No. 52101/250

PERMANENT MISSION OF THAILAND
GENEVA

The Permanent Mission of Thailand to the United Nations and other International Organizations in Geneva presents its compliments to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction Implementation Support Unit (ISU) and has the honour to transmit herewith Thailand's request for an extension of the deadline for completing the destruction of antipersonnel mines in mined areas in accordance with Article 5, paragraph 1 of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Antipersonnel Mines and on Their Destruction.

In this regard, the Permanent Mission has further the honour to request the ISU to forward this document to the Committee for Article 5 Implementation, with whom Thailand will continue to work closely on this matter, for their consideration.

The Permanent Mission of Thailand to the United Nations and other International Organizations in Geneva avails itself of this opportunity to renew to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction Implementation Support Unit the assurances of its high consideration.

PERMANENT MISSION OF THAILAND TO THE OFFICE OF THE UNITED NATIONS * GENEVA *

Geneva, 31 March B.E. 2560 (2017)

Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction Implementation Support Unit,
GENEVA.

Kingdom of Thailand

Request for an extension of the deadline for completing the destruction of antipersonnel mines in mined areas in accordance with Article 5, paragraph 1 of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Antipersonnel Mines and on Their Destruction

Submitted to the Chair of the Committee on Article 5 Implementation

H.E. Encyla Tina Chishiba Sinjela
Ambassador and Permanent Representative of Zambia to the United Nations in Geneva

Date 30 March 2017

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Executive Summary

Introduction

As one of the Convention's earliest members, becoming a party to the Convention on 1 May 1999, Thailand established the Thailand Mine Action Center (TMAC) under the Ministry of Defence to lead Mine Action in the country. Various NGOs, namely, the Norwegian People's Aid (NPA), the Thai Civilian Deminer Association (TDA), and Peace Road Organization Foundation (PRO) also operate in Thailand under the supervision of TMAC.

The most contaminated areas are along Thailand's borders with its neighboring countries, especially, the Thai-Cambodian border. Most landmines are remnants of Cambodia's internal conflict which spilled over the border (1970s-1990s) and the Communist insurgency in the region (1960s-1980s).

Progress since the First Extension and Current Status

During the 2000s, Thailand relied heavily on Traditional Methods, namely physical clearance. Such techniques were later deemed to be time and resource consuming if not done in combination with other techniques. Moreover, the Landmine Impact Survey (LIS), which reported that Thailand had 2,557 sq. km. (2,557,000,000 sq. m.) of suspected area was later proved to lack precision and grossly overestimated the magnitude of the actual contaminated area.

Hence, Thailand's progress at the early stages was much slower than initially assumed. Thailand therefore submitted its first extension request to the Eighth Meeting of the States Parties in 2008, which subsequently extended the deadline for completion for a period of nine and a half years (from 1 May 2009 until 1 November 2018). At the time of the first extension in 2008, a total of 1,611 sq. km. (1,611,000,000 sq. m.), had been declared mine-free, leaving around 528 sq. km. (528,000,000 sq. m.) still needing work.

From 2008 until present, significant progress has been made, which can be summarized into six key areas.

1. Clearance Progress

To date, significant progress has been made. Since work began in 2000, Thailand has released around 80% of the total reported contaminated area of 2,557 sq. km. (2,557,000,000 sq. m.). Therefore, around 16.5% or 422 sq. km. (422,000,000 sq. m.) of work remain, of that number, 359 sq. km. (359,000,000 sq. m.) are in complicated border areas.

2. Shift in Methodology

From 2000 – 2011, Thailand invested heavily on clearance as the single way to cancel suspected areas. The international practice popular at the time did not put information gathering at the center of Mine Action. Therefore any area that was suspected to be contaminated regardless of the accuracy of evidence, had to be investigated by deminers. This is known as the "Traditional Method," which led Thailand to the utilization of limited resources on areas containing no hazards and delaying the clearance of real hazardous areas.

From 2009 – 2011, Thailand released an average of 2.4 sq. km. (2,419,856 sq. m.) per year, nearly entirely from clearance. From 2012 onwards, progress was greatly boosted, releasing an average of nearly 30 sq. km. (30,000,000 sq. m.) per year, nearly entirely due to a new method known as "Land Release." Just with a shift in methodology, Thailand's progress per year increased on average by around 12 times. The shift introduced heightened reliance on Non-Technical Survey (NTS) in assisting cancellation of suspected areas.

NTS typically involves a desk study of information coupled with collecting information from past records, seeking information from central institutions and other relevant sources of information (police, hospitals, provincial authorities, landowners, etc.). This information allowed a determination of whether the area should be inspected by deminers or to be cancelled due to the lack of evidence. As a result, NTS allows Thailand to cancel enormous amounts of suspected areas with confidence, without the need for physical inspection.

Furthermore, since January 2016, TMAC and NPA have collaborated on a "Pilot Project" to resurvey suspected contaminated areas considered to be grossly overestimated by the LIS that was conducted in early 2000s. The initial results of the project indicated that many areas currently suspected to be contaminated are in fact mine-free. A comprehensive analysis of the findings to date shows that only around 0.22 – 13.5 % of the suspected areas are actually contaminated. Therefore, applying with confidence 13.5%, as the highest possible number of actual contaminated areas as identified by the Project and apply this percentage to all suspected areas remaining nationwide, Thailand can foresee cancelling an area of around 86.5%, which will bring Thailand much closer to be declared as mine-free.

3. Strengthened Community Engagement

TMAC has given much importance to build strong relations with the primary land users in affected areas - the local population and local authorities. This not only supports the on-going NTS efforts but

also aims to raise awareness of the hazards of landmines in those areas, which is also a core obligation of the Convention.

4. Strong Commitment Towards Mine Risk Education (MRE) and Victim Assistance (VA)

Thailand has demonstrated that an inter-disciplinary community-based approach to mine action can yield dividends that transcend the technical aspects of demining. Thailand has given high priority to promote MRE to reduce the risk of injury from mines and unexploded ordnance by raising awareness and promoting behavioral changes through public-information campaigns, education and training, and liaison with communities. Although definitely not the only factor, but MRE has contributed to the major decrease in landmine victims in the past several years.

As for VA, Thailand has adopted a holistic and integrated approach. VA measures in Thailand are comprehensive which closely corresponds with our obligations under the Convention on the Rights of Persons with Disabilities (CRPD) and integrated into the broader legal framework, national plans and programs or persons with disabilities in general. In 2016, Thailand was a Member and Chair of the Committee on Victim Assistance under the Convention.

5. Capacity Building and Strengthened Cooperation at the National Level

Thailand recognizes that the task of building closer relations with partners and counterparts, as well as supporting others in capacity building are important focus areas. This will enable all relevant agencies, including TMAC and NGOs, to work together in carrying out the common objective of a world free of landmines. Since 2008, TMAC has co-organized several trainings with its partners, for example, 4 workshops on EOD level 1 and 2 with USPACOM and NTS with GICHD.

6. Enhanced International Cooperation

Thailand has supported closer cooperation among States Parties which has helped to create better mutual understanding, reconciliation, as well as foster sustainable development in the bilateral and regional contexts. On the bilateral level, Thailand has and will continue to push for more robust consultation mechanisms on border issues, which includes further engagement with Mine Action Centers and bodies from neighboring countries. TMAC has continuously approached many related neighboring agencies especially with the Cambodian Mine Action and Victim Assistance Authority (CMAA) and other agencies such as CMAC. At the regional level, Thailand has supported and participated in a number of joint exercises under the ASEAN Framework.

Plan of Work for the Remaining Period of the First Extension and the Period of the Requested Second Extension

Thailand's first extension for completion will expire on 1 November 2018. As of date, Thailand has roughly a year left to work until that deadline. For period from 2017- November 2018, Thailand calls this as ***Phase 1***. All areas (around 14 sq. km. or 14,000,000 sq. m.) not complicated with border issues will be completed. Thailand will also start to prepare for the period of the second extension so that there is continuation. Thailand will submit an updated work plan to the ISU after Phase 1 is complete.

This document is a request for a 5-year extension period (from 1 November 2023 until 1 November 2023). During this period, work will be in the most difficult areas which are located along the Thai border, many of which are pending survey, demarcation process, or concerned with border related security issues in which Thailand refers to them as Area to be demarcated (AD)[1]. This phase Thailand calls as ***Phase 2.***

The only work remaining for Thailand in Phase 2, will be in ADs, which cover around 359 sq. km. (359,000,000 sq. m.) in 12 Provinces, bordering 3 countries, namely Cambodia, Lao PDR, and Myanmar. The contaminated areas along Thailand's border with Lao PDR are mainly located farther inland in dense mountainous forests and have access difficulty. On the border with Myanmar, ethnic conflict as well as operations of drug smuggling networks have raised safety concerns to mine action teams. Additionally, the pending survey and demarcation of boundary between Thailand and Cambodia has delayed TMAC's access to some border areas due to sovereignty sensitivities. With regards to Thailand's border with Malaysia, there are no ADs, and the total clearance is expected to be achieved by the end of 2018. Thailand will continue to work closely with all of the three neighboring countries to expedite the boundary survey and demarcation process while enjoying excellent ties with all of them.

