.

This definitely marks improvement in a process that was previously ill-defined. However, its own monitoring reveals: little progress towards the Global Vision's three goals, continued country dependence on external support and national plans that are receiving limited attention and are certainly not a driving force towards self-sufficiency at country level.

Integration indicators are similarly concerning. While functional integration appears high—meaning polio staff work within broader health programmes—this often represents a practical accommodation rather than genuine systemic absorption followed by impact.

Most concerning are the finance data: across the Africa and Eastern Mediterranean regions, countries exhibit high reliance on external funding, with only a handful crossing 40% domestic financing thresholds for core polio functions. This reflects structural realities about fiscal capacity, political prioritisation, and the true costs of sustaining polio-essential functions.

Indeed, financial sustainability remains the most challenging aspect of polio transition implementation, with all reporting countries demonstrating significant dependence on external funding sources.

While the Global Vision framework has generated useful baseline data, it has not demonstrated capacity to accelerate progress toward national ownership and domestic sustainability that will ultimately determine polio transition success.

The fundamental question is whether the Global Vision provides a more effective path toward sustaining polio-essential functions than available alternatives. Early evidence is mixed.

Certainly, the vagueness on show at most of the earlier TIMB meetings has gone. At the time, repeated probing by stakeholders left the feeling that polio transition was a process in constant search of an outcome to attach itself to.

The theoretical distinction between the Global Vision's "how" and Post-Certification Strategy's "what" breaks down against operational realities. The relationship between these frameworks still requires an operating model to reduce duplication and enhance synergies, though it remains a serious option to unify the two strategies.

A sense of faltering momentum

The partial erosion of faith in polio eradication's achievability has consequences extending beyond programme morale. A decade ago, the collective belief that interruption of poliovirus circulation was imminent generated political investment, sustained funding commitments, and operational intensity that drove progress despite underlying system weaknesses. To some extent, that faith has dissipated, replaced by scepticism born of repeated deadline failures, proliferating vaccine-derived poliovirus outbreaks, and the visible fragility of gains in countries that cannot maintain immunity levels without continuous external support.

This shift occurs against institutional turbulence that compounds programmatic challenges. The withdrawal of United States government support—abolition of USAID, departure from WHO, uncertainty about CDC's international role—removes not merely funding, infrastructure and staff, but decades of technical leadership and partnership coherence. WHO regional offices face staff reductions approaching 40% through budget cuts and loss of seconded personnel. The technical agencies expected to guide countries through polio

transition navigate their own organisational turmoil while simultaneously supporting national systems through complex handovers.

Countries now confront the very challenge transition was meant to solve: maintaining population immunity against polio through routine systems that remain inadequate, in fiscal and political environments less favourable than when polio transition planning began, with diminished support from external agencies.

The mismatch between operating environments and transition assumptions

The TIMB's detailed examination of polio transition priority countries shows operating environments that fundamentally contradict the assumptions underlying transition planning. Across 21 countries, the convergence of armed conflict, political instability, mass displacement, humanitarian crises, and recurrent extreme weather events have created conditions that preclude the stable governance, functional health infrastructure, and sustained domestic financing that successful polio transition requires.

“The countries facing the greatest epidemiological risk are precisely those least capable of independent function management.”

This is not temporary disruption pending return to normality. These are structural features of contemporary geopolitics, weak governance and climate reality that will persist indefinitely. Conflict in Afghanistan, Pakistan, Democratic Republic of the Congo, Somalia, Yemen, Ethiopia, South Sudan, Mozambique, Syria, Burkina Faso, Cameroon, Central African Republic, Mali, Niger, Sudan, and Myanmar, in many cases, shows no trajectory toward early resolution.

Climate shocks intensify annually. Humanitarian emergencies in multiple settings exhaust government capacity and donor resources simultaneously.





Routine immunisation: the weight of unreasonable expectation

Without progressive improvement, resulting in strong routine immunisation systems, in the most vulnerable communities, it will not be possible to make the journey to a polio-free world.

It is not currently clear how a rising tide of coverage will be achieved.

