

# TB AND HIV

## CONCEPT NOTE

### Investing for impact against tuberculosis and HIV

Countries with overlapping high burden of tuberculosis (TB) and HIV must submit a single concept note that presents each specific program in addition to any integrated and joint programming for the two diseases.

In requiring that the funding requests be presented together in a single concept note, the Global Fund aims at maximizing the impact of its investments to make an even greater contribution towards the vision of a world free of the burden of TB and HIV. Enhanced joint HIV and TB programming will allow to better target resources, to scale-up services and to increase their effectiveness and efficiency, quality and sustainability.

All concept notes should articulate an ambitious, strategically focused and technically sound investment, informed by the national health strategy and the national disease strategic plans (NSPs).

The concept note for TB and HIV is divided into the following sections:

**Section 1:** The description of the country's epidemiological and health systems context including barriers to access, the national response to date, country processes for reviewing and revising the response, and plans for further alignment of the NSPs, policies and interventions for both diseases.

**Section 2:** Information on the national funding landscape, additionality and sustainability

**Section 3:** The funding request to the Global Fund, including a programmatic gap analysis, rationale and description of the funding request, as presented in the modular template.

**Section 4:** Implementation arrangements and risk assessment.

**IMPORTANT NOTE:** Applicants should refer to the TB and HIV Concept Note Instructions to complete this template.

Applicant Information			
Country	Thailand		
Funding Request Start Date	1 Jan 2015	Funding Request End Date	31 December2016.
Principle Recipient(s)	Government PR: Department of Disease Control, Ministry of Public Health, Thailand. Civil Society PR: Raks Thai Foundation, Thailand		
<i>If the programs are to be managed as separate grants: Not applicable</i>			
Funding Request Start Date for HIV		Funding Request End Date for HIV	
Principal Recipient(s) for HIV			
Funding Request Start Date for TB		Funding Request End Date for TB	
Principal Recipient(s) for TB			

## FUNDING REQUEST SUMMARY TABLE



A funding request summary table will be automatically generated in the online grant management platform based on the information presented in the programmatic gap table and modular templates.

## Executive Summary

Thailand bears a significant burden of both HIV/AIDS and Tuberculosis, with an estimated 13% co-infection rate in 2013. The country hosts the 4<sup>th</sup> largest HIV epidemic in the Asia and the Pacific region and was designated by WHO as one of the 22 high burden TB countries globally.

The **HIV epidemic** is mature, declining, concentrated primarily in key affected populations of men who have sex with men, male and female sex workers, and transgender people, people who inject drugs, migrant workers and prisoners. The prevailing mode of transmission is through unprotected sex (90%), with unsafe injecting drug use as a second most important transmission route. Mother to child transmission has been effectively controlled. Most of the new infections occur in 33 provinces, including Bangkok.

The **TB epidemic** is mature, declining, concentrated primarily in elderly, prisoners and people living with HIV.

**HIV/ TB co-infection** occurs primarily people living with HIV who access diagnostics and treatment very late. The mortality rate in people with co-infection is high at 13%, twice that in people with TB.

In planning and implementing the **disease responses**, Thailand has remained abreast of the latest developments in global movement and science. The country has experienced a paradigm shift, from controlling TB and HIV to Stopping TB and Ending AIDS. The current national HIV and TB strategies are evidence informed and aim to provide equitable access to quality services to all Thais and non-Thais, building on the principles of human rights and gender equality; national ownership and leadership; partnership of government, civil society, communities and the private sector; participation and empowerment of key affected populations.

**Innovation** has been introduced and implemented at a scale in the disease responses. Service delivery models have been re-designed, with *community-based service delivery* featuring prominently, complementing facility-based approaches of the robust, decentralized, effective health system, and *combination prevention*, including early treatment irrespective of CD4 count, treatment as prevention and pre-exposure prophylaxis, lined up to make a real difference in the disease profile. Most importantly, mechanisms to reach and retain key affected groups have been diversified beyond the peer to peer approaches, with the introduction of social media and mobile (M) health approaches.

Thailand has made great strides in putting HIV and TB epidemics in check and ensuring availability of and access to related health and social services. However, some **challenges and unrealized opportunities** have been slowing down Thailand's progress towards Stopping TB and Ending AIDS:

*Legal barriers* exist that impede access of certain key affected populations, such as people who inject drugs, undocumented migrant workers, prisoners to life-saving prevention, treatment and care services.

*Stigma*, especially internal, or self-stigma, associated with HIV and TB, has been preventing people at highest risk, most vulnerable and most affected from accessing health and other social services.

*Low access to/uptake of services* negatively affects the disease response outcomes. Some of the prevention, treatment and care services -such as needle and syringe programmes are not universally available throughout the country; some, HCT - are accessed on a low scale or very late because of legal barriers and stigma.

While about 90% of resources financing national HIV and TB responses come from domestic sources, the proportion of *external funding* of the HIV prevention programmes is high, making prevention less sustainable.

All these issues will be addressed under/ in conjunction with the current GF investment.

The **current Global Fund investment** is viewed as a strategic short-term support to innovative and focused approaches that would facilitate the transition to fully domestically funded disease responses. This investment will allow Thailand to sustain and expand the gains in the HIV-TB responses while concentrating on mobilizing diversified domestic financing for sustained evidence informed, human rights based, gender sensitive HIV-TB programmes at all levels. Specifically:

The GF resource will strategically support scale up and delivery of quality prevention, treatment and care services tailored to the needs of populations most at risk, most vulnerable to, and most affected by HIV and TB.

The GF investment will facilitate and support collaborative effort to remove the legal barriers impeding access to services, reduce stigma, establish and implement the rights protection mechanisms, empower communities to promote and protect their rights.

Resources from the GF will provide an input in further strengthening health and community systems, with particular emphasis on enhancing the health-community systems interface so that to enable sustained functioning of the systems following the graduation from the GF support. The investment will support further integration of HIV and TB service delivery and programme management, including strengthening of the SI/M&E systems to facilitate evidence -informed decision making at national, sub-national and local levels. The investment will also encourage documentation of good practices for further replication across the country.

The two-year GF investment will provide a much-appreciated space for mobilization of diversified domestic financing. The major thrust of this effort will be in seizing and creating opportunities for integrating HIV-TB concerns in the existing systems, budgetary provisions and funding mechanisms in public sector (Health, Education, Social Welfare, Human Security, local administration, etc.), private sector, civil society and communities.

The **GF investment will be directed** to a strategically selected set of provinces. The geographic selection was made with the view of:

- sustaining and enhancing evidence-informed, rights-based, gender sensitive interventions in the geographic locations carrying the greatest burden of HIV and TB;
- ensuring the greatest possible coverage of key populations with life-saving prevention, treatment and care services at the lowest possible expenditure (optimal investment/ coverage ratio);
- making an optimal contribution for the greatest impact on the diseases in the long-term

- producing the greatest impact on strengthening health and community systems and enhancing health-community interface; building the body of good practice for replication throughout the country
- enhancing the foundation for sustained, fully domestically funded evidence-informed, rights-based, gender sensitive disease responses

The strategic contribution from the GF will be instrumental in accelerating achievement of the national impact targets related to HIV and TB.

- Reduction in TB prevalence by 25% (by 2019 against 2012 baseline).
- Reduction in TB mortality by 50% (by 2019 against 2012 baseline).
- Reduction in annual new HIV infections to below 1000 (by 2030).
- Reduction in AIDS-related deaths by 50% (by 2016 against the 2010 baseline).

## SECTION 1: COUNTRY CONTEXT

This section requests information on the country context, including descriptions of the TB and HIV disease epidemiology and their overlaps, the health systems and community systems setting, and the human rights situation.

### 1.1 Country Disease, Health Systems and Community Systems Context

With reference to the latest available epidemiological information for TB and HIV, and in addition to the portfolio analysis provided by the Global Fund, highlight:

- a. The current and evolving epidemiology of the two diseases, including trends and any significant geographic variations in incidence or prevalence of TB and HIV. Include information on the prevalence of HIV among TB patients and TB incidence among people living with HIV/AIDS.
- b. Key populations that may have disproportionately low access to prevention, treatment, care and support services, and the contributing factors to this inequity.
- c. Key human rights barriers and gender inequalities that may impede access to health services.
- d. The health systems and community systems context in the country, including any constraints relevant to effective implementation of the national TB and HIV programs including joint areas of both programs.

Thailand bears a significant burden of both HIV/AIDS and Tuberculosis, with an estimated 13% co-infection rate in 2013. The country hosts the 4<sup>th</sup> largest HIV epidemic in the Asia-Pacific Region. It is also designated by the World Health Organisation (WHO) as one of the 22 high burden TB countries.

The HIV epidemic is mature and rapidly declining since 1992. There were an estimated 459,688 people living with HIV in Thailand in 2013, including 193,965 women and 8,830 children (Asian Epidemic Model, 2013 estimation). The estimated adult HIV prevalence was 1.1%.

There were an estimated 8,256 new infections in 2013, including 117 in newborns. A quarter of adult infections (2,235) occurred in women, of them 243 in FSW, and the remaining 1,992 - in low risk women, who are mainly partners of key affected populations (KAP).

The transmission of HIV from parents to children has been successfully controlled; mother to child transmission (MTCT) rate was at below 2.3% in 2013. AIDS-related deaths have been steadily decreasing since 2001, with a sharp decline from 2006, following the scale up of ART. It is estimated that there were 21,000 AIDS-related deaths in Thailand in 2013.

The Asian Epidemic Model (AEM) for 2013 projected that 90% of new adult HIV infections were transmitted through unsafe sex and 10% resulted from unsafe injecting drug use practice. Among transmissions from unsafe sex 42% were among men who have sex with men (MSM), transgender (TGs), and male sex workers (MSW); 12% were in female sex workers (FSW) and their clients; 32% were among discordant couples (mostly partners of KAPs), and 4% were among those engaging in casual sex. It is notable that while the number of new infections in

PWID has stabilized, it is increasing as a proportion of new infections over time. PWID get infected earlier than other KAPs due to the higher probability of transmission related to injecting drug use, and the higher frequency of risk events. This underscores the need for positive prevention in the context of a high HIV prevalence rate in this population, while maintaining focus on primary prevention activities. Please see Table 1 for details.

<b>Table 1: New HIV infections by mode of transmission by year adults, AEM 2012-2018</b>							
<b>Mode of Transmission</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Sex Work	1,096	968	874	793	723	663	610
Discordant Couple	2,953	2,572	2,260	2,000	1,788	1,615	1,474
Casual sex	382	348	321	298	277	258	242
Male-male sex	3,495	3,448	3,432	3,418	3,405	3,394	3,385
Needle sharing	792	799	808	815	819	821	823
<b>Total</b>	<b>8,719</b>	<b>8,134</b>	<b>7,695</b>	<b>7,324</b>	<b>7,012</b>	<b>6,752</b>	<b>6,533</b>

There are an estimated 428,622 MSM in Thailand. Of these 145,981 MSM are thought to be at higher risk. A significant proportion is concentrated in the in Bangkok and in large cities and tourist destinations. Median HIV prevalence in MSM in the 12 provinces was 7.1% in 2012 (IBBS, 2012). HIV incidence among MSM has remained very high, especially among those living in large urban areas and international tourist destinations (e.g., Bangkok, Chiang Mai, Phuket, and Pattaya). In a large-scale clinic-based study of MSM coming forward for testing at the Silom Community Clinic in Bangkok, an incidence of 12.2 per 100 person years was found among 15 to 21 year old men, almost double that seen among all ages combined, which was 6.3 per 100 person years (Ananworanich et al. 2013). In an MSM cohort study from 2006 to 2010, the overall HIV incidence was 5.9 per 100 person years; again, it was much higher among the 18-21 year old (8.8 per 100 person years) and among the 22-29 year old participants (6.4 per 100 person years) (Van Griensven et al. 2013).

Information on HIV transmission, prevention means and HIV/ STI treatment exists and can be easily accessed across the country, including via electronic media. Prevention services specifically targeting MSM exist in 29 provinces; service sites offer peer-led interventions, targeted IEC/ media and condom promotion & distribution, HCT, referral to HIV and STI treatment. Uptake by MSM of prevention services is on the rise though yet insufficient (52.6% reported from the IBBS, 2012). The proportion of those having an HIV test and receiving the results in the preceding 12 months was very low, but increased from 14.9% (2010) to 25.6% (IBBS, 2012). The proportion of those having an HIV test and receiving the results in the preceding 12 months remained low (25.6% in 2012) though increasing. The key barriers to HCT uptake is (i) fear of positive diagnosis and the perceived stigma and exclusion attached (ii) limited availability of services tailored to the needs of MSM. Relatively low uptake of HCT limits uptake of ART, which is available across the country.

There are an estimated 75,626 transgender people in Thailand, of them 28,532 are believed to be at a higher risk of HIV infection. A significant proportion of TG at higher risk is concentrated in the Greater Bangkok Region, Chiang Mai, Phuket, and Pattaya. Limited data exists for TG people. The available data from the existing 3 sentinel surveillance sites in Bangkok, Chiang Mai and Phuket indicates that HIV prevalence in TG population is high, ranging between 10-17%. No data exists to describe the prevalence/ incidence trends in TG populations.

The reported condom use among TG people was around 80% at last sex; about 60% TGs reported consistent condom use. While general health services, ART included, do not discriminate on the grounds of gender, behavioural change communication (BCC)/ targeted interventions designed to meet the TG's needs are implemented on a very low scale. Prevention programmes that target TG people are focusing on TG engaged in sex work. Uptake of HCT among TG people is around 40%. Low availability of targeted interventions for TG is the key factor of low uptake of HIV prevention and HCT.

There are an estimated 16,970 MSWs in Thailand, and they are almost exclusively concentrated in Bangkok, Chonburi, Chiang Mai and Phuket. HIV prevalence among MSW has been slowly declining though remains very high (12.2% reported in IBBS, 2012), significantly higher than in most groups of FSW and the general MSM population. HIV prevention services targeting MSW exist in Bangkok and Pattaya. Delivered by an NGO SWING with the support of a qualified health professional, the services include peer-led interventions/community outreach, IEC, condom distribution, psycho-social support, HCT, as well as referral for treatment and care.

Uptake of prevention services for MSW is increasing and was reported as 73.8% (IBBS, 2012). Limited availability of services tailored to the needs of MSW has been limiting the uptake of services. On the supply side, high mobility of the MSW population has put on constraints on opportunities to maintain contact with the clients.

The proportion of MSW having an HIV test (and receiving results) in the past 12 months is sub-optimal (52.4% reported in IBBS, 2012) and growing slowly. Fear of pain associated with the test, fear of positive diagnosis, and perceived stigma and exclusion attached to HIV positive status have been key barriers limiting the HCT uptake.

There are an estimated 106,318 venue based FSWs and 26,579 non-venue based sex workers (NVB FSWs) in Thailand. HIV prevalence among venue-based FSW has been on a decline and stood at 2.2% in 2012. The reported condom use with clients has remained high (93.6% reported in IBBS, 2012) and stable over time.

Targeted interventions for FSW exist in 41 provinces. Services are delivered by NGOs in partnership with public health facilities. Access to HCT is universally available. Uptake of prevention services and HIV testing and counseling is insufficient: according to the IBBS in 2012, 53.9% venue-based FSW reported access to prevention services and 55.6% reported having an HIV test in the prior

12 months. Better adjustment of service provision to local contexts will likely increase service utilization of services by venue-based FSW.

Little data exists for NVB-FSW, including those who seek clients in public spaces or through virtual mechanisms; the existing limited evidence indicates that HIV and STI prevalence in this group are distinctly higher than for the venue-based FSW. The reported condom use with the most recent client is within the 62-85% range. The HCT uptake is about 30-40%. The population of NVB-FSW is hard to reach. While the 1996 Prostitution Prevention and Suppression Act remains in effect, it has not been cited as a barrier to provision or use of services targeting sex workers.

HIV epidemic among people who inject drugs has been on the decline: an estimated 815 new HIV infections, or 10% of the annual total, were attributed to injecting drug use in 2013, compared to 2,906 in 2000. HIV prevalence among PWID remains high (25.2% in 2012) and shows slow increase that may be partly related to improvements in ART coverage. The substance use patterns have been changing, with non-injecting substance use replacing the injections; the 2013 estimate of current injectors in Thailand is 40,300 (about 10% of them women), sharp downward revision from reported 168,000 in 2008. Among injected substances, amphetamine type stimulants (ATS) and short-acting benzodiazepines seem to be replacing the use of opioids, leading to increased sexual risk behavior and violence, and limiting the utility of therapeutic drug treatment approaches such as opioid substitution therapy.

To date, only 3 sentinel surveillance sites for PWID have been established in the country. According to the 2012 report, 80.4% of male and female PWID reported using clean needles/syringes the last time they injected; 17% received needles and syringes from a needle syringe programme, and over 80% purchased needles and syringes at pharmacies and other commercial sites (IBBS, 2010). Condom use at last sex was 49% (51% for male and distinctly lower at 40% for female injectors). The proportion of PWID having an HIV test in the preceding 12 months has been on a slow increase and reached 43.6% in 2012, with no gender-related difference in service uptake (IBBS, 2012).

Policy and legal constraints that affect access to services for PWID have been documented. The law only partially recognizes drug dependence as a disease requiring treatment. At the same time, under the 1979 Illicit Drug Act substance use is a criminal offence, and the State provides for compulsory treatment via a network of drug treatment facilities. This has been a barrier both on the demand and the supply side, fear of incarceration preventing PWID from accessing the services, and affecting safety and security of programme staff (who have also feared being arrested by law enforcement for distributing sterile injecting paraphernalia).

Despite these constraints, significant progress has been made in harm reduction service delivery and policy. Methadone maintenance therapy (MMT) has been available across Thailand as part of universal coverage (UC) since 2008, and as

part of its commitment to ensuring adequate access to MMT, the Ministry of Labour also agreed to provide free MMT services effective 1 May 2014 to all those registered under the Social Security Scheme (SSS). A total of 4,068 opioid drug users, an overwhelming majority of them men, were reported as receiving MMT in 2013. Uptake of MMT has been limited in some parts of Thailand due to physical access issues, but also due to the transition to injecting of benzodiazepines and amphetamine type stimulants. Dosage of methadone has also been historically low, resulting in ongoing injecting and poor management of cravings. New Standard Operating Procedures (SOPs) for MMT have recently been developed and being rolled-out to address these issues. GF investments will be used to further support roll-out of these SOPs, training of service providers, and expansion of MMT in rural settings.

The UC provides for two free HIV tests, treatment with first and second line ART, and Hepatitis C treatment for all Thai citizens, including substance users.

While needle/syringe programming has not been supported historically, the 'Order of National Command Centre for Combating Drugs' No. 1/2557 that became effective from 1st October 2013, and the associated implementation plan provides for a harm reduction package for PWID on a trial basis in 19 provinces and offers rehabilitation and reintegration services, in line with the WHO, UNAIDS and UNODC guidance.

In 2013, transmission from husbands to wives contributed to 22% of total new infections, while transmission from wives to husbands contributed 10%, resulting in a total 32% of all transmissions occurring within marriages and regular partnerships. Transmission in this group is a downstream consequence of infections in other KAPs such as FSWs (and clients), PWID and MSM that emerges down the line.

Specific interventions addressing this transmission route are yet to be established; unchecked it will result in nearly 2,000 new infections in 2015 in this category (AEM, 2013).

Apart from the KAP populations mentioned above, sex related HIV risk behaviors are noted in migrant populations such as fishermen and those working in the sea food processing industry. For migrant workers (MW), the IBBS in 2012 showed low HIV prevalence but high levels of risk behaviors (15% males reported having sex with more than one partner in the last year). The HIV prevalence of infection among the Burmese, Cambodian and Laos MW was 1.0%, 0.9%, and 0.8% respectively. However, in a behavioral survey conducted in 24 provinces among MWs aged 15-49 years, 21.6% of male workers had sex with more than one partner in the previous year compared with 4.6% female workers. Fishermen and those working in the sea-food processing industry often pay for sex. For example, in one study in Ranong province in 2008, just over 60% of fishermen reported having had sex with a sex worker, and among them 72% reported consistent condom use during paid sex encounters (Htoo, 2009).

Migration of FSWs is also documented, and it is notable that HIV prevalence

among FSWs in Cambodia and Myanmar is higher than 5%(IBBS Report for FSW, cited in GARPR Report for Myanmar 2010;HSS 2010, Cambodia, cited in GAPRR Report for Cambodia 2014).

At the same time, a large proportion of all MWs do not have access to universal health coverage, and are mostly employed in low paid jobs which restricts their ability to afford health care.