Potential Risk Factors Towards the Completion

Thailand projects two possible risks which could stand in the way of the completion of the work plan as they could cause delays and or access difficulty. First is the uncertainty regarding access to certain areas to be demined which are subject to the pending survey and demarcation of land boundary between Thailand and its neighbors. Second are factors or causes that are beyond control of the demining teams such as natural disasters and bad weather conditions.

[1] The use of the term Area to be Demarcated (AD) in this Request as well as the demining operations to be conducted in implementing Thailand's obligations under this Convention shall be without prejudice to Thailand's rights and duties with regard to the land boundary under international law.

I. Introduction

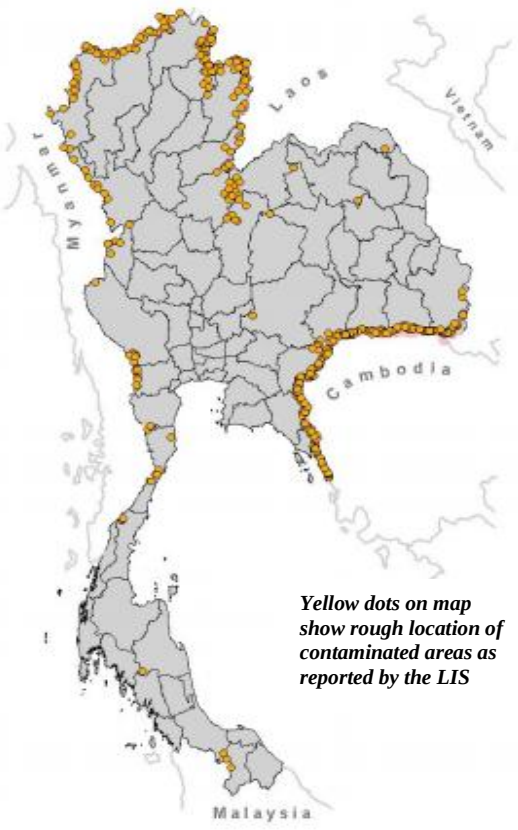
As one of the Convention's earliest members, Thailand ratified the Convention on 27 November 1998 which entered into force for Thailand on 1 May 1999. The contaminated areas in Thailand at that time were predominantly Explosive Remnants of War (ERW) such as landmines and Unexploded Ordnance (UXO) with origins from two main causes: (1) Cambodia's Internal Conflict, which spilled over the borders to Thailand in the 1970s to early 1990s, and (2) the Communist Insurgency Conflicts (1965-1981).

With the support of the Norwegian People's Aid (NPA), Thailand started conducting the Landmine Impact Survey (LIS) from May 2000 to June 2001. The survey reported a total landmine contaminated area of 2,557,000,000 sq. m., containing 933 mine and UXO contaminated sites, impacting 530 communities (69 of which being severely impacted) in 27 of Thailand's 76 provinces, and affecting a total of 503,682 persons. The most seriously affected areas were along the border with Cambodia. ***(Annex 1: Origins of Thailand's Landmine Challenge)***

Shortly after ratifying the Convention, the Royal Thai Government established the National Mine Action Committee (NMAC), comprising all concerned Ministries and Departments, to provide policy guidance and to monitor the implementation of the obligations set forth by the Convention.

The Thailand Mine Action Center (TMAC) was subsequently established by NMAC in January 1999, under the supervision of the Supreme Command Headquarters of the Ministry of Defence, with a mandate to act as the main agency for Mine Action in Thailand, which includes mine clearance, promoting mine risk awareness, and victim assistance.

(Annex 2: Thailand's Demining Structure)



Yellow dots on map show rough location of contaminated areas as reported by the LIS

Landmine Contaminated Areas as identified by the LIS
****A more detailed map is provided in the Annex***

During the early years of Thailand's demining efforts, the country relied heavily on Traditional Methods, namely physical clearance[2]. Such techniques were later deemed to be time and resource consuming if not done in combination with other techniques.

Realizing the limitations of the Traditional Methods, TMAC shifted towards a more effective method of Land Release which uses a combination of many methods, especially Non-Technical Survey (NTS). Since then, Thailand has made significant progress but several obstacles have come into conflict with Thailand's efforts and determination to become a mine-free country.

Thailand submitted its first extension request to the Eighth Meeting of the States Parties in 2008, which subsequently extended the deadline for completion for Thailand for a period of nine and a half years (from 1 May 2009 until 1 November 2018). This document is Thailand's second, requesting a 5-year extension period (from 1 November 2018 until 1 November 2023). Thailand intends to complete clearance in all areas outside the areas with border complications (Area to be demarcated: AD) by the deadline of the first extension (1 November 2018), and the extended 5 years, work will remain only in ADs.

[2] Methods are further elaborated in *III. Progress Since the First Extension and Current Status*

II. Thailand's First Extension Request (2008)

By the time of the first extension request in 2008, a total of 1,611,430,000 sq. m., had been declared mine-free. Of this number, 56,130,000 sq. m. were released by traditional methods and 1,555,300,000 sq. m. were released by LMP. Therefore, Thailand was left with 528,350,000 sq. m. needing work.

On 2 October 2008, Thailand submitted the final version of its request for an extension of nine and a half years until 1 November 2018 to the President of the Eighth Meeting of the States Parties. The request was subsequently granted at the Eighth Meeting of States Parties. The following key obstacles and impeding circumstances were outlined in the request.

(1) The methods of survey

LIS, though perceived as credible and recognized by the United Nations, lacked precision and resulted in a gross overestimation of the magnitude of the actual mine area. This caused the demining team to waste valuable resources and time in areas which had no contamination.

(2) Border and geographical challenges

The pending survey and demarcation of land boundary between Thailand and its neighbors constituted a factor of uncertainty regarding access to certain areas to be demined which explained delays or access difficulty. Moreover, many minefields have limited access to access areas such as mountainous regions, tropical jungles, and disease-prone areas. Weather conditions such as landslides also caused landmines to be relocated.

(3) Financial constraints

Finite government resources were reflected in a tight budget to equip TMAC with more personnel, to upgrade tools, and provide additional trainings to those involved, which overall made demining progress slower than initially assumed. External funding remained limited.

The first extension request projected low risk against completion by the requested extension period but cited two main potential risk factors (a) force majeure and (b) political uncertainty, such as a shift in the country's leadership that alters policy direction and political turmoil that may impact Government's budget and priorities.

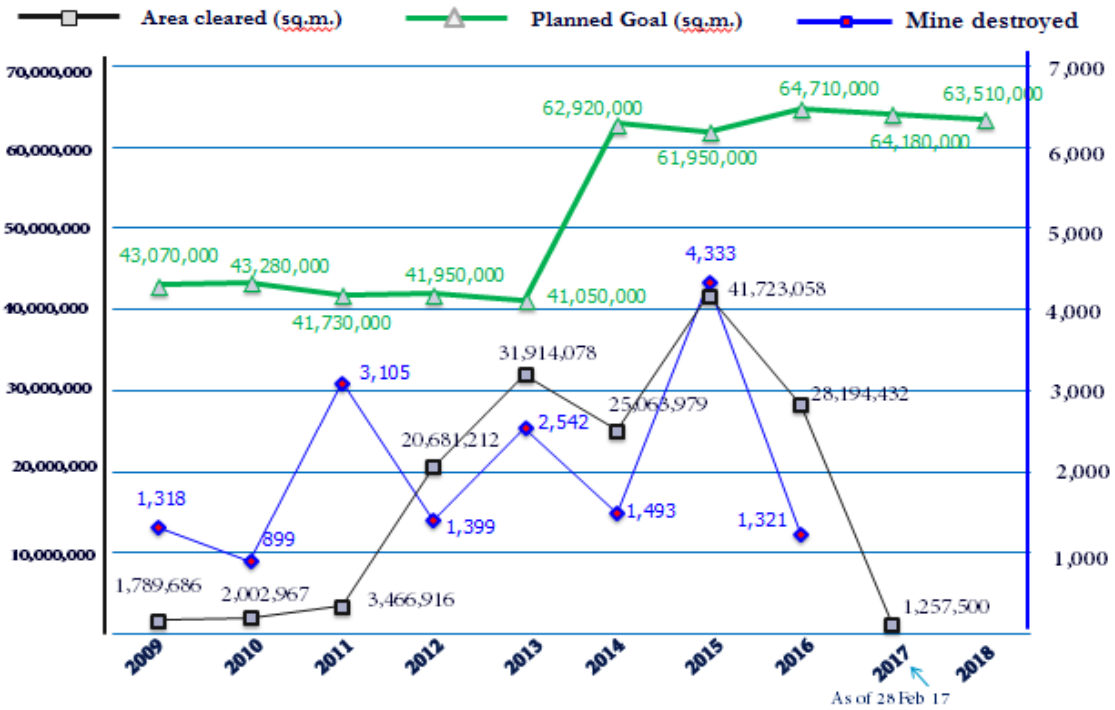
Year	**Planned Goal** (sq. m.)
2009	43,070,000
2010	43,280,000
2011	41,730,000
2012	41,950,000
2013	41,050,000
2014	62,920,000
2015	61,950,000
2016	64,710,000
2017	64,180,000
2018	63,510,000
Total	**528,350,000**

III. Progress Since the First Extension and Current Status

Despite the various challenges Thailand has faced in working towards total clearance by the end of 2018, significant progress has been made, which can be categorized into six key areas: 1) Clearance Progress, 2) Shift in Methodology, 3) Strengthened Community Engagement, 4) Strong Commitment Towards MRE and VA, 5) Capacity Building and Strengthened Cooperation at the National Level, and 6) Enhanced International Cooperation.