The relationship between polio eradication and routine immunisation has evolved from tension, to integration in rhetoric, while maintaining insufficient implementation in practice.

Pursuit of the Polio Programme's goals has always leaned strongly towards campaign-based approaches optimised for speed rather than sustainability. This has created the inherent tension that persists: rapid intensive action versus strong lasting foundations.

The mix of strategic actions that has emerged—high inactivated polio vaccine coverage through routine systems, integrated campaigns combining oral polio vaccine with other antigens, but diminution of intensive standalone oral polio vaccine outreach—still leaves too

The aggregate impact renders most polio transition timelines deeply uncertain. Countries cannot achieve technical and financial benchmarks for self-sufficient delivery of polio-essential functions while managing existential threats to state functioning, population survival, and basic service provision.

System integration slows or reverses with each emergency. The prospect of domestic financing becomes implausible when governments struggle to maintain core functions. Even where national commitment exists, progress becomes episodic and regularly erased by national health crises.

Achieving polio transition's core purpose—strong, resilient, self-sufficient national health systems sustaining polio-free status—remains distant for most priority countries. Without substantial increases in domestic and international investment, accompanied by political will and capacity-building support, self-sufficiency will be incremental and protracted, with several high-risk environments requiring support well beyond current planning horizons. The pathway demands adaptive strategies, flexible timelines, and long-term partnership rather than uniform progression to GPEI exit and country autonomy.

many immunity gaps that create conditions for poliovirus circulation.

Five years after COVID-19 disrupted immunisation systems, coverage is not fully back to 2019 baseline levels. There is extensive sub-national variation in coverage, with unreached populations concentrated in precisely the fragile and conflict-affected settings that dominate the polio transition priority list.

Placing expectations of universally high coverage on a system still in recovery from the biggest shock to its functionality ever is unrealistic.

Hexavalent vaccine will make a contribution. It has operational advantages but will not be transformational in the short-term.

The weakest link in strengthening immunisation systems quickly enough to serve polio eradication and transition timescales is the softness of accountability mechanisms.

Without GPEI funding leverage, accountability structures for immunisation performance operate at high levels of generality through Immunization Agenda 2030 and World Health Assembly mechanisms. These function more as report cards documenting shortfalls than as active management systems compelling corrective action. They are far removed from the granular

performance management required to improve coverage in specific geographies or to investigate and resolve situations preventing particular populations from accessing services.

Despite strong global and regional leadership of essential immunisation strategy and highly committed country teams, routine immunisation systems are not yet equipped, nor funded, to deliver what the polio eradication and polio transition processes now require of them.

Surveillance: partial success, persistent fragility

The Global Strategy on Comprehensive Vaccine-Preventable Disease Surveillance is a substantial achievement in articulating vision, defining frameworks, and providing implementation guidance through its tiered approach. This addresses precisely the structured direction the TIMB advocated for, six years ago, though with reduced scope from the original vision of comprehensive communicable disease surveillance extending beyond vaccine-preventable diseases.

Implementation experience reveals both possibility and limitations. The Integrated Disease Surveillance and

Response system in Africa demonstrates that operational integration at scale is achievable when adequately resourced. Its performance degradation when external funding ended demonstrates that structural integration does not guarantee sustainability without committed domestic resources. The subsequent introduction of “collaborative surveillance” despite close similarities to Integrated Disease Surveillance and Response illustrates how proliferating initiatives can disrupt systems countries spent years internalising.

The integration paradox observed in the Eastern Mediterranean Region—where massive vertical programme investment correlates with less, rather than more, integration—raises fundamental questions about programme design. Systems built outside national health systems with separate human resources, reporting mechanisms, and management structures prove extraordinarily difficult to integrate regardless of effectiveness.

The Polio Programme’s human capital legacy—cohorts of trained surveillance officers who contributed broadly to public health—provides genuine value. However, this legacy faces erosion as compensation gaps between external programmes and government employment make retention very difficult. Unlike physical infrastructure that can be

maintained even if sub-optimally utilised, human capital dissipates when experienced personnel depart.

