

# **Concept Note for Early Applicants**

## **MYANMAR - TUBERCULOSIS**

This concept note template is to be completed by early applicants invited to request funding from the Global Fund in 2013 during the transition to the new funding model. For more information on how to complete the concept note, please refer to the <u>Concept Note Instructions</u>.

The concept note details the applicant's request for Global Fund resources in a disease area (and/or health and community systems strengthening) for the next three year period. The concept note should articulate an ambitious and technically sound response, drawing from the Health Sector Strategic Plan, National Strategic Plans and other appropriate documentation. It should include a prioritized full expression of demand to maximize impact against the disease(s).

There are five different sections of the concept note:

- **Section 1:** How the application development process complies with CCM Eligibility Requirements.
- **Section 2:** An explanation of the country's epidemiological situation and the current legal and policy environment, and how the National Strategic Plan responds to the country disease context.
- Section 3: How existing and anticipated programmatic gaps of the National Strategic Plan have been identified.
- **Section 4:** How the funds requested will be strategically invested to maximize the impact of the response.
- **Section 5:** How the program will be implemented.

This concept note is specifically designed for early applicants and does not represent the final template to be used for the full roll-out of the new funding model. The concept note template will be revised to reflect feedback received during the transition phase.

## Abbreviations

3DF 3MDGs Fund	Three Diseases Fund Three Millennium	MMCWA	Myanmar Maternal and Child Welfare Association
	Development Goals Fund	ММК	Myanmar kyat
A&E ACSM	Accidents and Emergencies Advocacy, communication and	MNCH	Maternal, neonatal and child health
ACSIVI	social mobilization	MRCS	Myanmar Red Cross Society
AHRN	Asian Harm Reduction	MSF	Médecins sans Frontières
AIDS	Network Acquired immunodeficiency	MWAF	Myanmar Women's Affairs Federation
	syndrome	NAP	National HIV/AIDS Programme
ASEAN	Association of South-East Asian Nations	NGO	Nongovernmental organization
BSL-3	Bio-safety level 3	NTP	National Tuberculosis
CAP-TB	Care and Prevention		Programme
	(Tuberculosis) [project]	OPD	Out-patient department
СВО	Community-based organization	PEPFAR	[United States] President Emergency Plan for AIDS Relief
CESVI	Cooperazione e Sviluppo	PICT	Provider initiated counselling
CSO	Civil society organization		and testing
EQA	External quality assessment	PLHIV	Person/people living with HIV
FHI 360	Family Health International	DDM	or AIDS
FIND	Foundation for Innovative New Diagnostics	ΡΡΜ	Public–private or public–public mix
GDP	Gross Domestic Product	PR	Principal Recipient
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria	PSI	Population Services International
HIV	Human immunodeficiency	SOP	Standard operating procedure
	virus	SR	Sub-recipient
INGO	International	тв	Tuberculosis
	nongovernmental organization	тот	Training of trainers
IOM	International Organization for Migration	TSG	Technical Strategy Group
ISTC	International Standards for	UN	United Nations
	Tuberculosis Care	Union	International union against tuberculosis and lung disease
JICA	Japan International Cooperation Agency	UNOPS	United Nations Office for Project Services
M-CCM	Myanmar Country Coordination Mechanism	US\$	United States dollar
M&E	Monitoring and Evaluation	USAID	United States Agency for International Development
MDG	Millennium Development Goal	USG	United States of America
MDM	Médecins du Monde		Government
MDR-TB	Multidrug-resistant tuberculosis	VBDC VCCT	Vector-borne disease control Voluntary confidential
MHAA	Myanmar Health Assistants Association		counselling and testing
MMA	Myanmar Medical Association	WHO	World Health Organization

OVERVIEW: Summary Information					
Applicant Information					
Country	Myanmar				
Applicant Type	ССМ	Component	Tuberculosis		
Funding Request Start Date	1 Jan 2013	Funding Request End Date	31 Dec 2016		

Fundi	ng Request Su	mmary	Currency of Fu	Inding Request	US\$
Component:			Tuberculosis		
[Insert dates for annual period covered]	A= Existing (Global Fund grants: Phase 2)	B= Incremental Funding Request (Indicative)	C= Funding Request (above Indicative)	A+B= Existing and total Incremental Indicative Funding Request	A+B+C= Full Request
2013	13 647 798	1 000 000	1 055 326	14 647 798	15 703 124
2014	13 940 486	2 500 000	9 574 909	16 440 486	26 015 395
2015	14 830 452	2 500 000	12 899 920	17 330 452	30 230 372
2016	0	20 300 000	14 180 328	20 300 000	34 480 328
Totals	42 418 736	26 300 000	37 710 483	68 718 736	106 429 219

#### **Confirmation of Program Split for Indicative Funding**

This question is only relevant for early applicants invited to submit funding requests for more than one disease.

During country dialogue, the applicant will decide how best to distribute indicative funding across relevant disease programs and HCSS. Please provide the original indicative program split as communicated by the Global Fund and if relevant, the split approved by the Global Fund following country dialogue.

Program	Original Indicative Program Split Amount (US\$)	Approved Program Split Amount (US\$)
HIV	39.5 million	39.5 million
Malaria	26.0 million	26.0 million
Tuberculosis	26.3 million	26.3 million
HCSS		
Total Indicative Funding	91.8 million	91.8 million

### SECTION 1: CCM Eligibility Requirements and Dual Track Financing

**Two of the six CCM Eligibility Requirements** relate to application development and Principal Recipient (PR) selection processes and will be assessed as part of the concept note:

- a. **Requirement 1** Application development process
- b. **Requirement 2** The Principal Recipient(s) selection process.

For each Requirement, applicants must provide evidence of compliance and attach relevant supporting documentation. Please also fill in and attach the **CCM Endorsement** (Attachment 1).

#### **1.1 Application Development Process (Requirement 1)**

Please describe:

- a. The **documented and transparent process** undertaken by the CCM to **engage** a broad range of stakeholders, including non-CCM members, in the application development process.
- b. The efforts made to engage **key population groups**<sup>1</sup>, including most-at-risk populations<sup>2</sup>, as active participants in the country dialogue and application development process.

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#### a. Documented and transparent process

The Myanmar CCM (M-CCM) engaged a broad range of stakeholders, including non-CCM members in the application development process. The M-CCM follows as established procedure in developing applications: the M-CCM Secretariat together with relevant Technical Strategy Groups (TSGs) organizes information briefings, consultations, workshops, and proposal writing working group meetings to produce draft proposals or concept notes for review and endorsement by M-CCM. (Annex 1: M-CCM Performance Assessment Tool). For the development of the current Concept Note, the TSG-TB conducted a series of meetings in 2012 and 2013 (Annex 2: TSG-TB meeting minutes of 1 October 2012, 20 December 2012; and 7 and 20 March 2013).

Discussions on priorities and programmatic gaps concluded with the following intervention areas: maintenance of core TB activities and scale-up of three important areas (active case finding, TB/HIV and MDR-TB). Some implementers cautioned against

<sup>&</sup>lt;sup>1</sup> **Key population groups** include: women and girls, men who have sex with men, transgender persons, people who inject drugs, male and female and transgender sex workers and their clients, prisoners, refugees and migrants, people living with HIV, adolescents and young people, vulnerable children and orphans, and populations of humanitarian concern. In addition to these groups: internally displaced persons, indigenous persons, people living with TB and malaria and people working settings that facilitate TB transmissions should also be considered as key affected populations.

<sup>&</sup>lt;sup>2</sup> For the purpose of the transition to the new funding model (GF/B28/DP5), most-at-risk populations will be defined as subpopulations, applying to HIV, malaria and tuberculosis, within a defined and recognized epidemiological context:

<sup>1)</sup> That have significantly higher levels of risk, mortality and/or morbidity;

<sup>2)</sup> Whose access to or uptake of relevant services is significantly lower than the rest of the population; and

<sup>3)</sup> Who are culturally and/or politically disenfranchised and therefore face barriers to gaining access to services.

costly interventions with limited epidemiological impact (especially in remote areas) and urged to consider the major cost implications of scaling up MDR-TB. Expanding TB/HIV collaboration would also depend on excellent coordination with the National AIDS Programme (NAP) and its partners. After the priorities were agreed upon, a sub-group of the TSG (volunteers, PRs and WHO) was formed to write up the draft concept note. The sub-group also consulted with key implementing partners for each priority area and a number of meetings were held to confirm activities, target groups and target size. The first draft was circulated among all TSG members and feedback incorporated prior to submission to the M-CCM for endorsement. The M-CCM had a meeting on 18 October 2012, at which endorsement for submission of Concept Notes for all three diseases was obtained. The first Concept Note was submitted to the Global Fund on 23 October 2012 to top up Phase 2.

The process was transparent and inclusive of a broad range of stakeholders (civil society, local and international NGOs, bilateral partners, UN agencies and government). The M-CCM and TSG are multi-sector forums.

The Concept Note was reviewed by the Global Fund Phase 2 Renewal Panel in February 2013. The M-CCM Chair received an invitation from the Global Fund on 1 March 2013 to become an early applicant in the New Funding Model.

Information briefing to the TSG Chairs and Convenors and expanded TSG took place on 6 March 2013. As part of the country dialogue, inputs were also received from the Global Fund Country Team during a Modules Workshop (14-15 March 2013) and multistakeholder workshop (18-19 March 2013). The sub-group started preparing a new draft Concept Note merging Phase 2 as well as the previous concept note. A first draft was circulated to all TSG members on 22 March 2013. Comments were received from several members and incorporated prior to submission to M-CCM on 2 April 2013.

#### **b.** Engagement of key affected groups

Network members representing key populations participated in the expanded TSG meetings at which priorities and programmatic gaps were confirmed. Key population groups are also directly consulted regularly to ascertain their priority needs. The M-CCM secretariat together with UNAIDS Country Office routinely organizes meetings with network members representing key populations and PLHIV and influential visitors such as Executive Director of UNAIDS, USG PEPFAR representative, and Global Fund General Manager, Deputy General Manager and other senior Global Fund representatives. At these meetings, representatives of key populations raise policy, technical and socio-economic constraints they are facing and request for concrete support to community systems strengthening. Key populations are also vocal participants in all aspects of development, dissemination and review of the National Strategic Plan (2011-2015) and its supplement which is the main guiding document as well as other important programme documents.

### 1.2 Principal Recipient (PR) Nomination and Selection Process (Requirement 2)

Please describe:

- a. The documented and transparent **process and criteria** used to nominate any new or continuing PR(s).
- b. How any **potential conflict of interest** that may have affected the PR(s) nomination process was **managed**.

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The PRs nominated for the Concept Note are the same ones from the previous Global Fund grants for HIV, tuberculosis and malaria: the United Nations Office for Project Services (UNOPS) and Save the Children (USA). There is no new PR.

For a summary of the documented and transparent process and criteria used to nominate PRs for Round 9, (Annex 3: 4<sup>th</sup> M-CCM meeting minutes).

1.3 Dual-track Financing

Dual-track financing refers to a proposed implementation arrangement that involves both government and non-government sector PRs. If this funding request does not reflect dual-track financing, please explain why. If your funding request includes dual-track financing, please leave this section blank. - ½ PAGE MAXIMUM

This funding request does not reflect dual-track financing as Myanmar does not have a government-sector PR. UNOPS acts as a PR on behalf of the government. However, it is anticipated that given the current changes in Myanmar, a transition to a government-sector PR is being considered. Technical assistance will be provided to the National Tuberculosis Programme and government sector to enable the transition to take place.

#### **SECTION 2: Country Context**

#### 2.1 Country Disease Context

Explain the current and evolving epidemiological situation of the disease in your country. Refer as appropriate to the Performance and Impact Profile provided by the Global Fund, as well as other recent program reviews or relevant sources. Highlight the concentration of burden among specific population groups and/or geographic regions and any recent disease pattern changes (incidence or prevalence).