Clearance Progress

The table below shows the progress made during the period of the first extension (from 1 May 2009 until 1 November 2018)[3]. Thailand stated in its first request that it anticipated to clear 549,876,888 sq. m. by the deadline in November 2018. Up until 28 February 2017, Thailand was able to clear an area of 156,093,828 sq. m., leaving a total of 393,783,060 sq. m. to be released. During the extension period, a total of 16,320 landmines and UXOs were recovered. Since work began in 2000, Thailand has released around 80% of the total reported contaminated area of 2,557 sq. km. (2,557,000,000 sq. m.). Therefore, around 16.5% or 422 sq. km. (422,000,000 sq. m.) of work remain, of that number, 359 sq. km. (359,000,000 sq. m.) are in complicated border areas.



* During 2088-2009, TMAC found an additional of 21,526,888 sq..m. of contaminated land.

* During 2009-2016, TMAC found an additional of 27,500,000 sq. m. of contaminated land.

[3] Current available data presented up until 28 February 2017

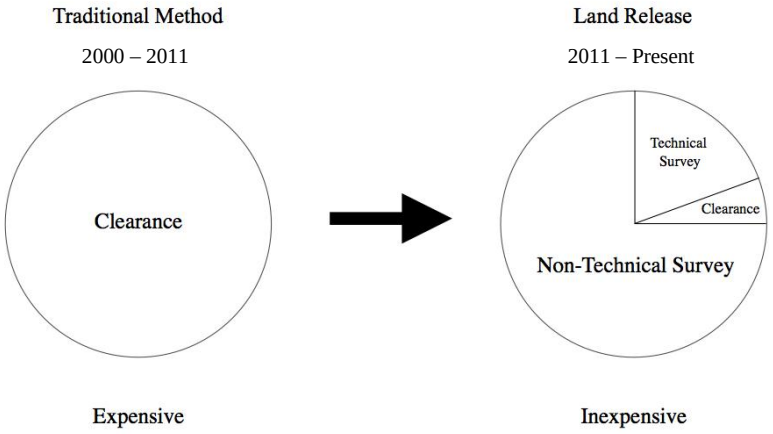
Overall, the years 2009 – 2011 saw limited progress made due to the traditional methods of clearance that were inefficient. After 2011, land release was made at a much higher pace due to a shift in methodology[4] used. Every year, on 4 April, the International Day for Mine Awareness and Support for Mine Action, all excavated mines are destroyed.

*Due to technical challenges in information management, before 2015, disaggregated data by Province was not available.

Year	Provinces	Planned Goal (sq. m.)	Actual result (sq. m.)				Total
			Clearance	Technical survey	Non-technical survey	Pilot project (NPA)	
2009		43,070,000	1,789,686	-	-	-	**1,789,686**
2010		43,280,000	1,964,277	38,690	-	-	**2,002,967**
2011		41,730,000	2,724,112	742,804	-	-	**3,466,916**
2012		41,950,000	288,980	-	20,392,232	-	**20,681,212**
2013		41,050,000	307,953	-	31,606,125	-	**31,914,078**
2014		62,920,000	228,911	-	24,835,068	-	**25,063,979**
2015		61,950,000	2,047,662	12,251,858	27,423,538	-	**41,723,058**
Northern Region	Tak		47,534	-	9,652,098	-	**9,699,632**
	Chiang Mai		-	-	3,354,380	-	**3,354,380**
	Mae Hong Son		-	-	5,433,500	-	**5,433,500**
	Phayao		-	2,499,917	-	-	**2,499,917**
	Nan		-	-	2,653,871	-	**2,653,871**
Northeastern Region	Ubon Ratchathani		109,606	1,979,010	2,124,816	-	**4,213,432**
	Surin		958,001	5,716,890	1,856,607	-	**8,531,498**
Eastern Region	Sa kaeo		400,426	897,662		-	**1,298,088**
	Trat		532,095	1,158,379	2,348,266	-	**4,038,740**
2016		64,710,000	394,238	71,537	20,979,376	6,749,281	**28,194,432**
Northern Region	Chiang Rai		-	-	920,297	-	**920,297**
	Chiang Mai		-	-	9,879,650	-	**9,879,650**
Northeastern Region	Ubon Ratchathani		-	-	7,580,562	-	**7,580,562**
	Surin		246,671	-	6,812,294	-	**7,059,165**
Eastern Region	Sa kaeo		4,193	71,537	472,665	-	**548,395**
	Chanthaburi		65,750	-	383,243	-	**448,993**
	Trat		77,624	-	1,679,746	-	**1,757,370**
2017		64,180,000	-	-	-	-	**1,227,500**
Northeastern Region	Ubon Ratchathani	5,206,134	**Data for 2017 is presented up until 28 Feb 2017 and are not yet be separated into province s**				
	Si Sa ket	16,626,580					
	Surin	1,824,928					
Eastern Region	Sa Kaeo	366,850					
	Chanthaburi	754,820					
	Trat	9,406,834					
Southern Region	Yala	558,443					
2018		63,510,000					
Northeastern Region	Ubon Ratchathani	17,272,813	**Future work**				
	Si Sa ket	1,355,219					
	Surin	44,406					
Eastern Region	Trat	9,792,317					
Southern Region	Yala	586,696					
Total		**528,350,000**	**9,745,819**	**13,104,889**	**125,236,339**	**6,749,281**	**154,836,328**

[4] A discussion of methodology is provided in the next section

Shift in Methodology



During 2000 – 2011 Thailand invested heavily on clearance as the single way to cancel suspected areas. Thailand did not invest in gathering information about suspected areas to confirm the likelihood of contamination. Therefore, any area that was suspected to be contaminated regardless of the accuracy of evidence, had to be investigated by deminers. This is known as the Traditional Method which led to the utilization of limited resources on areas containing no hazards and delay in clerance of real hazardous areas. This was the situation for Thailand prior to 2011.

From 2011 onwards, there was a paradigm shift. Land Release had replaced Traditional Method. The new paradigm saw the heightened reliance on Non-Technical Survey (NTS) in assisting cancelation of suspected areas. NTS comprises of identifying and collecting the essential information on suspected area. NTS typically involves a desk study of information coupled with collecting information from past records, seeking information from central institutions and other relevant sources of information (police, military, hospitals, provincial authorities, landowners, etc.) and inspections of the suspected area in the field. This information allowed a determination of whether the area should be inspected by deminers or to be cancelled due to the lack of evidence. As a result, NTS allows Thailand to cancel enormous amounts of suspected areas with confidence, without the need for physical inspection.

NTS activities in Thailand have included the followings: a few short site visits, meetings with a wide range of stakeholders, and reassessment of military and historical records. TMAC has worked in cooperation with various counterparts, including local communities in collecting and reassessing essential information in order to make informed decisions on clearance and land release.

Since January 2016, TMAC and NPA have collaborated on a "Pilot Project"[5] to resurvey suspected contaminated areas considered to be grossly overestimated by the LIS that was conducted in early 2000s. The initial results of the project indicated that many areas suspected to be contaminated are in fact mine-free.

TMAC is also in the process of updating the National Mine Action Standard (NMAS) to be in line with the latest version of International Mine Action Standard (IMAS).

The Pilot Project

In order to form the hypothesis and estimate the level of mine contamination in the area, NPA was invited to carry out Pilot Project to survey the area suspected to contain mines. Previously, NPA has been in collaborating with TMAC's HMAU 4 unit in one of the heaviest contaminated areas and the result showed that only 0.22% of the area once suspected contained mines, that is, only 47,534 sq. m. out of 21,141,383 sq. m. were actually contaminated. In 2017 and 2018, the Pilot Project will continue and it is forecasted that no more than 13.5% of the suspected areas resurveyed will have contamination, meaning more than 86.5% of the suspected areas could be released. ***(Annex 4:* Result of the Pilot Project*)***

Strengthened Community Engagement

TMAC has given much importance to build strong relations with the primary land users in affected areas - the local population, and local authorities from the provincial levels to the sub-district levels. This not only supports the on-going NTS efforts but also aims to raise awareness of the hazards of landmines in those areas. In recent years, more locals have approached TMAC with new information to confirm contamination in suspected areas and also to confirm non-presence of UXOs in others.

In 2015, TMAC first approached the provincial governors to seek full cooperation from top-down to the local community living in or near the contaminated areas. As a result, in 2016, the Chief Executive of the Sub District Administration Organization (SAO) has been actively involved in Mine Action, which accelerated the process of information gathering, the essential part for the NTS process. The SAO also supports TMAC in the NTS Training by providing facilities and field support.