Although there is no routine surveillance of HIV infection in prison populations, there are reasons to believe that rates are higher than in the general population. For example, one study in Klong Prem Prison in Bangkok in 2007 showed that among those who agreed to be tested (n=689), 25% had HIV infection (Wilson, 2007).

Programme evaluations have found that the coverage of prevention services for all KAPs in Thailand is still sub-optimal; though the reported condom use at last sex for all groups except PWID has been high and stable. Specific attention needs to be focused on where new infections are occurring, such as 'young KAP' (under age 25 years) and non-venue-based FSW, who have lower levels of knowledge and lower access to HIV counseling and testing (HCT).

Thailand has made outstanding gains in making HIV treatment accessible to all those who need it. Coverage with anti-retroviral treatment (ART) is high at 80% (CD4  $350\text{mm}^3$  and below). However, entry into treatment is late; people living with HIV (PLHIV) initiating ART have low CD4 counts (median of 111 in 2013), and 67% of newly initiated on ART had CD4 counts under  $200\text{mm}^3$  cells. This has implications not just for individual health outcomes but for ongoing transmission. Retention rates for PLHIV in the treatment system at 12 and 24 months were 83% and 79% respectively, while the mortality rates were 8% and 11% respectively (Thailand GARPRReport, UNAIDS, 2014).

Uptake of HCT among KAPs is limited. For example, only 25.6% MSM and 43% PWID reported being tested in the preceding 12 months knowing their test results (IBBS, 2012). Of the estimated 459,688 people living with HIV (AEM, 2013), 388,833 are registered for care. At least, 62,425 people are yet to be diagnosed and linked into care, and intensified HCT in community settings is essential to meeting this objective. Despite considerable progress in reaching and delivering HIV prevention and treatment services to these individuals, programmes continue to struggle with access to some of these populations (e.g. PWID), and residual risk behaviors continue. An important tool in reducing transmission will be to ensure early diagnosis and high quality ART. As most new infections continue to be among KAPs, the focus of HCT needs to remain on this population and their sex partners.

Analysis of the treatment cascade shows inadequate linkage between diagnosis and treatment and care, and insufficient retention across the prevention and care continuum. This partly due to the passive nature of health care delivery for HIV patients, and services being limited to provincial and tertiary health care settings, where staff have limited time and resources to follow-up and support

adherence among patients. At the same time, inadequate linkages between health care and community settings, and inadequate patient tracking mechanisms between community based organisations (CSOs) and traditional public sector health facilities contributes to reduced retention across the prevention and care continuum.

For example, of the 331,357 individuals who met ART criteria (among the 388,833 people registered for HIV care), 286,214 commenced ART (86.4%) in 2012. Due to 'loss to follow up' and mortality among these, 227,451 continued treatment in 2013 (79.5%). Among the 175,804 who had a viral load test done in the last year, 155,221 had a suppressed viral load. In other words, there was 32% attrition between those who should have been on ART, and those who are actually on ART. A comparison of those who are registered for HIV care versus those who currently receiving ART, shows a significant 'leakage' in the treatment cascade (42%). Therefore, it is an urgent priority in Thailand to ensure early treatment and improved adherence to control transmission at a population level, as well as improve individual health outcomes.

Epidemiological modeling also indicates that saturating KAPs with a high coverage of HCT and initiating treatment irrespective of CD4 count is an effective strategy for minimizing new infections. Cost effectiveness analysis has shown that it is feasible to scale-up this approach for a relatively small additional cost (UNAIDS, Investment Case for Thailand, 2013). On the basis of this analysis Thailand is revising its current ART guidelines, and also developing a reach-recruit-test-treat-retain (RRTTR) strategy. Negotiations with health insurance agencies to put additional patients on treatment (who will be diagnosed as a result of a large scale community based testing program) are ongoing. As Thailand produces some anti-retroviral drugs (ARVs) domestically, and has effectively used compulsory licensing arrangements to assure affordability, the additional cost of treatment is feasible in the context of an upper middle income country.

As an upper middle income country, with universal health coverage and a relatively small number of new infections each year, Thailand is uniquely positioned to end the AIDS epidemic. In 2013, political support for this received a big boost, when the National AIDS Committee (NAC) agreed to the ambitious target of 'ending AIDS'. On the basis of this support, a budget request to the Cabinet for domestic resources to 'End AIDS' is currently being processed. Thailand proposes to strategically invest NFM resources from GFATM to 'front-load' the investment required for 'ending AIDS' in the country while domestic resources are being secured. The resources from GF will support the normalization HIV by further reducing stigma and discrimination, enabling systems that allow high impact interventions to be delivered at scale (and effectively), and ensuring effective linkages between community-based and health facility based services for KAPs. This is critical to not just for diagnosing, treating and retaining adequate numbers of patients and leveraging the prevention effects of early HIV treatment, but ensuring the sustainability of the response.

## *TB*

Thailand has achieved the MDG target of reverting TB incidence and is on track to achieving the Stop TB Partnership targets of halving TB prevalence and mortality by 2015 compared with the level of 1990. Tuberculosis incidence is 119 per 100,000 and prevalence is 159 per 100,000 (WHO, Global TB Report 2013). The treatment success rates for new smear-positive cases improved from 76% in 2007 to 85% in the 2010 cohort (Bureau of TB, routine data).

The estimated incidence rate in Thailand declined over the period 1990-2012 and, on average, by 3.4% per year since 2000 (Glaziou, unpublished, August 2013). The rate of decline in TB incidence is positively affected by improvements in TB control, economic growth, the impact of health insurance on access to health care and improvements in the quality of care services, decline in the HIV epidemic and improved coverage of ART in HIV-infected individuals, among other factors. TB mortality in Thailand is relatively high at 14 per 100,000. Delayed diagnosis and inadequate management of co-morbidities including HIV has contributed to this.

Case detection in Thailand is incomplete, with nearly 19,000 missing cases annually. Case notification is also incomplete, though this is largely related to inadequate reporting from the private and large teaching/military hospitals, although significant under-diagnosis of TB in both the elderly and children has been noted.

Drug resistance transmission is limited, as indicated by results of the fourth national drug resistance survey (DRS), showing a prevalence of multi-drug resistant TB (MDR-TB) of 1.89% in newly detected TB patients with no history of prior TB treatment and 18.9% in retreatment cases. Thailand has an estimated 1760 MDR TB, and 19 cases of extensively drug resistant TB. MDR diagnosis and treatment is routinely available for all Thais and insured migrants as part of UHC.

Treatment success reached the global 85% treatment success target in 2009, although it subsequently declined to 82% in 2012 (among new smear positives). However, treatment outcomes were lower than the targeted 85% in cases followed up at teaching and private hospitals in Bangkok. This is mainly due to the inability of nursing staff in tertiary health care facilities to follow up patients and provide directly observed therapy (DOT).

Thailand has a rapidly aging population with implications for TB control. Case notification rates (CNRs) in people 55+ are over three times higher than in young adults. This translates into an estimated 11,000 patients annually, many of whom have co-morbid conditions like diabetes and hypertension. Reasons why older people have a higher rate of TB include a high prevalence of infection acquired in the past at a time of high TB transmission. Aging contributes to slowing down the decline in TB burden.

Another key affected group for TB is prisoners (anecdotal evidence suggests transmission rates at ten times more than in the general population; multi-drug resistance in new patients was at 4% (Sasiwan, unpublished study, 2013). Thailand

has a large prison population (Department of Corrections estimated 293,000 prisoners in 2014), and overcrowding is frequent. Additionally, a significant proportion of prison inmates have substance use histories and HIV co-infection is a likely issue. Health care in prisons is available to those who are insured; however nearly a sixth of the prison population is uninsured (or lacks supportive documentation to get publicly funded services). Even for those with insurance, diagnosis and treatment is often delayed as prisoners (or laboratory samples) have to be transported to health facilities and/or laboratories outside. Overcrowding in the context of a high HIV-TB prevalence present specific challenges for infection control in closed settings.

Currently, Thailand hosts an estimated 1.1 million registered migrants, and another 2.13 million who are unregistered (IPSR, citing the Office of the National Economic and Social Development Board, 2013). Registered migrants have access to the Thai public health-care system through either the compulsory migrant health insurance scheme, which annually costs THB 1300 (plus 600 THB for enrolment and medical checks), or through the social security scheme (SSS) for those employed in the formal sector. However, less than half of those eligible have enrolled in either scheme. In August 2013, the Ministry of Public Health announced a policy to extend health insurance coverage to all migrants, regardless of age or registration status, but with increased premium cost to the migrants. The implementation of this scheme is ongoing, but the system is not fully developed yet and will need some time before it becomes fully operational. Therefore, access for migrants to prevention and care services for both HIV and TB, while improving, is still limited.

TB is a public health concern among migrant populations for two main reasons: (i) most migrants are from Myanmar, Laos and Cambodia where TB prevalence is much higher than in Thailand, and (ii) migrants have limited access to TB and HIV diagnosis and treatment due to financial and language constraints. As a result, they tend to be underdiagnosed (for HIV and TB), receive DOT less frequently, have higher 'loss to follow up' rates, and are at greater risk of developing drug resistance. ART coverage among migrants is limited as UC does not currently cover migrants. Of the estimated 14,903 HIV positive migrants in Thailand, 2,551 are currently on ART. Fears of job loss and interactions with the Ministry of Labour, police and immigration authorities are not supportive to positive health seeking behaviours. Further, treatment continuity for migrant HIV patients can be compromised for migrants who travel back and forth between Thailand due to differences in treatment regimens used across the Mekong Region. When the Association of Southeast Asian Nations (ASEAN) Economic Community comes into force in January 2015, the free movement of labour, which is included in its provisions, will possibly increase immigration further.

#### *HIV-TB*

The HIV-TB co-infection rate in 2013 was reported as 13% (WHO, Global TB

Report). It is likely to reduce as new HIV treatment guidelines are implemented at the end of 2014 (recommending treatment irrespective of CD4 count). HIV-TB services are delivered in an integrated manner in Thailand. Patients do not need to travel between different sites to access treatment as services are delivered within the same hospital (but at different clinics to support infection control). Often the same clinician will manage the patient for ART and TB. This allows easy coordination, information sharing and case management. If a patient is diagnosed with either HIV or TB, screening for co-infection is routinely undertaken.

In addressing HIV-TB in a consolidated manner, Thailand has promoted provider-initiated HIV testing and counseling (PITC) for TB patients, with a target to test all registered TB patients for HIV. In 2013, 92% of TB patients were tested for HIV, with 15% testing positive (GARPR Thailand Report, 2014). However, ART commencement is still delayed due to inadequate TB diagnosis among those who are HIV positive, as well as clinician fear of setting off immune reconstitution syndrome. Based on programmatic data, 59% of HIV infected TB patients received treatment with ARVs in 2013.

The HIV Qual-T system found that 97.9% of PLHIV coming for treatment were screened for TB at least once in 2013. Mortality for cases of TB-HIV co-infection was about 13%, or about twice the mortality of TB cases without HIV infection. Improvements in ART coverage have contributed to the decline of TB-AIDS mortality, which has dropped from 20.4/100,000 in 2001 to 3.34/100,000 in 2012, an 84% decline in TB-AIDS mortality.

While the National TB Guidelines (2013) recommend INH prophylaxis for 9 months in adult HIV infected patients regardless of Tuberculin test results, implementation of INH prophylaxis for adults is not routinely recommended in the National HIV Treatment Guidelines (2014) except in cases when a PLHIV has been in contact with a TB patient. The medical community in Thailand continues to have strong reservations in this area due to concerns about amplifying resistance (INH combined-resistance in Thailand is 15.37%); inability to always exclude active TB; erratic tuberculin skin tests availability; and a lack of home-grown evidence for the efficacy of IPT in the context of ART irrespective of CD4 count. In order to address this, GF investments will be used to support consultation with the Royal College of Physicians of Thailand, to generate clinical practice guidelines that will influence clinical practice positively in support of IPT.

It should be noted in this context that service delivery and laboratory services in Thailand are fully decentralized and integrated at the health facility level. There is no vertical HIV and TB programme at the national or sub-national levels as such.

Infection control for HIV-TB is monitored via the Hospital Accreditation Agency (HAA) annually. Significant training on infection control has been supported through previous GF investments in Thailand, including the Single Stream Funding

(SSF) grant in 2010.

### *Health and Community systems*

Thailand has a strong and well-funded health system, with the vast majority of resources provided from domestic sources. The Government pays for three quarters of health spending, while private expenditure on health is only 25%, of which just over half is out of pocket. Dependence on external donor funding is very limited. Human resources capacity for health is also well developed. The Health Reform Agenda is strongly focused on decentralization and reducing fragmentation.

Administratively, the Thai health system is divided into 12 regions, each with an Office of Inspector General of Health. This Office of Disease Control and Prevention (ODPC) within the Department of Disease Control (DDC) sit within this structure. There are 76 provinces (each with a provincial health coordinator), which are divided into districts and tambons (sub districts). The Bangkok Metropolitan Administration is independent and has its own governance structure.

There is a three-tier public health delivery system. Provincial hospitals have 400-2,000 beds, district hospitals have 30-120 beds and 2-9 doctors, and rural health centres have 3-6 nurses and other health workers. Thailand also has a network of 987,019 public health volunteers, who can play a significant role in addressing public health issues.

While Thailand has made considerable progress in reducing stigma and discrimination for PLHIV and TB patients in the health system, this issue is by no means resolved. Discriminatory attitudes continue to exist in the health care system and in communities. For example, Chan et al. (2008) reported in a study of Thai student nurses, that participants considered PLWHA with co-characteristics of drug use and/or links to sex work, as less deserving of their sympathy and (professional/private) support. Fear of disclosure, mistrust in healthcare staff and concerns regarding patient confidentiality were frequently cited concerns of PWID (Churcher, 2013). These factors continue to reduce demand for HIV testing, promote late initiation into ART (despite near universal access to first and second line treatments), and compromise the full implementation of DOTS

A network of health promoting hospitals exists across the country that is well placed to undertake health promotion and primary prevention work. Infrastructure for health is almost universally good, with laboratory and diagnostic capacity available at provincial and lower levels. However, there is ongoing over-reliance on secondary and tertiary health facilities, creating bottlenecks and delays by over-burdening staff and under-utilizing human resources at the primary care level. Big urban conglomerates and Bangkok have a large number of world-class private treatment facilities, and an effective partnership between the public and private sectors to improve adherence to standards is required. Currently, no regular collaboration and coordination mechanism to bring providers in the private and public sector together is in place.

A major strength of the current health system in Thailand is the three insurance schemes, which cover 99% of the Thai population and ensure comprehensive access to diagnosis and treatment for a wide range of conditions including HIV, MDR TB and cancer. This has contributed to good health outcomes for the people of Thailand. Most important among these is the UC scheme (also known as the 30 Baht scheme) established in 2001, and run through the National Health Security Office (NHSO), which covers over 70% of the population. The Civil Servant Medical Benefits Scheme (CSMBS) and the SSS are funded from tripartite sources (employee, employer and the government) and cover the remainder of the Thai population. In 2013, the MOPH announced a policy to provide health insurance (with ART coverage included) for cross-border migrant workers who are not covered by social security, including both registered and unregistered migrants. There are several challenges in the implementation of this policy which will require some time before all aspects are fully operational. However, progress in uptake of this scheme has been unexpectedly rapid and currently 239,036 migrants have subscribed to this migrant health insurance scheme (MHI).

The Bureau of Tuberculosis (BTB), Bureau of AIDS TB and STIs (BATS), and the National AIDS Management Centre (NAMC) are technical agencies whose roles are mainly focused on policy and guidance development, supervision and monitoring. However, they have no direct control on implementation. As a result of decentralisation, central authorities now have little say on health budgets, which go directly to provinces, mostly hospitals. The new budgetary authorities at the provincial level have increased responsibility on HIV and TB but, in many if not most cases, limited awareness and capacity to address it, especially regarding KAP issues. Budgetary decisions usually favour clinical care for other diseases over prevention for HIV and TB. This is further compounded by a lack of strategic information. With decentralization, reporting and analysis has been compromised as health care staff at the health facility level struggle to fulfil reporting requirements to various disease programs and insurance agencies.

The insurance agencies reimburse hospitals on a performance basis against an agreed cost per procedure or treatment provided. This has implications for the implementation of standard treatment guidelines and protocols and how the quality of diagnosis and treatment is monitored. The reimbursements provided by the insurance agencies are also limited to public and specific private hospitals; financing of outreach and community delivered services is absent. Given the significant work loads of health care staff, this has consequences for availability of trained human resources for active case finding and retention of patients in care and treatment services. The need for task sharing from health facilities delivered HCT to trained community based organisations is becoming more urgent, and mechanisms to leverage the strengths of community based organisations are fundamental to 'Ending AIDS' and bring the TB epidemic under control in Thailand. Moreover, task shifting will improve service uptake by taking HCT closer to KAPs and support early diagnosis and prevention. It will also ensure sustainability of the response by increasing capacities in HCT, building referral

networks and supporting adherence.

Thailand has a tradition of vibrant civil society engagement on HIV issues, with several groups working on delivering services, safeguarding treatment access, and improving the policy and legal context for HIV prevention and care work. Prominent organisations such as Foundation for AIDS Rights (FAR), ACCESS Foundation, SWING, Rainbow Sky, Seven Sisters, Thai Network of Drug Users (TDN), and Thai Red Cross etc. have been crucial partners in tackling the HIV epidemic in the country. The Raks Thai Foundation, who is the Civil Society Principle Recipient for the NFM has a long history of promoting equitable access to health for migrants and other vulnerable populations. There is ongoing need to harness the skills, knowledge and commitment of all these agencies as Thailand moves towards elimination of HIV.

#### *Scope of this Concept Note*

The Thai national response to HIV and TB aims to address issues of equity, gender, and human rights issues by ensuring equal access to prevention and treatment services for all Thai and non-Thai people. This joint HIV-TB Concept Note aims to address the epidemiological and health systems challenges discussed above in a geographically and epidemiologically prioritized manner. The CCM wishes to utilize this funding opportunity to support innovation and cushion Thailand's transition to a fully domestically funded response. NFM resources will be strategically invested to ensure consistency in service provision, while developing the capacity for a sustained response.

As part of the innovation agenda, the CCM proposes the implementation of the RRTTR (Reach-Recruit-Test-Treat-Retain) framework which removes the dichotomy between prevention and treatment interventions. The specific objectives of for service delivery are as follows:

- (i) To prevent the transmission of HIV and TB by sustaining intensive behavior change activities, appropriate use of prophylaxis and the strategic use of anti-retroviral drugs;
- (ii) Actively find HIV and TB cases in the community and health care settings by recruiting 'at risk' and 'vulnerable populations' into HIV testing and TB screening;
- (iii) To ensure early and accurate diagnosis of both diseases by improving diagnostic capability, and reducing turn-around time (by using rapid HIV testing and molecular diagnostic techniques);
- (iv) To provide early treatment and ensure retention in care for all those diagnosed with HIV and/or TB.