Laboratory integration shows selective progress driven by pragmatic necessity. Current work focuses on efficiency gains through consolidated approaches—joint accreditation visits, aligned documentation, coordinated capacity building. These represent meaningful incremental steps rather than components of comprehensive strategic transformation.

Funding constraints now define boundaries of the possible. Withdrawal of substantial United States government contributions to WHO has created a crisis atmosphere in which programmes really struggle.

The fragility of surveillance systems built on external funding is starkly apparent once that funding ends. Some countries, once supported by substantial GPEI resources, now operate without dedicated polio infrastructure. Surveillance reverts to government district officers who previously received incentives for reporting and specimen submission. Without those incentives, enthusiasm and quality decline. Yet, governments cannot afford to maintain external programme support levels. Adequacy of human resources, operational costs, reporting incentives, and specimen transportation—all deteriorate



when vertical programme funding withdraws. For countries such as these, when the funding is not channelled into integrated surveillance delivery, as one polio programme leader told the TIMB: “it doesn’t become an asset, it becomes a liability”.

This creates acute vulnerability in the most fragile states. Countries at lowest levels of per capita income would suffer catastrophically if polio funding ended abruptly. The next tier of countries demonstrate growing capacity for system ownership and have absorbed substantial surveillance infrastructure into government operations, though significant external support remains necessary. The trajectory suggests eventual sustainability, but the timeline remains uncertain.

The sustainability challenge extends beyond simple funding levels to fundamental questions of system design. Surveillance operations built separately from national health systems—with individual governance and work processes—cannot be readily integrated, irrespective of their efficacy or adherence to international standards.

The Global Strategy on Comprehensive Vaccine Preventable Disease Surveillance represents a major milestone, articulating a clear vision with pragmatic guidance and sound frameworks. Although its range is more restricted than the TIMB originally envisioned, it provides the kind of organised, graduated, holistic plan needed, with due consideration given to country capacity.

The key question is institutional and financial: whether the global health community will treat surveillance infrastructure as requiring sustained long-term investment, or continue approaching it as a series of vertical programme activities vulnerable to funding fluctuations and organisational fragmentation.

The health emergencies role: a continuation of watchful waiting

The expectation that WHO health emergencies teams will absorb polio outbreak response functions reflects misunderstanding of both current capacity and operational requirements. Health emergencies teams operate on rapid response models designed for short-duration interventions—deploying quickly, stabilising situations, withdrawing to address subsequent crises. This fundamentally differs from the sustained, resource-intensive campaigns required for controlling vaccine-derived poliovirus outbreaks that may require months of intensive field operations, complex logistics coordination, multiple vaccination rounds reaching millions of children, sophisticated surveillance networks, sustained government engagement, and cross-border coordination.

Regional experiences emphasise these constraints.

The reality is that current health emergencies capacity, however skilled in crisis response, cannot simultaneously manage sustained polio operations alongside ongoing responsibilities for Ebola, cholera, measles, yellow fever, other epidemic-prone diseases and non-communicable disease health emergencies.

The polio function within WHO must continue coordinating outbreak response mechanisms for at least the next two to three years until type 1 wild poliovirus elimination is sustained and the overall outbreak burden

diminishes sufficiently that specialised polio capacity can genuinely integrate into broader emergency response structures.

Premature functional transfer risks creating response gaps precisely when outbreak control demands remain high. The appropriate pathway involves establishing closer collaboration mechanisms and protocols for coordination between polio and health emergencies teams while maintaining specialised polio capacity until epidemiological conditions genuinely warrant absorption. This is an intermediate stage requiring careful sequencing rather than an immediate solution.



Containment: the strategic opportunity blind spot

Containment is perhaps the starkest example of the gap between strategic importance and programmatic prioritisation. The containment challenge is that even after transmission ceases, poliovirus persists in many facilities worldwide—research laboratories, vaccine manufacturing plants, storage repositories across 21 countries.

The November 2024 recommendations from the Global Commission for Certification clarified that containment certification is a prerequisite for wild poliovirus eradication certification, extending to facilities retaining any poliovirus serotype. Without containment success, there can be no certification of eradication success, regardless of epidemiological achievements. Biological victory could be reversed by institutional biosecurity failure.