[5] the extensive results of the pilot project are annexed

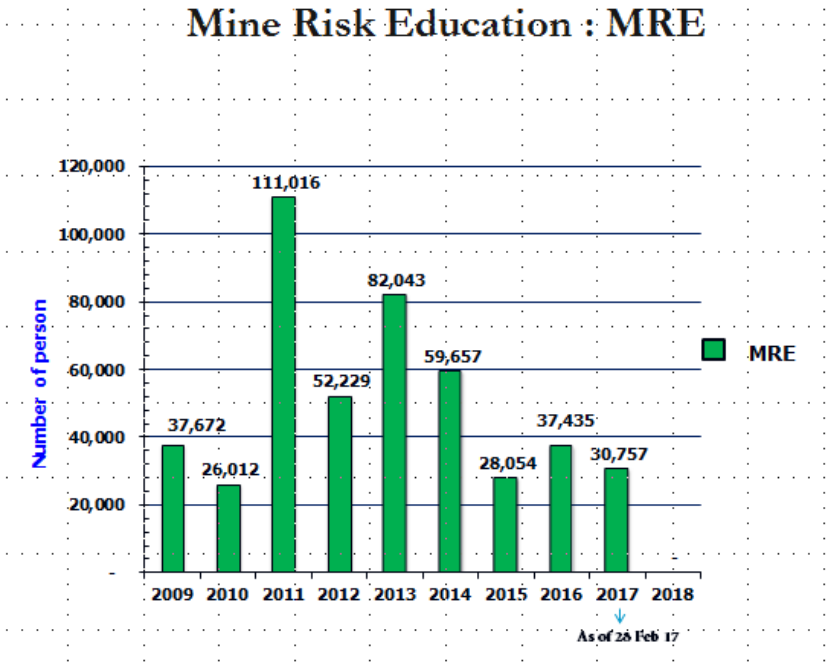
Moreover, TMAC has worked in accordance with relevant Ministries and other agencies concerned towards raising awareness on Quality Management (QM), Quality Control (QC), and Quality Assurance (QA). Local participation, especially in sub district and village level, has been fully incorporated into the main stages of the process of releasing land. Also, the communities are invited to relevant briefings and area inspection accompanied by officials.

Strong Commitment Towards MRE and VA

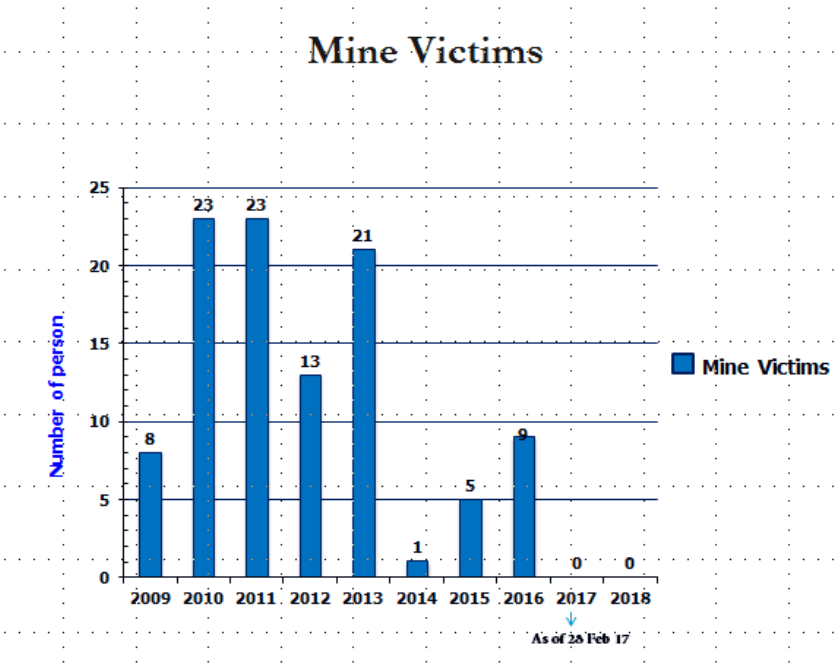
Mine Action has historically been a very technical field of expertise, however it is moving toward a more inter-disciplinary approach to relieve the impact of landmines and UXO on communities. The Mine Ban Treaty clearly sees the need to put obligations on countries beyond ending the use, production, stockpiling and transfer of antipersonnel mines, and to clear affected areas, by placing the need for mine awareness and risk reduction education and victim assistance at the heart of the document. The Mine Ban Treaty is after all a humanitarian document. Thailand was early to realize this and has year after year boosted its activities in Mine Risk Education (MRE) and Victim Assistance (VA). Thailand has also demonstrated that an inter-disciplinary community-based approach to mine action can yield dividends that transcend the technical aspects of demining. This has opened the door to many more people with disabilities and has helped many others from becoming victims.

Thailand has given high priority to promote **MRE** to reduce the risk of injury from mines and unexploded ordnance by raising awareness and promoting behavioral change through public-information campaigns, education and training, and liaison with communities. TMAC units aim to use every opportunity available to conduct MRE, for example, temple fairs or local gatherings. These activities would ensure that communities are aware of the risks from mines, unexploded ordnance and/or abandoned munitions and are encouraged to behave in ways that reduce the risk to people, property and the environment.

The Psychological Battalion of Army Special Warfare Unit, with the support of relevant NGOs, has conducted regular MRE for the local communities in contaminated areas. Although definitely not the only factor, but MRE has contributed to the major decrease in landmine victims in the past several years. The statistics show that most victims continue to be male adults due to their way of life that includes many being hunter and gatherers. The number of victims that are youths have seem to decrease due to many MRE programs in schools that have systematically incorporated into the local education curriculum. Thailand aims to reach at least 30,000 yearly through MRE programs.



As for **VA**, Thailand has adopted a holistic and integrated approach. Victim assistance measures in Thailand are comprehensive, which closely corresponds with the obligations under the Convention on the Rights of Persons with Disabilities (CRPD), being a long-term process encompassing many aspects of the lives of those victims. Services for landmine victims are integrated into the broader legal framework, national plans and programs for persons with disabilities in general. For instance, Thailand has introduced a universal health-care coverage scheme since 2002. The scheme covers treatment and rehabilitation, including prosthesis for persons with disabilities and those affected by mine related incidents. Moreover, the Ministry of Social Development and Human Security, has been working to ensure that people with disabilities are entitled to equal opportunities and rights are protected. Currently, all persons with disability receive monthly support payment of 800 Baht per person. The Ministry of Labor and Social Welfare and the Ministry of Agriculture has supported victims to restart their livelihoods with vocational training and agricultural incentive, such as provision of seeds and livestock.



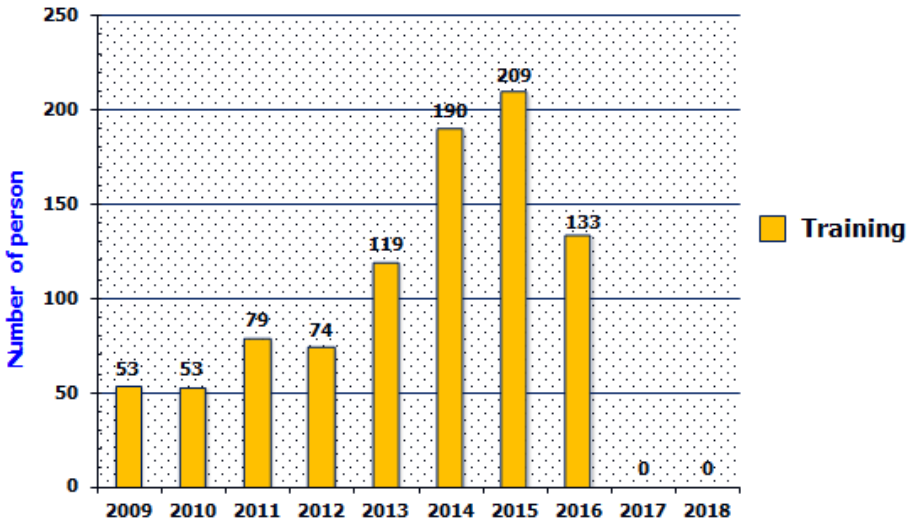
In 2016, Thailand was a Member and Chair of the Committee on Victim Assistance under the Anti-Personnel Mine Ban Convention. During its term, Thailand has worked with partners in different Conventions that contain related provisions on victim assistance, in particular the Convention on Cluster Munitions and the Convention on Certain Conventional Weapons, and launched the Guidance on Victim Assistance Reporting at the 15th Meeting of the State Parties in Santiago, Chile.

Capacity Building and Strengthened Cooperation at the National Level

Thailand recognizes that the task of building closer relations with partners and counterparts, as well as supporting others in capacity building are important focus areas. This will enable all relevant agencies, including TMAC and NGOs, to work together in carrying out the common objective of a country free of landmines.

TMAC has co-organized several trainings with its partners, including 4 workshops on EOD level 1 and 2 with the United States Pacific Command (USPACOM) for a total of 53 participants, and 2 NTS courses with NPA and the Geneva International Centre for Humanitarian Demining (GICHD) for a total of 26 participants. These events have helped develop the capability and efficiency of personnel responsible for resurveying operations. Other government agencies also played a crucial part. For instance, the National Institute of Emergency Medicine under the Ministry of Public Health organized a first aid course, while the Ministry of Social Development and Human Security organized a workshop on the rights of persons with disabilities. These concerted efforts resulted in a successful

resurveying campaign in Ubon Ratchathani province due to the enhanced relationships and understanding within the local community.