At the management and enabling environment level, there are two main objectives. These are:

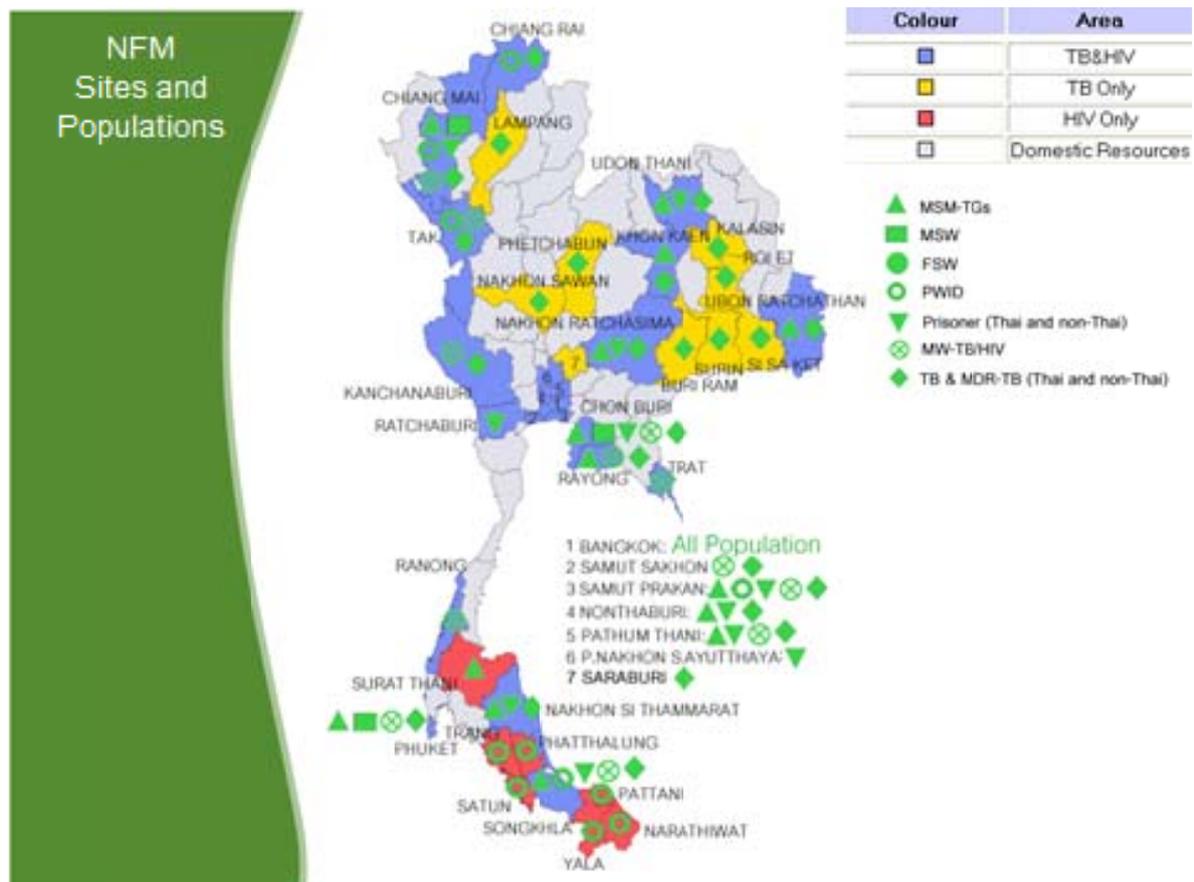
- (i) To foster collaborative activities across HIV and TB programs at national and sub-national levels, and ensure sustainability by strengthening linkages between community and health systems;
- (ii) To 'normalise' HIV and reduce stigma and discrimination for both HIV and

TB.

The CCM has taken note of the findings of the Portfolio Analysis for Thailand, presented in March 2014, and agrees with the findings and recommendations provided. These have informed the programmatic gap analysis and future programming directions for this NFM.

Extensive epidemiological and programmatic analysis has driven the choice of the 38 provinces that this NFM request is aimed at. Provinces were selected as high burden HIV, TB or HIV-TB provinces. Of these, 22 provinces will have HIV and TB activities. In addition, 26 sites where MDR TB activities which were initiated under the Single Stream Funding (SSF) mechanism will be continued, in order to ensure treatment completion and patient monitoring for those who commenced treatment in 2011-2013. Please see map below for proposed provinces and populations to be addressed.

**Fig 1: Map of proposed NFM sites and populations selected for interventions**



There were five main criteria that influenced the choice of provinces for implementation and inclusion of KAPs:

(i) sustaining and enhancing evidence-informed, rights-based, gender sensitive interventions in the geographic locations carrying the greatest burden of HIV and TB;

(ii) ensuring the greatest possible coverage of key populations with life-saving prevention, treatment and care services at the lowest possible expenditure (optimal investment/ coverage ratio);

(iii) making an optimal contribution for the greatest impact on the diseases in the long-term;

(iv) producing the greatest impact on strengthening health and community systems and enhancing health-community interface; building the body of good practice for replication throughout the country;

(v) enhancing the foundation for sustained, fully domestically funded evidence-informed, rights-based, gender sensitive disease responses.

The number of provinces chosen was the lowest possible number, while trying to achieve adequate geographical coverage, in order to benefit from economies of scale and reduced management costs.

Table 2: Proposed coverage of KAPs by NFM investments

Target Pop	National size estimate	Numbers Covered by NFM	No. of provinces	Total contribution to national coverage targets (NFM provinces %)	Expected national coverage 2015-16(reached) (%)
High risk MSM	145,981	74,450	14	50.7 65.9	70, 75
High risk TG	28,532	18,723	14	65.9	70, 75
MSW	16,970	15,692	4	92.4	80,90
NVB-FSW (Bangkok)	26,579	7,859	1	29.6	63, 72
PWID	40,300	17,057	12	42.3	53, 63*
Regular sex partners	67,069	39,764	22	59.2	45, 52
Prisoners	293,492	136,541	13	46.5	43, 49
High-risk migrants (HIV)	47,426	32,796	13	NA	60, 64
Vulnerable Migrants (TB)	421,365**	271,665	13	64.5	40, 50

\*Includes coverage of MMT covered by domestic resources;\*\* factory and construction workers only.

As the HIV and TB epidemics in Thailand remain concentrated among KAPs, it is strongly felt by the CCM that strategic investments should be focused in these groups. The Country Coordinating Mechanism (CCM) proposes a cost-sharing and 'front-loading' approach to ensure that adequate resources are available to allow good coverage of all KAPs. Therefore the duration proposed for this investment is from 1 January 2015 to 31 December 2016.

Specifically, transgender, MSM, male and female sex-workers and the male and female sex partners in sero-discordant relationships are prioritized KAPs for this NFM. This decision has been taken in explicit recognition of the fact that gender inequality continues to exist in Thai society (based on heterosexual normative values), which perpetuate and reinforce the clear distinction and expectations of the masculine and feminine gender roles and behaviours. While Thai law does not

criminalise homosexuality, it also does not explicitly ban discrimination on grounds of sexual orientation and gender identity.

PWID continue to face legal and physical barriers to access, with forced detention and other human rights violations. In 2012 a UN Joint Position Paper called on all States to close compulsory drug detention and rehabilitation centres and implement voluntary, evidence-informed and rights-based health and social services in the community. This NFM prioritises PWID not just for service delivery of prevention and treatment services, but also for activities relating to human rights protection as well as policy change (see section 3.3).

The Thai Government will share cost for commodities, infrastructure and human resources as part of transitioning to a fully domestically funded response. Specifically, 50% of the condom and needle/syringe requirement for the implementation of the NFM will be provided by domestic resources; as will the vast majority of diagnosis and treatment costs. In Year 2, only 40% of commodity costs will be requested from the GF. At the same time, domestic funding for prevention activities with all KAPs is also being mobilized, with Cabinet approval for funding commencing in fiscal year 2015 currently being processed.

The CCM requests the TRP to note that this Concept Note focuses not just on strategic investments to ensure cost effective prevention and treatment interventions in KAPs, but on community capacity building for enabling effective service delivery, and improving linkages and referral mechanisms across health providers. As an upper middle income country, Thailand is not requesting costs for drugs, infrastructure and routine diagnosis. Instead, it is requesting investment in (i) activities for enabling and strengthening systems and; (ii) capacity development of community based human resources for activities aimed at 'recruitment' and 'retention' of patients in the prevention-treatment-care-support continuum (please see Section 1.2). Currently, domestic resources available for these activities are insufficient, although efforts to ensure the availability of these funds from the 2015 fiscal year have progressed well. As Thailand graduates from receiving external donor resources for health, Global Fund (GF) resources will be used to strategically to both 'frontload' investments, and strengthen health and community systems for highest impact of interventions, while allowing a gradual transition to full domestic funding.

CCM Thailand wishes to utilize the current window of opportunity to control new infections, and ensure an inclusive and participatory transition to a fully domestically funded response.

## 1.2 National Disease Strategic Plans

With clear references to the **current** TB and HIV national disease strategic plan(s) and supporting documentation (including the name of the annexed documents and specific page reference), briefly summarize:

- a. The key goals, objectives and priority program areas under each of the TB and HIV programs including those that address joint areas.
- b. Implementation to date, including the main outcomes and impact achieved under the HIV and TB programs. In your response, also include the current implementation of TB/HIV collaborative activities under the national programs.
- c. Limitations to implementation and any lessons learned that will inform future implementation. In particular, highlight how the inequalities and key constraints and barriers described in question 1.1 are currently being addressed.
- d. The main areas of linkage with the national health strategy, including how implementation of this strategy impacts the relevant disease outcomes.
- e. Country processes for reviewing and revising the national disease strategic plan(s). Explain the process and timeline for the development of a new plan and describe how key populations will be meaningfully engaged.

Both HIV and TB programs in Thailand have updated and fully costed National Strategic Plans (NSPs). The development of these NSPs has been informed by extensive reviews, consultations with a wide range of stakeholders, epidemiological analysis and cost effectiveness analysis (HIV). As an upper middle income country with a strong health system and declining HIV and TB epidemics, Thailand has seized the opportunity to eliminate HIV, and bring down TB prevalence (by 25%) and mortality (by 50%). A paradigm shift from controlling the HIV epidemic to 'Ending AIDS' underscores Thailand's response. For TB control, Thailand is also moving to a Three Zero's approach (Zero deaths, Zero untreated disease and zero physical and economic suffering due to TB). Thailand stands out as one of the few countries which set such ambitious goals and targets. In the following paragraphs, detailed information is provided.

### *HIV*

The spread of HIV/AIDS in Thailand remains an important topic in the public health agenda, even though more urgent focus is now on non-communicable diseases. The 11<sup>th</sup> National Health Development Plan (2012-2016) specifically expresses concern about ongoing HIV transmission among PWID and MSM, and the increasing rates in sexually transmitted infections among youth.

Thailand has committed itself to ending AIDS by 2030. The Cabinet and National AIDS Committee (NAC) approved the national AIDS strategic plan (NASP) for 2014-16. The updated NASP has reinforced the original 2012-16 strategies and incorporated additional measures that will enable the country to achieve the ending AIDS targets by 2030. An Operational Plan for Ending AIDS in Thailand

(2015-2019) is currently being finalized.

The National AIDS Strategy 2012-2016 is linked to 11<sup>th</sup> National Economic and Social Development Plan (NESDP) 2012-2016, and to other national master plans, i.e. National Reproductive Health Plan and the National Human Rights Protection Plan. Two core principles of the strategy development process were (i) creation of ownership of government, civil society, and private sectors at both national and sub-national levels, (ii) technical soundness to achieve success in HIV prevention and mitigation in a sustainable way.

A strategy drafting process was informed by an evaluation of National AIDS Strategy and implementation. The main finding of this evaluation was that the Strategy was not fully operationalized and required the development of a nationally endorsed Operational Plan. Stakeholder meeting reviewed the policy and program implementation. The Thai NGO Coalitions on AIDS and Thai Network of PLHIV organized forums for civil society organizations and communities in 4 regions of the country to review the response to date and propose new strategies. A core working group (constituted by GO, NGO, academia, and international organizations) drafted the national strategic framework, including the vision, goals, and strategies. This was presented to the National AIDS Committee (NAC) for approval.

NAC agreed with the draft strategy for the period 2012-2016, and assigned the Department of Disease Control (as NAC Secretariat) to coordinate with other government agencies, CSOs, the private sector, technical specialists and international organizations to develop the details of the new, five-year plan, which was approved by the NAC on April 27, 2012. Based on the HIV Investment Case, the NAC agreed to a revised NAS for the period of 2014-16, which aligned with the concurrent five-year NESDP period. This revised plan enables linkages with the relevant NESDP components and was submitted to the Cabinet for approval, followed by dissemination of the NAS details to serve as a guideline for implementing agencies.

The Operational Plan uses the National AIDS Strategy as a framework. Main inputs were drawn from the National Consultation on Strategic Use of ARVs, the evaluation of the national HIV prevention programme for key affected populations and prisoners in Thailand by Institute for Population and Social Research (IPSR) in 2013 as well as the Ending AIDS in Thailand through Evidence-based Responses, national consultation during 20-21 March 2013.

In the NSP (2012-2016), Thailand has two over-arching strategic directions; (i) innovation and change (see section 3.2 for further information on specific innovations to improve access to KAPs and the shift in approach to combination prevention); and (ii) optimisation and consolidation. It is based on the principles of promoting equality; implementation of people-centred approaches; clear target setting; creating national ownership and leadership; empowerment and increasing self-esteem; and working in partnership with government, private and

non-governmental sectors. The focus remains on vulnerable populations of MSM, TG, MSW, PWID, FSW and their clients in this strategy.

The NSP (2012-2016) set ambitious targets: (i) new HIV infections reduced by two-thirds; (ii) vertical transmission of HIV less than 2%; (iii) universal access to social protection and quality care and treatment for PLHIV; (iv) AIDS related deaths reduced by 50%; (v) TB deaths among PLHIV reduced by 50%; (vi) laws and policies which impede access to prevention, treatment and care and other government health services revised; (vii) human rights and gender specific needs are addressed in all HIV responses; and (viii) number of discrimination and /or human rights violation cases occurring to PLHIV and KAPs reduced by 50%.

Significant achievements in the area of PMTCT, reducing TB deaths among PLHIV and almost universal access to treatment for PLHIV have been noted. At the same time, low coverage rates, non-targeted approaches, lack of effective packaging and delivery of services has slowed achievements in prevention. The need for further intensification and prioritization has been highlighted.

Development of the Operational Plan was coordinated by NAMC and involved a series of working group meetings around key strategic areas (prevention, care and treatment, strategic information, stigma and discrimination) and broader stakeholder workshops. Working groups were tasked with reviewing the current plan, reviewing programme assessments and evaluations, and identifying partner comparative advantages in order to develop an actionable list of interventions that would overcome the gap between what is currently being implemented, and what needs to be implemented in order to achieve the goals of the three zeros.

Working groups reached consensus and their inputs were integrated into the plan prior to hosting a larger national stakeholder workshop to review the proposed interventions.

The National HIV Operational Plan (2015-2019) focuses on 33 priority provinces, with the most intense focus on the Greater Bangkok Area (where modeling and epidemiological studies suggest that nearly a quarter of new infections are occurring (1,917 new HIV infections in Bangkok out of a total of 8134 in 2013, i.e.24%).

The Plan focuses on leveraging the preventive effects of ART that will further contribute to a decline in new infections. Given very high reported rates of 'last time' condom use and sterile injecting during the last five years, there are concerns that a saturation point may have been reached for behavioral interventions in Thailand. Specifically, while the proportions among KAPs who report safe behaviors are high, the rates of HIV counseling and testing (HCT) are typically low. Despite HCT being provided as part of universal health coverage to all Thai nationals, uptake is poor.

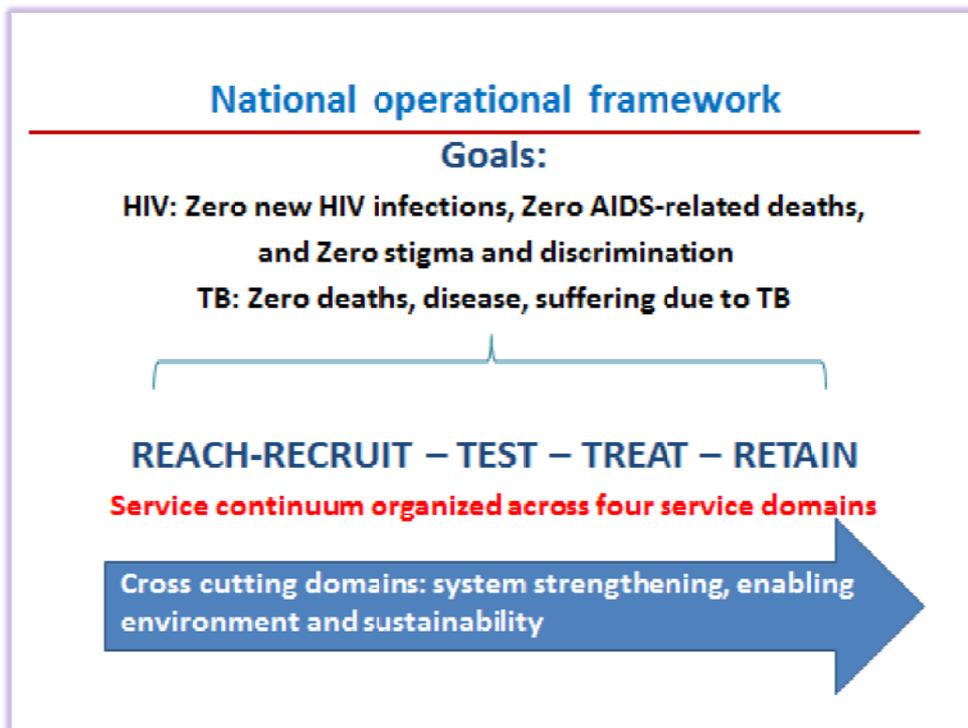
In addition to saturation levels being achieved in behavioral change, and limited HCT, Thailand needs to address transmission among sero-discordant couples

(over a third of new infections are estimated in this population). Targeted provision of HTC to this population in and out of PMTCT settings, and the provision of early ART to the infected partner will be fundamental to controlling transmission in this group.

In order to action this, there is a realization that one needs to move beyond the provision of health 'hard-ware' and information, to actual service provision by taking a more active and 'case-finding' approach, with adequate linkages to treatment initiation and retention. Thailand is now introducing a new form of combination prevention, with a strong focus on community led approaches to identify the most at risk KAPs (such as younger MSM). Innovation in outreach service delivery models and demand creation for HCT, with tight linkages into early initiation of ART and adherence support are also vital.

A shift to community based services will respond to capacity constraints in the health system, and allow expansion of services like ARV treatment, HCT, and adherence support. Crowded publicly funded health facilities and overstretched human resources have necessitated a task sharing and shifting approach. Clearly, alternative systems leveraging community level strengths and ability to access risk groups will help to address these gaps. The Reach-Recruit-Test-Treat- Retain (RRTTR) approach to HIV diagnosis and treatment is the framework that National Operational Plan for HIV (2015-2019) utilises, and this is in line with the WHO endorsed approach to HIV diagnosis and treatment using a cascade approach. The RRTTR approach also has direct relevance to the control of TB in Thailand, as early detection and universal quality treatment of co-infected patients will contribute to decreased incidence of TB. The Operational Plan (2015-2019) sets targets for a high proportion of KAPs and their regular sex partners individually for each component of the RRTTR framework. Please see Figure 2.

Figure 2: The RRTTR Framework for HIV and TB control



In summary, Strategic Use of ARVs (SUARV) for Option B+, Post exposure prophylaxis (PreP) and early ART (at any CD4count) is viewed as a real ‘game-changer’ in Thailand. The development of PreP as an intervention in Thailand is overseen by the Committee for Biomedical Interventions which reports to the National AIDS Committee. Implementation research with domestic resources is currently planned for PreP in MSM. The feasibility an early treatment approach has also been assessed with a large implementation research programme in Bangkok (MSM Test and Treat Study, Thai Red Cross and HIV-NAT), and cost effectiveness and benefit analysis studies indicate that such an approach will be an excellent investment in the Thai epidemiological and economic context. The Investment Case for Thailand (UNAIDS, 2013) National Consultations on SUARV (August, 2012) and Option B+ (January, 2013) have been held in Thailand and consensus on integrating this into national policy and programming has been achieved.

**TB**

The TB NSP (2015-2019) sits within the broader context of the 11<sup>th</sup> National Health Development Plan (2012-2016) and the Strategic Plan for the Department of Disease Control (2014-2017).

The 11<sup>th</sup> National Health Development Plan takes into account the shift in

disease burden in Thailand and, hence, in priorities, away from communicable diseases to non-communicable or life-style diseases. It aims to strengthen individuals' and communities' contributions to health, in collaboration with the public sector, and to foster self-reliance in the promotion of health and the provision of health services. The Plan seeks to strengthen health systems with quality standards and with adequate health personnel and appropriate technology at all levels. The Plan foresees the establishment of the National Health Service Delivery Board to balance the needs of purchasers and providers, and to reduce the differences between the three major insurance schemes. Health care for migrants is included, as well as an improved health information system and greater emphasis on public-private partnerships.

Since the distribution of this Plan, further health reform has been announced that intends to further decentralize the management of the health system to the regional level.

The current strategic plan of the Department of Disease Control (DDC) covers the period 2014-2017. It is composed of six strategies which support disease prevention, surveillance, control and rehabilitation services. TB treatment success rate is a key performance indicator under strategy 5.

The NSP (2015-2019), while based on the Stop TB Strategy, takes into account the advances already made in Thailand in universal health coverage, full access to care and social protection, with virtual elimination of catastrophic expenditure incurred by TB. It also incorporates greater emphasis on patient-centred care and a more significant role for CBOs, collaborating with the public sector.

Inputs for the NSP (2015-2019) were also provided by the 5<sup>th</sup> Joint International Monitoring Mission (JIMM) took place in August 2013. It was organized by the BTB (the central unit of the NTP and part of the DDC of the MoPH). Other Thai organizations that took part of this review were the Bangkok Metropolitan Administration (BMA), Kaset University, Mahidol University, Walailuk University, Siriraj Hospital and the Raks-Thai Foundation. Overall coordination was facilitated by the WHO Country Office for Thailand. International experts were from the International Union Against Tuberculosis and Lung Disease (the Union), Family Health International (FHI360), USAID, CDC (Thai MoPH-US CDC Collaboration as well as CDC-Atlanta), Interactive Research and Development (Karachi, Pakistan), Global Infectious Diseases Consulting Ltd. (London), and the Global Fund; as well as staff from WHO Headquarters and the Regional Office for South-East Asia.