Current progress reveals a trajectory virtually ensuring failure. As of October 2025, only two of 71 facilities designated for certification have completed the process. Certification typically requires two to three years. Several countries have not started the process.

The challenge is not technical compliance, capability, or financing. Facilities predominantly exist in countries with sophisticated regulatory systems, advanced scientific infrastructure, and substantial fiscal capacity. The challenge is political prioritisation at levels where ministerial decisions enable or obstruct progress. National Authorities for Containment frequently operate without the political authority necessary to compel facility action or secure ministerial attention. They function as technical advisory groups rather than empowered decision-making entities.

Containment's structural position within WHO shows additional vulnerabilities that compromise

implementation effectiveness. Recent organisational restructuring and budget reductions have reduced the WHO containment team from five staff members to one, even as the 2026 certification deadline approaches and facility numbers requiring oversight remain substantial.

If the Polio Programme cannot mobilise the wider political will necessary to secure containment certification in well-resourced countries with sophisticated biosecurity infrastructure, the prospects for sustaining more complex polio transition functions in fragile health systems appear even more remote.

**“The challenge of
certifying containment is
political prioritisation at
levels where ministerial
decisions enable or
obstruct progress.”**

The imperative of sanitary reform

The IMB and the TMB have long advocated for the need to address poor sanitary conditions in polio affected and polio vulnerable countries. It is striking that a key mode of transmission of the poliovirus has not been an imperative for action by the Polio Programme either on its own initiative, or by seeking to mobilise other partners and funding sources with the capability to get involved in building permanent sanitary infrastructure. The WASH (Water, Sanitation, Hygiene) programmes are delivered by UNICEF and bring benefits but are not sufficiently championed within the GPEI. The reform of water and sanitation systems in polio transition countries would be transformative in facilitating the journey to a polio-free world.

When the sun finally sets

The emergence of the “funding cliff”—a sharp decline in GPEI funding landing in 2027—adds urgency to all polio transition questions. Potential withdrawal of substantial United States funding, historically providing approximately 15% of WHO’s budget and substantial bilateral support to many transition priority countries, further compounds pressures.



This financial reality exposes the illusory nature of many transition assumptions.

The critical pre-switch vaccination campaigns required to achieve population immunity levels preventing vaccine-derived poliovirus emergence following oral polio vaccine cessation present particularly acute financing challenges. Self-financing will not be possible in perhaps 10-15 critical countries essential for global immunity protection. This requires a special funding initiative ensuring coordinated, adequately resourced vaccination campaigns across all vulnerable settings simultaneously. Without such coordinated financing and technical support, the vision of safe oral polio vaccine withdrawal remains aspirational rather than operationally achievable.

The prospect of dissolving the GPEI upon wild poliovirus elimination (the fabled “sunset” spoken of by GPEI leaders) is perhaps the most dangerous temptation facing Programme

leadership and donors. The hypothetical scenario—wild poliovirus disappearing unexpectedly tomorrow—would likely trigger powerful advocacy for rapid GPEI dissolution and transition of all functions to routine systems and generic emergency response mechanisms.

In the TIMB’s view, expressed consistently, the concept of GPEI dissolution should be a non-starter until epidemiological conditions genuinely warrant functional transfer. If dissolution proceeds prematurely due to donor pressure or partnership fatigue, the subsequent need to reconstitute coordinating mechanisms and partnerships when outbreaks inevitably occur will prove far more difficult than maintaining existing structures through the transition period. The strategic imperative is clear: avoid endorsing or supporting premature GPEI dissolution, thereby preserving options for programmatic continuity and partnership maintenance through the unpredictable post-wild-poliovirus-elimination period.

Programme receptivity to criticism and advice

Over the years, there has been little alignment between TIMB concerns and analysis and programmatic response and action.