In your response, describe:

- a. **Key affected populations** that are epidemiologically important and may have disproportionately low access to prevention and treatment (and for HIV and TB, care and support services).
- b. Factors that may cause **inequity in access to services** for treatment and prevention, such as gender norms and practices, legal and policy barriers, stigma and discrimination, poverty, geography, conflict and natural disasters.
- c. **System-related constraints** at the national, sub-national and community levels in reducing the burden of the disease.

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The morbidity and mortality of TB – a curable disease – is unacceptably high with an estimated prevalence of over 240 000 cases, 20 000 co-infected with HIV and almost 10 000 MDR-TB cases every year. More than 23 000 people still die from TB every year.

TB remains thus an important public health concern in Myanmar. The country is listed among:

- 22 high TB burden countries
- 27 high MDR-TB burden countries
- 41 countries with a high burden of TB/HIV

The 2011 (Global TB Report 2012) estimated prevalence (all cases) was 506/100 000, the fourth highest in the world and alarming against the global average of 170 cases per 100 000 or regional average of 271 per 100 000.

Myanmar has also one of the most severe HIV/AIDS epidemics in Asia. The HIV prevalence rate for adult population was 0.53% in 2011 with an estimated 240 000 people living with HIV. Among the 4496 TB patients who knew their HIV status, 900 (20%) were HIV-positive. Repeated sentinel surveys have indicated a co-infection rate of around 10% of HIV in new TB patients.

WHO estimates that there were 180 000 new TB cases in Myanmar in 2011. The majority of the patients belong to the economically active age group. There were an estimated 5500 MDR-TB cases among the 115 371 notified pulmonary TB cases.

In 2011 Myanmar notified 136 737 new and relapse TB cases corresponding with a notification rate of 294 per 100 000. The country ranks 11<sup>th</sup> in the global high burden list and 3<sup>rd</sup> among ASEAN countries. It has the second highest TB rate in the WHO Southeast Asia Region (only Timor-Leste reported higher rates). There was much variability in incountry notification rates: between 137.9 per 100 000 in Shan State (South) and 351.8 per 100 000 in Yangon Region.

In 2009-2010 a nationwide TB prevalence survey was undertaken. This survey revealed that the prevalence of all forms of TB was almost three times higher than anticipated. Estimates for prevalence and incidence have been revised by WHO accordingly. The 2011 estimates are summarized in the table below, compared to the estimates used in the Round 9 Global Fund proposal.

	2011 estimate <sup>*</sup>	Previous estimate (Rd9 full proposal) <sup>†</sup>
Prevalence rate (all cases)	506/100 000	162/100 000
Prevalence (all cases)	240 000	93 312
Incidence rate (all cases)	381/100 000/year	171/100 000/year
Incidence (all cases)	180 000/year	98 496/year
Incidence rate (TB/HIV)	38/100 000/year	19/100 000/year
Incidence (TB/HIV)	18 000/year	10 835/year
Mortality rate (excl. HIV)	48/100 000	13/100 000
Mortality (excl. HIV)	23 000	7 488

<sup>\*</sup> Source: Global tuberculosis control: WHO report 2012

<sup>†</sup> Source: Round 9 proposal (based on: Global tuberculosis control: WHO report 2009)

Identified risk groups with a significant higher probability for developing TB disease than the general population include: prisoners, HIV-infected people, people living in poor urban slums, contact cases, migrants and people residing in states. While there is no evidence of higher TB rates in work places, it is expected that some types of work places (e.g. mines) are also likely to count relatively more TB patients among their workers and their families. Other risk factors that contribute to the high TB burden include diabetes, smoking, old age, though yields are substantially less; any screening targeting the latter categories of people can be undertaken while they attend health services for other reasons.

Repeated sentinel surveillance has indicated a fairly stable trend of around 10% of tested TB patients being HIV-infected (though with a high variation among survey sites).

The MDR-TB rate was found to be 4.2% in the latest drug resistance survey (results of the 2012-2013 survey are not yet available) while estimates among retreatment cases vary between 10% and 15%.

The gaps between notified and estimated burden is largely explained by the accessibility. This is very obvious in remote areas (especially in States) but it is also valid in urban areas where poverty delays sick people from seeking care in health facilities or even private practitioners that are operating in relatively nearby neighbourhoods. Loss of wages, local transportation and minor (bearable) symptoms are main reasons for not immediately seeking health care in urban areas; while excessive transportation cost and weak general health services cause delays in remote areas. In post-conflict areas health services (where existing) may not be all in line with the national TB control guidelines. There is no evidence of any gender- or race-based difference in use of TB services. However, states are predominantly inhabited by ethnic minorities. States are characterized by low population density, remoteness and less developed health services. Current unsettled conflict areas have witnessed disturbances in health care delivery affecting TB control including (temporary) closure of clinics but efforts have been taken by the government and civil society organizations to provide interim services (e.g. mobile clinics) and/or redevelop long-term services.

System-related constraints are also linked to providing access to health services. Basic TB services including microscopy laboratories are well developed in the country but need to be further complemented by strengthened referral mechanisms, sputum collection facilities and active case finding programmes where mobile clinics are sent to these communities with less access. More advanced TB services (e.g. diagnosis of MDR-TB) are fairly centralized as it is only recently developed and because of technical complexities and cost. HIV services are also more centralized than TB services posing additional challenges for mutual referral.

#### 2.2 National Strategic Plan

Briefly describe your National Strategic Plan and how it addresses the country disease context described in 2.1.

In your response, please describe:

- a. The **goals**, **objectives and priority interventions** of the National Strategic Plan, placing emphasis on their **on-going relevance** and any planned or needed revisions over the lifetime of the Funding Request.
- b. The **current stage of implementation** of the National Strategic Plan and the country processes for reviewing the Plan. If you are in the last 18 months of the period covered by the National Strategic Plan, please explain the process and timeline for the development of a new plan.
- c. The main findings of, and response to, any recent assessments and/or program

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#### a. National Strategic Plan

The Government of Myanmar has adopted the Millennium Development Goals (MDGs) including the targets and indicators that relate to health and disease control and prevention programmes, including TB control. A five-year National Strategic Plan for Tuberculosis Control, 2011-2015 was developed.

The <u>goal</u> of the plan was to reduce dramatically the TB morbidity, mortality and transmission, in line with the MDGs and the Stop TB Partnership targets, until it no longer poses a public health threat in Myanmar.

The objectives and targets of NTP Myanmar are:

- To move towards universal access to TB diagnosis, treatment and care by reaching a 80% case detection rate of all forms of TB and by curing at least 85% of cases; and
- To reach the interim targets of halving TB deaths and prevalence towards achieving the MDGs for 2015 which will improve universal access to high-quality diagnosis and patient-centred treatment and protect poor and vulnerable populations from TB, TB/HIV and MDR-TB.
- To halt and begin to reverse the incidence of TB by 2015
- To achieve and then surpass a 75% treatment success rate among MDR-TB cases

In 2007, Myanmar adopted the global Stop TB strategy. The following six <u>strategies</u> and <u>implementation approaches</u>, therefore, form the basis for the national response to tuberculosis in the country:

- (1) Pursuing high-quality DOTS expansion and enhancement
  - Ensure early case detection and diagnosis through quality-assured bacteriology
  - o Provide standardized treatment with supervision and patient support
  - Ensure effective drug supply and management
  - o Provide efficient programme management including monitoring and evaluation
  - Ensure availability of trained and motivated human resources
- (2) Addressing TB/HIV, MDR-TB and other challenges
  - Scale up collaborative TB/HIV activities
  - Scale up prevention and management of MDR-TB
  - o Ensure treatment of tuberculosis in children
  - Address the needs of poor and vulnerable populations
  - $\circ\,$  Strengthen infection control in health services, other congregate settings and households
- (3) Contributing to health system strengthening
- (4) Engaging all care providers
  - Scaling up of public-private mix
  - Scaling up of public–public mix
- (5) Empowering people with TB, and communities through partnerships
  - Pursue advocacy communication and social mobilization
  - Foster community participation in TB care, prevention and health promotion and

#### promote use of Patient's Charter for Tuberculosis Care

- (6) Enabling and promoting research
  - o Conduct programme-based operational research

This National Strategic Plan was developed based on the 2007 estimated disease burden, which significantly underestimated the disease burden. The nationwide prevalence survey of 2009-2010 indicated a much higher disease burden. This let NTP decide to bring out a supplement to its national strategic plan in 2012 with a revised scope of the five-year plan both in scale (to address a larger burden of symptomatic cases in remote areas) and in depth (in particular to address the issue of the majority of definite cases not being able to be detected through strategies emphasizing passive case detection of symptomatic cases) or both. The funding requirements were also reassessed.

This supplement builds on the earlier plan and is to be seen as an addition to the earlier plan. It contains three important annexes: (i) active case finding; (ii) MDR-TB expansion; and (iii) TB/HIV expansion.

The <u>active case finding</u> strategy is based on the 2011 WHO guidelines on "Early detection of Tuberculosis" and WHO guidelines for contact investigation. The plan foresees building capacity for active case-finding in an incremental fashion resulting in finding at least an additional 33 000 TB cases over the next four years. Basic interventions that need continuous strengthening and were included in the five-year plan are: scale-up of basic TB services (remote and conflict areas), improvement in basic diagnostic and treatment practices, and expansion of engagement of private practitioners, informal provider and NGOs. The interventions included in the supplement are:

- Improving suspect identification and diagnosis in health facilities
- Screening in risk groups
- Contact investigation
- Screening of prisoners
- Mobile clinics for TB screening in high-prevalence communities including poor urban settlements

<u>MDR-TB scale-up plan</u>. Based on the results of the MDR-TB pilot project (2009-2012), MDR-TB management is being scaled up. Revised MDR-TB guidelines have been developed with expanded eligibility criteria for drug susceptibility testing and treatment and with a revised model of care with increased focus on community-based MDR-TB management. The MDR-TB expansion plan states that all retreatment cases, contacts to MDR-TB cases and people living with HIV/AIDS should be tested for MDR-TB. Moreover, all patients diagnosed with MDR-TB should be treated under WHO-endorsed treatment protocols. Over the plan period, almost 10 000 MDR-TB cases are planned to be enrolled for treatment. By the end of 2016, 100 townships would have MDR-TB facilities, covering 41.5% of the population.

As detailed in the <u>scale-up plan for TB/HIV</u>, collaborative activities will be gradually expanded to all townships and public hospitals over the next four years. In scaling up collaborative TB/HIV activities, the National AIDS and TB Programmes will aim to decentralize and integrate TB and HIV services, preferably at the same time and location through a "one-stop service". Due to the concentrated nature of the HIV epidemic, the efforts to scale up collaborative TB/HIV activities will also cover people who inject drugs and other drug users. The plan includes rapid HIV test kits for TB patients and co-trimoxazole and antiretroviral drugs for HIV-positive TB patients.

The National Strategic Plan and its Supplement were developed for a period of five years:

2011-2015. Full implementation of the strategy would depend on eliminating the actual funding gap. In spite of the significant increase in funding provided by the Government and external donors, a financial gap remained leading to a phased implementation of the National Strategic Plan. It was, therefore, decided to extend the current National Strategic Plan and Supplement till 2016 keeping the same targets.

## **b.** Current stage of implementation

When checking on the MDG impact indicators and revised targets, we may conclude that NTP is progressing well in implementing TB control activities. Compared to 1990, the mortality rate (excluding HIV) reduced from 113 to 48 per 100 000 in 2011 or a reduction with 57%. In the same period, the prevalence reduced from 894 to 506 per 100 000 (reduction of 43%). It is thus likely that more than 50% reduction will also be reached by 2015. The incidence reduced from 393 to 381 per 100 000.

Based on the results of the last two prevalence surveys (conducted in 1994 and 2009-2010), the NTP was successful in removing symptomatic infectious cases to a large extent. However, the bulk of prevalent cases are less infectious and more of a chronic nature with less typical symptoms. As a group they contribute significantly to transmission. Their numbers may have been higher several years ago, but NTP likely had less impact in removing those cases as they were generally not picked up through the routine, passive case finding strategy with two or three weeks cough as entry point.