Following this 5<sup>th</sup> JIMM, the preparation of the NSP for the next programme period commenced in September 2015. A broad consultation took place in October 2013 involving many of the organizations included in the 5<sup>th</sup> JIMM; and the national Stop TB Partnership. Follow-up consultations took place in January and March 2014 in which, in addition to the participants of previous consultation,

the Principal Recipient (DDC) and more representatives of KAPs attended people (including former TB patients and people living with HIV); civil society organizations (CSOs) and NGOs. These discussions focused on identifying key gaps, and lessons learnt from the implementation of the current NSP (2011-2015).

The JIMM identified the following key issues that NSP (2015-2019) addresses:

**1. Low case notifications**

Private, university, military and some MoPH hospitals failed to report TB cases. The extent of this national underreporting is unknown but likely to be significant. This is especially the case in children, the elderly and those with MDR-TB, where reported rates are well below estimated rates. Among the reasons for this low reporting are that the private sector is not effectively engaged in partnership with the NTP. Though case notification for TB is mandatory by law, this law is neither observed nor enforced.

**2. Inefficient reporting and surveillance systems**

Current systems for registering and following cases are time consuming and do not exploit the existing opportunities offered by the information technology infrastructure in Thailand. Potential synergies of sharing data with the NHSO have also not been exploited. The country is at risk of failing to recognize rapid changes in the TB epidemic, e.g. outbreaks of MDR- or XDR-TB while there is capacity to manage both.

**3. Urgent need for improvement of treatment outcomes**

Nationally, the treatment success rate was 82% in 2012 among the notified new Thai smear-positive cases, which is below the global target of 85%. This is largely due to the private hospitals failing to follow up and to report outcomes properly. A wider range of support approaches is needed for patient-centred care. This should be provided by expanding existing public services to include outreach services for difficult-to-reach patients, through collaboration with other care providers, such as non-governmental agencies.

**4. Provision of suitable care for all migrants in need**

The majority of migrants are undocumented. They are concentrated in border areas as well as in and around Bangkok. Demand for healthy labour, respect for human rights and protecting public health all suggest that access to treatment should be facilitated for all migrants, regardless of documentation status.

The JIMM recommended that:

1. The MoPH should address the gaps in notification with the goal of finding all TB cases. Greater priority should be accorded to TB control. The Ministry should take the lead in strengthening/establishing a PPM approach. The

notification system needs to be strengthened in order to achieve mandatory reporting to the BTB of all cases from all institutions that treat TB. The quality of diagnosis needs to be improved by using the new rapid diagnostic tests as the first-line test throughout the country by 2016. Investments should be made in quality assurance. All TB laboratories should be accredited.

2. A unified, nationwide case-based, web-based electronic recording and reporting system should be set up that capture all cases in all facilities. Such a system should be linked with the data collection system of the NHSO. A careful transition from the current system should be planned.
3. To ensure maximum treatment success, a campaign targeting both patients and health staff should be organized to improve treatment outcomes based on DOT. Care needs to be more patient-centred, with provision of enablers to poor patients, proper management of co-morbidities and clarity on the roles and responsibilities of patients and providers. Resources for DOT should focus on higher-risk patients (HIV, the elderly, uninsured, marginalized, etc.). Quality of care should be monitored.
4. To provide suitable care for all migrants in need, the MoPH should promote the principle that to safeguard the health of all people in Thailand, TB care should also be offered to migrants, regardless of their status. Access to care should be extended among non-Thais by promoting active TB case-finding, migrant-sensitive TB health service delivery and coordinated approaches with international and local NGOs and CBOs.
5. As Thailand is undergoing a transition to an industrialized economy with universal health coverage, the BTB should keep pace with these changes to avoid becoming less relevant in an environment where TB diagnosis, treatment and care are increasingly undertaken in hospital and reimbursed by the health insurance agencies. The MoPH needs to expand the BTB's analytical, financial and management capacity, while also strengthening its technical capacity.

The vision of the NTP is a "Thailand free of TB". The overall goal is to reduce the prevalence of TB from 159 per 100 000 to 120 per 100 000 between 2012 and 2019. There are three main operational objectives:

- 1) To ensure that all (100%) TB patients have access to standard TB diagnosis and effective treatment services - including special populations who are at high risk of TB infection and those living in border areas - by 2019.
- 2) To halve the TB mortality by 2019 as compared to the 2012 baseline.
- 3) To strengthen the leadership and strategic management capacity for TB control

#### ***HIV-TB***

Both HIV and TB programs operate under the auspices of the Department of Disease Control (DDC) within the Ministry of Public Health. They are coordinated at the level of the Deputy Director General for Disease Control who provides

oversight to broad policy, budgeting and strategic issues. Collaboration between the National programmes (BTB, National AIDS Management Centre and Bureau of AIDS TB and STIs) can be further improved.

Policy and programmes for HIV/TB integration shows good progress in relation to service delivery, with a high level of coverage on screening PLHIV for TB and screening for HIV among TB patients. Service delivery is fully integrated and access both services in one site is often the norm. However, the mortality rate among those with co-infection is still too high indicating gaps at the care and treatment level. Specifically provision of ART to those who are co-infected is still at sub-optimal levels (59% of registered TB patients who are living with HIV are currently on ART).

### 1.3 Joint planning and alignment of TB and HIV Strategies, Policies and Interventions

In order to understand the future plans for joint TB and HIV planning and programming, briefly describe:

- a. Plans for further alignment of the TB and HIV strategies, policies and interventions at different levels of the health systems and community systems. This should include a description of i) steps for the improvement of coverage and quality of services, ii) opportunities for joint implementation of cross-cutting activities, and iii) expected efficiencies that will result from this joint implementation.
- b. The barriers that need to be addressed in this alignment process.

Having faced a large disease burden of HIV and TB and a significant co-infection rate for over two decades, Thailand has made considerable progress in alignment of HIV and TB programmes over time. Provider initiated counseling and testing in TB patients for HIV, and the routine screening for TB among HIV patients is universal. At the national level, coordination across the two programmes is the responsibility of the DDC. At the regional and provincial level, the public health coordinators are responsible for monitoring both diseases and are in-charge of collating data.

The Thai health system also provides for integrated patient care at national and sub-national levels. Patients benefit from HIV and TB being diagnosed and treated within different departments and units of a single health facility. The Hospital Accreditation Agency (and the NHSO to some extent) implements a system of quality and standards monitoring to which all hospitals must adhere to. These standards include those relating to airborne infection control. However, to date there has been limited integration of HIV and TB programmes *vis a vis* service delivery at the community level. For example, human resource allocation by NGOs for outreach programmes has been driven by a disease specific approach and opportunities for integration have not been considered adequately.

An analysis of the epidemiology and programming contexts in Thailand suggests that there is considerable room for further alignment of the two programmes in three key areas: (i) monitoring and evaluation; (ii) policy and strategy development; and (iii) delivery of community level interventions for specific populations (PWID, migrants, PLHIV with TB). There is an opportunity to improve efficiencies, reduce workloads, check duplication of effort and costs, and improve outcomes for people on the ground if alignment in these areas can be achieved. In the following paragraphs, each of these areas is addressed separately:

#### ***Monitoring and evaluation***

Currently monitoring and evaluation for TB and HIV is not yet fully aligned. The TB programme has a paper-based and pilot electronic recording and reporting system (TB Clinic Management Database - TBCM). The HIV testing and treatment programme is monitored through the National AIDS Programme (NAP) database. A

parallel reporting system for prevention activities supported by external donors is also in place. At the same time, the health insurance agencies also ask hospitals to report data for the two diseases separately (e.g. the SMART TB Database). This creates a massive reporting burden, along with delays and inaccuracies. To address this fragmentation and meet the strategic information needs of programme managers and policy makers, NAMC has defined national indicators, and implemented the AIDS Zero Data Portal (2013-2014). This is a data visualization and analysis tool which uploads existing information from databases automatically at a national and sub-national level (down to district level) using the national and UNGASS indicators as a framework for data visualization. At the same time, both HIV and TB programmes plan and implement reviews and evaluations separately.

In 2015-2016, it is foreseen that (i) HIV and TB reviews are conducted jointly; (ii) the TBCM and the AIDS Zero Data Portal are linked up to provide real time information in the area of joint HIV-TB indicators; (iii) advocacy with the NHSO to link up the SMART TB and NAP databases is also planned.

### *Policy and Strategy Development*

It is planned that a quarterly meeting between the technical agencies that are involved in HIV and TB activities is held in order to align policy and strategic issues. This will commence from January 2015 onwards. BTB, NAMC and BATS will specifically use this opportunity to (i) align treatment guidelines (currently these processes are undertaken independently and can sometimes lead to inadequate consideration of HIV-TB issues); (ii) negotiations with health insurance agencies for reimbursement of specific procedures and treatments relating to HIV-TB (such as NHSO reimbursing the cost of molecular diagnostic tests used to diagnose TB in HIV patients); (iii) joint capacity building and training activities at national and sub-national levels; (iv) joint task analysis of health care delivery staff workload to identify efficiencies and opportunities for task sharing and shifting; and (v) joint advocacy to keep HIV and TB on the public health agenda in the context of an aging population where NCDs are the leading cause of death. The latter is particularly important if ongoing resources and political support for 'Ending AIDS' and TB control are to be secured.

### *Integrated Community Based Service Delivery*

NGOs staff and community health volunteers are currently tasked to undertake peer education, case finding and patient support activities separately for HIV and TB. From 2015 onwards, it is planned that for populations vulnerable for both HIV and TB (PWID, migrants, and prisoners) there is integration of these roles. For example, a peer volunteer will provide information, commodities and referral services relating to HIV, TB, and STIs etc. At the same time, a cadre of well-trained 'case managers' will be developed within NGOs to address treatment, care and support issues jointly for HIV and TB. This approach will not only improve patient health outcomes, but has an overall positive impact on community

healthand reduces the level of human resource investment needed.

### ***Barriers to achieving alignment that need to be addressed***

In order to achieving better alignment between the HIV and TB programmes, potential barriers and opportunities need to be adequately analysed and addressed. While there are no specific barriers as such, strong leadership and coordination will be required to further alignment.

An in-depth process of consultation and consensus building will be needed on these issues. Why alignment is important, how it will help to reduce workloads and achieve efficiencies, and how outcomes for patients can be improved etc. will need to be clearly demonstrated at national and sub-national levels. Lessons learnt from other contexts similar to Thailand will need to be identified and disseminated.

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## SECTION 2: FUNDING LANDSCAPE, ADDITIONALITY AND SUSTAINABILITY

To achieve lasting impact against the diseases, financial commitments from domestic sources must play a key role in a national strategy. Global Fund allocates resources that are insufficient to address the full cost of a technically sound program. It is therefore critical to assess how the funding requested fits within the overall funding landscape and how the national government plans to commit increased resources to the national disease program and health sector each year.

### 2.1 Overall Funding Landscape for Upcoming Implementation Period

In order to understand the overall funding landscape of the TB and HIV national programs and how this funding request fits within these, briefly describe:

- a. The availability of funds for each program area and the source of such funding (government and/or donor). Highlight any program areas that are adequately resourced (and are therefore not included in the request to the Global Fund).
- b. How the proposed Global Fund investment has leveraged other donor resources.
- c. For program areas that have significant funding gaps, planned actions to address these gaps.

The trend line of national health expenditures based on the National Health Account up to 2011 has reflected a steady increase from US\$ 11,794 million in 2012 to US\$ 20,260 million in 2017. As an upper middle income country, Thailand does not receive a large amount of external donor funding, and the vast majority of health spending is from domestic resources. The Thai health system has a two year budget planning cycle, and current financial gaps for both HIV and TB during 2015-2016 reflect planned expenditure and assumptions about incoming external funding from 2012-2013.

### *HIV*

The National AIDS Spending Assessment in 2014 reveals that total AIDS spending was US\$283 million in 2012, and increased to US\$ 287 million in 2013. Growing country ownership for prevention interventions has been documented. Domestic funding has risen as a share of total investments from 85% (in 2011) to 89% in 2013. Notably, there is a small but discernible increase in prevention spending from less than 13% in 2011 (US\$43 million), to 17% (US\$49million) in 2013. External donor assistance from multi-lateral and bi-lateral partners (excluding the GF) is limited to technical assistance, research support or demonstration activities relating to MSM Test and Treat strategies. The total combined assistance for HIV/AIDS in Thailand during 2012-2013 was US\$3.2 million.

The implementation of the National AIDS Strategic Plan and Ending AIDS Operational Plan require a total annual investment of US\$394 million (2014), US\$423 million(2015),US\$ 450 million (2016) and US\$ 473 million (2017) .During 2015-2017, a total of US\$234 million (US\$ 63 million in 2015; and US\$ 83 million in 2016 and US\$ 88 million in 2017) are required in addition to what domestic resources are currently allocated (please see Table 3). This resource gap will be lowered if the proposed NFM investments from this Concept Note are accepted by the TRP and GAC. Nevertheless, a significant resource gap of an estimated US\$200 million is likely to remain.The 2017 budget is still in draft, as the NAC has not yet endorsed it.

Thailand has no funding gap for health facility based HIV testing and ART treatment for Thai citizens. There are no noticeable gaps in terms of infrastructure and PMTCT interventions

ART and TB treatment costs have historically not been available for uninsured migrants, but as the Migrant Health Insurance (MHI) scheme comes on line, a transition to domestic funding is expected. Spending data shows that investment in KAP specific interventions is still very low. Even as a proportion of the total prevention budget, specific programmes for sex workers, MSM and PWID are poorly funded. Out of the total prevention budget for KAPs, 14% is domestically funded and 86% is supported from international resources in 2013 (mainly the GF and the US Government).

The funding gap from 2014-2017 reflects the resource needs to bring about innovation and change that is needed for an accelerated implementation and achieving 'Ending AIDS' targets.

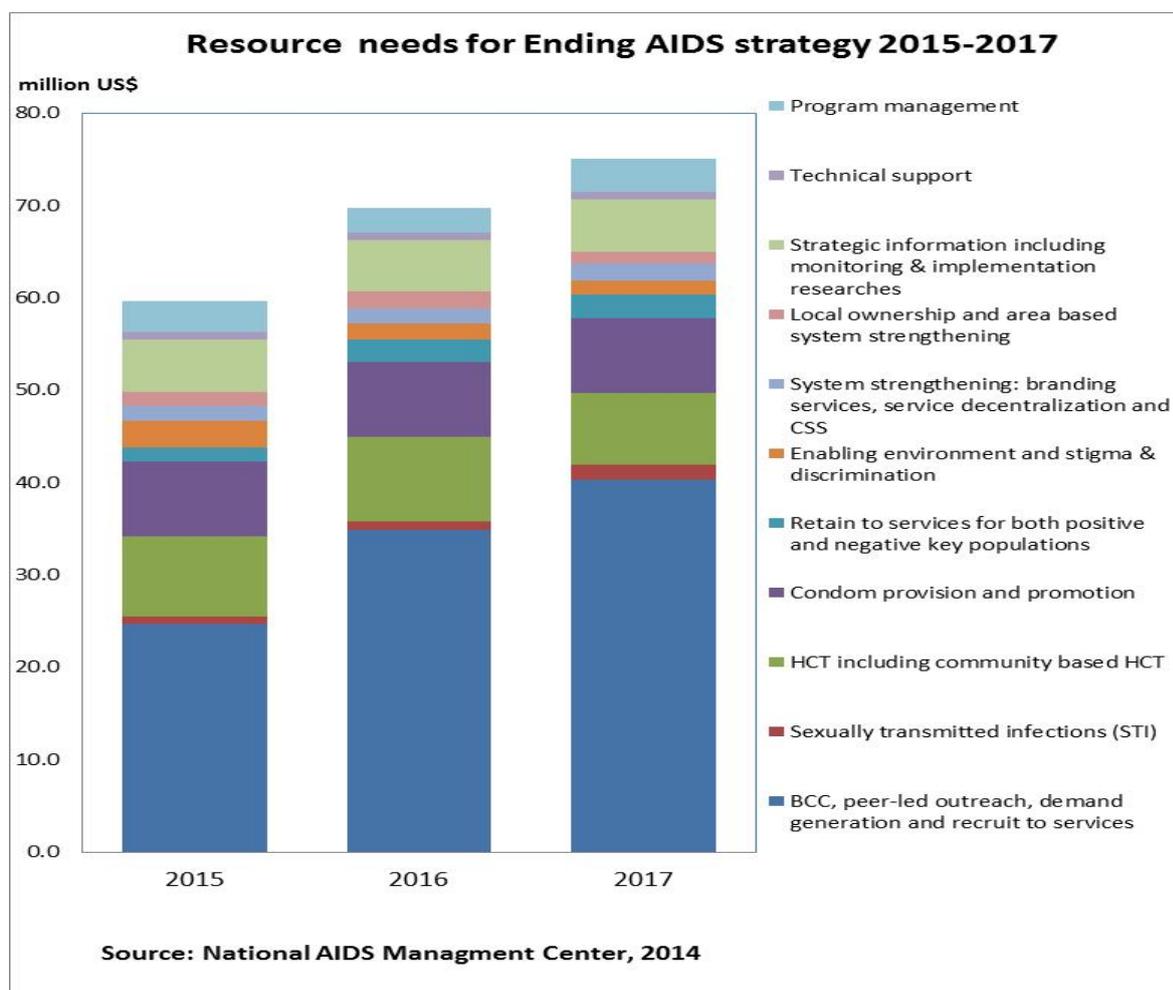
**Table 3 Domestic and external donor investments in HIV in Thailand (2012-2013) and projected resources for 2014-2017.**

Funding Source	Investment in HIV (US\$ million)		Projected resources for 2014-2017 (US\$ million)			
	2012	2013	2014	2015	2016	2017
Domestic source-Government revenues	221.0	227.1	260.6	309.7	315.9	332.3
Domestic source-Social health insurance	32.7	29.5	35.3	43.4	45.8	46.3
Domestic source-Private sector contribution	0.3	0.1	0.1	0.1	0.1	0.1
<i>Total Domestic</i>	<b>253.9</b>	<b>256.8</b>	<b>296.0</b>	<b>353.2</b>	<b>361.7</b>	<b>378.7</b>
United States Government (USG)	1.0	1.9	4.2	4.2	4.2	4.2
World Health Organization (WHO)	0.0	0.1	0.2	0.2	0.2	0.2
World Bank (WB)	0.1	0.4	0.1	0.1	0.1	0.1
UN agencies	0.9	0.9	1.5	1.6	1.6	1.6
<i>Total External - excluding Global Fund</i>	<b>2.0</b>	<b>3.2</b>	<b>6.0</b>	<b>6.1</b>	<b>6.0</b>	<b>6.0</b>
<i>Total External - Global Fund</i>	<b>27.0</b>	<b>27.3</b>	<b>39.2</b>			
<b>Total</b>	<b>282.9</b>	<b>287.3</b>	<b>341.1</b>	<b>359.3</b>	<b>367.7</b>	<b>384.7</b>
Resource needs according to NSP and Ending AIDS Plan approved from NAC 2014-2016 and estimated for 2017			393.9	422.5	450.4	472.9
Resource Gaps			52.8	63.2	82.6	88.2

Areas that are inadequately resourced are: behavioural change communication with innovative approaches; demand creation for HCT, optimizing service providers network, utilizing social media approaches, community based HIV counselling and testing, community systems strengthening, and enabling environment including reduction of stigma and discrimination and lastly strategic information and M&E. In this NFM a total of US\$23.8 million, is requested for HIV specific interventions. Should this request be realized, the total funding gap for HIV during 2015-2017 is projected to be US\$ 205 million. Apart from the above funding gaps for prevention (particularly for KAP interventions), specific funding challenges in relation to the migrant population also require mention. As of August 2013, out of the 736,104 migrants who were eligible for social security, less than half (357,643), were enrolled; while approximately 234,284 adult migrants with work permits were registered with the migrant health insurance (Kantayaporn and Mallik, Dec. 2013, WHO, Bangkok. *Draft*). This means approximately 493,000 documented migrants are without health insurance, while an estimated to be another 1.1 million undocumented migrants also have

inadequate access to health services. It is also notable that where health insurance is available, it only provides access to curative services. Preventive measures such as isoniazid prophylaxis (IPT), routine testing and screening are not covered as part of the current package. Therefore, a significant financial gap exists *vis-à-vis* HIV and TB prevention and treatment for this population. The new MHI package is currently focussed on treatment services and specific dialogue at the policy level is needed to address this issue.