In what may be the last freestanding TIMB report (the Polio Oversight Board governance review foreshadows this), this eighth TIMB report draws the Polio Programme's attention to the following imperatives that emerge from accumulated evidence:

- 1) Transition planning must acknowledge and accommodate extended timelines required for genuine sustainability rather than creating impressions of linear progress that do not reflect complex, iterative realities of health system strengthening.
- 2) Financing assumptions require fundamental revision. The expectation that countries will achieve 40% domestic financing for polio-essential functions within current timelines appears increasingly unrealistic given fiscal constraints and competing health priorities.
- 3) Containment requires immediate high-level political engagement.

Without systematic facility certification, the global community cannot certify wild poliovirus eradication regardless of epidemiological achievements.

- 4) The relationship between the WHO's Global Vision framework and post-certification strategy (*Sustaining a Polio-free World: A strategy for long-term success*) requires genuine operational consolidation rather than parallel coordination.
- 5) Strengthening routine immunisation so that it performs to a polio-elimination standard is the fundamental prerequisite, not currently able to be fulfilled.
- 6) Surveillance integration must prioritise sustainability over theoretical elegance. This means accepting heterogeneous national and regional approaches that translate outputs into compatible formats rather than imposing uniform systems that break functional arrangements. It also means recognising that systems built outside national health systems cannot easily be integrated regardless of sophistication, and designing future investments to embed within- rather than parallel to- government structures.

GPEI partnership mechanisms and coordination structures must be

maintained until epidemiological conditions warrant dissolution.

The measure of success and credibility

The ultimate test of polio transition is not whether strategic frameworks exist, monitoring mechanisms function, or coordination structures operate. The test is whether children in the most vulnerable settings receive vaccines that protect them, whether outbreaks are detected rapidly and controlled effectively, whether laboratory capacity built over decades continues serving public health, and whether the enormous investment in polio infrastructure leaves behind health systems stronger—not weaker—than before intensive vertical programming began.

By these measures, polio transition's success remains uncertain. Many countries cannot yet maintain polio-essential functions without external support. Routine immunisation systems have not recovered from pandemic disruption. Surveillance capacity risks erosion as external funding contracts and experienced personnel depart. Health emergencies teams cannot yet absorb outbreak response functions at the required scale. Containment certification proceeds too slowly to meet critical milestones.

These realities demand honesty about what remains achievable within realistic timelines and available resources, and what requires either extended international commitment or acceptance of reduced scope and scale. The programme confronts a choice between continuing to articulate aspirational goals that operational realities cannot support, or recalibrating expectations to match demonstrated capacity and securing commitments for sustained engagement at levels actually required for success.

As GPEI funding begins its projected decline and geopolitical pressures reshape the international development landscape, tolerance for incremental progress and sophisticated frameworks that do not deliver measurable improvements will diminish.