The programme has scaled up DOTS coverage and notification rates increased nearly fourfold between 2000 and 2010. The 70% case detection rate target has consistently been achieved for new smear-positive cases since 2002. In view of the higher burden of smearnegative disease and its significant transmission and the higher uncertainty range around disaggregated disease burden estimates, NTP is now also moving to monitoring case notification instead of case detection and for all cases instead of only smear-positive cases.

The treatment success target of 85% has also been surpassed since 2006 pointing to the fact that maintaining quality is achievable while expanding, integrating or including new activities. The results of the pilot project for MDR-TB are also very much encouraging with a cure rate of 71% (as compared to 48% globally). The last two drug resistance surveys (2002-2003 and 2007-2008) reported MDR-TB prevalence rates among new TB patients at 4% and 4.2%, respectively, and among previously treated patients at 15.5% and 10%, respectively, suggesting no deterioration in case management practices. Starting with a pilot project, the NTP has gradually scaled up its MDR-TB programme, heavily centred on Yangon and Mandalay where laboratory facilities are available. All 600 targeted patients under Global Fund have been enrolled. The number of MDR-TB townships has also increased to 38.

The country has a concentrated HIV epidemic among high risk groups. The programme has a provider-initiated testing policy for HIV among TB patients, and 13% of TB patients were tested for HIV in 2012. Twenty per cent of those tested were found to be HIV-positive. Among the known HIV-positive TB patients, 80% were on ART based on the data from 15 townships.

Contributing to the successful case notification is the role played by the private sector. General practitioners contributed 18% of the national case notification. Two PPM schemes are implemented on a large scale through the Myanmar Medical Association (MMA) and Population Services International (PSI) and include approximately 2245 private practitioners in over 200 townships.

## c. Main findings of and response to recent programme review

The last joint programme review took place in November 2011. It noted as major achievements: since the previous review [in 2007], 1.2 million persons were examined for TB, over 630 000 patients were diagnosed and treated and at least 100 000 lives were saved. Tuberculosis services were made available in an uninterrupted fashion despite periods of resource instability and were integrated in primary health care services.

Recommendation Action taken Energetically pursue all Proposals submitted and commitments or funding received: Global Fund Round 9 Phase 2, USAID (including CAP-TB), 3DF potential funding sources 3MDGs Fund, PEPFAR, (costed extension), UNITAID, **Government of Myanmar** Public–private and public–public mix further Need to further increase case expanded. Successful TB REACH projects by PSI and the Union. detection New diagnostics (GeneXpert) introduced Mobile clinics increased especially in remote and conflict areas Detailed plan for scale-up of active case finding developed Take full advantage PPM activities have been maintained and scaled up to involve of existing collaboration with additional general practitioners, additional hospitals private sector and scale up (specialists). linkages with specialists The private sector will also be involved in addressing MDR-TB TB/HIV collaborative Provider-initiated testing and counselling is being rolled out, activities to all townships, including in the private sector. starting with making HIV test Agreement reached with NAP for testing all TB patients for HIV. kit available for routine NTP will provide budget for procurement of HIV test kits as part testing of TB patients of NAP consolidated test kit procurement. Agreement of three interlinked patient monitoring systems and systematic TB screening and information in NAP recording and reporting forms Early detection of MDR-TB GeneXpert is being rolled out as screening tool for MDR-TB through deploying rapid (currently 12 machines are operational) while line probe assay diagnostics and improving and MGIT are also available for confirmation. laboratory capacity. Second-Plan has been developed for increasing the number of bioline drugs need to be secured safety level-3 laboratories to diagnose MDR-TB. timely Enrolment criteria for MDR-TB treatment have been relaxed to screen all retreatment cases, contacts of known MDR-TB patients, and known HIV-positive TB patients. This will allow earlier diagnosis (previously only failures after Category 2 were eligible) and improve the prognosis. Conduct third nationwide Enrolment in third survey almost completed. drug resistance survey Preliminary results expected by mid-2013. Encourage partnerships with Agreement on systematic screening for TB in antenatal services. **MNCH** programme Renewed emphasis on improving quality of diagnosis of paediatric TB.

Key recommendations included and actions taken are shown in the following table.

## 2.3 Implementation of the National Strategic Plan

Please describe the **implementation progress** of your National Strategic Plan, referring as appropriate to the Performance and Impact Profile provided by the Global Fund as well as any recent evidence from program reviews, evaluations and relevant surveillance surveys.

In your response, include:

- a. The **priority interventions** that are currently being implemented.
- b. The **outcome and impact** achieved to date by these priority interventions.
- c. The key stakeholders involved in the implementation.
- d. Any **limitations** of the response to date and the **lessons learned** informing the design of future interventions.
- e. Any limitations in national data systems to measure and demonstrate impact.

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#### a. Priority interventions

Basic DOTS services remain the first NTP priority since early detection and prompt treatment are the best prevention of TB. Maintaining capacity for diagnosis through sputum smear microscopy, proper classification of patients, ensuring uninterrupted drug supply and routine monitoring was possible through regular and effective coordination particularly at central and state/regional level, conducting induction training for new staff and refresher trainings for existing staff. The EQA system covers almost all public laboratories and a good number of private laboratories, is able to detect errors and guide for remedial action for improving laboratory quality. Tuberculosis services are available in all townships of the country but accessibility remains a problem in remote areas, some border and conflict areas and poor urban neighbourhoods. This has been partially addressed by complementing the permanent, static health facilities by mobile clinics. While the latter have shown good impact in areas where they have been conducted, their coverage remained very limited. The DOTS reporting system is well established across the country and reporting rates are high, though sometimes late due to constraints in transferring the reports to the higher level. The introduction of interim reports with limited indicators (for Global Fund purpose only) has allowed timely reporting. Emphasis has been put on analyzing relevant data at different levels. WHO data assistants have contributed much to this and critical analysis of data is regularly done by the TB teams and has resulted in local actions being taken in areas where bottlenecks were defined. Childhood TB is also addressed as documented in multiple age groups for children, improving diagnosis of TB in children, availability of paediatric drug formulations, provision of IPT and linkages with MNCH programme.

With regard to <u>MDR-TB</u>, the National TB Reference Laboratory in Yangon and the Upper Myanmar TB Reference Laboratory in Mandalay are fully functional BSL-3 laboratories with the capacity to undertake conventional and liquid culture and drug-susceptibility testing. The pilot project for MDR-TB, covering ten townships in Yangon and Mandalay in collaboration with MSF-H has enrolled 275 patients and achieved a treatment success rate of 71%. Based on lessons learned during this pilot project, national MDR-TB guidelines were developed and the programme is being mainstreamed in NTP activities. In spite of severe bottlenecks with procurement of second-line drugs, the target of 600 patients could be enrolled within 18 months after receiving second-line drugs. This was possible thanks to complementary inputs of NTP, the Global Fund and UNOPS (drugs), 3DF (patient and provider support) and USAID (support to technical assistance), INGOs (ancillary drugs) and WHO (technical assistance). Important policy changes that will allow faster enrolment include broadened criteria for enrolment (which will likely further improve cure rates); community-based treatment instead of mandatory hospitalization; change in treatment regimen for non-failure cases (thereby significantly reducing the treatment cost).

### TB/HIV: see under 2.4

Health systems strengthening. On the one hand many activities initiated by NTP from the viewpoint of strengthening TB control have strengthened the overall health systems; on the other hand investments in systems capacity have got positive impacts on TB control. Health financing received a major boost after the Government committed to incrementally increase its health budget to 5% of the country's GDP, thereby aiming to reduce the out-ofpocket expenditure. Core TB services will remain free-of-charge. There is general consensus about the value of having national guidelines applying to all relevant stakeholders, thereby facilitating governance. The M-CCM already overseas the national response to TB (and not only the Global Fund-funded activities). Infrastructure is in many places outdated. The NTP has contributed to upgrading of facilities including patient wards, consultation areas and laboratories. The need for proper infection control to prevent the transmission of TB as well as the roll-out of GeneXpert and the increased collaboration with NAP are catalyzing this process. The WHO network of national technical officers, laboratory supervisors, data assistants and community care officers as well as staff from the Principal Recipient and some NGOs have been instrumental in building technical and managerial capacity at state/regional and township levels. Initial hiccups in fund flow have been addressed and a system is in place that allows resource tracking and promotes accountability and that can potentially be adopted (and adapted) by the Government. The Global Fund's initiated fund flow mechanism is based on quarterly micro-planning which is increasingly done in a bottom-up fashion, thereby strengthening the programme management capacity at peripheral levels. This will be very useful in future when more services will be decentralized. The development of a single M&E plan was also considered an important step for aligning donor reporting requirements. The Global Fund is increasingly accepting untied indicators that directly draw from routine country data. Quarterly TB meetings have been institutionalized at different levels and offer scope for other programmes to piggy-back. The supply chain system has benefitted from Global Fund support where central and state/regional warehouses have been renovated. The logistics and supplies management information systems were rolled out in a uniform way. Drug quality is also been addressed in a comprehensive way with monitoring quality of TB (and malaria and HIV) drugs as entry point to support strengthening the quality assurance mechanisms of the country's food and drug administration.

The Myanmar NTP has been cited as one of the best examples in Southeast Asia for engaging all care providers, especially in the private sector but also in linking public hospitals. This was possible thanks to a coherent strategy and delineated packages where private practitioners and public hospitals could opt (on a voluntary basis) which TB control public health functions they would like to undertake; the adoption of the International Standards of TB Care; the involvement of MMA and PSI as interfaces who have the mechanisms and capacity to link to numerous providers; the provision of drugs by NTP for use in the private sector; and the inclusion of private sector contributions in national TB reports, thereby stimulating compliance with notification requirements. It has resulted in over 2000 general practitioners being trained and actively referring TB suspects or

providing treatment. PSI has combined its TB scheme with other primary health priority programmes, thereby increasing its efficiency and cost-effectiveness and building qualitatively enhanced private services. As private doctors (or traditional healers) are often the first point of contact for sick people in Myanmar, their linkage to NTP will also allow earlier detection of TB. Progress has also been achieved in linking public hospitals. A total of 18 hospitals have been formally linked. Advocacy meeting, training, provision of drugs and stationeries from NTP and supervision were or are part of the linkage process. The relationship established for providing DOTS services and referral systems will also foster introducing additional activities such as routine screening. The plan is to expand hospital linkages to include all regional/state and district hospitals and to broaden the scope of TB services available in hospitals, thereby focusing on childhood TB services as well as screening of TB, especially in admitted patients, OPD patients and A&E patients that belong to higher risk groups for TB.

With support from the Global Fund (as well as JICA and 3DF), models were developed and expanded for devolving programme activities to the <u>community</u> level. This focuses primarily on increasing case finding through identification of TB suspects (with symptoms) and referring them for diagnosis and, in the case of MDR-TB, also in provision of supervised treatment. To promote more equity, underperforming townships and underserved areas were prioritized for involvement of national NGOs. As the number of townships supported has been limited, share at national level is still marginal but in areas where these activities are implemented, community-led referrals contribute approximately 5% directly.

As several new approaches have been adopted in recent years, <u>operational research</u> was directed to support the introduction of these new approaches and to their evaluation at an early stage so that, based on lessons learnt, methodologies could be adjusted, where necessary. Most research projects were conducted in a collaboration between NTP, the Departments of Medical Research and NGOs. The NTP could thus benefit most from the results of research while the research institutes could further strengthen their capacity to address programme-related research priorities. Current research projects supported by WHO include: use of FM radio and vernacular in health education messages in ethnic areas; application of fluorescence microscopy in diagnosis of TB; application of GeneXpert; PPM in hard-to-reach areas; role of traditional healers in TB treatment; community participation; active case finding in hospitals and in remote areas.

#### **b.** Outcome and impact

As per the WHO Global Report (2012), the key indicators are well on track to reach the TBrelated MDGs. The target for reducing mortality (excluding HIV) has already been achieved. Even if we consider the higher TB mortality due to HIV, a 50% reduction is also achieved. The table below shows the WHO estimates (Source: WHO Global TB Report 2012).