**Figure 3: Resource needs by programme area for HIV control 2015-2017.**



The big proportion of resources needs for Ending AIDS strategy is Behavioral Change Communication and demand creation for HCT, which include (i) outreach services: community analysis, micro-planning, peer driven intervention, peer led activities, services at drop-in centers; (ii) reaching target population through social media and social network; (iii) services provided by local drug stores; and (iv) public and local communication.

### **TB**

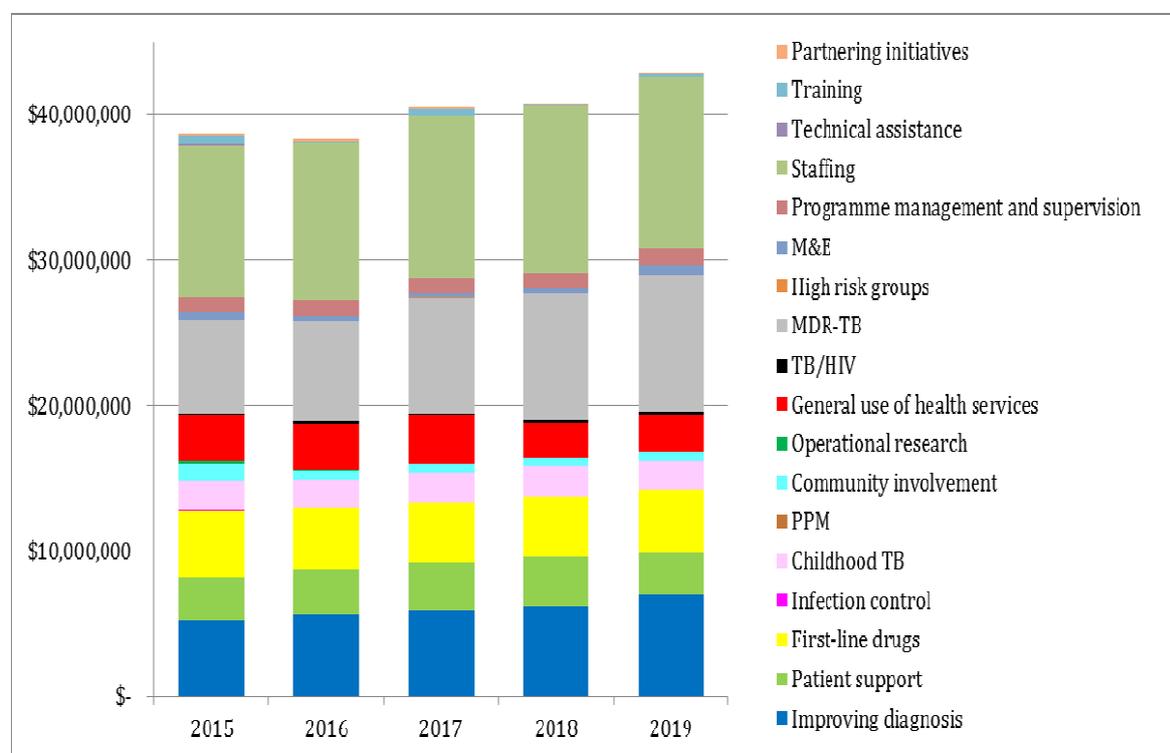
There is no routine data collection system to track TB investments in Thailand.

This section is based on costing exercise using the TB Budgeting and Planning Tool (WHO) that was undertaken as part of the development of the NSP for TB Control (2015-2019). It has not been possible due to time and information constraints to reflect all national investments for TB in the data presented below.

Between 2015 and 2019, the NSP for TB control foresees a total expenditure of US\$ 201.3 million, rising from US\$ 38.7 million in 2015 to US\$42.9 in 2019 (please see Figure4). The main factors contributing to this increase is the cost of molecular diagnostics, and diagnosis and treatment of MDR TB. Please refer to Annexes for the budget section of the TB NSP.

Of these costs the greatest single budget item is staffing: US\$ 55.7 million over five years (27.7%). This is followed by laboratory costs (US\$ 29.8 million) which reflects the investments proposed in new molecular tests, and in the expansion of culture and DST laboratories. These investments are aimed at accelerating the diagnosis of both drug susceptible and -resistant TB rapidly in order to restrict transmission. The third highest expenditure item is for MDR-TB treatment, which is based on the current prices of second-line drugs. First-line drugs are the fourth highest component. These are followed by patient support costs of which the bulk are for incentives/reimbursing travel costs to health care workers in both the government and NGO sectors to encourage case-finding and case-holding. The last major component is for childhood TB, with the highest allocations for contact tracing and provision of prophylactic treatment.

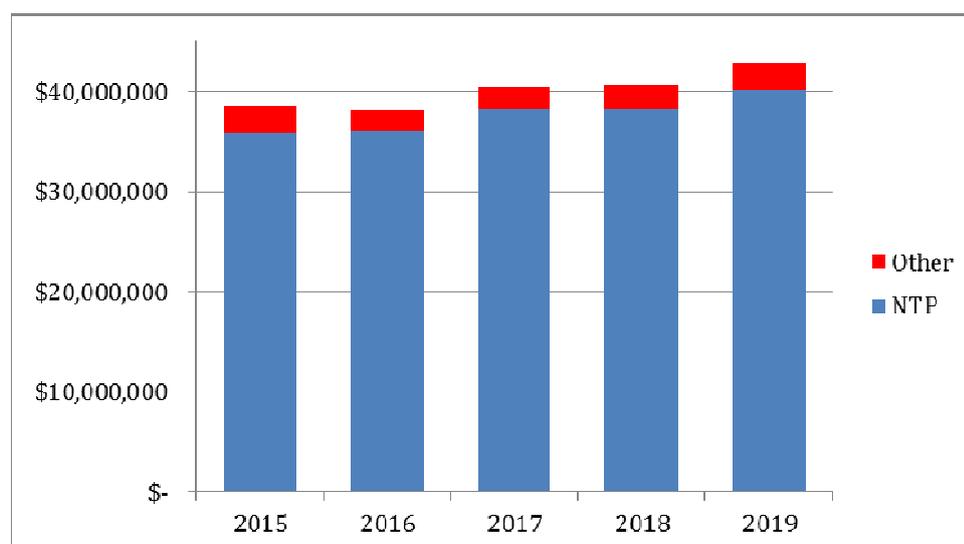
**Figure 4. Summary of NSP budget by programme area for TB care and prevention, 2015-2019.**



The large majority of total costs are expected to be borne by the country itself with only a relatively small amount covered from grants from the Global Fund and

other external sources. This picture represents the fact that for over a decade Thailand has invested significantly into broadening the access to health services benefitting almost its entire population. The vast majority of prevention, diagnosis and treatment services are implemented by the GO (please see figure 5). Currently, apart from the GF, international donor investment for TB is negligible. The USAID supports Family Health International 360 for the development of an MDR TB demonstration project that has an annual estimated investment of USD 350,000 (ending 2015), while the UK DFID has made a small investment into active case finding for migrants in cross-border sites with Shokolo Malaria Research Unit . No other donors are active for TB related investments in Thailand currently.

**Figure 5. Budget allocation, by implementing entity, for TB care and prevention, 2015-2019.**



The majority of the funds (US\$ 82.6 million or 41%) are expected from the central government and about US\$ 30.7 million (15.2%) from local governments, with small amounts from intermediate levels. Additionally, an estimated investment of US\$15 million from the SSS, and domestic spending of US\$8.5 million from the private sector is forecast.

During 2015-2016, the total funding gap for TB control is US\$21,204,549.. To cover this resource gap, a total of US\$15,936,036 is requested from GF. If this request is met, the total funding gap will be US\$ 5,268,513. However, there are some unaccounted domestic investments from the CSMBS for which data is not currently available, and in reality the funding gap may be close to negligible if the proposed GF investments are realized. Anticipated resources for TB control in Thailand for 2017 are currently estimated at US\$ 30,310,321..

Areas that are adequately resourced in the TB program are: human resources, procurement of first and second line drug; diagnosis of TB using traditional AFB techniques; infrastructure and inpatient services; and program management. Areas that are inadequately resourced are: improving diagnosis (specifically the cost of culture for follow-up and molecular diagnostics required to meet

international standards and norms); drug procurement for XDR patients; public - private partnership initiatives; community involvement; HIV-TB collaborative activities and monitoring and evaluation.

Reflecting these financing gaps, in this NFM application, the Thai CCM requests US\$ 4.93 million for improving diagnosis, care and follow-up of drug sensitive TB and US\$ 3.4 million for the rapid diagnosis and follow up of MDR TB patients. US\$ 1.74 million is requested to support HIV-TB collaboration. TB interventions for MWs and prisoners will take up US\$1,161,618. Another US\$ 5,803,635.74 has been allocated for development of TB specific HMIS, enabling environment, community system strengthening and programme management activities.

**Complete the Financial Gap Analysis and Counterpart Financing Table (Table 1).** The counterpart financing requirements are set forth in the Global Fund Eligibility and Counterpart Financing Policy.

- a. For TB and HIV, indicate below whether the counterpart financing requirements have been met. If not, provide a justification that includes actions planned during implementation to reach compliance.

Counterpart Financing Requirements	Compliant?	If not, provide a brief justification and planned actions
i. Availability of reliable data to assess compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
ii. Minimum threshold government contribution to disease program (low income-5%, lower lower-middle income-20%, upper lower-middle income-40%, upper middle income-60%)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
iii. Increasing government contribution to disease program	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

- b. Compared to previous years, what additional government investments are committed to the national programs (TB and HIV) in the next implementation period that counts towards accessing the willingness-to-pay allocation from the Global Fund. Clearly specify the interventions or activities that are expected to be financed by the additional government resources and indicate how realization of these commitments will be tracked and reported.

- c. Provide an assessment of the completeness and reliability of financial data reported, including any assumptions and caveats associated with the figures.

**HIV:**

The Royal Thai Government invested a total of US\$ 17.5 million in 2015, and will spend an estimated US\$ 9 million in 2016, and US\$ 10 million in 2017 to support the NSP including the Ending AIDS strategy. The 2015 government budget has been approved; meanwhile the 2016-2017 budget is awaited for the next budgeting cycle for approval from the Cabinet to finance additional measures to support Ending AIDS Strategy.

The government investment is estimated for basic prevention services for condom promotion, STI services, prevention activities and HCT in health care setting to maintain at the same level in 2015-2017 at US\$ 9 million per year (in average)

including US\$ 0.9 million for prevention activities, US\$ 1.3 million for condom promotion, US\$ 0.3 million for STI, US\$ 2.9 million of HCT and lastly US\$ 3.1 million for M&E system strengthening and the least for programme management.

With the updated of NSP reinforced additional measures to enable Thailand to achieve the Ending AIDS targets by 2030, the National AIDS Management Center in collaboration with stakeholders has developed a 2015 costed operational plan and secured funding at US\$ 9.5 million from the National Health Security Office to implement Ending AIDS activities for key populations. Prevention activities include peer-led intervention, community mobilization, demand generation for HCT through social and health networks, linkage of services provided at the district, sub-district and community levels and quality of counselling services in the community and health outlets.

The government commitment will be tracked and reported through the National AIDS Spending Assessment that will be conducted every two year as a part of Thailand AIDS Global Progress Report.

#### ***TB:***

The country investment for TB is the sum of investments from the national budget contributed by Department of Disease Control, National Health Security Office (NHSO, UC), Social Security System (SSS) and Civil Servant Medical Benefit System (CSMBS) and the Bangkok Metropolitan Authority (BMA) annual budget. Some of the data needs to be estimated conservatively since there is no routine financing data collection specifically for TB e.g. contribution of human resources, surveillance system, routine health services running cost, office running costs, etc. Data on, investments from the private sector and the CSMBS are not available.. Therefore a rough estimate, equivalent to 10% of budget of UC and SSS is assumed as investments/spending in TB in the private sector..

The total funding needs for the National Strategic Plan (2015-2019) have been developed using WHO TB Budgeting Tool.. This tool provides only the information from 2015 onwards, thus, the funding needs in 2014 are estimated as being similar to the figures for 2015.

The total requested funding from the Global Fund is calculated on the basis of priority activities listed in the Concept Note and the Modular Template (3 modules specified for TB and HIV-TB). For the cross cutting issues between HIV and TB, 50% contribution across the modules is assumed. The total counterpart financing for TB in Thailand is calculated as 69% contributed from the national investment.

#### ***Transition and Sustainability Plan***

Total resource needs for HIV programme is \$US 436.1 million, and TB programme is \$US 40.6 million, meanwhile available funding from both domestic and external sources (excluding the GF) are estimated to be \$US 384.7 million and \$US 30.3 million for HIV and TB programmes respectively. The remaining gaps are \$US 51.4 million for HIV programme and \$US 10.3 million for TB programme.

The Government of Thailand intends to transition to a fully domestically funded response to HIV and TB in 2017. As an upper middle income country, with universal health coverage, and strong health infrastructure, Thailand is well placed to achieve this.

This transition will require careful planning and will need to take into account the specific needs of vulnerable and key populations. At the same time, financing of the full continuum of existing prevention and treatment services, while addressing health systems issues needs consideration. Four key activities have been undertaken to manage

the transition by 2017. These are:

1) The MoPH and the National Health Insurance Office have negotiated to set up category of HIV prevention in the annual budget of the universal coverage scheme with the start-up of a 200 million Baht (US\$6.6 million) budget for HIV prevention implemented by CSOs. The DDC also has its own budget support for CSO activities on HIV prevention and care in the amount of Baht 50 million a year (US\$ 1.66 million). This amount is for small projects run by community groups. Meanwhile the HIV prevention fund has been prepared. The HIV prevention subcommittee, which reports to the NAC, is also discussing on the establishing of the HIV prevention fund, partly supported by the government budget. Under this NFM, the Thai National AIDS Foundation (TNAF) will play a key role in research and fact finding related to various channels of funding that could be possible for support CSO activities beyond the period of the NFM. This will include the review of corporate social responsibility (CSR) channels and local administration organizations at the community level.2) Partial take-over by the Thai Government of HIV prevention commodity costs from 2014 onwards, with an increasing proportion of commodities (50% of condoms, 100% lubricants, etc. in 2015) by each year till complete transition can be made in 2017.

3) Strengthening community Systems, with a focus on task shifting and sharing, with a move away from over-reliance on health facility and disease specific approaches, is planned. GF investments proposed in this Concept Note will be used to support recruitment for HCT, case management, adherence support and build capacity of local community based organisations to deliver these services in a safe and effective manner. Specifically, local organisations, rather than international NGOs will be supported and mentored to take on programmes by 2017, so that there is adequate local know-how to reach KAPs and deliver effective services to them. Organisations of people who use drugs (Thai Network of Drug Users or TDN), Transgender people (Kathoeay Thai) and sex workers are specifically proposed as implementing agencies in this Concept Note in order to ensure adequate capacity development for both service provision, M&E and referral initiation and management.

4) The Migrant Health Insurance scheme will be further developed to increase willingness of the hospitals to cover additional migrant workers and their dependents within the health insurance programme. This includes organizing the fund management to assure that hospital will be able to recover their costs. The current GF investment requested will be used to develop and support marketing strategy to increase enrolment of 37,000 migrants in the health insurance system. Currently there are 239,026 (as of 19 May 2014); while only 200,000 needed to enrol to make the scheme financially viable. Another important step for creating sustainability for migrant health/TB/HIV programmes is the policy recommendation for the Migrant Assistant Health Workers and the Migrant Health Volunteers to be incorporated into the government's health services for migrants. This has been discussed in the past, but now that the Migrant Health Insurance programme is official since 2013, there is greater support for services to be accessible to migrant populations.

## SECTION 3: FUNDING REQUEST TO THE GLOBAL FUND

This section details the request for funding and outlines how the investment is strategically targeted to achieve greater impact on the diseases and health systems. While the investments for both the HIV and TB programs should be described, the applicant should also provide information on the expected impact and efficiencies achieved from planned joint programming for the two diseases including cross-cutting health systems strengthening as relevant.

### 3.1 Programmatic Gap Analysis

**A programmatic gap analysis should be conducted for the six to twelve priority modules within the applicant's funding request. These modules should appropriately reflect the two separate disease programs in addition to cross-cutting modules for both programs such as Health System and Community Systems Strengthening.**

Complete a programmatic gap table (Table 2) for the quantifiable priority modules within the applicant's funding request. Ensure that the coverage levels for the priority modules selected are consistent with the coverage targets in section D of the modular template (Table 3).

For any selected priority modules that are difficult to quantify (i.e. not service delivery modules), explain the gaps, the types of activities in place, the populations or groups involved, and the current funding sources and gaps in the narrative section below.

A total of 22 programmatic gap analyses tables were completed in the areas of HIV, TB and HIV-TB.

The main gaps for HIV pertain to inadequate coverage of prevention interventions for those who are high risk, and limited HCT, which in turn leads to delayed treatment. This is particularly the case among younger KAPs. The main interventions proposed to address this gap are (i) high 'dosage' of a package of behavioural interventions; and (ii) high levels of recruitment into HCT and linkages to ART and adherence support.

For TB, the main gaps relate to inadequate capacity for rapid diagnosis, incomplete case detection (and case notification), as well as sub-optimal treatment outcomes contributing to high mortality.

The main intervention proposed to address these gaps are: (i) to undertake ICF activities in vulnerable populations (HIV-TB patients, elderly patients in diabetes clinics, migrant factory and construction workers, and prisoners) increase detection and; (ii) to improve routine reporting by using a real time web based M&E system which allows the private, academic and non-MoPH treatment providers to report easily and reduces reporting workload for staff, and (iii) invest in the scaling up of rapid molecular diagnostic techniques. The main interventions to improve treatment outcomes are: (i) to detect TB early by scaling up the use of rapid molecular screening and confirmatory tests; and (ii) providing intensified DOT for all MDR patients, M+ migrants, M+ elderly and M+ HIV-TB cases using DOT Watchers and Community DOT Providers. To address the

specific limitations of human resources and address long duration treatment for MDR patients, the use of SMART phone technology is proposed.

For HIV-TB, inadequate diagnosis of TB among HIV patients remains a gap, specifically due to the large proportion of smear negative cases, extra-pulmonary and asymptomatic TB noted in this group, (which is poorly diagnosed in routine verbal screening algorithms). The main intervention to address this gap in detection of TB infections is to improve the quality of diagnosis by using GeneXpert, even though asymptomatic patients will need ongoing evaluation and investigations.

CCM requests TRP to consider funding the following NFM targets within selected provinces, which in turn will contribute to the meeting of national level coverage targets, and the achievement of ambitious impact and outcome targets (see 3.3). Most importantly, this will allow a gradual transition to full domestic funding.

The main rationale behind what targets were set was to ensure adequate 'intensity' and reach of interventions in each province. Please note that targets listed below relate to those funded by GF investments in the NFM provinces, and not national targets (see Programme Gap Tables and Modular Template for national targets and information on domestic contribution to those targets).

- 1) PWID to be reached with a defined package of prevention services including needles/syringes, condoms and behavioural change communication: 11,940 (Y1) and 13,646 (Y2). Targets calculated to reach 70% and 80% coverage in NFM provinces in Y1 and Y2 respectively.
- 2) PWID to be provided HCT and linkage to prevention, treatment and adherence support: 8,358(Y1) and 10,916 (Y2). Target calculated on the basis of 70% and 80% of those reached in Y1 and Y2.
- 3) MSM and TG to be reached with a defined package of prevention services:73,566 (Y1) and 78,163 (Y2). Targets calculated to reach 80% and 85% coverage in Y1 and Y2 respectively.
- 4) MSM and TG to be provided HCT: 44,139 (Y1) and 54,714 (Y2). Target calculated on the basis of 60% and 70% of those reached in Y1 and Y2.
- 5) MSW to be reached with a defined package of prevention services in 4 NFM provinces: 12,538 (Y1) and 14,105 (Y2). Targets calculated to reach 80% and 90% coverage in Y1 and Y2 respectively.
- 6) MSW to be provided HCT in 4 NFM provinces: 10,030 (Y1) and 11,989(Y2). Target calculated on the basis of 80% and 85% of those reached in Y1 and Y2. Total country coverage is 10,975 (Y1) and 13,069 (Y2).
- 7) NVB FSW to be reached with a defined package of prevention services: 6,287 (Y1) and 7,073 (Y2). Targets calculated to reach 80% and 90% coverage in Y1 and Y2 respectively.
- 8) NVB FSW to be provided HCT: 4,715 (Y1) and 6,012 (Y2). Target calculated on the basis of 75% and 85% of those reached in Y1 and Y2.