Enhanced International Cooperation

Thailand supports closer cooperation among States Parties, which will create better mutual understanding, reconciliation, as well as foster sustainable development in the bilateral and regional contexts.

On the ***bilateral level***, Thailand has and will continue to push for more robust consultation mechanisms on border issues, which include further engagement with Mine Action Centers and bodies from neighboring countries. TMAC has continuously approached several competent agencies of our respective neighboring countries especially the Cambodian Mine Action and Victim Assistance Authority (CMAA) and other agencies such as the Cambodian Mine Action Center (CMAC). The two counterparts have discussed the possibility for joint operation. Thailand's priorities are on (a) Special Economic Zones and (b) 7 permanent joint border checkpoints and 7 temporary joint border checkpoints to promote (i) enhanced border-crossing performance; (ii) infrastructure and operating costs reduction; and (iii) compliance with international conventions such as the Kyoto Convention on relating to the simplification of customs procedures and the harmonization of border controls.

At the **regional level**, a joint exercise under the ASEAN Defense Ministerial Meeting (ADMM) and ADMM Plus framework was organized in Pune, India in 2016. Humanitarian Mine Action (HMA) Group was then established to advance further cooperation, namely to promote cooperation among member countries in recovery from the aftermath of bombs, mines, and explosives left over from wars and conflicts.

TMAC has also pursued the aim of becoming an ASEAN Centre of Excellence in mine action with 5 major focuses: (a) regional EOD training center in cooperation with USPACOM (b) center for NTS training in cooperation with GICHD and NPA (c) facilitation center for information management for NGOs (d) ASEAN dog hospital and (e) prosthesis production and education center.

IV. Challenges Towards Completion

A number of persisting and emerging challenges have disrupted the undertakings of Thailand's work plan on land release by 1 November 2018. Many remain similar to what Thailand faced prior to 2008.

Overestimation

The overestimation of suspected areas as a result of the LIS continues to be a challenge for demining work, though the introduction of NTS contributed significantly in systemizing the gathering and reassessment of data, which consequently resulted in the cancellation of contaminated areas, the process is still however time consuming.

Border Issues

Pending survey and demarcation of land boundary with neighboring countries as well as safety and security concerns in border areas, remain key obstacles to the demining progress in recent years. For example, the mined areas along Thailand's border with Lao PDR are mainly located farther inland in dense mountainous forests and have access difficulty.

On the border with Myanmar, ethnic conflict as well as operations of drug smuggling networks have raised safety concerns to mine action teams. Additionally, the pending survey and demarcation of boundary between Thailand and Cambodia has delayed TMAC's access to some border areas due to the security concerns. With regards to Thailand's border with Malaysia, there are no border-related problems, and the total clearance is expected to be achieved by the end of 2018. These areas of border complicated, Thailand refers to them as Area to be demarcated (AD).

Those areas which are yet to be demined are mostly located along the border between Thailand and its neighboring countries. Thailand refers to them as Area to be demarcated (AD). In this regard, AD shall be construed as the border areas which are subject to the pending survey and demarcation process to be jointly conducted by Thailand and its respective neighbors under the relevant mechanism and framework. The access to those areas is considered restricted for safety and security concerns. The use of the term Area to be Demarcated (AD) in this Request as well as the demining operations to be conducted in implementing Thailand's obligations under this Convention shall be without prejudice to Thailand's rights and duties with regard to the land boundary under international law.

Landscape and climate

Many remaining contaminated zones are hardly reachable due to severe natural circumstances, which are, in large part, tropical jungle or rough terrains such as steep inclines, ditches and culverts, and some provinces are faced with harsh rainfall during monsoon season. This makes the movement of individual deminers or mechanical equipment difficult and even dangerous. Humidity and heat, as well as virulent tropical diseases, pose health threats that further complicate deminers' work. As such, the average working time for clearance in these areas can take up to twice as long as other places.

Financial and resource constraints

In the early years since the first extension request was submitted in 2008, demining efforts by TMAC did not reach peak efficiency due to the sufficient but still limited budget allocated to Mine Action. External support was also relatively limited. Thailand therefore remains open to any foreign donations, especially for related equipment and training for Thai staff.

Unforeseen pressing circumstance

The challenge of finite resources in mine clearance was amplified by a number of contingencies and emergency situations. For instance, the severest flood in five decades affected three quarters of the country from July 2011 to January 2012. The government was compelled to direct attention and resources to flood mitigation, relief efforts, and the subsequent rebuilding of infrastructure.

Political Circumstances

In the 2008 extension request, political instability was pointed out as a low risk factor towards the completion of Thailand's land release work. However, Thai politics underwent several rounds of cabinet reshuffles, early elections, and changes in the government, which impacted public administration and continuity of public policy.

V. Plan Of Work For The Remaining Period of the First Extension (Present – November 2018) and the Period of the Requested Second Extension (November 2018 – November 2023)

Thailand's first extension for completion will expire on 1 November 2018. As of date, Thailand has roughly a year left to work until that deadline. This phase Thailand calls as ***Phase 1.***

This document is a request for a 5-year extension period (from 1 November 2018 until 1 November 2023) and work will be conducted in the most difficult areas which are located along the Thai border, many of which are subject to the pending survey and demarcation process (AD). This phase Thailand calls as ***Phase 2.*** Thailand will submit an updated work plan after Phase 1 is complete. By reflecting back, Thailand will be able to better plan for work ahead and also reassure to the States Parties of its commitment to rid its soil of landmines. The request has taken into account the reality of the situation, the capabilities of TMAC and its counterparts, as well as the need for consultations with all stakeholders, including various government agencies, local communities and neighboring countries.

No.	Province	Plan Of Work: 2017 - 2023						
		2017	2018	2019	2020	2021	2022	2023
Northern Region		Phase 1		Phase 2				
1	Tak				←	→		
2	Chiangmai			←			→	
3	Uttradhit			←		→		
4	Phitsanulok			←				→
Northeastern Region								
5	Ubon Ratchathani			←				→
6	Si Sa Ket	←	→	←				→
7	Surin	←	→	←				→
8	Buri Ram			←				→
Eastern Region								
9	Trat	←	→	←				→
10	Chanthaburi	←	→	←			→	
11	Sa Kaeo	←	→	←				→
Southern Region								
12	Chumphon			←		→		
13	Yala	←	→					

During 2017- November 2018, when Thailand's first extension period expires, all areas (63,796,040 sq. m.) that is not AD will be completed. Thailand will also start to prepare for the period of the second extension so that there is continuation and that efficiency can be boosted.

Year	Remaining Areas	Op plans	Balance	Province	Activity Highlights
2017	422,605,172	34,744,589	387,860,583	Ubon Ratchathani, Si Sa ket, Surin, Sa Kaeo Chanthaburi, Trat, Yala	• During this period, TMAC will continue to release contaminated areas. • Yala province will be mine-free by the 2018 deadline. • Aside from clearance, TMAC will prepare to maximize efficiency for the period of the 5 year extension by building staff capacity, slowly transiting from Traditional to Land Release methodology and fostering relations with neighboring countries.
2018	387,860,583	29,051,451	358,809,132	Ubon Ratchathani, Si Sa ket, Surin, Trat, Yala	

In 2017, there will be 422,605,172 sq. m. remaining area to be operated. During 2017-2018, Thailand will attempt to release the 63,796,040 sq. m. as those areas are already accessible. By the end of 2018, Thailand will have 358,809,132 sq. m. of the suspected area left.

Showing the extent if the pilot project results are accurate and applied nationwide (only 13.5% land are actually contaminated meaning that 86.5% could be cancelled), for the years remaining from the first extension, 2017 -2018

Year	Remaining suspected area after Land Release	Balance after - 86.5%	Province
2017	422,605,172	57,051,698	Ubon Ratchathani, Si Sa ket, Surin, Sa Kaeo Chanthaburi, Trat, Yala
2018	387,860,583	52,361,178	Ubon Ratchathani, Si Sa ket, Surin, Trat, Yala

Financial Figures and Support Request

Year	OP Plan (Sq. m.)	Budget (Mill. Baht)			Support Request
		Government (85%)	NGO (15%)	Total	
2017	34,744,589	206.3	34.9	241.2	• NTS Training • EOD Training • MDT Training • Equipment • ATV • New Technology
2018	29,051,451	240.0	36.6	276.6	
Total 17-18	**63,796,040**	**446.3**	**71.5**	**517.8**	

In 2017-18, TMAC will receive 206.3 million baht through the Ministry of Defence which will account for 85% of the total budget. NGOs, namely, the NPA and TDA receive their financial support via foreign governments and will contribute another 15%. The existing financial support is adequate for the current operation. However, training on NTS, EOD, as well as or the necessary equipment such as ATV or other new technologies, can greatly support Thailand if available from international community.