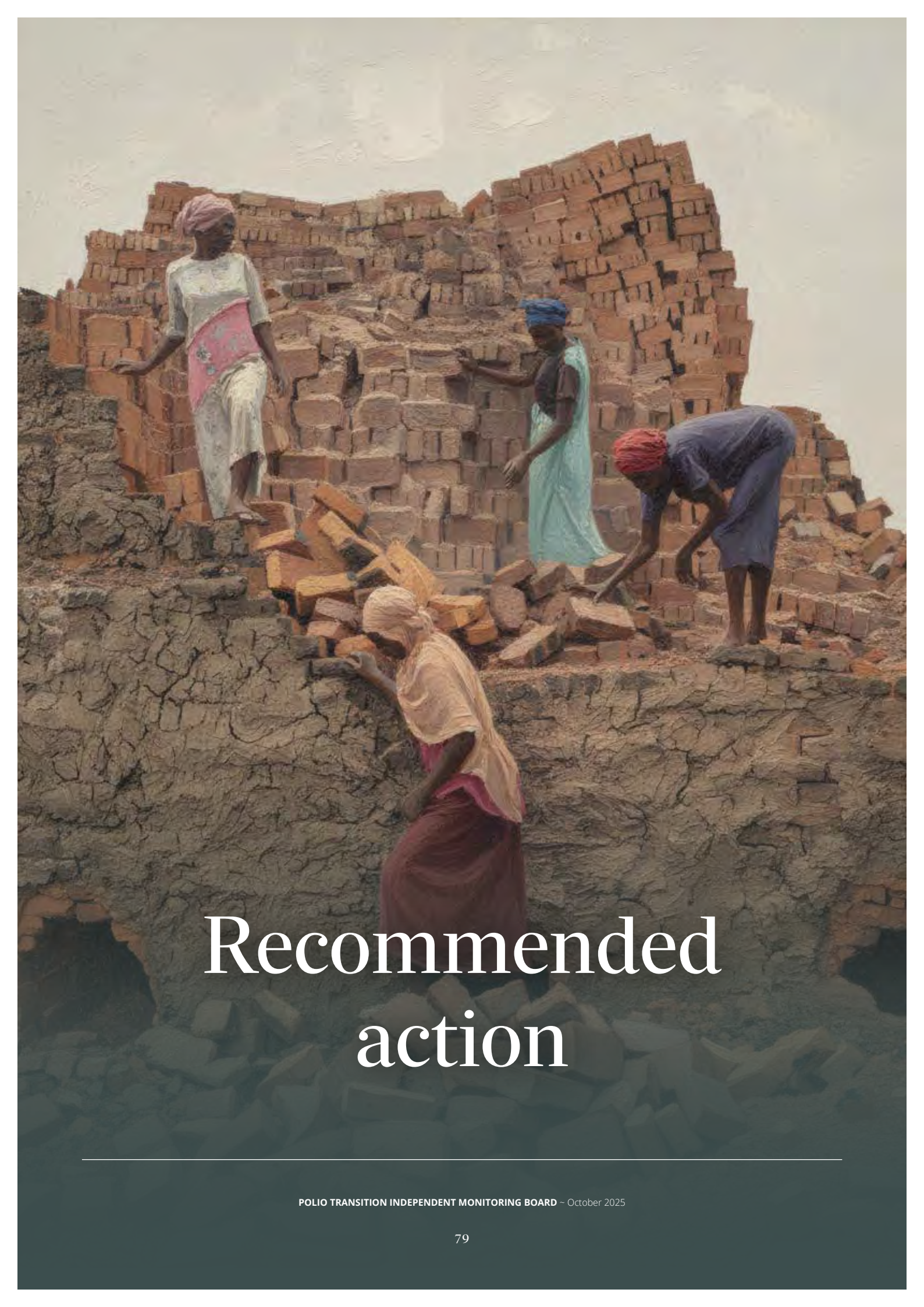
The architecture of resilience and the craft of permanence

The Polio Programme's greatest strength—its single-minded focus on interrupting transmission—has become polio transition's fundamental weakness. Eradication demanded thinking in campaign cycles and outbreak responses; preservation requires thinking in generations and institutional lifecycles. The TIMB's eighth report documents the consequences of attempting transition without first cultivating the temporal vision necessary for building enduring systems. The capability to future-proof, to design for continuity across political cycles, donor choices, and administrative upheavals—to

construct institutions resilient enough to outlive their founders—is a discipline that international health cooperation has allowed to wither even as the need for it has intensified. The question confronting polio transition, and the broader global health architecture it symbolises, is whether this discipline can be relearned before the window for preservation closes entirely.

“Eradication demanded thinking in campaign cycles; preservation requires thinking in generations and institutional lifecycles.”





Recommended action

POLIO TRANSITION INDEPENDENT MONITORING BOARD – October 2025

Recommended action

1. Recalibrate polio transition timelines to reflect operational realities.

WHO and GPEI partners should formally revise transition timelines and milestones to reflect the extended periods required for genuine sustainability in fragile and conflict-affected settings. This recalibration must:

- Acknowledge that “intermediate transition” represents not a temporary phase but a likely permanent arrangement for many countries, requiring sustained international technical and financial support;
- Establish country-specific timelines based on demonstrated capacity and capability, operating environment stability, and domestic financing trajectories rather than uniform programmatic targets;
- Create transparent criteria for determining when countries have achieved genuine self-sufficiency versus when they require continued external support;
- Communicate revised timelines openly to donors, governments, and stakeholders rather than maintaining aspirational goals that undermine credibility when repeatedly missed.