- 9) Male and female regular sex partners of KAPs in community settings to be provided HCT: 23,858(Y1) and 27,835(Y2). Target calculated on the basis of 60% and 70% reached in Y1 and Y2 and assumes that 60% among those are willing to be tested.
- 10) MWs to be reached with a defined package of prevention services: 22,957 (Y1) and 24,597 (Y2). Targets calculated to reach 70% and 75% coverage in Y1 and Y2 respectively.
- 11) High risk MWs to be provided HCT: 9,138 (Y1) and 11,807 (Y2). Target calculated on the basis of 50% and 60% of those reached in 2015-2016, of whom 80% will recruited for testing.
- 12) ART for Uninsured migrant workers, persons without identified citizenship: 2,551 (Y1) and 1,938 (Y2). Targets are declining slowly as domestic resources are mobilized to provide ART to this group and complete transition occurs at the end of 2016.
- 13) Prisoners to be reached with a defined package of prevention services: 95,579 (Y1) and 109,233 (Y2). Targets calculated to reach 60% and 70% coverage in Y1 and Y2 respectively.
- 14) Prisoners to be provided HCT with RDTs: 18,351 (Y1) and 20,973 (Y2). Target calculated on the basis of verbal screening for those who are reached; an estimated 30% will be offered HCT.
- 15) Percentage of TB patients who had an HIV test recorded in the TB Register: National targets calculated on the basis of 95%: 59,910(Y1) and 60,508 (Y2). No support requested from GF.
- 16) Percentage of HIV positive registered TB patients given ART during TB treatment: Target 90% in Y1 (7,421) and Y2 (7,421). No support requested from GF.
- 17) Percentage of HIV positive patients who were screened for TB in HIV care or treatment settings: Target 96,451 (Y1) and 120,719(Y2). No support for routine screening requested from GF. Support for procurement of 30 GeneXpert MTB/RIF requested to improve quality of diagnosis. National targets: 246,049 (Y1) and 342,174 (Y2). Targets increase dramatically in year 2 as ART Treatment Guidelines (irrespective of CD4 count) are implemented.
- 18) Number of notified cases of all forms of TB - bacteriologically confirmed plus clinically diagnosed, new and relapses: Targets for intensified case finding (ICF) are 6,931 (Y1) and 8,528(Y2). Target for contact tracing: 19,043 index patients (Y1) and 19,622 (Y2). Support requested to trace and screen up to 5 contacts per index case.
- 19) Percentage of all new TB cases, bacteriologically confirmed plus clinically diagnosed, successfully treated (cured plus treatment completed) among all new TB cases registered for treatment during a specified period. Targets for intensified DOTs: 5,576 (Y1) and 6,583 (Y2).
- 20) Number of TB cases (all forms) notified among KAPs/high risk groups. Target: 16,462 (Y1) and 17,900 (Y2). Support for M&E to improve notification of passive and ICF cases from vulnerable groups requested.

- 21) Number of cases with MDR TB that are treated by second-line treatment. Target: 64 (Y1) and 74 (Y2). Costs from GF are requested for a small proportion of uninsured patients who would otherwise not receive any treatment and die. All others will be treated with domestic resources. Planned number to be treated is 1,127 (Y1) and 1,211 (Y2).
- 22) Number of bacteriologically confirmed MDR cases notified: Target for ICF is 539 (Y1) and 638 (Y2). Support for procurement of 12 HAIN Line Probe Assays and 30 GeneXpert MTB/RIF machines to support rapid molecular diagnosis, along with capacity and External Quality Assurance development is requested. Total national targets: 1,143 (Y1) and 1,393 (Y2).

In addition to the above service delivery programmatic gap tables, the Thai CCM has selected four modules which are relevant for demand creation for services and ensuring their sustainability, by addressing policy/ legal barriers and building capacity. These are: community system strengthening (CSS); addressing legal barriers; HMIS and M&E; and programme management (please see section 3.3 for details for the rationale for choosing these modules, and refer to Modular template for a detailed description of approach to reaching KAPs, chosen key interventions chosen and other relevant background information).

Provide a strategic overview of the applicant's funding request for TB and HIV, including both the proposed investment of the allocation amount and the request above this amount. Include the specific elements related to joint programming such as health systems and community systems strengthening. Describe how the request addresses the gaps and constraints described in sections 1, 2 and 3.1. If the Global Fund is supporting existing programs, explain how they will be adapted to maximize impact.

The CCM Thailand requests a total of US\$ 39,755,500 million over a two year period from 1st January 2015 to 31<sup>st</sup> December 2016 to 'front-load' investments required for Ending AIDS and controlling TB, implementing innovative approaches, and strengthening the collaboration between the two programmes. See Table 4 below for breakdown for proposed funding sources and related coverage.

**Table 4: Coverage of HIV prevention for KAP and ART for migrants with domestic and NFM resources 2015/2016.**

Population	Country targets %	All sources%	Country budget%	NFM budget%
MSM and TG	75 / 80	70 / 75	28 / 30	42 / 45
MSW	80 / 90	80 / 90	6 / 7	74 / 83
FSW	70 / 80	64 / 72	40 / 45	24 / 27
PWID	60 / 70	34 / 40	5 / 6	30 / 34
Migrants	60 / 70	60 / 64	12 / 12	48 / 52
Prisoners	60 / 70	43 / 49	10 / 12	33 / 37
Migrant - ART	40 / 50	25 / 23	8 / 10	17 / 13

The current Global Fund investment is viewed as a strategic short-term support that would facilitate the transition to fully domestically funded disease responses. The investment will allow Thailand to sustain and expand the gains in the HIV-TB responses while concentrating on mobilizing diversified domestic financing for sustained evidence informed, human rights based, gender sensitive HIV-TB programmes at all levels. Critically, GF support will be used to support innovative activities which will improve access to hard to reach populations and take services closer to them and improve uptake.

Specifically, GF resources will support a move away from 'business as usual' approaches. First, as part of this new way of doing business to End AIDS, Thailand will move away from drop-in-centre based service models (which have had limited

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uptake to date), and use social media tools (such as LINE, Facebook, Grindr, CamFrog and dedicated websites) to effectively reach KAPs. This is in recognition of the fact that KAPs do not always physically congregate in community settings, but operate in virtual environments, saunas, entertainment venues etc. Therefore, mobile and outreach approaches to reach them both in person and via electronic tools are necessary. Effectively utilization of mobile phone technology to improve health seeking behavior, retention in prevention programmes, and adherence (by providing SMART phones for video confirmation for DOTS Plus using existing free applications such as Tango, Facetime and LINE; text messaging services) will also be used in addition to peer/health provider based approaches.

Second, there will be closer alignment of service delivery for HIV and TB for certain populations, in order to promote better coordination and efficiency for improved patient outcomes and task sharing. For PWID, MWs and prisoners, services for HIV-TB will be delivered as a package, rather than vertically. Task shifting to leverage the potential of CBOs to recruit KAPs into HTC, effective referral, treatment literacy and adherence support in community settings will be commenced in the country with GF investments. GF investments will support large scale capacity building to deliver effective, safe, high quality prevention and case management services in community settings. The GF investment will also facilitate and support collaborative efforts to remove the legal barriers impeding access to services, reduce stigma, establish and implement rights protection mechanisms, and empower communities to promote and protect their rights.

The resources from the GF will provide a critical input in further strengthening health and community systems, with particular emphasis on enhancing the health-community systems interface so as to enable sustained functioning of the systems following the graduation from the GF support. The investment will support documentation of good practices for further replication across the country.

The two-year GF investment will also provide a much-appreciated space for mobilization of diversified domestic financing. The major thrust of this effort will be in seizing and creating opportunities for integrating HIV-TB concerns in the existing systems, budgetary provisions and funding mechanisms in public sector (Health, Education, Social Welfare, Human Security, local administration, etc.), private sector, civil society and communities.

The GF investment will be directed to a strategically selected set of provinces. The geographic selection was made with the view of:

- (i) sustaining and enhancing evidence-informed, rights-based, gender sensitive interventions in the geographic locations carrying the greatest burden of HIV and TB;
- (ii) ensuring the greatest possible coverage of key populations with life-saving prevention, treatment and care services at the lowest possible expenditure (optimal investment/ coverage ratio);

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(iii) making an optimal contribution for the greatest impact on the diseases in the long-term;

(iv) producing the greatest impact on strengthening health and community systems and enhancing health-community interface; building the body of good practice for replication throughout the country;

(v) enhancing the foundation for sustained, fully domestically funded evidence-informed, rights-based, gender sensitive disease responses.

At the level of service delivery, this funding request is aimed at addressing key programmatic gaps in KAPs and highly vulnerable groups in areas of HCT and linkages into early treatment and retention.

The budget requested by the PR-DDC is US\$ 20,307,962 and US\$ 19,447,538 by PR-RTF. No above allocation funding is requested by the CCM for TB. The HIV-TB disease split agreed by the CCM is in line with what the GF Secretariat has proposed.

The budget for the HIV component of this Concept Note is focused on service delivery for KAPs in prioritized provinces, as epidemiological and cost-benefit investment analyses indicate that the highest return on investments will be obtained in this manner. Over a third(38%) of the budget allocations for prevention and HCT for KAPs; with the largest share going to prevention and HCT activities for MSM and TG populations (reflecting the highest burden of infections in this group). The second largest allocation goes to PWID interventions and the remainder of the investments addresses heterosexual transmission. The unit cost of reaching each KAP with prevention services is efficient and demonstrates good value for money (please see Table 5).

The average unit cost is low (less than half of the unit costs for previous GFATM grants in Thailand) and reflects innovation in service delivery and integration of HIV and TB outreach activities (calculated on the basis of the average annual target and budget). The prison prevention and HCT interventions are particularly cost efficient due to no outreach costs, and all human resource requirements are funded from domestic resources (by DOC). The cost of PWID interventions is the highest, and reflects the cost of outreach, annual verbal TB screening, as well as the higher commodity cost attached to the interventions (needles/syringes, condoms, distilled water, non-latex tourniquet, safe disposal equipment, alcohol swabs etc.).

**Table 5: Average unit cost per KAP reached, 2015-2016.**

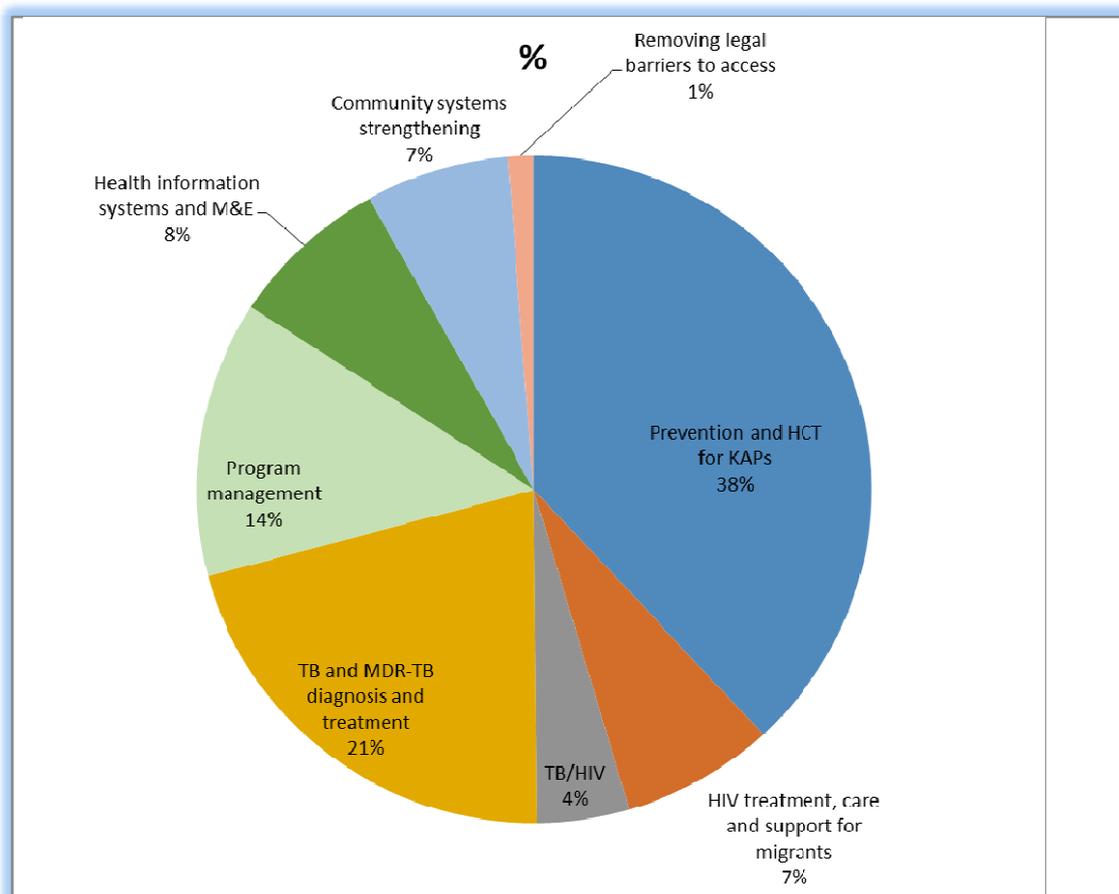
KAP	Target Y1 Reached	Target Y2 Reached	Average reached per year	Average Budget USD per year	Average unit cost per KAP reached
MSM and TG	73,655	78,163	75,909	3,614,149	47.61
MSW	12,538	14,105	13,322	921,019	69.14
NVB SW	6,287	7,073	6,680	395,619	59.22
PWID <sup>B</sup>	11,940	13,646	12,793	1,714,251.5	134
MWs*	22,957	24,597	23,777	880,928	37.05
Prisoners*	95,579	109,233	102,406	285,068	2.78

<sup>B</sup> PWID will receive verbal TB screening, \*HIV-TB interventions delivered jointly for MWs and prisoners.

Just over a fifth of the entire budget at 21.5% is for TB prevention, diagnosis and treatment; 8.56% for ART for uninsured migrants and 4.07% for HIV-TB interventions. Nearly 14% of the budget is allocated to cross cutting system strengthening and HMIS and M&E activities. Programme management takes up 14.7% of the budget, with a large proportion going to human resource costs, including outreach for community service delivery.

It should be noted that more than half of the proposed budget for this NFM will be implemented by CSOs namely World Vision Foundation Thailand and the RTF.

**Figure 6: Proposed budget allocations by programme area**



### 3.3 Modular Template

Complete the **modular template**. Note that the template allows access to modules that are specifically relevant to TB and HIV components, in addition to modules that are cross-cutting for both diseases.

To accompany the modular template, for both the allocation amount and the request above this amount, explain:

- The rationale for the selection and prioritization of modules and interventions for TB and HIV, including those that are cross-cutting for both diseases.
- The expected impact and outcomes of the interventions being proposed. Highlight the additional gains expected from the funding requested above the allocation amount.

The choice of the priority modules and interventions for this NFM is informed epidemiological and programmatic analysis; and by the goals and objectives of the national HIV and TB NSPs (please see section 1.2).

Table 5 lists the 12 priority modules chosen to address the objectives of this Concept Note.

Modules have been selected on the basis of their ability to address prevention service delivery gaps, diagnosis and referral to early treatment of KAPs; the need to address specific challenges relating to legal and policy barrier (identified in reviews and programme evaluations); and contribute to community system strengthening (CSS). In relation to HIV, achieving adequate coverage and 'dosage' of prevention and HCT interventions for KAPs, along with recruitment into testing led to the choice of 5 modules.

For TB, challenges in early detection, and retention in care of vulnerable and high risk groups (migrant construction and factory workers, HIV-TB patients, prisoners, MDR-TB and elderly patients) guided the choice of 3 modules focusing on intensified case finding (ICF), improved diagnosis using molecular techniques, intensified DOTs, and adequate diagnosis and treatment of MDR. In the joint areas of HIV-TB the key thrust is on improving early initiation of ART, and complete diagnosis of TB in HIV patients, one module was identified.

To ensure the quality and performance of the response, a well-functioning strategic information system is critical. While Thailand has made great progress in this area, the need to address strategic information needs in a fully de-centralised and integrated health care system requires ongoing investment. The key thrust here will be to reduce fragmentation in data collection systems, improve real time data availability for policy-makers and programme managers, link up data systems, to enable improved analysis and use at the local level of routine data. This thinking has guided the selection of the module on health information systems (HMIS) and M&E.

The acknowledgement that the national goals of both the HIV and TB programmes cannot be met by relying on health facility based diagnostic and treatment services alone, has led to increasing emphasis being placed on improving the capacity of communities to engage in service delivery, and on supporting them to become active confederates for promoting good health care choices and behavioral norms in their communities. In addition to this, existing human resource constraints within the Thai health system, necessitate task-sharing (and shifting) if achievement of high HCT and early treatment initiation rates is to be guaranteed. This thinking has driven the prioritisation of the module on CSS.

Interventions targeting HIV-related stigma within healthcare settings need to be reinforced by approaches at the community level. Communication messages to the public should be clear and unambiguous, targeting basic health literacy on HIV. At the same time, legal barriers (mostly through criminalization of certain

behaviours) continue to hamper access and uptake of services in Thailand. This analysis underpins the choice of the module on 'Removing Legal Barriers to Access'.

The following paragraphs provide further detail on each of the non-service delivery modules prioritized by the CCM.

CSS: The key objective is to develop the roles of KAPs and communities, CSOs and their networks, and public/private-sector stakeholders who work in partnership with civil society at the community level, in the design, delivery, M&E of services and activities aimed at leveraging their unique strengths in supporting the RRTTR framework and ensuring the sustainability of the HIV/TB response in Thailand. Key activities proposed are: (i) empower KAPs and their networks to have a greater ownership and meaningful involvement in health promotion activities by building their capacity; (ii) build capacity of community health volunteers, outreach workers and peer volunteers in service delivery in cooperation with public health services (specifically, to support HCT, treatment literacy, adherence and case management in community settings); (iii) build capacity for community health workers to deliver DOT effectively; (iv) develop effective referral linkages across community and publicly funded health facilities and; (v) develop capacity for oversight, monitoring and evaluation -including training in the use of strategic information generated by M&E systems for evidence based planning, advocacy and policy formulation.

Addressing legal barriers to access: The main objectives are to (i) reduce stigma and discrimination, including legal barriers that hinder KAPs from addressing services by ; (ii) develop a rights protection mechanism for KAPs at the provincial level; (iv) review legal barriers related to the roll out of comprehensive harm reduction policies and sensitize law enforcement agencies; (v) promote migrant health insurance by increasing awareness and demand creation, while identifying systemic issues that act as barriers and advocating for their removal and; (vi) support CSOs to seek sustainable financial funding by working with domestic governmental and private funding sources such as the Thai National AIDS Foundation (TNAF).

As part of a strategy to impact the enabling environment, specifically focusing on Human Rights protection and legal issues, Foundation for AIDS Rights (FAR) will support CSOs to become more engaged in legal processes through provision of paralegal training. FAR has a leading role in advocacy and protections of rights related to HIV, and will lead the advocacy activities. This will include building the capacities of members of the KAPs to become para-legal helpers within the communities of the KAPs.

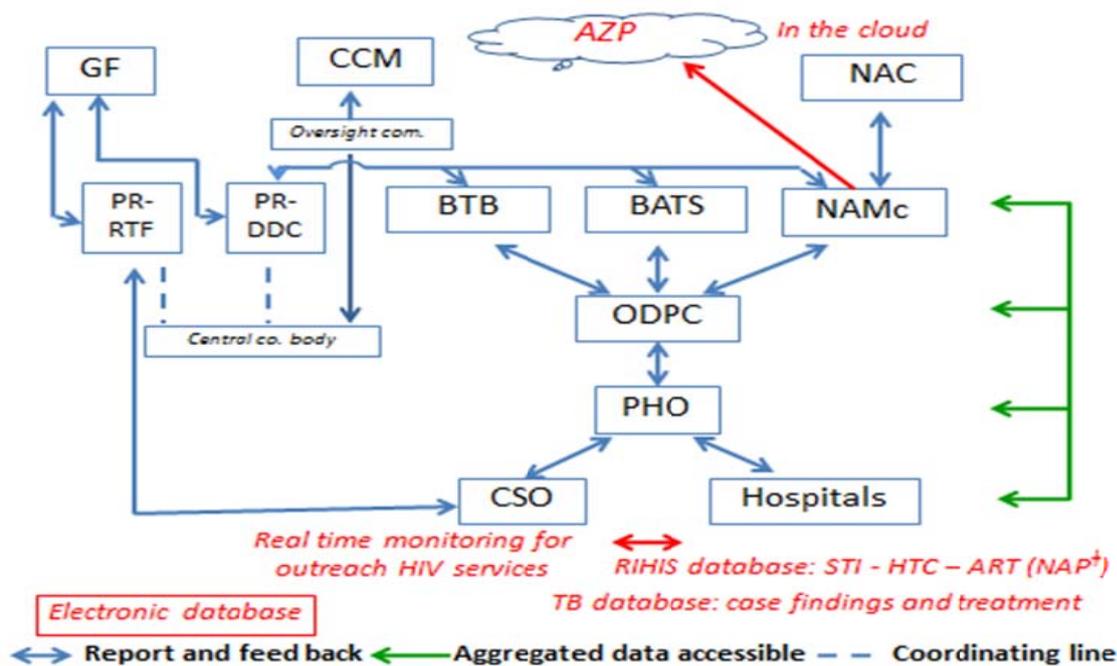
Specifically, they will also provide capacity building for Rights monitoring and provide an advocacy platform for policy reform. A primary focus of FAR's work will be PWID community, as this group is most directly affected by punitive policies and practices. Critically, education and training of law enforcement officers at national and local levels to improve attitudes to harm reduction will be undertaken through a structured police training programme implemented at

the national and provincial levels.