	2011 estimate	1990 estimate	Difference
Prevalence rate (all cases)	506/100 000	894/100 000	-43%
Incidence rate (all cases)	381/100 000/year	393/100 000/year	-3%
Mortality rate (excl. HIV)	48/100 000	113/100 000	-58%

Though the prevalence survey showed a much higher TB prevalence than earlier thought, there is ample evidence that the programme was very successful in reducing the burden of the most crucial group of patients: definite symptomatic cases. The decline in burden of smear- or culture-positive TB, especially those without typical symptoms such as chronic cough, is much less prominent, though. Most currently undetected patients belong to this

#### group.

Incidence rates are also falling, though at a much slower pace. The overall gap between notifications and incidence is narrowing, though not uniformly across the country.

Case detection rates have increased tremendously in recent years, thanks to a strong partnership, the significant additional funding and the availability of TB drugs free-of-charge.



The notification-prevalence ratio (as a measure of coverage of case detection) is higher in women than men. It is also higher in regions compared to states. Declines in prevalence and mortality were modest between 1990 and 2000 and accelerated much after 2000, likely due to the impact of the DOTS programme which was rolled out during the nineties.

Reaching the benchmark of 85% treatment success in consecutive years is proof of the good quality of the programme. It ensures that the programme is able to manage properly the cases it detects. It also implies that contributing activities are overall OK, such as drug quality, patient classification, referral mechanisms and recording and reporting.

With 4.2% among new cases, MDR-TB is not negligible. As under NTP cure rates are high and failure rates low, causes of MDR-TB are likely mostly outside NTP. Promoting referral to NTP as well as sound TB services in the private sector and advocating against the over-the-counter availability of TB drugs are strategies effectively used by NTP to prevent MDR-TB. While results of the third TB drug resistance survey are expected in mid-2013, there is currently no evidence of an increase in MDR rate.

## TBHIV: see Section 2.4

Engagement of other health care providers, especially private practitioners, did contribute more than 15% of the country's notifications. It also must have contributed to earlier case finding with reduced diagnostic delays. The PPM approach initiated by NTP provides also a mechanism that can be used for other components of TB control. It can also be availed by other programmes and hence may have a positive impact much beyond TB control.

## c. Key stakeholders

Through NTP, the Ministry of Health is at the top of TB control in the country. It is the designated government body to develop relevant TB control policies and strategies, ensure service delivery, make linkages with other relevant ministries, if necessary, and report to national and international bodies. It has also an important role in coordinating the contributions of different partners.

The M-CCM is the ultimate oversight body for overseeing the national response for TB control. It is chaired by H.E. Minister for Health and composed of 29 members representing

various constituencies. Principal Recipients report about the Global Fund grant implementation to M-CCM. The TSG-TB advises M-CCM for matters of policy and technical nature related to TB. The TSG-TB and its subcommittees are widely inclusive with all implementing partners as well as academia regularly being consulted. The NTP is further supported by various committees (e.g. Expert Committee on Drug-Resistant TB, research committee). Patient representatives are also increasingly being consulted in NTP normative work and service delivery.

Implementing partners include both national and international NGOs. Among INGOs are AHRN, CESVI, FHI 360, IOM, Malteser International, MDM, Merlin, MSF (Holland and Switzerland), PACT, PSI, Union and World Vision. National NGOs include MHAA, MMA, MMCHA, MRCS, MWAF and PyiGyiKhin. Several of these NGOs work with community-based organizations and patient groups at the most peripheral level.

The current principal agencies providing funding for TB control in Myanmar are the Government, the Global Fund (with UNOPS and Save the Children as Principal Recipients), 3DF and 3 MDGs Fund (both managed by UNOPS), USAID (providing support to general TB control through PSI and WHO; and for MDR-TB through the CAP-TB project managed by FHI 360), JICA, the Global Drug Facility (grant for pediatric TB drugs), UNITAID, FIND and TB REACH. Some INGOs raise significant private funding. WHO has also a modest budget line from its core budget.

Technical assistance is mostly provided by WHO. The agency can draw on in-house expertise including from its regional office and headquarters and is in a position to recruit short-term consultants from anywhere in the world. Technical expertise in specific areas is also provided by JICA and the Union while UNOPS is also contributing to strengthening the NTP's and partners' managerial capacity particularly in the area of grant and assets management.

Representatives from affected communities (including patients) are also involved. World Vision has been successful in setting up TB self-help groups. (Ex-)patients were also present in meetings for formulation of national guidelines (e.g. community guidelines) and sometimes act as DOT provider. There is also a major buy-in from professional organizations, academia and research agencies, particularly in areas where they have a direct stake.

#### d. Limitations

The process of involving multiple stakeholders is at this point of time as important as the outcome as mechanisms and procedures are being developed, mainstreamed and institutionalized. TB control is moving to finding the optimum level of broad consultation without delaying decision making, of supporting the national response in the most effective way, thereby balancing cost-effectiveness and improving equity and partner involvement based on comparative advantage. While sustainability is kept on the radar, ad-hoc and temporary measures are sometimes put in place for quick results thereby balancing long-term country views and immediate donor requirements.

Major limitations are in the area of capacity augmentation (including addressing staff shortages). The National Strategic Plan was designed for ideal circumstances, i.e. an enabling environment is fully in place in terms of available funding, human resources and infrastructure. The reality is quite different with an enormous need to augment capacity particularly for the new areas in TB control. MDR-TB diagnosis requires a huge investment in more sophisticated laboratory development (which itself is also dependent on several

"obvious" but often absent basic amenities such as uninterrupted electricity provision or low-mineral water supply). Expanding TB/HIV collaborative activities depend also on a simultaneous expansion of HIV services and increasing access to antiretroviral treatment. Active case finding (in particular to detect the asymptomatic definite cases) requires huge upfront investments in mobile digital X-ray and GeneXpert and is fairly labour-intensive.

Human resources are also a major bottleneck. Dedicated TB teams are in place in 101 districts and townships while TB activities are fully integrated in the remaining townships. The latter situation increased workload of health staff enormously but may likely offer avenues for quick wins in integrating TB and MNCH services. Decentralization of MDR-TB and TB/HIV services as well as further expanding PPM services will require much handholding, intensive supervision and on-the-spot training (in addition to the initial update training) for which there is currently a lack of cadre.

If all the committed funding is realized, a significant funding gap remains. Increasing the absorption capacity implies also strengthening the managerial capacity for planning, monitoring, evaluation and reporting. Building this capacity requires additional investments, several of them outside NTP and will definitely take much time. Capacity will also need to be built for coping with change as in the coming years funds will likely be managed by government agencies. In the longer term there will surely be major changes in technical areas through the introduction of new regimens and new diagnostic tools, which may alter the programme design fundamentally.

#### e. Limitations in national data systems to measure and demonstrate impact

The routine TB reporting system has been firmly in place for several years. It has served monitoring the implementation of DOTS effectively. Aggregated cohort-wise data are available from all townships. Additional indicators have been added to capture PPM activities, MDR-TB and TB/HIV activities. By and large this system serves the purpose of NTP, even if compiling country reports may take up to six months due to bottlenecks in collecting and compiling data at state/regional and township and transferring those to the higher levels. Some of these bottlenecks are explained by erratic infrastructure, absence of telephone/internet or inaccessibility of some areas during rainy season. Instability in security-compromised areas and remoteness also affects reporting. To partially address this, a limited "essential report" was designed to allow timely reporting of Global Fund indicators.

The routine reports measure mostly inputs, progress and outputs but not impact. Measuring impact in TB control is a more tedious job and makes sense after a prudent period of time (e.g. the acceleration of case detection after 2000 is largely the results of the investments in DOTS expansion in the nineties: while a small increase was detectable during expansion, the major impact become only apparent when implementation was in full swing). Therefore it does not make sense to repeat a disease prevalence survey within five years of a previous survey. In view of the relatively wide confidence intervals, demonstrating a small difference over a shorter period would require a huge sample size which would make a survey prohibitively expensive. This is not in the interest of NTP neither of any donor. The same principle applies to demonstrating impact in drug resistance.

With regard to conducting prevalence or drug resistance surveys in Myanmar, there is ample capacity in the country to do so. Procedures and lessons learned in previous surveys (as well as surveys in other countries) have been well documented and were considered when designing the last prevalence survey and on-going drug resistance survey. While technical inputs were provided by WHO and the Research Institute for Tuberculosis (Japan), the bulk of the work (implementation and data analysis) was done in the country and did not require much international handholding. Data from the most recent surveys were considered as robust and are used by WHO when reassessing global disease burden annually. The impact results of the Myanmar NTP were shared in several international forums (e.g. Union World Conference on Lung Health) and were also published in reknown peer-reviewed journals.

The country has no experience in conducting mortality surveys. An operational research project (funded by WHO) is currently undertaken by the Department of Medical Research to develop a methodology that could be applied for an eventual nationwide mortality survey. Verbal autopsy is central to such type of survey. In the absence of direct measurement, Myanmar depends on mortality estimates annually provided by WHO for reporting against the TB mortality MDG indicator.

#### 2.4 Enhancing TB/HIV Collaborative Activities

If you are submitting a **TB and/or HIV concept note(s)**, you must describe the scope and status of on-going TB/HIV collaborative activities.

- a. How the funding requests will strengthen TB/HIV collaborative activities.
- b. The linkages between the respective national TB and HIV programs in your country.

#### 1 PAGE MAXIMUM

#### a. Strengthening of TB/HIV collaborative activities

The country has established a sentinel surveillance system which annually assesses (among others) the burden of HIV in TB. The number of sites has increased from 4 in 2005 to 25 in 2012. Subsequent rounds show a positivity rate hovering around 10%. There are, however, more wide variations between sites with one site reporting a co-infection rate of 19%. The TB prevalence among people living with HIV is believed to be over 30%. The mortality amongst the TB/HIV co-infected persons is also higher: 24% compared to 5.5% in TB patients with unknown HIV status. This could be due to a relatively late diagnosis as well as delayed initiation of ART. Due to limited availability of antiretroviral drugs, the most severe patients (most of them with a CD4 count of <140/mm<sup>3</sup>, who have also the worst prognosis) are prioritized. The TB and HIV concept notes attempt to bridge these gaps and consequently decrease the mortality associated with the co-infection as well as prevent new infections to some extent since ART itself is key to reducing the TB incidence.

Enhanced collaboration between NTP and NAP is promoted. During the past two years and with support of the Global Fund, TB/HIV collaborative activities were expanded with increased HIV screening among TB patients, ART provision for HIV-infected TB patients and their spouses and the provision of isoniazid preventive therapy for people living with HIV in 21 townships. As of June 2012, up to 2105 co-infected patients were started on ART. For 2015, target is to reach 3000 people.

In 2012, a joint national TB/HIV treatment strategy was finalized. This strategy addresses most of the components of the global WHO strategy. It includes the following elements: (i) intensified case finding for TB among PLHIV: (ii) HIV counseling and testing for TB patients: (iii) improved TB/HIV awareness and health education: (iv) co-trimoxazole

prophylaxis; and (v) referral to HIV care and treatment including ART. Relevant TB/HIV activities are developed collaboratively by both national programmes with inputs from all stakeholders.

In the designated townships, current TB/HIV activities include screening of PLHIV for TB during each visit (this is done using a clinical algorithm focusing on detecting TB among symptomatic patients); provider-initiated HIV counseling and testing (PICT) for TB patients; and infection control measures. These activities are planned to be strengthened and expanded under the current request through the concept notes from TB and HIV programmes. The provision of IPT was piloted at 12 sites in Myanmar in 2011 and planned for scale-up. This will be undertaken by NAP but isoniazid will be provided by NTP.