The current disconnect between stated timelines and operational capacity and capability creates planning distortions, undermines stakeholder confidence, and prevents honest resource mobilisation for actual requirements.

2. Secure dedicated financing for pre-switch vaccination campaigns.

WHO, in coordination with GPEI partners and major donors, must establish a dedicated

financing mechanism for intensive pre-switch vaccination campaigns required to achieve population immunity levels preventing vaccine-derived poliovirus emergence following oral polio vaccine cessation. This mechanism should:

- Identify the critical countries that cannot realistically self-finance intensive preventive campaigns yet are essential for global immunity protection;
- Provide multi-year funding commitments covering not only vaccine procurement but operational costs, technical support, social mobilisation, and quality monitoring;
- Coordinate campaign implementation across vulnerable settings simultaneously to prevent immunity gaps that create regional risks;
- Establish clear technical standards for campaign quality and coverage that must be achieved before oral polio vaccine withdrawal proceeds.

Without such dedicated financing and coordination, safe oral polio vaccine withdrawal remains aspirational and high-risk rather than operationally achievable, regardless of epidemiological progress in interrupting transmission.

3. Launch high-level political advocacy for containment certification.

Engage with heads of government and foreign ministers in countries with designated containment facilities to secure political commitment for certification completion. This advocacy work must:

- Position containment as an equal pillar of the certification enterprise rather than a technical appendix to the eradication strategy;
- Clarify that certification of wild poliovirus eradication cannot proceed without containment certification, regardless of epidemiological achievements;
- Target specific countries where progress has stalled due to political awareness deficits rather than technical or financial constraints—particularly the United States, China, Russian Federation, France, and Romania;
- Establish a revised certification timeline that is challenging but achievable, with transparent monitoring of country-level progress and escalation mechanisms when implementation stalls;
- Integrate containment into global health security frameworks and International Health Regulations implementation to connect with political priorities that command ministerial attention.

The 2026 milestone will be missed; the question is whether failure prompts the fundamental reframing necessary for success on revised timelines or initiates drift toward indefinite delay.

4. **Consolidate Global Vision and Post-Certification Strategy into unified operational framework.**

WHO should integrate the Global Vision for polio transition and the Post-Certification Strategy into a single operational framework that countries and partners experience as coherent guidance rather than parallel demands. This consolidation should:

- Eliminate theoretical distinctions between “the what” and “the how” that break down in practice, creating instead unified

planning, reporting, and implementation support structures;

- Reduce the number of separate monitoring frameworks, reporting requirements, and coordination mechanisms that consume country bandwidth;
- Establish clear accountability for integrated framework implementation at global, regional, and country levels;
- Prioritise practical country needs over maintaining separate institutional planning streams that serve internal organisational requirements rather than operational effectiveness.

The current different frameworks create complexity rather than clarity and risk becoming another example of process preoccupation rather than outcome focus.

5. **Establish mechanism for retaining surveillance workforce expertise.**

WHO, in collaboration with member states and donors, should create a mechanism enabling countries to retain experienced surveillance officers and technical personnel as external programme compensation ends. This could include:

- Transition salary support that bridges compensation gaps between external programme levels and government salary structures for defined periods;
- Competitive recruitment of experienced surveillance officers into WHO country offices and regional offices to preserve expertise while supporting country systems;
- Regional centres of excellence that employ cohorts of experienced personnel providing technical support across multiple countries;
- Documentation and institutionalisation of surveillance methods, case investigation protocols, and quality assurance approaches

developed through decades of Polio Programme implementation.

The human capital built through polio surveillance is a genuine potential legacy that will dissipate unless deliberate mechanisms preserve and redeploy expertise. Unlike physical infrastructure that can be maintained even if sub-optimally utilised, human capital disappears when experienced personnel depart.