The implementation of the Migrant Health Insurance policy is another focus area, as there are still inconsistencies in understanding and implementation of the policy which have resulted in discrimination against migrant PLHIV. Proposed activities include (i) design of appropriate marketing strategies; (ii) development of appropriate communication materials; (iii) provision a platform for national level dialogue and consultation; and (iv) input into the development of the health insurance management systems including options for financial feasibility and sustainability.

HMIS and M&E: In order to monitor programme performance and provide critical strategic information at national and sub-national levels, the CCM has prioritized the module of Health Information Systems and M&E. In the context of the Health Reform Agenda in Thailand, local level information for action and decision making and reduction of fragmentation in the system are important directions that all disease specific M&E activities need to be cognizant of. The vision of an integrated M&E system which helps to better align the HIV and TB programmes is described below in Figure 7. CCM asks TRP to note the emphasis on feedback on reports which will promote better ownership, use and quality of data collection. Notably, this framework supports the alignment of HIV-TB, as well as community and health system based programmatic monitoring. This framework also specifies the critical coordination role of the Provincial Health Office, the Office of Disease Prevention and Control (Regional levels) and the Central level coordinating body under the PR DDC.

**Fig 7: M&E framework for HIV-TB**



Abbreviations: AZP(AIDS Zero Portal); RIHIS(Routine integrated HIV information system); ODPC (Office of Disease Prevention and Control - Regional); PHO (Provincial Health Office)

Current challenges include several paper based reporting systems that overload staff at the service delivery level; inadequate use, analysis, and visualization of data; and inability to obtain complete reporting from the private, military and university teaching hospitals.

The CCM proposes activities to support transitioning from paper based systems to a unified web based M&E system for TB (a key recommendation of the 5<sup>th</sup> JIMM). The TB Clinical Monitoring (TBCM) system which has been implemented in some provinces will be further developed in collaboration with Mahidol University to provide a system which is real time and can also upload HIV-TB information directly into the AIDS Zero Data Portal. To ensure better alignment of HIV-TB and the introduction of variables to measure performance of joint HIV-TB activities (using the standard UNGASS indicators which are also national indicators) into the current national disease databases for both HIV and TB. Support for the institutional strengthening for M&E at sub-national levels and improve data availability is also planned. Critically, real time monitoring systems of outreach based service delivery in community settings will be resourced from GF funding (including the development of software and training of stakeholders to use the system). This system, along with the Routine integrated HIV information system (RIHIS) (health care setting based) will help the collection and reporting of consolidated information at national and sub-national levels without any delays that a paper based system would entail. RIHIS will allow data collection on STI, HCT and ART services disaggregated by key populations. These systems will use unique identifier codes to ensure confidentiality. Strong data protection systems are in place and these will be maintained.

*Programme Management:* has been selected to ensure good grant management, financial and programme monitoring of NFM activities, regular reporting, seamless procurement and supply chain management. Most importantly, adequate coordination within MOPH as well as with CSOs will be undertaken as part of this module.

The expected strategic contribution to national impacts desired for HIV and TB are:

- 1) **Reduction in TB prevalence by 25%** (from 159 per 100,000 in 2012 to 120 per 100,000 at the end of 2019). CCM asks TRP to note that while incidence may show a slight increase with ICF and better case detection, in the medium to longer term, a decline in prevalence will be noted.
- 2) **Reduction in TB mortality by 50%** (from a baseline of 14 per 100,000 in 2012). This indicator will be monitored using vital registration and routine cohort monitoring data.
- 3) **Reducing New HIV infections** (to below 1000 new infections by 2030). This will be modelled indicator.
- 4) **Reducing AIDS related death** (modelled) by 50% in 2016 against a 2010 baseline.

**Table 5: Priority modules and key interventions at a glance**

<b>Module Name</b>	<b>Key Interventions</b>
<b>Prevention programmes for MSM and TGs</b>	Targeted peer, internet and social media based strategies aimed at MSM and TG visiting saunas, massage and other gay venues; demand creation for HCT, recruitment into HCT (mobile, outreach and health facility based); outreach based distribution of male condoms and lubricants; STI management; HCT for regular partners; referral services
<b>Prevention programmes for Sex Workers and their clients</b>	Targeted internet and social media based strategies for male and female (NVB) sex workers and owners of venues; use of network based approaches to ensure reach; recruitment into HCT (mobile, outreach and health facility based); testing of regular partners, distribution condoms and lubricants; STI management; promotion of sexual and reproductive health; referral services
<b>Prevention programmes for PWID and their partners</b>	Implementing needle syringe programmes; referral to OST; Targeted social media based strategies; outreach and peer education; demand creation for, and recruitment into HCT (mobile, outreach and health facility based); distribution of condoms; drug counselling services, HCT for regular partners; referral services
<b>Prevention programmes for (high risk migrants and prisoners)</b>	Implementation of community-based behavioural interventions; outreach and peer education which are culturally and language appropriate; condom promotion and provision to high risk migrants; HCT and referrals for high risk migrants. Group level behavior change communication in prisons; condom distribution; campaign based HCT for high risk prisoners and post-release referral mechanisms designed.
<b>Treatment care and support</b>	ART provision, including treatment monitoring and adherence support focusing on uninsured migrants, displaced persons and ethnic minorities without citizenship
<b>TB care and prevention</b>	Early case detection and ICF focusing on high risk MWs, prisoners, elderly, MDR and HIV-TB patients; rapid diagnosis using rapid molecular diagnostic tools; intensified DOTs; contact tracing of all M+, MDR and elderly M+ cases; treatment provision for uninsured migrants and prisoners; IPT for contacts of child TB; development of TBCM to ensure complete case notification and PPM activities.
<b>TB-HIV</b>	Implementation of TB-HIV collaborative activities at national and sub-national levels including, HIV testing of TB patients; TB screening in HIV patients; early initiation of ART in co-infection patients; IPT for HIV patients with TB contacts, coordinating body for HIV-TB.
<b>MDR TB</b>	Early case detection using rapid molecular diagnostics in decentralized settings; provision of second-line treatment for uninsured MDR TB patients; including social and living support; DOT for all patients; lab monitoring; infection control; coordination of ART for patients with HIV.
<b>Health Information systems and M&amp;E</b>	Development and roll out of electronic recording and reporting system (TBCM version 2); data collection and reporting from other care providers including private sector and civil society; TB DRS in 2016; linkage between AIDS ZERO data portal and TBCM; capacity building for analysis and use of strategic information at sub-national levels; implementation of joint monitoring
<b>Removing legal barriers to access</b>	Training on rights for police and health workers; analysis and options of migrant health insurance scale up; community based monitoring of legal rights; rights protection; training on harm reduction for police and other law enforcement agencies at regional and provincial levels; policy and

advocacy for legal rights.

**Community systems strengthening**

Institutional capacity building of CSOs; development of mechanisms to strengthen networking and effective linkages between community and health services; capacity development for service delivery

**Programme Management**

Grant management; policy planning and coordination; financial management and reporting; procurement and supply management

Key outcomes expected are: (i) Improved case notification rates per 100,000 populations for all forms of TB; (ii) increased treatment success rate; (iii) improved retention in care after ART initiation at (12, 24, 36 months); (iv) Decreased percentage of HIV patients commencing ART at CD4 counts lower than 200mm<sup>3</sup>; (v) Increased percentage of men reporting condom use last time they had anal sex with a male partner; (vi) Increased percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected; (vii) increased percentage of sex workers (NVB FSWs and MSWs), reporting the use of a condom with their most recent client; (viii) increased percentage of other vulnerable populations (high-risk migrants and prisoners) who report the use of a condom at last sexual intercourse. Please see table 6 for targets set for outcome indicators relating to HIV and TB.

**Table 6: Proposed outcomes of investment in HIV and TB programmes, baseline and planned for 2015-2016.**

Outcome Indicator	Baseline 2012-13	Target 2015	Target 2016
1. Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (disaggregated by age <15, 15+, sex, with 24 and 36 month data)	83%	90%	90%
2. Percentage of HIV patients initiating ART at CD4 less than 200 mm <sup>3</sup>	67%	55%	40%
3. Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	85.5%	90%	95%
4. Percentage of PWID reporting the use of sterile injecting equipment the last time they injected	80.4%	81%	82%
5. Percentage of adult migrants aged 15-49 who had more than one sexual partners who report the use of a condom during their last sexual intercourse	69.4%	70%	72%
6. Percentage of FSWs reporting the use of a condom with their most recent client	93.6%	95%	95%
7. Percentage of MSWs reporting the use of a condom with their most recent client	98.2%	99%	99%
8. Percentage of prisoners aged 15-49 who had more than one sexual partners who report the use of a	40%	50%	60%

condom during their last sexual intercourse

<b>9. Case notification rate of all forms of TB per 100,000 population - bacteriologically confirmed plus clinically diagnosed, new and relapse cases (disaggregated by age &lt;15, 15+, sex and HIV status)</b>	90	94	95
<b>10. Treatment success rate - all new TB cases (disaggregated by age &lt;15, 15+, sex and HIV status)</b>	81.5%	83%	85%

For relevant coverage targets relating to each programme gap area including those for HCT and MDR TB, please the Modular Template.

CCM asks TRP to please note that Thailand is not eligible for above indicative funding for HIV and is not seeking above indicative funding for TB.

### 3.4 Focus on Key Populations and/or Highest Impact Interventions

This question is not applicable for Low Income Countries.

For TB and HIV, describe whether the focus of the funding request meets the Global Fund's Eligibility and Counterpart Financing Policy requirements as listed below:

- a. If the applicant is a lower-middle income country, describe how the funding request focuses at least 50% of the budget on underserved and most-at-risk populations and/or highest-impact interventions.
- b. If the applicant is an upper-middle income country, describe how the funding request focuses 100% of the budget on underserved and most-at-risk populations and/or highest-impact interventions.

Thailand is an upper-middle income country, which meets the requirements of the Counterpart Financing Policy for both HIV and TB. More than two-thirds of the programmes are funded with domestic resources, and this proportion is likely to increase on an annual basis. In this NFM, 100% of the budget will be allocated to underserved populations and KAPs. No funding is requested for general population interventions. Specifically, the populations where resources will be allocated are: (i) uninsured migrant workers; (ii) prisoners; (iii) MSM; (iv) TG; (v) MSW and non-venue based FSWs; (vi) PWID; and (vii) the elderly with TB co-morbidities (aged 65 or more).

These populations bear a disproportionate burden of HIV and/or TB compared to the general population, and also have the poorest access to health services due to legal, language and cultural barriers (migrants); prisoners (unable to control when and how they access health services as they lose the right to free movement); MSM, TG, PWID and those who sell sex are often criminalized and/or feel discriminated against within traditional health care facilities in the public sector. The TG group is particularly vulnerable and suffers from a disproportionate amount of discrimination in employment and stigma in educational settings. The elderly are often feeble, living with several co-morbidities which make them more vulnerable to TB (specifically, diabetes) and also have poor health seeking behaviors. Their ability to physically access health services is limited, and social support is often limited (See Section 1.1).

Apart from the above general considerations, PWID face very specific legal and policy barriers, including detention in mandatory treatment centres where human rights violations have been documented. GF investments are needed to continue to advocate for an evidence-based humane approach to addressing drug dependence as well as training of policemen to reduce harassment of drug users and outreach staff. With the positive, though tentative changes in harm reduction policy in Thailand (see section 1.1), the time is right to make a real push to advocate for scale-up of voluntary treatment; integration of harm reduction into the wider supply and demand reduction framework; and ensure prevention of, and documentation of any rights violations (see section 3.3).

There are also unique challenges related to access to health for MWs. While

documented workers have access to health insurance including ART and TB treatment (through the SSS under the Ministry of Labour), undocumented workers and workers in the informal labour are not eligible for Social Security. To date, the GF has been a major source of funding for ART for HIV positive migrant workers and TB treatment. In 2013, the Thai government announced a new migrant health insurance policy for undocumented migrants, their dependents as well as migrants in the informal sector. This new health insurance includes ART as well as TB treatment. The migrant health insurance (MHI) still requires additional development to become fully functional, but encouraging levels of uptake of this scheme provide hope for longer term sustainability of this scheme. Additionally, a large proportion of migrants in need of treatment are also buying ARVs privately. For example, Raks Thai programme data collected in 2013 shows that in 37 provinces, 1032 MWs were buying ART privately (compared to the 1155 MWs who were receiving ART supported by GF investments in the same provinces). This means that almost a similar proportion of migrants are buying ARVs in the private sector, which also bodes well for longer term transition and sustainability.

GF investments will focus mainly on 4 populations that have a higher prevalence/disease burden related to HIV and TB. This includes those working in fisheries, seafood processing, construction and industries. For HIV the programme for migrants will include migrant sex workers that are not covered by the regular STI/HIV prevention programmes of the Thai government. In addition the NFM budget will be used to strengthen the MHI scheme by further promoting awareness among migrants of this option.

In terms of policy the GF investments will support activities designed to address long term solutions for a fully function MHI, and improved accessibility for MWs to services in the community through the institutionalization of the assistant migrant health workers and migrant health volunteers.

Focusing resources among these groups in an efficient and geographically prioritised manner is fundamental to meeting the goals of the TB and HIV NSPs. NFM resources will be directed to those provinces and sites where the highest coverage can be attained (see Fig 1 and Table 2). Resources will be directed to high impact interventions such as needle/syringe and condom distribution, HCT, rapid diagnostic techniques and DOT (within the RRTTR framework). The choice of interventions which have the highest impact is informed by cost benefit analysis (See Investment Case for Thailand 2013, and Report of the Technical Working Group on Cost Benefit Analysis, 2013).

The CCM requests the TRP to note the strategic investment in system enablers such as human resources and capacity development for community system strengthening, with the explicit objective of increasing the recruitment into HCT, adherence and retention (for ART and TB prevention and treatment components). These investments, will allow the overall health system to be utilized more

effectively (specifically by improving uptake of free diagnosis and treatment), while building further capacity of KAP communities to support service delivery.

The CCM considers that this is an opportune time to move away from a 'business as usual' model and wishes to ensure that Thailand does not lose this crucial window of opportunity to 'End AIDS' and 'Stop TB'. Domestic funding for implementation of this new approach is currently inadequate as budget planning cycles require preparation two years in advance. Planning for the 2017-2018 budget cycle is currently ongoing. Therefore, over the next two years implementation of this new 'prevention combination approach' with innovative service delivery mechanisms with the help of GF financial support will allow a gradual transition to complete domestic funding in 2017.

## SECTION 4: IMPLEMENTATION ARRANGEMENTS AND RISK ASSESSMENT

This section requests information regarding the proposed implementation arrangements for this funding request. Defining the implementation arrangements for the program including the nominated Principle Recipients (PRs) and other key implementers is essential to ensure the success of the programs and service delivery. For the concept note for TB and HIV, the Country Coordinating Mechanism (CCM) can nominate one or more PRs, as appropriate given the country context.

### 4.1 Overview of Implementation Arrangements

For TB and HIV (including HSS if relevant), provide an overview of the proposed implementation arrangements for the funding request. In the response, describe:

- a. If applicable, the reason why the proposed implementation arrangement does not reflect a dual-track financing arrangement (i.e. both government and non-government sector PRs).
- b. If more than one PR is nominated, how co-ordination will occur between PR(s) for the same disease and across the two diseases and cross-cutting HSS as relevant.
- c. The type of sub-recipient management arrangements likely to be put into place and whether sub-recipient(s) have been identified.
- d. How coordination will occur between each nominated PR and its respective sub-recipient(s).
- e. How representatives of women's organizations, people living with the two diseases and other key populations will actively participate in the implementation of this funding request.

The Thailand NFM proposes an implementation arrangement based on a dual-track financing (DTF) arrangement with 2 PRs. Thailand CCM members acknowledge that DTF is critical for ensuring adequate reach of KAPs by high impact interventions, and for ensuring a sustainable and equitable response by further institutional and organisational strengthening of CSOs.

The two PRs were selected from an open call for applicants and were selected by a vote of the CCM members. The two PRs are: the Department of Diseases

Control (DDC) and the Raks Thai Foundation. Both have experience as PR in previous/on-going grants with relatively high performance ratings.

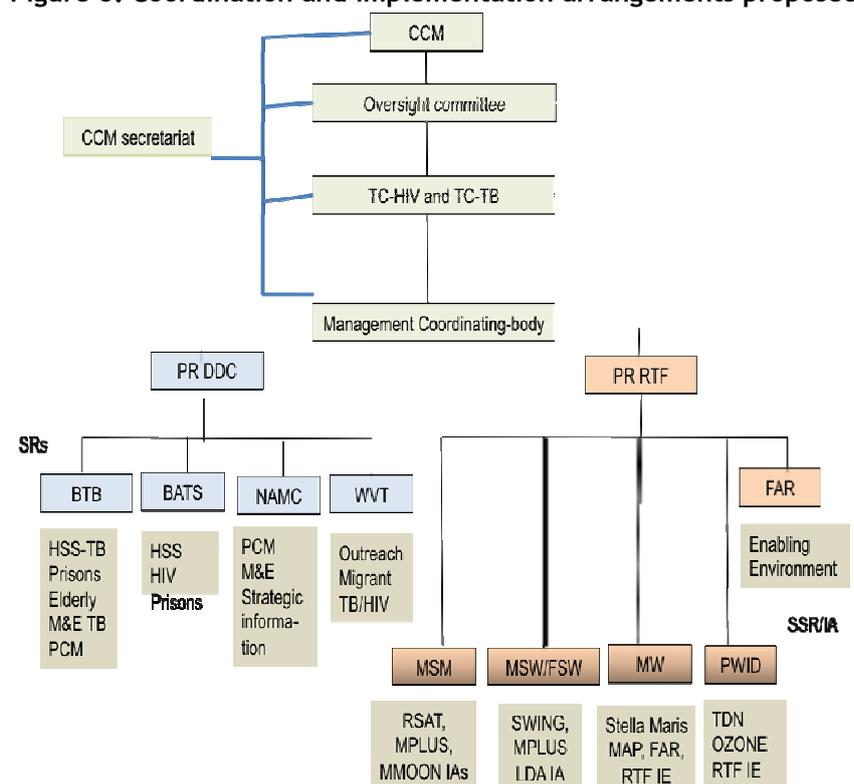
The 2 PRs have worked together under previous GFATM supported programmes and have been working closely in the preparation of this Concept Note

The implementation arrangements have been designed to ensure better integration and coordination at the national and sub-national levels, while minimizing duplication between SR/SSRs. Implementation arrangements have also taken into consideration reporting requirements and have been kept deliberately lean to minimise management costs.

The PR DDC will be primarily responsible for government agencies which are part of the health system, and for all activities on TB except ICF for migrants; the PR Raks Thai will focus on civil society and direct implementation with KAPs under the HIV component and ICF for migrants.

A management coordination body will be set up to support coordination between the PRs. This will be a virtual body with no reporting relationship as such, and will act as a platform for discussion, consensus building and trouble shooting. Both PRs will be directly accountable to the CCM. The HIV and TB technical committees will monitor implementation and programme quality and provide necessary technical support. The CCM Oversight Committee will provide strategic supervision. This mechanism allows representatives of government agencies, relevant donor, and KAPs themselves to provide advice to the 2 PRs on programme implementation and monitoring. Please see Figure 8.

**Figure 8: Coordination and implementation arrangements proposed for PR-DDC and PR-RTF.**



**Abbreviations:** Technical Committee (TC), Health System strengthening (HSS), World Vision Foundation (WFT), Bureau of Tuberculosis (BTB), Bureau of AIDS TB and STIs (BATS), National AIDS Management Centre (NAMC) Thai Network of Drug Users (TDN), Rainbow Sky Thailand (RSAT), Foundation for AIDS Rights (FAR), OZONE (Brand name of Drop in Centres for PWID operated by Population Services International).