Phase 2

Plan of work for the period of extension, November 2018 – November 2023

Phase 2					
Year	**Remain**	**Op plans**	**balance**	**Province**	**Activity Highlights**
Nov 2018 -2019	358,809,132	72,116,482	286,692,650	Uttaradit, Phitsanulok Ubon Ratchathani, Si Sa ket, Surin Buri-Ram, Sa Kaeo Chanthaburi, Trat Chumphon	• The success of political mechanism development will be a determining factor for the work progress in 2019-2023. • Capacity building and methodology transition will speed up the Land Release work for TMAC field units. • Land release effort will be focused along Myanmar and Laos border as there is significant progress in demarcation. • Uttradhit has a high possibility to be mine-free within 2020.
2020	286,692,650	72,062,020	214,630,630	Tak, Chiang Mai Uttaradit, Phitsanulok Ubon Ratchathani, Si Sa ket, Surin Buri-Ram, Sa Kaeo Chanthaburi, Trat Chumphon	
2021	214,630,630	73,233,510	141,397,120	Chiang Mai, Phitsanulok, Ubon Ratchathani Si Sa ket, Surin Buri-Ram, Sa Kaeo	

				Chanthaburi, Trat Chumphon	
2022	141,397,120	74,536,729	66,860,391	Chiang Mai, Phitsanulok Ubon Ratchathani Si Sa ket, Surin Buri-Ram, Sa Kaeo Chanthaburi, Trat	
2023	66,860,391	66,860,391	-	Chiang Mai, Trat Phitsanulok Ubon Ratchathani, Si Sa ket, Surin, Buri-Ram, Sa Kaeo	

Showing the extent if the pilot project results are accurate and applied nationwide (only 13.5% land are actually contaminated meaning that 86.5% could be cancelled), for the years remaining from the first extension, 2018 -2023

Year	Remaining suspected area after Land Release	Balance after - 86.5%	Province
Nov 2018 -2019	358,809,132	48,439,232	Uttaradit, Phitsanulok Ubon Ratchathani, Si Sa ket, Surin Buri-Ram, Sa Kaeo Chanthaburi, Trat Chumphon
2020	286,692,650	38,703,507	Tak, Chiang Mai Uttaradit, Phitsanulok Ubon Ratchathani, Si Sa ket, Surin Buri-Ram, Sa Kaeo Chanthaburi, Trat, Chumphon
2021	214630630	28,975,135	Chiang Mai, Phitsanulok, Ubon Ratchathani Si Sa ket, Surin Buri-Ram, Sa Kaeo Chanthaburi, Trat Chumphon
2022	141,397,120	19,088,611	Chiang Mai, Phitsanulok Ubon Ratchathani Si Sa ket, Surin Buri-Ram, Sa Kaeo Chanthaburi, Trat
2023	66,860,391	9,026,152	Chiang Mai, Phitsanulok Ubon Ratchathani, Si Sa ket, Surin, Buri-Ram, Sa Kaeo Trat

Budget

Expenses for Mine Action in Thailand in 2017

No.	Organization	Amount (person)	Expenses (million Baht)			
			Salary	Hazard Pay	Equipment	Total
1	**TMAC**	197	44.4	8.9	10.3	63.6
2	**HMAU 1**	80	19.2	12.3	0.8	32.3
3	**HMAU 2**	84	24.1	12.6	0.8	37.5
4	**HMAU 3**	86	26.4	13.2	1.0	40.6
5	**HMAU 4**	80	19.2	12.3	0.8	32.3
Total TMAC		452	133.3	59.3	13.7	206.3
6	**NPA**	18	Operational Costs			11.5
7	**TDA**	24	Operational Costs			11.5
8	**PRO**	30	9.3	0.6	2.0	11.9
Total NGOs		72	20.6	8.0	6.3	34.9
Total		**524**	**153.9**	**67.3**	**20.0**	**241.2**

The budget estimation is based on the 2017 approved budget and is projected to increase 5% yearly for pay raise. This budget plan excludes the emergency extra budget requested, for example, 10 million baht of training budget which will have to be approved case by case. In 2017, TMAC has also requested additional 27 million baht budget for All-Terrain Vehicle (ATV), off-road trucks, mine detectors and GPS modules, the approval is pending.

Year	OP Plan (sq. m.)	**Budget** (Mill. Baht)			Support Request
		Government (85%)	**NGO** (15%)	**Total**	
2019	72,116,482	249.8	38.4	288.2	• Equipment • ATV • New Technology
2020	72,060,020	220.0	40.3	260.3	
2021	73,233,510	227.3	42.3	269.6	
2022	74,536,729	235.0	44.4	279.4	
2023	66,860,391	243.1	46.6	289.7	
Total 19-23	**358,809,132**	**1,175.2**	**212.0**	**1,387.2**	

In the realm of training, TMAC plans to increase the capacity of its personnel throughout the year by training as follows:

- EOD and Non-Technical Survey and these training are primarily being organized by the Marine Force Pacific (MARFORPAC) and Geneva International Centre for Humanitarian Demining (GICHD). The EOD Trainings (both level 1 and 2) are to ensure that the personnel operating in the minefields are able to perform the task. The EOD training will complement the effort on Technical Survey as well.

- Also, Thailand plans to bring in new technology such as drone to help manage the demining operation along the border. Internally, TMAC also organizes its own demining course, which prepares the personnel for the actual demining operation.

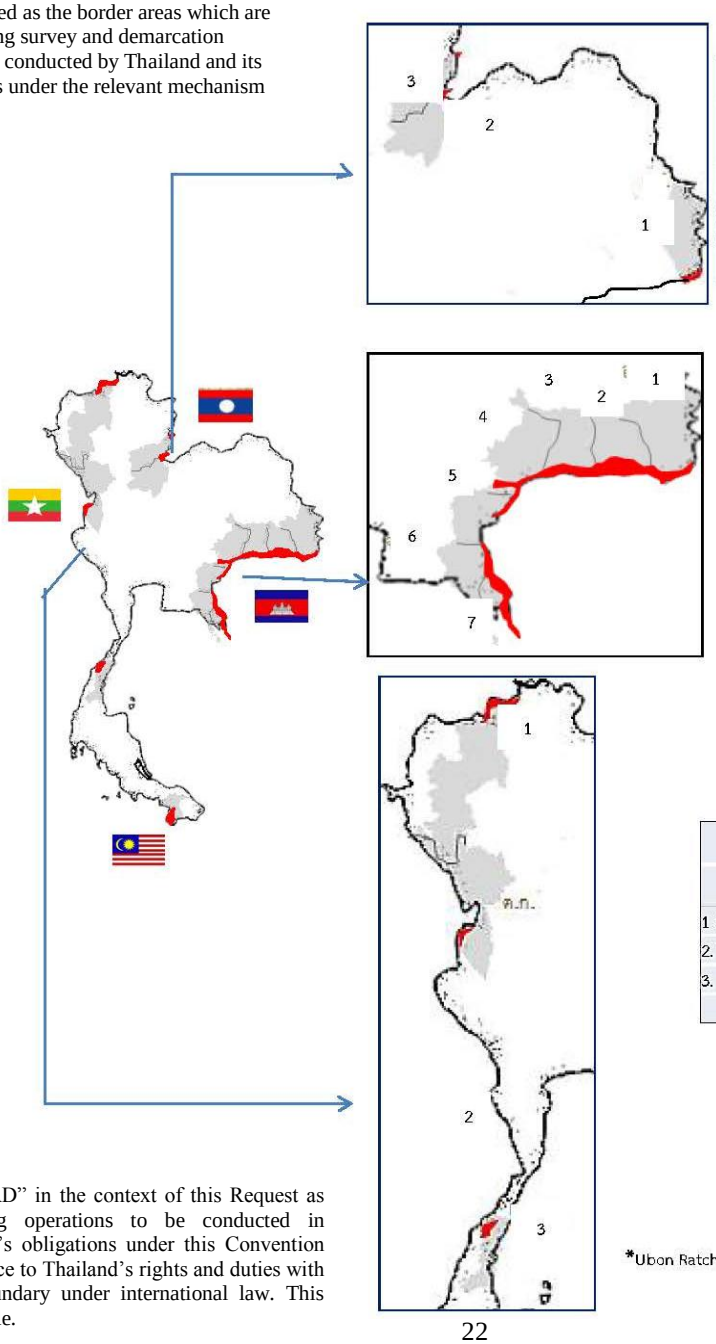
Thailand is open to any additional support from external donors on the abovementioned training and equipment. With more and upgraded tools, as well as, more expertise via training for demining staff, Thailand's performance in mine action will be boosted.

Areas Complicated By Border Issues

The difficulty to access the areas to be demined mostly relates to the ADs. Currently, the remaining areas to be demined, including the Ads, which cover 358,800,000 sq. m. in 12 Provinces, bordering 3 countries, Cambodia, Laos, and Myanmar. Thailand works closely with all of the three neighboring countries to expedite the boundary survey and demarcation process while enjoying excellent ties with all of them.

SUSPECTED HAZARDOUS AREA : SHA
Classified as Area to be Demarcated : AD
12 Provinces*/ 244 Areas/ 358,809,132 sq.km.

AD shall be construed as the border areas which are subject to the pending survey and demarcation process to be jointly conducted by Thailand and its respective neighbors under the relevant mechanism and framework.