This concept note proposes to offer HIV testing to all diagnosed adult TB patients across the country. Knowing one's HIV status is a cross-cutting issue related to rights and assists clinical management by facilitating timely initiation of CPT and ART (at par with expansion of these services by NAP), thereby improving treatment outcomes as well as reducing HIV transmission through targeted health education (in areas with no access to ART). By the end of 2016 it is expected that all adult TB patients will be offered HIV testing as well as an uptake of 60%-70%. It is also envisaged that HIV-positive patients will be linked to the care and treatment services for HIV under NAP so that they could be offered CPT and ART as per the national guidelines. Testing of TB patients is proposed and budgeted by NTP while the provision of CPT and ART is planned and budgeted by NAP. The TB concept note also addresses the component of infection control in TB facilities that would also provide HIV care. All the townships covered under the grant are expected to have improved diagnosis by GeneXpert.

NAP has experience with HIV testing in different parts of the country. Selected staff in TB facilities will be properly trained for counseling and testing with referral of positive cases to HIV services. In integrated services, counseling and testing can be done by trained general health care staff. There will be a gradual scale-up with 60% of adult TB patients targeted to be tested in 2013, 75% in 2014, 90% in 2015 and 100% in 2016. PICT will be undertaken in 200 facilities in 2013, 250 in 2014, 300 in 2015 and nationwide in 2016.

#### b. Linkages between TB and HIV programs

Apart from the programmatic linkages that govern the implementation of the collaborative activities and are discussed above, the two programmes collaborate with many national, international and development agencies to ensure best use of available resources. To avoid duplication of efforts, regular HIV and TB TSG meetings. The TB TSG includes a sub group on TB/HIV. In addition to the TSGs, there is a central TB/HIV coordination committee which has a varied membership including the two programmes, implementing and funding partners, and UN agencies. This committee is responsible for the governance, planning, coordination, implementation and scale up of the TB/HIV activities.

#### **SECTION 3: Programmatic Gap**

Please complete the **Programmatic Gap Table** in Attachment 2 by identifying the gaps in coverage for three to six priority program areas consistent with the National Strategic Plan,

and which will be addressed through the applicant's funding request.

All numbers in this table should relate to the size of the population groups targeted by the priority program areas, and not the financial need for the program areas.

3.1 In accordance with the **Programmatic Gap Table** in Attachment 2, describe the **assumptions, methodology and sources** used in estimating the programmatic gaps.

**1 PAGE MAXIMUM** 

The 2011 external NTP review identified the following main gaps in the TB programme:

- 1. Early and intensified case finding among risk groups;
- 2. TB/HIV collaborative activities (HIV testing and ART scale up);
- 3. MDR-TB treatment scale up;
- 4. Diagnostic capacity;
- 5. Additional human resources need for key areas.

The Phase 2 request for renewal submitted by M-CCM was based on the TRP-approved ceiling for Phase 2. The current concept note incorporates (and extends) Phase 2 and includes a significant request for scaling up beyond Phase 2. While the full concept note proposes the most realistic scale-up considering the time frame and absorption capacity (and not the full expression of demand), the indicative budget would mainly allow to implement Phase 2 core activities with one year extension (2016) and limited scale-up activities.

The proposed scale-up would include the following key activities:

- 1. TB/HIV: by the end of 2016, almost all adult TB patients will be offered HIV testing through PICT. Uptake of the test is anticipated to be in the order of 50% for new areas increasing to 70% or more after a prudent period of experience (about three years). In addition, all HIV-positive TB patients will receive CPT and ART in TB/HIV townships.
- 2. MDR-TB: 2000 additional patients, thus 3200 patients in total for the period 2013-2016.
- 3. Active case finding: at least 22 500 additional patients are expected to be detected.

## Assumptions

While NTP has planned a budget, it will rely on NAP to procure and distribute HIV test kits. Though presence of TB disease has already been made one of the critical criteria to start ART (irrespective of CD4 cell count), NAP will ensure availability of co-trimoxazole and antiretroviral drugs.

MDR-TB scale-up will depend heavily on critical investments in laboratory capacity as well as timely procurement and delivery of second-line anti-TB drugs, ancillary drugs and patient support. While laboratory expansion and drugs are also planned under this grant, experience learns that any procurement should be initiated well in advance in order to enroll the planned number of patients throughout the year and avoid the sudden surges followed by months of non-enrolment. Provision of adequate patient and provider support will also depend on proper coordination with other funding sources.

Active case finding requires initial heavy investments which may take time to procure. It also needs significant additional human resources involving recruitment, training, supervision and also planning to cope with unavoidable turnover in order to make

maximum use of large investments. Yields in active case finding are still fairly uncertain. Though there is evidence from the prevalence survey, it is not known what will be the participation rate since this will remain on voluntary basis. Massive screening programmes have automatically lower relative yields, and require confirmation tests especially when aiming to detect the patients without typical symptoms. Partners can contribute much but will depend on carefully planning their work area and seek timely amendment of their MoU with the Government.

#### **Methodologies and sources**

One of the principal sources for estimating the gaps and yields were the prevalence survey, HIV sentinel surveys and drug resistance surveys. A 1% prevalence rate is used to estimate the maximum potential yield for active case finding in higher risk groups. This may be more in poor urban areas, remote areas or prisons, but is much less in contact cases or diabetes (but still significantly more than in the general population and therefore worth to screen). Approaches for estimating additional cases have been used in a conservative way, considering the fact that current activities (basic services, PPM, etc.) will continue permanently while the active case finding will be developed as a one-time or periodic campaign in a given area. Yields will also vary depending on the methodology used. With conventional X-ray, a symptom-filter is required which may lead to identifying the most sick patients but missing more than half of the patients, especially those with no or minimal symptoms. Digital X-ray and computer reading of images will allow almost universal screening.

As per national guidelines, broadened categories of MDR-TB suspects will be tested for drug resistance. Diagnosis of TB with GeneXpert (as planned in HIV and active case finding) will also yield rifampicin-resistant cases (about 4.2%) who have never been treated. The total MDR-TB will still be much short from the total number of MDR-TB cases present in the country but will likely be higher than what can be treated and hence relevant committees will need to prioritize the patients for treatment.

## SECTION 4: Funding Request to the Global Fund

Please complete the questions below together with the **Modular Template** in Attachment 3.

#### 4.1 Funding Request within the Indicative Funding Amount

Please describe how indicative funding requested and any existing Global Fund financing will be invested (or reprogrammed) during the funding request period to maximize impact. In your response, include:

- a. The objectives and expected outcomes of the funding request, and how the outcomes have been estimated and will contribute to achieving greater impact. Please refer to available local evidence of effectiveness of the programs being proposed.
- b. The **proposed modules and interventions** of the funding request in order of priority, in addition to the rationale for their **selection** and **prioritization**.
- c. For **consolidated funding requests**, explain how current interventions will be adapted, discontinued or extended to maximize impact.

4 PAGES MAXIMUM

The indicative funding amounts to US\$ 68.4 million: 42.4 million earlier committed for Phase 2 and an additional 26.3 million US\$. Sustaining Phase 2 activities in 2016 would require approximately 18 million US\$. This means there is only 8.3 million US\$ available for scale-up during 2013-2016. In view of the time constraint to develop detailed work plans beyond what is available and the fact that the 3MDGs Fund may provide funding for 2013-2014, it is also propose to tap on additional money from the Global Fund only from 2014 onwards and stick to the earlier agreed Phase 2 activities during 2013. The 8.3 million US\$ extra indicative funding will be prioritized to provide support for PPM activities in order to consolidate the current achievements, involve private practitioners in MDR-TB and TB/HIV management (by MMA) and prevent a reversal of gains made in recent years. In view of two grants to PSI coming to an end, the planned continuation of key activities with Global Fund support is crucial to ensure facilitate further geographic expansion as well as embarking on managing TB/HIV and/or MDR-TB in the private sector. Expansion of TB/HIV activities and active case finding will also be feasible while MDR-TB roll-out will mostly depend on incentive funding.

## a. Objectives and expected outcomes

The goal is to reduce the burden of TB by 2015 in line with the MDGs and the Stop TB Partnership targets.

The objectives are:

(1) Pursuing high quality DOTS: enhancing the quality and expanding services to all TB patients (including through active case finding), to sustain and further improve case detection and treatment success rates;

(2) Addressing TB/HIV, MDR-TB and other challenges such as TB care for high risk groups in border areas and infection control;

(3) Engaging all health care providers through public–private and public–public mix and rolling out the International Standards of TB Care (ISTC) in other sectors;

(4) Advocacy, Communication, Social Mobilization (ASCM) and community based DOTS in hard-to-reach areas by partner agencies.

#### **b.** Proposed modules and interventions

As the indicative funding allows financing Phase 2 activities and PPM, the 12 service delivery areas have been regrouped in five modules: (1) DOTS-based package, including PPM, ACSM, intersectoral collaboration and active case finding; (2) TB/HIV; (3) MDR-TB; (4) monitoring and evaluation; and (5) programme management. Health and community systems strengthening, and gender are embedded across the relevant modules and interventions. Similarly, technical assistance will also be linked to the relevant modules. Human rights will further be selected as module and relevant activities related to this will be grouped here.

#### (1) DOTS-based package

This is the anchor of TB control. Major cost elements include the first-line drugs. While the government in the past maintained a budget line to provide drugs for areas where the Global Fund had no access to, this budget line will continue to be used but without geographic earmarking. Quality of drugs will also be monitored up to the point of care level. Currently, quality-assured drugs were imported by GDF but consumption could be up to one year later. The more down-the-line assessments will provide a more robust

guarantee and safety for the patients and will also be implemented for TB (and other) drugs acquired from other suppliers, which is very relevant in case they are not prequalified.

The microscopy network will be further maintained with external quality assurance mechanisms being institutionalized. X-ray machines in government facilities will be maintained.

The public–private and public–public approach will be further expanded by engaging more private practitioners, private pharmacies, private laboratories as well as all remaining public hospitals. For linking private practitioners, two schemes are mostly followed: Scheme I, which includes identifying and referral of suspects; and Scheme III, which, in addition to the Scheme I activities, includes also providing treatment (with drugs provided by NTP). DOTS hospitals are linked to NTP through Scheme I (diagnosis and referral) and Scheme IV (including providing treatment and follow up). The scope of the PPM hospitals will be expanded to include systematic screening of all hospital attendants. Mobile team activities will continue to be conducted particularly in urban and remote areas, for which portable digital X-ray machines will be bought.

Other active case finding activities include prisons. Community-based organizations are already involved, particularly in identification of TB suspects. Volunteers organized by MHAA, MRCS, MMCWA and MWAF actively search for symptomatic TB cases with an increased number of underserved and/or underperforming townships being prioritized. National guidelines to streamline community-based activities have also been developed. Contact tracing, with priority for smear-positive index cases, will also be more systematically undertaken.

Migrant populations, including internal and cross-border migrants, pose additional challenges: a relatively higher risk (due to living and working conditions) as well as access to diagnosis and treatment. Six border townships and peri-urban slum areas (especially where industries are present) are specially targeted. Activities for these groups will include advocacy and coordination with local/border authorities, active case finding with mobile teams, border health committee meetings; information, education, communication as well a media campaigns. The International Organization for Migration is a key actor in this area.

Any activity currently undertaken in collaboration with other sectors (e.g. TB in prisons) will continue during the next years.

The recording and reporting system will be further improved, moving towards computerized case-based data entry. This will initially start for MDR-TB with the possibility to link it for all forms of TB and link to the overall health system the ministry is developing.

### (2) TB/HIV interventions

The current level of activities will be maintained and gradually expanded. NTP will provide the budget for procurement of HIV test kits. These will be procured by NAP together with HIV test kits for other beneficiaries. Depending on the local conditions, TB patients will be referred to PICT services or (trained) TB clinic staff will conduct VCCT themselves. The number of townships where NAP will provide CPT and ART will increase from 18 to 42 (to be scaled up further with incentive funding), thus increasing the opportunities for HIVpositive TB patients to access ART, prophylaxis and OI services. HIV patients will be investigated for TB on a periodic basis, with referral of TB suspects for screening with Xray, microscopy and/or GeneXpert. Isoniazid preventive therapy will also be rolled out.