6. Maintain GPEI partnership coordination mechanisms until vaccine-derived poliovirus control is demonstrated.

WHO and GPEI partners should commit to maintaining core partnership coordination mechanisms, dedicated funding streams, and specialised technical capacity until sustained global evidence demonstrates control of vaccine-derived poliovirus circulation alongside wild virus elimination. This commitment requires:

- Explicit rejection of premature GPEI dissolution driven by donor exit preferences or arbitrary timelines rather than epidemiological conditions;
- Clear criteria defining the threshold for partnership wind-down;
- Sustained financing commitments from major donors extending beyond current planning horizons, with recognition that outbreak response capacity remains essential;
- Preservation of Rotary International, Gates Foundation, UNICEF, and CDC (depending on its ongoing status in global health) partnership roles in coordination, financing, technical support, and implementation rather than premature transfer to generic WHO mechanisms that lack specialised capacity.

WHO alone, however technically proficient, cannot manage intensive outbreak responses within countries without the supplementary support provided by GPEI partnership arrangements. Dissolving these mechanisms prematurely will create response gaps that prove far more difficult to reconstitute than to maintain.

7. Prioritise routine (essential) immunisation system strengthening as primary vehicle for polio immunity maintenance.

WHO and GPEI partners should explicitly recognise routine (essential) immunisation system strengthening as the fundamental prerequisite for sustaining polio immunity and reorient investment priorities accordingly. This reorientation requires:

- Shifting some resources from polio-specific vertical mechanisms toward routine immunisation infrastructure, workforce development, supply chain reliability, and service delivery strengthening;
- Advocating for adequate domestic and international financing for routine immunisation as the foundation for multiple health security objectives including but extending beyond polio;
- Establishing accountability mechanisms for essential immunisation performance that operate beyond annual report cards to enable active management of coverage improvements in specific districts and populations.

The question is not whether routine immunisation can theoretically sustain polio-free status—the epidemiology confirms it can—but whether current investments create conditions making this achievable in practice.

8. Commission independent assessment of surveillance integration feasibility and requirements.

WHO should commission an independent technical assessment examining the feasibility, requirements, and timelines for integrating polio-built surveillance capacity into comprehensive vaccine-preventable disease surveillance systems. This assessment should:

- Evaluate current Integrated Disease Surveillance and Response performance, identifying specific technical and operational gaps that must be addressed before polio surveillance can safely transfer;
- Determine the specialised technical support infrastructure, laboratory capacity, and operational resources required to maintain polio surveillance quality standards within integrated platforms;
- Assess workforce requirements, compensation structures, and career pathways necessary to retain surveillance expertise as vertical programme employment ends;
- Identify countries where surveillance integration can proceed safely versus where continued specialised polio surveillance capacity remains essential for defined periods;
- Provide realistic timelines and resource requirements for achieving integration that maintains rather than compromises surveillance quality.

The current approach assumes integration feasibility without systematically assessing whether receiving systems possess capacity to maintain sophisticated polio surveillance functions. This assessment would enable evidence-based planning rather than aspirational assumptions.

9. Mobilise strategic action on water and sanitation infrastructure in polio-affected and polio-vulnerable countries.

WHO and GPEI partners should actively champion and mobilise coordinated action on water, sanitation, and hygiene (WASH) infrastructure in polio-affected and polio-vulnerable countries, recognising that transmission through faecal-oral routes is a fundamental barrier to achieving and sustaining a polio-free world. This mobilisation requires:

- Positioning sanitary reform as a strategic imperative for polio transition rather than treating it as peripheral to core programme functions, acknowledging that permanent sanitary infrastructure transforms the operating environment for polio control;
- Leveraging UNICEF's existing WASH programmes more systematically within GPEI coordination mechanisms, including regular reporting on progress mobilising resources and implementing infrastructure improvements in priority geographies;
- Identifying and engaging development banks, bilateral development agencies, climate adaptation financing mechanisms, and other infrastructure funding sources capable of investing in permanent water and sanitation systems at the scale required for public health impact.

The striking reality is that a key mode of poliovirus transmission has not been an imperative for action by the Polio Programme. The infrastructure investments required extend beyond the GPEI's direct financing capacity, but mobilising action through partnership, political advocacy, and technical coordination falls squarely within its remit and mission.