Footnote: Under PR RTF - SSR/IA (Sub-recipient, Implementing Agency) is used to signify that these are smaller organizations that will operate will need additional financial management support by the PR.

A call for sub-recipients was made and potential SRs were contacted based on past experience and programme performance. SRs were matched to the appropriate PR as mentioned above, with government agencies and TB programming under PR DDC, and civil society and key population groups under PR Raks Thai. There are no middle-level SRs, between the PR and implementation level entities, with direct implementation entities reporting directly to the PR Raks Thai. Only one non-implementing SR (FAR) that will report to RTF with the responsibility of implementing enabling environment interventions, and removal of legal barriers to access related interventions. See below for details on the roles and responsibilities for PRs and SRs.

*PR-DDC will be responsible for:*

- Overall grant management
- Facilitation and coordinating support for bodies at National, Regional and Provincial levels as part of its programme management function.
- Monitoring and supporting SRs/SSRs for programme implementation as well as providing capacity building and development activities
- Undertake risk management activities
- Be responsible for communication with CCM, GFATM, other international and national agencies
- Ensure seamless procurement

SR-BATS, SR-BTB

- Both Bureau of AIDS and Bureau of TB are the National Disease Control and related programme management focal points.
- Within the MOPH organisational structure, they have the mandate to coordinate with the Office of Disease Prevention and Control (ODPC-regional level) and Provincial Health Office (PHO) as well as the individual hospitals in the provinces. They will ensure local level coordination with CSOs to support the RTTR activities in NFM sites.
- Develop guidelines and SOPs for the delivery of the service package for RTTR (including same day result HCT, ICF(TB), early and complete treatment, adherence counselling tools, case management and intensified DOT.
- Manage programme implementation with their SSRs and implementing

agencies e.g. Office of Disease Prevention and Control at regional level, Provincial Health Office, hospitals.

- Facilitate HSS activities, including integration for HIV-TB and capacity building of community health volunteers.
- Coordinate with all stakeholders (including in private sector) and ensure provision of technical support at provincial level and lower levels.
- Coordinate with NGOs that will conduct programme activities in the field.
- Facilitate Public Private Mix (PPM) activities.

#### SR-NAMC

- Operate as the National M&E Centre for HIV/AIDS
- Develop monitoring systems, and monitor the progress of programme implementation, link with the national programme goals, strategies and activities
- Advocate for policy which is supportive to all stakeholders and implementers in line with the National Strategy and Operational Plan for 'Ending AIDS'.
- Provide comprehensive information for high level decision makers and health insurance agencies.
- Facilitate resource mobilization and national budget allocation and plan for sustainability.
- Coordinate with the Provincial Coordinating Mechanisms to ensure that policies and plans are synchronised with national goals
- Explore the use of new technologies and service delivery models which can be used to support effective programme implementation e.g. implementation research activities relating to saliva based tests and PreP.

#### SR-WVFT

- Conduct programme outreach activities for MWs relating to HIV-TB in Greater Bangkok Area and provinces (6 provinces)
- Coordinate with the government organizations (esp. Bangkok Metropolitan Authority) for the linkage of programme implementation, particularly the recruitment and retention aspect.
- Develop communication materials including social media based IEC.
- Conduct activities to facilitate coordination and consensus generating events to support a strong approach to PPM.
- Undertake advocacy and social mobilisation activities.

Affected populations, CSOs, and gender-based organisations will play a strong role in the implementation of these GF investments. The Thai Network of Drug Users, Service Workers in Groups (working with MSWs and FSWs in the community) Rainbow Sky Thailand (working with MSM), and *Katoey Thai* (working with TG) are proposed either SSRs or implementing agencies.

<b>4.2 Ensuring Implementation Efficiencies</b>
<b>Complete this question only if the CCM is overseeing other Global Fund grants.</b>
From a program management perspective, describe how the funding requested links to any existing Global Fund grants, or other funding requests being submitted by the CCM at a different time. In particular, explain how this request complements (and does not duplicate) any human resources, training, monitoring and evaluation, and supervision activities.
<b>Not applicable</b>

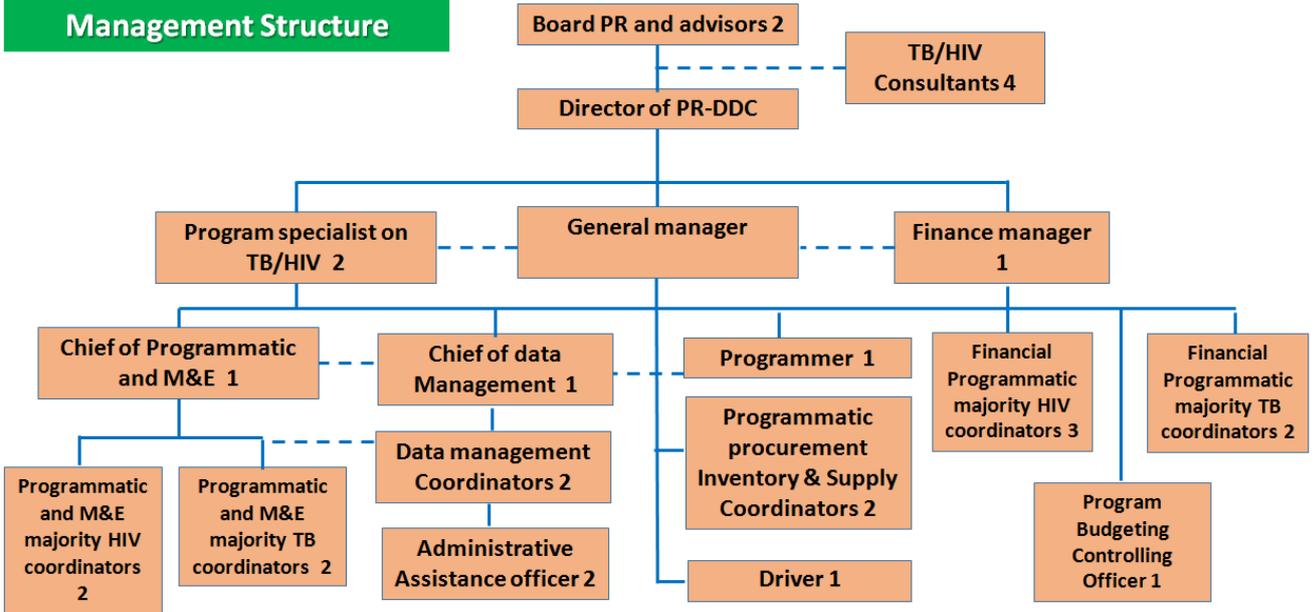
<b>4.3 Minimum Standards for Principal Recipient (PR) and Program Delivery</b>			
<b>For both TB and HIV complete the table below for each nominated PR. For more information on Minimum Standards refer to the Concept Note Instructions.</b>			
<b>PR 1 Name</b>	PR-DDC	<b>Sector</b>	<b>HIV-TB</b>
<b>PR2 Name</b>	RTF		
Does this PR currently manage a Global Fund grant(s) for this disease component or a stand-alone cross-cutting HSS grant(s)?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Minimum Standards</b>		<b>CCM assessment</b>	
1. The Principal Recipient demonstrates effective management structures and planning		<p>PR-DDC is the government organization under Department of Disease Control established in 2003. It has been run in the semi-privatization pattern led by the appointed director who has the top record of public health expertise and sound technical skills. DDC has assigned well-trained officials to be the program specialist of each disease component and the core functions of grant management, i.e. Program, Finance, Procurement and M&amp;E, have been operated by full time staff hired specifically for the GFATM supported program. PR DDC can well cooperate and collaborate with all government organizations includes DDC, MOPH and other ministry as well as the international organization e.g. WHO, UNAIDS, USAID, UNICEF. Organization structure is attached.</p> <p>Raks Thai Foundation has strong management Board with the members from various sector and professions including government, Business sector, civil society and INGO. With the support of Board members, the Executive Director of Raks Thai provides leadership for the Foundation. Raks Thai Board Members and ED have a wide range of experience in organization management including program and financial management. PR Raks Thai has 5 departments to oversee its project activities, which includes HR and training, finance and admin., marketing and communication, program quality and resource development.</p>	

<p>2. The Principal Recipient has the capacity and systems for effective management and oversight of Sub-Recipients (and relevant Sub-Sub-Recipients)</p>	<p>PR-DDC has demonstrated its capacity in SR management for more than 10 years. Experience of managing 12 GFATM grants effectively, with a sound track record of grant performance is evidence of its management capacity (particularly in the current SSF grants of HIV, TB and Malaria). With the good relationship and long standing partnership, PR-DDC can run its business collaboratively with GOs and NGOs for successful program implementation.</p> <p>Raks Thai Foundation has many years of experience in grants and program management meeting international standards. Program quality department oversee all programs and monitors on a regular basis. Raks Thai also has over 10 year experience in Global Fund grant management including overseeing SRs and SSRs of different Key Populations.</p> <p>Raks Thai has been the key project development team in Rounds 2, 3 (with Vancouver Harm Reduction Institution), and Round 8, which have been successful proposals. We have also participated in the project development teams of round 6, 7, 9 and 10. Raks Thai Foundation has been the PR for 3 rounds (2, 3 and 8) and the SR managing SSRs in 4 rounds (1, 2, 8, and 10).</p>
<p>3. The internal control system of the Principal Recipient is effective to prevent and detect misuse or fraud</p>	<p>PR-DDC has strong internal controls in its financial systems since it runs day to day business on the platform of a government organization; rules and regulations particularly on financing system have been established. DDC also has its internal control from financing division and they conduct financial audit regularly. PR-DDC has not been found to have experienced any misuse or resources or fraud despite a long history of a large number of procurements with big budgets. Importantly, during the GFATM-OIG visit in 2012, no major financial risk within the system of PR-DDC was found.</p> <p>Raks Thai has experience in managing international grants and follows GFATM standards for audit. Raks Thai recruits internal audit firms to audit its finances, including financial audit of all SRs and SSRs. PR has experience in GFATM standards for audit, and use external firm as internal auditor.</p>
<p>4. The financial management system of the Principal Recipient is effective and accurate</p>	<p>PR-DDC has established a quality control system for financial management. A clear SOP has been developed to ensure the quality of financial practice and any risks and errors occurring in the system are identified early and analysed regularly among financial and management teams to prevent re-occurrence. The related financial documents are kept securely, and can be retrieved easily if needed. This good financial management and quality control system has been well recognized by the LFA, auditor and OIG team.</p> <p>Raks Thai Foundation's sources of funds draw on a range of funding channels, principally institutional donors such as the GFATM and the European Commission, as well as private and corporate companies.</p> <p>Raks Thai is recognised for its accountability in management of financial resources. Raks Thai Finance and accounting is based on obligations on project Budget Control, General Accounts, and Finance. Director of Finance and Administration is responsible for overall</p>

	<p>financial management of all grants and services. All Financial statements are prepared under the Historical Cost Convention and in accordance with International standards. Raks Thai also undergoes an internal and external finance audit and LFA review.</p> <p>As a current PR RTF has been through audits and LFA review and has performed satisfactorily.</p>
<p>5. Central warehousing and regional warehouse have capacity, and are aligned with good storage practices to ensure adequate condition, integrity and security of health products</p>	<p>PR-DDC has established Condom Management Centre (CMC) to be the focal point for managing the condom inventory. The CMC is aimed to be the central storage for condom and lubricants to prevent overflow of commodities to the field implementing units, and minimise overstocking. This will mitigate the interruption of supplies and can be a pilot site of National Program. For ARVs and Anti-TB drugs management system, it will be operated by Government Pharmaceutical Organization (GPO) with the Vendor Managed Inventory (VMI) procedure which is the national inventory system for ARVs and Anti-TB drugs.</p>
<p>6. The distribution systems and transportation arrangements are efficient to ensure continued and secured supply of health products to end users to avoid treatment / program disruptions</p>	<p>Raks Thai Foundation has procurement procedures and systems integrated into the financial and accounting systems. The procurement process includes selection of vendors or service providers, price and service comparison/ bidding, delivery, quantity and quality checks. The PR has been involved in procurement of condoms, that is managed by delivery of stock to the various program sites in the country, to avoid the need for maintain large stocks. PR follows international procurement guidelines.</p> <p>The distribution system and transportation of condom and lubricants will be managed via CMC as mentioned above. The SRs/SSRs/IAs will request the required amount according to their work plan with the stock remaining adjusted. All stock remained needs to be reported to PR every 6 months and the distribution will be managed at re-order time point. Transportation will be done through the contract with Thailand Post Company with good practice for commodities shipment and distribution manual. For ARVs and anti-TB drugs, these will be distributed via VMI system and GPO will conduct transportation according to good practice of medicine shipment by make a contract to private company. To date, there is only minimal errors and mistakes within these 2 systems and PR-DDC is monitoring the function of these 2 system especially CMC.</p>
<p>7. Data-collection capacity and tools are in place to monitor program performance</p>	<p>The data collection of PR-DDC is based on the national program system i.e. National TB Program and National AIDS Program. For Bureau of Tuberculosis, currently we are developing the electronic-base, case-based recording and reporting system by end 2015. The Routine Integrated HIV Information System (RIHIS) has been developed to collect the information of HIV services to the national system. For the activity-based data collection, PR-DDC has set the reporting system via Excel file to collect the information regarding the program implementation of the GF supported program. However, the output indicators which are in-line with the national M&amp;E system will be reported via the</p>

	<p>national system.</p> <p>PR Raks Thai, through its previous experience as a PR, has a number of program monitoring tools and systems in place. There are data monitoring systems in place at the SR and SSR implementing level with reporting tools such as reporting forms to triangulate data for each activity, which is then reviewed by the On-site Data verification team of the Program Quality Department. The performance monitoring system is guided by a performance framework which is linked to expenditures under the allocated budget.</p>
<p><b>8.</b> A functional routine reporting system with reasonable coverage is in place to report program performance timely and accurately</p>	<p>For PR-DDC, it is as mentioned in item 7. In addition, the OSDV of both 2 HIV and TB grants revealed no major defect of routine reporting system. There was only under reported result due to the premature data collection system that needs to be further strengthened.</p> <p>PR Raks Thai has a separate M&amp;E function under the Program Quality Department (PQD) based in the Bangkok office which monitors quarterly routine reporting and final annual reporting. As a Principal Recipient of the Global Fund grant, PR has developed program operation procedures and M&amp;E guidelines in line with those of the Global Fund. The Consolidated Monitoring and Evaluation Plan for the program grant is jointly developed among PRs, SRs and the CCM to ensure that program activities are implemented to achieve outputs and outcomes in line with the grant performance framework. There is a quarterly Joint Steering Committee meeting that brings together all SRs and the PR to review performance and discuss related issues. PR has worked with over 7 SRs and another number of SSRs in 36 provinces producing programmatic results that have received high performance ratings by the GF.</p>
<p><b>9.</b> Implementers have capacity to comply with quality requirements and to monitor product quality throughout the in-country supply chain</p>	<p>PR-DDC has established the Quality Control System of Pharmaceutical and Health Products internally both pre-distribution and post-distribution. All medicines and condom will be tested by the ISO 17025 certified laboratory. Medication and condoms will be randomly tested for the quality and use by dates and ensure that there are no quality issues prior to distribution.</p>

**PR-DDC  
Management Structure**



**PR-Raks Thai Management Structure**

Note:  
All positions are identified in specific modules related to their responsibilities and tasks in the program.



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

- a. With reference to the portfolio analysis, describe any major risks in the country and implementation environment that might negatively affect the performance of the proposed interventions including external risks, PR(s) and key implementers' capacity, past and current performance issues.
- b. Describe the proposed risk mitigation measures (including technical assistance) included in the funding request.

While Thailand has a strong track record of delivering health programmes, the Thai CCM foresees some potential risks and considers it very important to plan for risk mitigation. Five key risks are identified. These are:

While Thailand has a strong track record of delivering health programmes, the Thai CCM foresees some potential risks and considers it very important to plan for risk mitigation. Four key risks and mitigation measures are identified. These are:

- a. **The current political situation:** after several months of anti-government protests, a military coup on 22<sup>nd</sup> May occurred. A committee has been set up from the National Council for Peace and Order to propose policies and measures for migrant workers. The Junta has shown up to now that they are being sensitive on how they respond to the issue of undocumented migrant workers. There is additional pressure to be sensitive to migrants since Thailand has been re-categorized as Tier 3 by the US Government. Also in relations with the recent coup is the situation regarding the attempt to control selling of illicit addictive drugs.

##### **Risk mitigation**

Since the MOPH is one member of the committee, the CCM will coordinate with the MOPH in providing proposed evidence-based policy and measures to the committee. The important issues include migrant health insurance and integration and harmonization of harm reduction into drug policy.

- b. **MOPH-Migrant health insurance (MHI):** that was launched in August 2013 is still not fully functioning. It may not be fully rolled out due to systemic and financing challenges. While there are health insurance schemes in place such as the SSS and the Migrant Health Insurance (MHI), there are also gaps in coverage. Hospitals are still reluctant to sell MHI for fear of incurring net losses. Administrative and financial procedures related to this remain unclear and MWs themselves remain poorly informed about this. Overall, this may impact negatively on the sustainability of the MHI.

##### **Risk mitigation**

The Permanent Secretary and the Director General of the DDC are also appointed to the sub-committee to address the management of undocumented migrants. Both these officials will be adequately briefed about the need to ensure policies that are consistent with a public health and human rights approach. The other main mitigation strategy is to create more demand for

health insurance among MWs. By May 2014, 239,036 migrants had already subscribed to the new MHI. It was estimated that at least 200,000 are needed to enrol to make it financially viable.

In order to encourage migrants to subscribe to health insurance, they must feel that it is to their benefit. The development of “Migrant Friendly” services, which primarily incorporates Migrant Health Workers and community-based services, has been in process some time, will be recommended for institutionalisation. On 25<sup>th</sup> June 2014, the Thai MoPH has further reduced the fees for health check-ups for migrant workers, and has initiated the “Samutsakorn Model” where migrants can be registered and enrolled on health insurance within the hour via a one-stop service model. Advocacy and capacity building will be undertaken to ensure this and suggest that this model is rolled out nationally. Another part of risk mitigation in this respect includes advocating for policy change to ensure that hospitals have finance mechanisms in place that will support the provision of health services for migrants, especially for HIV prevention and treatment services.

**c. Community based HIV testing:** The program has been designed to increase HCT uptake by developing community based HIV testing. A limited availability and number of certified medical health technologists may not allow adequate mobile services to the community as needed. The regulation regarding self-testing is a main barrier for task shifting to NGOs.

#### **Risk mitigation**

To address this risk, scaling up same day testing will require task shifting from GO health facilities to NGOs and CSOs in the community, who in turn will need to be very well trained. If any of these processes are poorly managed, this will compromise the entire 2RTTR approach to Ending AIDS. Meanwhile, the DDC is working with the Food and Drug Administration regarding self-test which will allow the rooms for task shifting on the HCT services.

**d. Financial sustainability of NGOs and CSOs:** Government will significantly limit domestic funding to civil society while external sources dry-up, leaving communities to a narrow and restricted role in the response.

#### **Risk Mitigation**

In response to this uncertainty, the NHSO in discussion with the DDC and other NGOs has planned for a 2015 budget of THB 225 million for prevention activities among KAPs. There is also a discussion that Thai National AIDS Foundation (TNAF) will explore ways to tap into other funding in order to support the efforts of the CSO PR and the CCM. TNAF will act like a secretariat by coordinating efforts in exploring possible funding schemes and other sources of funding. Advocacy and lobbying to ensure that this occurs will be undertaken by both PRs.

## CORE TABLES, CCM ELIGIBILITY AND ENDORSEMENT OF THE CONCEPT NOTE

Before submitting the concept note, ensure that all the core tables, CCM eligibility and endorsement of the concept note shown below have been filled in using the online grant management platform or, in exceptional cases, attached to the application using the offline templates provided. These documents can only be submitted by email if the applicant receives Secretariat permission to do so.

<input checked="" type="checkbox"/>	Table1: Financial Gap Analysis and Counterpart Financing Table
<input checked="" type="checkbox"/>	Table2: Programmatic Gap Table(s)
<input checked="" type="checkbox"/>	Table3: Modular Template
<input checked="" type="checkbox"/>	Table4: List of Abbreviations and Attachments
<input checked="" type="checkbox"/>	CCM Eligibility Requirements
<input checked="" type="checkbox"/>	CCM Endorsement of Concept Note