## (3) MDR-TB

Starting from 2012, NTP is enrolling 400 patients per year with more being diagnosed. This number will be maintained during the next years and, subject to availability of incentive funding, scaled up with another 2000 patients between 2014 and 2016 (total 3200). Laboratory capacity will be further developed with the procurement of 24 GeneXpert machines, and the maintenance (including provision of consumables) for five culture/DST laboratories. Infection control will be addressed through administrative measures, engineering controls and personal protective equipment. Though a regimen without PAS has been adopted for non-Cat.2 failures, second-line drugs remain an important budget line.

## (4) Human rights

The Patient Charter has already been translated into Myanmar language and will be further disseminated through all NTP partners, patient groups and advocates. Reducing barriers to diagnosis and treatment will promote the right of each patient to access treatment. PICT will facilitate patients being made aware of their HIV status (positive or negative). This entails inclusion of all townships (including the post-conflict townships), extending services through the use of CBOs and mobile teams in areas which are underserved by regular health services. Training related personnel of health and other departments in rights-based TB control package will contribute to the goal that all patients will access "best practice" in TB treatment. Promoting early case finding through active searching and linking private sector will also help in reducing the transmission; similarly increased attention for infection control and the regular checking of health workers will facilitate prevention and prompt treatment of nosocomial infections. Sputum collection centres and transportation mechanisms, provision of incentives (e.g. travel fare, food packages) and enablers to patients as well as free-of-charge drugs and laboratory investigations will further reduce out-of-pocket expenditures while additional support for basic health workers and volunteers will increase motivation and efficiency of the grassroots health workforce. As CSOs will be crucial in supporting this approach, their capacity will also be augmented.

#### (5) Monitoring and evaluation

Quarterly case notification and cohort reports are well in place and will remain in place over the next four years. New global guidelines will be incorporated which will require a major change in compilation and reporting while safeguarding the cohort principle (which is key to the accountability of the programme).

Case- and web-based electronic recording will be introduced and gradually expanded. This will initially be limited to MDR-TB sites (since reporting units are few and internet penetration in the country is still very limited) but software used should have the provisions for encompassing all TB requirements and be linked to the overall health system. It is expected that 3MDGs Fund and possibly USAID will also contribute in this process. IT infrastructure of NTP and partners will be maintained and further developed. Quarterly and annual reports will continue to be produced.

Field visits will also continue to be undertaken from central to states/regions; to TB/HIV townships (to be gradually streamlined with general supervision); from state to townships. Microbiologists and senior TB laboratory supervisors focus on all laboratory activities during their supervision rounds. Where possible joint supervision visits will be promoted between government, NGOs, CSOs, WHO and/or PR. These visits offer also a good opportunity for on-the-spot training, communicating programme instructions, obtaining

feedback from field staff and checking if adequate action is taken on earlier recommendations. Data quality assessments will be undertaken by NTP or partners aiming at validating reported data and obtaining.

No prevalence or DRS surveys are planned over the next four years. Preparations for a nationwide TB prevalence survey will start in 2016 with the actual survey being planned for 2017. TB was included in annual HIV sentinel surveys. This will continue, unless routine PICT for HIV will be in place in the whole country in which case routine programme data covering the majority of patients will be much superior than information from relatively small sentinel samples. A mortality survey is being planned with non-Global Fund resources.

#### (6) Programme management

This module includes all administrative and management activities undertaken by PRs and SRs. This includes:

- Quarterly planning meetings, where micro-plans are developed for the next quarter are developed.
- Coordination meetings at different levels have proven to be very useful and will be continued throughout the country. NTP and partners organize their quarterly and annual coordination meetings with mutual inputs and focusing on issues relevant for their staff and agency. TSG-TB meetings (at least quarterly) as well as meetings of other committees subcommittees and task forces are also included.
- Evaluation meetings will be held monthly or quarterly at state/regional and SR level; and annually at central level (general and laboratory); meetings in six border townships will also be supported.
- Office running cost includes hiring and maintaining of office space and warehouses, utilities, acquiring and maintaining office equipment, IT, provision of stationeries for PRs and SRs.
- Transportation: no new vehicles are planned, but a budget for maintenance, fuel, drivers and insurance has been included.
- Procurement and supplies management cost (including warehousing and handling); and distribution cost for drugs.
- Management and support staff of PRs and SRs including fund flow mechanism.

Training of PR and SR staff as well as other implementers such as CBOs, private practitioners, etc. occupies multiple budget lines. To a maximum extent training will be coordinated to cover logical components of TB control into one package and to link with other programmes. Training activities encompass technical as well as management training.

Advocacy, communication and social mobilization activities are also included in this module. World TB Day activities will be organized at central, state/regional and district level participation of NGOs and CBOs and affected communities. Community volunteers will also be involved in SR-led evaluation events on periodic basis. IEC materials will be developed by NTP and/or SRs, field-tested and used by all stakeholders in the country. Mass media campaigns will also be undertaken.

Technical assistance has been included under each module, where relevant. The network of field-based staff (currently contracted by WHO) will be maintained over the next

implementation period. Consideration will be given to transferring this network under direct government management when favourable conditions prevail. Technical assistance of a multi-modular nature has been included in this module. This includes WHO long-term staff (with partial funding from non-Global Fund funding source) and central-based national technical officers. WHO short-term missions have not been included as these will be funded from other funding source while other partners have included also some shortterm consultancies related to their specific support area.

Annual missions will be conducted by the Green Light Committee for which a flat rate of US\$ 50 000 is budgeted. An external programme review is planned towards the end of 2014 (previous review was in November 2011).

#### c. Consolidated funding request

The proposal submitted to be funded by the indicative funding is a consolidated proposal in the sense that it includes the entire Phase 2 proposal, as submitted earlier but realigned to the modules, interventions and activities with almost no changes. This carried a value of 42.4m US\$. The remaining 26.3m US\$ under indicative funding will be used for extending all relevant Phase 2 activities till 2016 (with discontinuation of inclusion of TB sentinel sites for HIV subject to adequate scale up of universal PICT). This leaves about 8.3m US\$ which will be mainly used for PPM consolidation and expansion, with increased coverage targets (for Global Fund-funded activities) as well as TB/HIV expansion, selected active case finding initiatives and providing some foundation work for MDR-TB expansion.

## 4.2 Funding Request above the Indicative Funding Amount

Building on the applicant's funding request in 4.1, please describe and prioritize the funding request above the indicative amount, including:

- a. The **additional gains**, **objectives** and **outcomes** that could be realized to achieve specific national goals or objectives.
- b. What the **additional proposed modules and interventions** are in order of priority. Explain the rationale for this prioritization.

#### 2 PAGES MAXIMUM

There remain significant gaps between what can be funded with the indicative funding, what is in this concept note (for incentive funding) and the ambitious goals of the updated strategic plan ("full expression of demand"). This concept note points towards the programme's ambitions but is less than the full expression of demand as it considers a realistic absorption capacity over the next four years as well as potential funds available.

#### a. Additional gains, objectives and outcomes

Most of the scale-up as highlighted in the annexes to the Supplement of the National Strategic Plan will be funded from incentive funding. The NTP aims of treating not less than 2000 additional MDR-TB cases (on top of the 400 patients annually) as this is felt as a minimum required capacity as interim benchmark towards the goal of treating 10 000 MDR-TB cases over five years. The TB/HIV expansion will aim towards offering HIV testing on a routine basis while active case finding will be developed in a big way to maximize impact at a national level. It is planned to start introducing scale-up activities from 2014 onwards with some activities (such as procurement and staff selection) being initiated in

#### 2013.

If all funds can be made available, then the following results are expected:

More than 90% of adult TB patients will be offered HIV testing and 50%-70% are expected to be actually tested. Lives will be saved by offering CPT and ART to a maximum extent. TB transmission will be further reduced by an expected reduction in HIV transmission if patients know their HIV status.

With regard to MDR-TB, capacity will be built for diagnosing and managing an additional 2000 patients at a cost of 12.7m US\$. This scenario will have a coverage of 72 townships or 32% of the country's population. In addition, new TB patients with MDR-TB will be also be diagnosed during the active case finding campaigns (when GeneXpert is used) and treated as per the national guidelines.

Accelerated case finding will make a difference in two major ways: identification of smearpositive cases in hard-to-reach areas through the conduction of mobile clinics and further decentralization of services; and identification of the more difficult but substantial group of patients with minimal symptoms (as confirmed by the prevalence survey) through special screening programmes in hospitals and through mobile clinics with dedicated teams, especially in urban areas. More systematic contact screening is also expected to yield additional cases. In the absence of large-scale experience, total yields are estimated rather conservatively. It is expected to detect about 22 500 additional cases, costing 7.5 million US\$. More importantly, these active case finding strategies will contribute to earlier case detection with inherent prevention of transmission.

To make this scale-up possible, additional human resources have been planned, as recommended in the Human Resources mission conducted in October 2012. It is paramount that the proposed scale-up will not be realized without these additional people. Additional staff has been planned at key levels: three people at central level and each state/region. These will provide technical and management support to the TB teams in this crucial phase of expanding critical services that are themselves of a more sophisticated nature compared to the DOTS expansion. It is expected that this intensive support can be reduced after four years if a critical mass of health managers in the country have become well familiar with the new approaches.

## b. Additional modules and interventions

With the incentive funding and since this pertains mainly to a massive scale-up of activities that already occur on a much smaller scale, almost all same modules and interventions will be applied.

## (1) DOTS-based package

Active screening will be included in the DOTS-based package with diagnosis and treatment provided for TB patients identified through screening campaigns. This will require procurement of One-Stop clinics mounted on trucks and including digital X-ray (with computer-aided reading), GeneXpert, microscope, air-conditioning and generator; it will also include running these units as well as continuing to run two similar units planned to be procured under 3MDGs Fund (after phase out of 3MDGs Fund in 2015-2016). It will also entail upgrading X-ray facilities in selected hospitals. NGOs will play an important role in implementing active case finding activities, both in remote areas as well as urban areas, targeting underserved communities, ultrapoor, migrant populations. Systematic involvement of prisons and expanding providing services in mines will also be undertaken

in collaboration with relevant departments (Ministry of Home Affairs for prison and Department of Occupational Health for mines and industries). Pregnant women, diabetes patients, elderly and other people at higher risk for TB will be systematically screened when they visit hospitals. Much of the groundwork will be done with 3MDGs Fund support and scale up with Global Fund support. Systematic contact screening will also be undertaken, prioritizing household members of definite TB cases, followed by (grand)parents of childhood TB cases and lastly contacts of smear-negative or extrapulmonary cases.

## (2) TB/HIV

TB/HIV activities will be rolled out nationwide. All elements of the TB/HIV strategy will be implemented in a phased manner. Coordination between the two programmes at all relevant levels will be institutionalized.

#### (3) MDR-TB

Building capacity for diagnosis and management of an additional 2000 MDR-TB patients will entail major laboratory scale up, with two additional BSL-3 laboratories, additional laboratories for culture and line probe assay and additional GeneXpert. As the policy has been changed to ambulatory treatment with optional hospitalization for severe cases, it is expected that this will not put additional stress for hospitals. However, investments will be made in patient wards, consultation rooms and laboratories to improve infection control. Second-line drugs and ancillary drugs for the additional targeted patients will also be provided free-of-cost. Socio-economic support will be provided as well.

#### (4) Human rights

The same activities as described in 4.1 will be undertaken but expanded at par with the increase in relevant activities for active case finding, MDR-TB, TB/HIV, etc.

## (5) Monitoring and evaluation

Apart from several of the active case finding interventions, it is expected that the M&E mechanisms developed to monitor activities funded from the indicative funding will be largely sufficient. There will even be a cost-saving through the discontinuation of sentinel surveys for HIV in TB if PICT is expanded to most of the country.

#### (6) Programme management

The management cost by PRs has been estimated at 5% of the budget on top of the indicative budget. This is significantly less than the management cost for the indicative budget and is explained by the fact that the set-up to manage the indicative budget allows absorbing much larger amounts of funding.

Additional human resources will be required at the implementation level (mainly affecting SRs) which carries also a higher administrative cost and a higher operational cost, especially since these additional people will be mainly involved in capacity building of the health system across the country.