AD on Thai-Lao Border 3 Provinces		
Province	No.	Area (sq.m.)
1. Ubon Ratchathani	22	33,246,312
2. Uttradhit	1	3,345,061
3. Phitsanulok	1	32,990,520
Total	24	69,581,893

AD on Thai-Cambodian border 7 Provinces		
Province	No.	Area (sq.m.)
1. Ubon Ratchathani	25	56,698,953
2. Si Saket	41	70,883,609
3. Surin	26	28,670,745
4. Buriram	15	19,483,928
5. Sa Kaeo	25	9,192,948
6. Chanthaburi	21	3,936,224
7. Trat	60	67,454,225
Total	213	256,320,632

AD Thai-Myanmar Border 3 Province		
Province	No.	Area (sq.m.)
1 Chiangmai	4	25,615,188
2. Tak	1	366,772
3. Chumphon	2	6,924,647
Total	7	32,906,607

*Ubon Ratchathani is adjacent to both Cambodia and Lao PDR

The use of the term "AD" in the context of this Request as well as the demining operations to be conducted in implementing Thailand's obligations under this Convention shall be without prejudice to Thailand's rights and duties with regard to the land boundary under international law. This sketch map is not to scale.

(1) Thai - Myanmar Border

Three provinces fall under such category (Chiang Mai, Tak, and Chumphon), a total of 7 Suspected Hazard Areas (SHAs) or 32,900,000 sq. m. In 2014, the Ministry of Foreign Affairs of Thailand invited 15 delegates from Myanmar to observe training on demining in Thailand. During the official visit of Aung San Suu kyi, Leader of the National League for Democracy to Thailand, Thailand proposed an aid package to support Myanmar's demining efforts with an emphasis on victim assistance and mine risk education. ADs are located in Chumphon province in the South of Thailand and will further be discussed by the two countries.

On the Thai-Myanmar boundary demarcation, the two countries have concluded the Memorandum of Understanding between the Government of the Kingdom of Thailand and the Government of the Union of Myanmar relating to the Fixed Boundary on the Mae Sai-Nam Ruak Rivers Sector in 1991. Thailand and Myanmar are also negotiating an MOU on the Survey and Demarcation of the entire stretch of their boundary and will hold the 9th Meeting of the Thailand-Myanmar Joint Boundary Committee during mid-2017 to expedite the process. Meanwhile, Joint Technical Committee on River Boundary and Joint Committee Relating to Fixed Boundary on the Mae Sai-Nam Ruak Rivers Sector, sub-Committees under the JBC, held their meetings in January 2017, and the Meetings of Joint Technical Survey Committee and Senior Officials were held March 2017.

(2) Thai - Lao Border

Three provinces fall under such category (Uttradit, Phitsanulok, and Ubon Ratchathani), a total of 24 SHAs or 69,600,000 sq. m. TMAC has requested to include the issue of demining in the Areas to be Demarcated in the Thai-Lao General Border Committee (GBC) meeting. In 2015-2016, TMAC in cooperation with the USPACOM, hosted the EOD level 1 training for 36 officers from the National Regulatory Authority for UXO / Mine Action Sector in Laos (UXO-NRA Laos) and Lao National Unexploded Ordnance Programme (UXO LAO). TMAC and USPACOM plan to continue the trainings, both before and after demarcation, into the future as part of a collaborative agenda in confidence building.

On the Thai-Lao boundary demarcation, both countries have completed 96% of the land boundary demarcation, with 210 boundary pillars installed. The 11th Meeting of the Thai-Lao Joint Boundary Commission will be held in the second half of 2017 to accelerate the demarcation process of the remaining section of land boundary.

(3) Thai - Cambodian Border

Seven provinces fall under such category (Ubon Ratchathani, Surin, Buriram, Sisa Ket, Sa Kaeo, Chanthaburi and Trat), a total of 213 SHAs or 256,300,000 sq. m. Within the framework of the Thai-Cambodian General Border Committee, the two countries agreed to support joint operation on demining between TMAC and CMAC, and the Thai side proposed to cooperate on demining in Special Economic Zones (SEZs) along the Thai-Cambodian border for the successful implementation of SEZ development

Other areas

Under the responsibility of Humanitarian Mine Action Units HMAU TMAC, the border with Malaysia in the southern region, namely, Yala Province has no ADs and is projected to be finished within 2018.

VI. Socio-economic Implications and Gains

The LIS reported that the presence of landmines and UXO resulted in blocked access to, or restricted use of four major resources: forest, cropland, pasture, and water. Forest area was the resource most frequently reported to be affected by the presence of mines because most of the armed conflicts took place in the forested border areas. Thus, it was recognized that the important socio-economic dimension will be increasingly taken into account along with the humanitarian impact. Additional information to be added when consultation with relevant agencies comes to a conclusion later this year.

VII. Potential Risk Factors Towards the Completion for the Requested Extension Period

1. Pending process of boundary survey and demarcation: While Thailand is committed to expediting boundary demarcation with its neighboring countries, such process rests upon political factors of neighboring countries which always have some uncertainties. Unclear boundary line inevitably poses difficulty to access some border areas for safety or security concerns. The success will also depend on our neighbors' views, policy, and willingness to cooperate on humanitarian grounds, which is the factor beyond Thailand's control.

2. Unforeseen Circumstances and force majeure: causes that are outside the control of the parties involved that could not be evaded through the exercise of due care, such as natural disasters, change in terrain, political uncertainties, and major budget cuts due to the need for urgent reallocation of funds.

ANNEXES

1. Origins of Thailand's Landmine Challenge

Landmine contaminated areas in Thailand are mostly found along Thailand's borders, especially the borders with Cambodia. The two main causes of landmine and unexploded ordnance (UXO) contamination in Thailand are **(1)** Cambodia's internal conflict which spilled over to Thai-Cambodian border area in 1970s – early 1990s and **(2)** the 1965-1981 conflict between the Thai government and communist insurgents, especially in northern Thailand. Millions of explosive remnants remain in these areas despite the conflicts ending, threatening the peace and security of the communities in the affected areas. To date, thousands have been injured or killed by these explosive remnants.

2. Thailand's Demining Structure

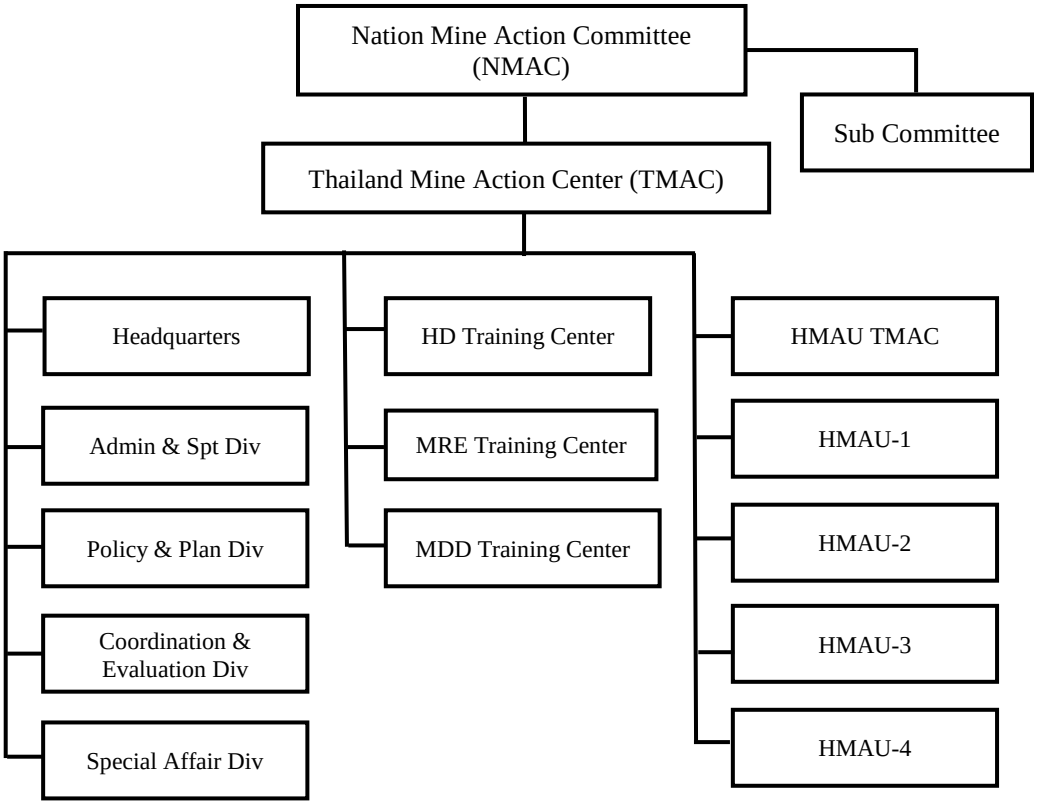
TMAC operates under the authority of the Supreme Command Headquarters of the Ministry of Defence. Five Humanitarian Mine Action Units (HMAU) were established to conduct demining operations and cooperate with other local organizations in conducting MRE and victim assistance

- **HMAU-1** Burapha Task Force, responsible for Sakeo province
- **HMAU-2** Chantaburi Marine Task Force, responsible for Chantaburi and Trat provinces
- **HMAU-3** Suranaree Task Force, responsible for Buriram, Surin, Si Saket and Ubon Ratchatani provinces
- **HMAU-4** Phamuang Task Force, responsible for Phitsanulok, Phetchabun, Uttaradit, Nan and Phayao provinces.
- **HMAU TMAC** which was established in 2016 using personnel from TMAC Headquarters is responsible for the work in the southern provinces (Chumphon and Yala). Each HMAU has approximately 100 personnel and complimented by 27 demining dogs.
- Personnel from Government and Non-Governmental Sector in Thailand and mine detectors

No.	Organization	Amount (person)			Mine detection dog	Mine detector	Remarks
		Male	Female	Total			
1	**TMAC**	178	19	197	8	61	
2	**HMAU 1**	80	-	80	5	8	
3	**HMAU 2**	84	-	84	5	35	
4	**HMAU 3**	86	-	86	4	29	
5	**HMAU 4**	80	-	80	5	8	
Total TMAC		433	19	452	27	141	
6	**NPA**	9	9	18	-	26	
7	**TDA**	20	4	24	-	12	
8	**PRO**	25	5	30	-	N/A	
Total NGOs		54	18	72	-	38	
Total		**487**	**37**	**524**	**27**	**179**	

TMAC also has three training schools (1) Humanitarian Demining Training School, Ratchaburi province (2) Mine Risk Education Training School, Lopburi province and (3) Mine Detection Dog Training School, Nakhorn Ratchasima province.