Training will be an important component. Trainees will be relatively more nongovernment community health staff and volunteers who will supplement the government workers in further decentralizing service delivery and awareness creation. More CBOs and NGOs are expected to be involved and their technical and managerial capacity will also need to be built.

#### **Priority setting**

The 2011 joint review recommended to allocate highest priority to active case finding (in order to reduce this large burden of TB to a level that routine health services can mange without too much external or project support). Second priority is TB/HIV (as most lives can likely be saved there) and third priority MDR-TB (in view of the heavy cost for a relatively small fraction of patients).

This concept note has already reduced the target for MDR-TB dramatically. The 3200 cases over four years are now considered as a minimum in order to be at an acceptable level and allow capacity augmentation when more funds can be mobilized (or MDR-TB management cost would go down).

TB/HIV aims at making PICT a routine. This is relatively inexpensive for the TB budget at national level. Irrespective of the amount of incentive funding, the NTP will aim at offering HIV testing for 100% of the adult patients. Ideally ART scale-up by NAP should match. While there are still advantages of offering HIV tests in the absence of ART, the success of PICT uptake will likely also be determined by the availability of ART.

This means that there is most room to prioritize activities for active case finding as this can be easily done in a phased manner. Depending on the available budget, the number of activities can be adjusted, keeping in mind that any major epidemiological impact at a national level will require a wide implementation. With the indicative funding alone, limited active case finding will be undertaken (mainly what is programmed under Phase 2, continued in 2016), while, depending on the funds available, the number of additional patients detected is expected to increase to 22 500. As active screening is also a field of interest of the 3MDGs Fund, complementarity of activities will be ensured. The 3MDGs Fund is likely to decide on the level of support subject to what will be committed by the Global Fund.

#### 4.3 Commitment to Sustainability and Additionality

Financial sustainability is important to ensure continuity of impact. In particular, implementing country governments must fulfill their obligations to sustain and increase contributions to the national response. The counterpart financing requirements of the Global Fund are set forth in the Policy on Eligibility Criteria, Counterpart Financing Requirements, and Prioritization (ECFP).

Please complete the **Financial Gap Analysis and Counterpart Financing Table** in Attachment 4.

- a. Indicate whether the **counterpart financing requirement** has been met. If not, provide a justification that includes actions planned during implementation to reach compliance.
- b. Describe whether and how this funding request to the Global Fund will be complemented by additional funding commitments from the Government.
- c. Describe how this funding request to the Global Fund can leverage other donor resources.

1 PAGE MAXIMUM

a. Counterpart financing and b. Additional funding commitments from the Government

The following table shows how the amount of government funding was computed (all

Fiscal Year Regular Budget				TB drugs	Total	
	NTP	Aung San TB Hospital	Patheingyi TB Hospital	Htantapin Workers TB Hospital		
2010-11	575	83	94	70	94	916
2011-12	694	79	106	62	58	999
2012-13	1 080	114	111	66	200	1 571
2013-14	1 092	115	112	66	200	1 585
Total	3 441	391	423	264	552	5 071

Total expenditure or budget for four years: 5.07b MMK equivalent to US\$ 5.96 million

Global Fund total request (2013-2016): 106.4 million US\$

Government contribution: 5.96m / (5.96m +106.4m) = 5.3%. This is above the minimum threshold of 5%. It should also be noted that the government contribution includes only the "vertical" TB costs. The true contribution is much higher if also "horizontal" costs are (proportionately) included, e.g. use of basic health staff, hospital infrastructure, etc.

## c. Leverage of other donor resources

The Global Fund has become the principal funding source for TB control in Myanmar. The Three Diseases Fund was set up as a salvage fund after the unilateral withdrawal of the Global Fund in 2005. With the re-entry of the Global Fund, the 3MDGs Fund (successor mechanism of 3DF) would now change its scope of support towards maternal and child health and health systems. Still it has committed ample resources for the three diseases which are likely to be made available during the first two years (i.e. in 2013 and 2014).

As there will thus be important developments in the areas of maternal, neonatal and child health as well as health systems – all areas which have linkages to TB control – Global Fund funding will be fully complementary to investments by the 3MDGs Fund.

The National Strategic Plan is considered to be the central frame for providing donor support. The support provided by external agencies is anchored around this plan, both at the funding level as well as implementation level. The activities implemented by local and international NGOs are well coordinated by NTP. While several other donors may provide funding based on their own agenda, strategy or interest, the NTP can accept this support as it fits well with the national strategy. The request for funding to the Global Fund is largely country-driven and fills funding gaps not covered by other partners.

The request to the Global Fund is ambitious yet realistic. It will require a major augmentation of national capacity for which technical assistance has been included in the proposal. Additional necessary technical assistance is already committed by other partners, who have also a major interest that the NTP (including the Global Fund-funded activities) is successful.

#### 4.4 Focus of Proposal

This question is **not** applicable for Low Income Countries.

If the applicant is a **Middle Income Country**, describe how this request meets the Focus of Proposals requirement according to the threshold based on the income classification for the country. - <sup>1</sup>/<sub>2</sub> PAGE MAXIMUM

Not applicable

## **SECTION 5: Implementation Arrangements**

### 5.1 Principal Recipient Information

Complete this section for each nominated Principal Recipient. For more information on Minimum Standards refer to the Concept Note Instructions.

PR 1 Name UNOP		S	Sector	Tuberculosis
Does this PR cur Fund grant(s) in		anage a Global ase/HCSS area?	⊠Yes	□No
Minimum Standards		CCM assessment		
demonstrates	<ul> <li>the Principal Recipient demonstrates effective management structures</li> <li>competitive at international level (e.g. Programme Coord Finance Officer, M&amp;E Officer, Procurement Specialist, Lo Officer, Quality Assurance Officer).</li> <li>Regarding procurement, PR conducts the procurement for</li> </ul>		ed its targets. Latest equaled B1 (P7/2012). Iuding professionals gramme Coordinator, Specialist, Logistics rocurement for both approved by GF based t in August 2012. A eing shared with CCM ery Monday. en approved. formance Framework	
<ul> <li>The Principal Recipient has the capacity and systems for effective management and oversight of Sub-Recipients (and relevant Sub-Sub-Recipients)</li> <li>The PR p data ma current p visits to practices</li> </ul>		programmatic overs level performance a data quality assurant GF including measure Management capac monthly workshops staff, UNOPS-Progra Disease Control offic The PR plans to cont data management p current practice of c visits to the SRs li practices. For local NGOs (SR review and work pla		sorption capacity and lings are submitted to ed. nhanced through bi- through WHO-hired nce officer placed in ions. technical assistance in and continue with its ous DQA and support to data management ties include quarterly ad on-the-job support

		further provides status updates of SRs capacity. Summary reports on desk reviews and field visits to identify and address weaknesses.
		PR monitors SR compliance with set agreements on eligibility of expenses.
3.	There is no conflict-of- interest for the selection of the Principal Recipient(s) and Sub- Recipients	Meets minimum standards No conflict of interest has been reported by the parties concerned in terms of PR and SR selections by M-CCM. A MoU has been developed in January 2011 between the two PRs describing coordination and division of labour.
4.	The program- implementation plan provided in the concept note is sound	Meets minimum standards The implementation plan provided in the concept note is aligned to the National Strategic Plan and is supported by all stakeholders including NTP and WHO.
5.	The internal control system of the Principal Recipient is effective to prevent and detect misuse or fraud	Meets minimum standards The internal control system is considered effective to detect misuse and fraud. This system is implemented through mechanisms including: a code of conduct to which all personnel subscribe; clear delegations of authority which limit an individual from processing incompatible transactions; regular reports and reconciliations to UNOPS Regional Office; financial declarations for identified personnel; robust recruitment systems which require a thorough background check; a financial management information system (Atlas) with embedded strong and proven controls, and periodic reviews and audits by HQ for PR operations and PR compliance reviews for SRs operations.
6.	The financial- management system of the Principal Recipient is effective and accurate	Meets minimum standards The financial management system of the PR is considered as effective and accurate. The system can handle large budgets and can easily produce accurate income and expenditure reports in the format desired by most donors.
7.	The central warehouse and the warehouses for key regions have capacity, appropriate conditions and security to store health products, and to maintain their quality	Meets minimum standards Renovation work of central NAP and VBDC warehouses was completed and highly appreciated during the inauguration by H.E. the Minister and the General Manager of the Global Fund on 17 August 2012. The renovation work of the three TB warehouses (Central, Lower Myanmar and National TB Reference Laboratory) was also completed in December 2012. Besides the above, Latha warehouse originally used as Central NAP has also been renovated for NAP. Regarding a total number of 41 warehouses, ART clinics and TB/HIV sites of all three National Programme in the States/Regions, completion of renovation works is expected by June 2013. Six new warehouses were built with financial and administrative support of the Embassy of Japan. The renovated warehouses now have enough capacity, appropriate storing conditions and access control environment.

	30 LMIS trainings (250 participants from NTP) have been conducted in 2012, including TOT and cascade training at state/regional level.
<ol> <li>The distribution process can handle the requisition of supplies to avoid treatment / program disruptions</li> </ol>	Meets minimum standards The NTP has a robust pull-based system of distribution of drugs throughout the country. A buffer stock (six months at central level, three months at state/regional level and one month at facility level) is maintained to avoid any stock-out. To allow a smooth distribution process, recruitment for foreseen posts has been completed including an International Logistics Officer. Intensive trainings and hands-on mentorship are being carried out for all Procurement and Logistics staff members. In order to avoid over/under estimation of supplies in 2012, PR has forecasted the requirement considering stock-in-hand, pipeline supplies and expected consumption until arrival of the next orders. PR tries to minimise stock-outs by encouraging borrowing among SRs (with prior approval of PR) and borrowed supplies need to comply with the Global Fund Quality Assurance Policy. Stock Management Software has been developed and is being tested by NTP and Pyi Gyi Khin in order to have a better maintenance of stocks and timely reports.
	The PR is also working on the preparation of the distribution plan in consultation with the National Programs, other SRs and WHO. With the implementation of LMIS, the storage and distribution system and reporting is expected to improve. Inventory management has already improved a lot even in States/Regions and the information is being correctly filled in the stock cards/ledger.
9. Data-collection capacity and tools are in place to monitor program performance	Meets minimum standards. The PR uses the national systems to avoid creating parallel systems while gathering data and reports for reporting to the Global Fund. These are based on universally developed, WHO- approved recording and reporting tools. The routine TB reporting and recording system is functioning well. Data collection tools have been updated to capture additional indicators such as PPM activities, MDR-TB and TB/HIV. However, the PR documented several concerns: (1) risk related data security as there is weak back-up system; (2) the data management system continues to be paper-based at state/region and at most peripheral levels; (3) minimal data management trainings for township level staff. PR receives quarterly reports from all its SRs against the agreed indicators and reports them to the Global Fund six monthly.
<b>10.</b> A functional routine reporting system with reasonable coverage is in place to report program performance timely and accurately	Meets minimum standards. The PR through its Programme and M&E Units (Performance Management Unit) maintains a functional routine reporting system to report on programme performance timely and accurately. The PR also conducted rapid data quality audits, on- site data validation, programme reviews and monitoring visits

	for the SRs. During Phase 1, remarkable improvement in timely submission of programmatic reports have been achieved by all SRs. Reporting from security-compromised areas remains a challenge.
<b>11.</b> The CCM actively oversees the implementation of the grant, and intervenes where appropriate	Meets minimum standards. M-CCM is informed in due time of the implementation of the grant through its TSG and regular M-CCM meetings. Moreover, M-CCM organizes bi-annual field visit to project sites to identify best practices and bottlenecks regarding programme implementation. M-CCM also has a dashboard and a website to monitor and report the progress of the grants.
<b>12.</b> A quality-assurance plan is in place to monitor product quality throughout the in- country supply chain	Meets minimum standards. Appropriate systems/procedures are being put in place to ensure compliance with the requirement to conduct random sampling and quality control testing of health products throughout the supply chain (WHO pre-qualifications or ISO 17025). A team headed by one representative of the country's Food and Drug Administration was formed in November 2011 and terms of reference established for in-country quality monitoring of pharmaceuticals. The team finalized the Standard Operating Procedures (SOPs) and first sampling plan for testing of selected pharmaceuticals during the first meeting in June 2012. Samples of different key and sensitive pharmaceuticals were withdrawn from Yangon and Sagaing state and sent to TUV SUD Singapore (a WHO-prequalified laboratory for test/analysis). All drug samples were declared of standard quality. The PR is in the process of establishing a LTA with a qualified Lab.

P	R 2 Name	Save the Children-USA		Sector	Tuberculosis
Does this PR currently m Fund grant(s) in this dise				□No	
Mi	inimum Standa	ards	CCM assessment		
<ol> <li>The Principal Recipient demonstrates effective management structures and planning</li> </ol>		effective	planning with regard Fund. Save the Chi national staff fully o	ted effective managem d to management letter ldren has a team of 3 dedicated to the manag ts in Myanmar. The	s sent by the Global 0 international and gement of the three
2.	2. The Principal Recipient		Meets minimum sta	ndards.	

	management and oversight of Sub- Recipients (and relevant Sub-Sub- Recipients)	The PR has the capacity and system for effective management of SRs as demonstrated during the first two years of the grant.
3.	There is no conflict-of- interest for the selection of the Principal Recipient(s) and Sub- Recipients	Meets minimum standards. No conflict of interest has been reported by the concerned committee for selection of PR and SRs.
4.	The program- implementation plan provided in the concept note is sound	Meets minimum standards. The plan provided in the concept note was developed in coordination with the second PR (UNOPS) and all stakeholders and is considered to be sound.
5.	The internal control system of the Principal Recipient is effective to prevent and detect misuse or fraud	Meets minimum standards. The internal control system is considered effective to detect misuse and fraud.
6.	The financial- management system of the Principal Recipient is effective and accurate	Meets minimum standards. The financial management system of PR is considered as effective and accurate.
7.	The central warehouse and the warehouses for key regions have capacity, appropriate conditions and security to store health products, and to maintain their quality	Meets minimum standards. The warehouse network for the Global Fund project was assessed during the first six months of 2011 and recommendations for improvement where put in place during 2011. Moreover, Save the Children regularly monitors, through field visits, warehousing and storage capacity of SRs at central and township level.
8.	The distribution process can handle the requisition of supplies to avoid treatment / program disruptions	A good distribution system is in place. No disruption of key medicines has taken place during the period 2011-2013. Moreover, the PR has put in place a supply chain system that identifies excess stock of supplies that can be redirected to other SRs in urgent need.
9.	Data-collection capacity and tools are in place to monitor program performance	Meets minimum standards. Data collection mechanism has been in place since the beginning of Phase 1 and it is well functioning.
10.	A functional routine reporting system with reasonable coverage is in place to report program performance timely and accurately	Meets minimum standards. Routine reporting is in place to report performance in time and accurately as confirmed by management letters sent for the previous reporting periods.
11.	The CCM actively oversees the implementation of the grant, and intervenes	Meets minimum standards. M-CCM is informed in due time of the implementation of the grant through its TSG and regular M-CCM meeting. Moreover,

where appropriate	M-CCM organizes bi-annual field visits to project sites to identify best practices and bottle necks regarding programme implementation.
<b>12.</b> A quality-assurance plan is in place to monitor product quality throughout the in- country supply chain	Save the Children coordinates quality assurance/quality control of key pharmaceuticals with the country's Food and Drug Administration in order to avoid duplication. It is expected that updated quality assurance/quality control plans (that fulfill needs of the Global Fund) will be presented to FDA and subsequently approved.

## 5.2 Current or Anticipated Risks to Program and PR(s) Performance

In reference to the Minimum Standards above and risk assessments conducted (if applicable), describe current or anticipated risks to the program and nominated PR(s) performance, as well as the proposed mitigation measures (including technical assistance) included in your funding request. - 1-2 PAGES MAXIMUM

Following risks have been identified:

- Timely clearance for import license and tax exemption of pharmaceutical and health products
- Delays in arrival of commodities and medical supplies
- Identification of new implementing partners community-based activities and active case finding
- Unpredictable accessibility to certain parts of country (post-conflict areas)
- Scale-up needs to be staggered: need time for procurement and funding to set up programme expansions

Proposed mitigation measures:

Increased government commitment to support programme implementation. M-CCM will play lead role in coordinating increased collaboration among existing and new implementing partners to facilitate treatment absorption, to scale-up TB/HIV, MDR-TB and active case finding and to expand to areas previously inaccessible. It is anticipated that increased resources from the Global Fund, other donors and government will enable the national TB response to be scaled up to reach targets set.

#### 5.3 Overview of Implementation Arrangements

Please provide an overview of the proposed implementation arrangements for the funding request. In your response, please describe as appropriate:

- a. If more than one PR is nominated, how co-ordination will occur between PR(s).
- b. Whether Sub-Recipients (SRs) have been identified and the type of management arrangements likely to be put into place.
- c. How coordination will occur between each nominated PR and its respective SR(s).

1-2 PAGES MAXIMUM

a. Coordination among PRs

More than one PR is nominated (same PRs as in Round 9: UNOPS and Save the Children). Regular meetings are conducted to share programmatic achievements and lessons learned. The PRs also conducts M&E meetings. UNOPS will continue to manage the grant for local NGOs and NTP while Save the Children managed the grant for international NGOs.

### **b. Sub-recipients**

Sub-Recipients have previously been identified during Round 9. All will continue to support TB control (one INGO, however, will no longer require Global Fund funding). Remaining NGOs will continue to implement the programme under the new funding mechanism. New SRs may be required and subsequently recruited in order to ensure expansion of community-based TB services. The process for new SR selection will be open and transparent as in Round 9.

## c. Coordination between PRs and SRs

PRs regularly conduct review meetings in, addition to day-to-day communication, for programmatic achievements and lessons learned. Annual procurement plan meetings and fund flow management workshops also carried out to brief SRs of latest issues. Workshops to review SOPs in various technical and management areas are also conducted together with NTP and SRs to seek inputs and validate the policy guidance.

## 5.4 Addressing Links to other Concept Notes and/or Existing Grants

If you are requesting funds for more than one component (including stand-alone HCSS) during the transition or have an on-going Global Fund grant (for another component), describe how the interventions being requested link to existing Global Fund grants or other concept notes being submitted, in particular as they relate to human resources, staffing, training, monitoring and evaluation and supervision activities. - 1 PAGE MAXIMUM

All three programmes are submitting a consolidated concept note simultaneously. They are based on national strategic plans and incorporate any live Global Fund grant. While the three programmes are fairly separately managed at the central level, they come under the same directorate (Disease Control) in the Ministry of Health, of which its Director ensures coordination. At the implementation level, efforts are undertaken to maximize synergies across programmes. The TB programme is well integrated into the general health services under the local leadership of township medical officers and state/regional health director and with support of local (general) laboratories and basic health staff. The same cadres of staff are also involved in other programmes such as maternal and child health. With the trend of involving more NGOs in TB control and more government services in HIV control, supporting systems of the two programmes are converging towards each other.

Implementing NGOs also apply similar synergistic approaches, where feasible. For example, private practitioners can take part in various franchising schemes of PSI (funded by different donors) which, with proper coordination, results in increased efficiencies in training, supervision and monitoring. Even though malaria endemicity is more limited geographically, some data assistants from TB as well as malaria have been supporting both programmes. Depending on workload and needs, this model will be further expanded.

At the PR level, administrative support services are fully merged with each PR having single human resources, finance, procurement, quality assurance and M&E units. The WHO core administrative units reinforced with cost-shared common support staff are also providing essential services to implement Global Fund-funded activities.

At the technical level, the TB programme aims at offering HIV tests to all TB patients. While NTP has earmarked a budget for test kits, it will rely on NAP to procure and distribute these as well as provide training in VCCT for TB clinic staff or support referrals to HIV centres. In consultation with NTP, NAP has already adopted the policy for providing ART to all HIV-positive TB patients irrespective of CD4 cell count.

Some active case finding approaches, undertaken by TB, particularly those in remote areas, will at the same time give attention to HIV, malaria and other priority health concerns. This will make the efforts much more rewarding for the beneficiaries in those areas.

At the governance level, joined meetings of TB- and HIV-TSGs will be periodically held. The mandate of M-CCM was already broad, overseeing the national response to the three diseases (thus not only the Global Fund activities). HSS and MNCH were earlier added and more recently M-CCM is becoming a multi-stakeholder oversight body for all health activities.

## 5.5 Women, Communities and other Key Affected Populations

Please describe how representatives of women's organizations, people living with the three diseases and other key affected populations will actively participate in the implementation of this funding request, including in interventions that will address legal or policy barriers to service access. - 1 PAGE MAXIMUM

The Myanmar Women's Affair Federation and the Myanmar Maternal and Child Welfare Association are two examples of women's organizations that have been involved in TB control under NTP. They have implemented community-based activities in 143 townships. Most basic health staff are midwives (female) and are heavily involved in service delivery at the community level. Staff employed by other local and international NGOs as well as WHO and UNOPS include a sizable proportion of women. There is no gender-based discrimination for selecting or promoting staff. The NTP manager and two out of four assistant directors are women.

Key affected populations are also closely involved at the planning stage, during service delivery, in advocacy and social mobilization and during monitoring and evaluation. Self help groups are organized by World Vision with the aim of empowering TB patients, and strengthen the overall programme. Other NGOs have different forms of involving affected people. It results in reducing the stigma attached to the disease.

Patients (or cured patients) are also member of various committees. Their inputs in guideline development are appreciated. Representatives of affected communities have also been included in the TSG-TB as well as in M-CCM. Through this grant support will also be provided to CBOs and CSOs.

#### 5.6 Major External Risks

Please describe any major external risks (beyond the control of those managing the

implementation of the program) that might negatively affect the implementation and performance of the proposed interventions. - 1 PAGE MAXIMUM

The described activities are based on current epidemiological knowledge, strategies and expected funding situation. If any of these changes dramatically, it may have repercussion during implementation and will then need to be addressed through programme change or in other ways.

The concept note is not a stand-alone proposal. Implementation will depend on the synchronization of other actors and availability of funding from non-Global Fund sources (including government) as cost-sharing among various sources is paramount in several programme components. In case one of the actors fails to deliver, it may have negative impact on activities funded by the Global Fund.

While TB control has witnessed strong leadership over the past several years, much of this was dependent on the capacity and commitment of individual persons. While efforts always focus on institution building, results may be affected if less committed people would be given leadership responsibility.

In recent years there have been dramatic improvements in settling conflicts. However, there are still areas with slumbering or full-blown conflicts. Programme development in such areas is along less organized ways and may depend on regular or haphazard services provided by whoever is present. It can potentially lead to a total closure of activities.

Presidential elections are due in 2015. There may be risks related to post-election period/administration which may affect the management and implementation of the programme.

While inflation has been fairly stable in recent months, any significant fluctuation is likely to affect fund availability and programme implementation.

Natural calamities such as cyclones or earthquakes can never be ruled out and may jeopardize implementation of planned activities in directly affected areas but also in other parts of the country (due to attention diverted to affected areas).

#### **ATTACHMENT 1**

#### **CCM Endorsement of Concept Note**

Please attach the CCM Membership Form Attachment with signatures of all the members endorsing the concept note submitted.

#### **ATTACHMENT 2**

#### **Programmatic Gap**

The Programmatic Gap Table is a required attachment to be completed as an Excel template.

## **ATTACHMENT 3**

#### **Modular Template**

The Modular Template replaces the performance framework, detailed budget and logical framework previously requested for Global Fund grants. Further guidance on completing the Template is available in the Concept Note Instructions.

## **ATTACHMENT 4**

#### **Financial Gap Analysis and Counterpart Financing Table**

The Financial Gap Analysis and Counterpart Financing Table is a required attachment to be completed as an Excel template.