ORGANIZATION OF TMAC



TMAC's work is supported by a number of non-governmental organizations, including Norwegians People's Aid (NPA), Peace Road Organization (PRO), and Thai Civilian Deminer Association (TDA).

3. Landscape and climate challenges

Minefield in Harsh Terrain in Sa Kaeo Province

Minefield in Harsh Terrain in Surin Province

Dense Forest in Trat Province

Mountainous Terrain in Mae Hong Son Province

Severe Weather in Chanthaburi Province

Flooded Area in Trat Province

4. Result of the Pilot Project

The first phase of the Pilot Project took place in Ubon Ratchathani province (the most heavily contaminated province) using the Evidence Based Survey (EBS), as part of NTS, to locate CHAs. The 8-month resurvey enabled TMAC to release 8,000,000 sq. m. (14 SHAs) from the total of 119,000,000 sq. m. (72 SHAs) and discovered 800,000 sq. m. CHAs. The results revealed that only 10 per cent of the suspected areas actually contained landmines. Moreover, an earlier attempt to resurvey in 2013-2015 led by NPA in the areas in Northeastern Thailand, showed that only 0.22% of all suspected land actually contained landmines. Therefore, with the experiences to date with the resurveying, TMAC has estimated that once completed nationwide, no more than 30% of the suspected areas in record now will actually be contaminated. Thailand will keep the Committee updated on its progress.

Annex 4: Summary of Establishing a Baseline of Mine/ERW Contamination in Thailand Project

A: Summary of Project Information (excerpted from the Project Document)

1. General

Vast areas along the Thai - Cambodian border are severely contaminated by landmines and ERW. Mine action resources are scarce in Thailand and it has proven inefficient to deploy these resources effectively because of a lack of a detailed evidence based survey. Past survey efforts have in part identified the larger areas that could be contaminated but these areas are inflated and fail to represent a realistic scope of contamination. The landmine problem in Thailand thus has remained poorly defined.

2. Problem statement

Past survey efforts have defined only parts of the mine/ERW problem. Typically, existing minefield records tend to be inaccurate and inflated. Worse, yet unknown minefields have surfaced along the Cambodian border. Effective employment of scarce mine action resources for clearance of mine suspected areas is hampered and made more costly because mine action resources are tasked to clear land that is actually free of contamination. Ad-hoc mine action activities in vastly inflated polygons is an ineffective use of scarce mine action resources.

Efforts to systematically and effectively release mine-contaminated land rely on a credible baseline survey that will deliver a much higher resolution of true contamination and facilitate more effective addressing of the follow-on requirement for release of land.

A baseline survey will clarify the extent of contamination. In the absence of an accurate baseline survey the extent of the mine/ERW contamination will remain erroneous and provide unreliable data for resource mobilisation.

Past survey efforts have included a Landmine Impact Survey (LIS) and degrees of non-technical survey. The LIS initially identified 2,557 km^2 as SHAs. Subsequent national and international survey efforts over the years has justified cancellation of around 2,000 km^2, leaving approximately 528.2 km^2 of mine suspected land. While this is good, there is reason to believe that most of the remaining suspected areas are also hugely inflated.

3. Creating the baseline

A baseline survey is in effect an evidence-based non-technical survey (NTS) that may be enhanced with components of technical survey (TS) to provide greater accuracy where necessary. The survey will free up land where fear from mines/ERW currently impedes cultivation and other development/business initiatives. More specifically the survey will:

- ⇒ Define accurate CHA boundaries of all contaminated areas in Thailand
- ⇒ Enable effective planning of follow-on mine action activities after the survey
- ⇒ Reduce the follow-on requirement considerably
- ⇒ Steer development and industrial initiatives into areas that are mine free
- ⇒ Enable effective definition of requirements for mine action support at national and local levels and the type of assets/capacities required for best overall efficiency
- ⇒ Establish a credible national baseline defining the scope of mine, and ERW contamination

Key to building a successful baseline is a robust evidence-based survey methodology, a systematic information gathering/assessment process, well-trained survey teams and appropriate levels of quality assurance. The methodology is described in detail in NPAs document *"A guide to Non-Technical Survey"*, which will be the framework for designing and implementing the survey.

A priority has been given to completing the survey in Ubonratchathani province bordering both Lao PDR and Cambodia. This province has five suspected-hazardous districts and a total population of 1,844,669.

4. The survey process

TMAC/NPA has invested into developing improved methodology for conduct of more accurate survey and higher overall land release rates. The survey methodology is evidence based and combines non-technical and technical efforts to achieve the best results.

Non-technical Survey (NTS) is first step in the process. NTS is one of the most important, and also challenging, activities in the overall land release process. NTS is used to identify, as accurately as possible, those areas that require follow-on technical survey and/or clearance. The NTS will also re-survey areas previously recorded as hazardous, to determine if the information and evidence is still valid or if all or parts of it may be cancelled. Information gathered during NTS assists the overall national planning and prioritization process. The NTS provides vital information that will assist TMAC with the planning of follow-on Technical Survey (TS) and Clearance operations to ensure that all survey/clearance resources are applied efficiently and effectively within prioritised tasks.

The NTS process can be divided into eight main steps. These steps may require various degrees of attention. For example, not all steps are applicable when operating in restricted areas, minefields with minefield records or where village meetings cannot be undertaken.

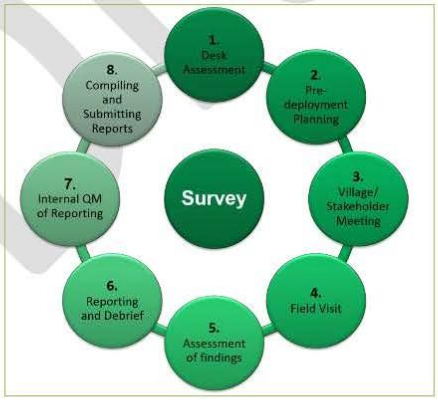


Figure illustrating principle elements of the baseline survey

5. Objectives

The main objective is to establish a survey capacity and conduct systematic survey of all potentially mined areas along the Thai – Cambodian border over a period of 24 months. At least three survey teams will be required. The emphasis in 2016 will be on completing Ubonratchathani province in the HMAU-3 area of responsibility. Remaining SHAs will tentatively be addressed in 2017. At the beginning, the survey will combine NTS and TS capacities to increase land cancellation rates and more narrowly define CHAs. It will further ensure that future technical survey and clearance resources are targeted towards the areas that are actually mined as opposed to clearing a large portion of mine free land.

Objective	Activities
Objective 1 Establish a capacity of 3 NTS teams, supported with a TS component	• Set up and train teams • Assess past survey information/reports • Finalise survey concept and survey plan for all 3 teams • Prepare for deployment of 3 combined survey teams
Objective 2 Survey all areas on the Cambodian border	• Deploy all teams for systematic NTS • Systematically survey all areas under HMAU-3 responsibility • Survey other areas of high priority when required • Survey all remaining mine suspected areas when the survey in HMAU-3 is completed
Objective 3 Effective monitoring of progress	• On-going Quality Control of the three teams • On-going assessment of the security situation prior to deployment of teams • On-going talks with TMAC and HMAU-3 about progress and alternative deployment plans if the security situation prevents safe survey work in certain areas

B: Summary of Preliminary Survey Results[1]

The project started on 1 January 2016, when NPA worked in joint-operations with the HMAU3, conducting a pilot baseline survey in the Ubonratchathani province. Throughout year 2106, the joint teams were able to survey 18 existing suspected hazardous areas (SHAs) close to communities, but not areas close to the border because of security concerns and as those areas are areas to be demarcated with neighbouring countries first (AD). Meanwhile, 11 new identified SHAs/suspected hazardous spots in addition to the existing SHAs were identified. Out of 11 new SHAs/suspected hazardous spots, 9 of them are confirmed hazardous areas. In total, NPA-HMAU3 survey teams conducted survey of 29 SHAs/suspected hazardous spots, on approximately 16,578,389 m^2 in 2016.

Preliminary Survey Results	m^2	%
Define CHA (including new found CHAs) *From existing SHAs* *From new found*	2,213,197 *2,056,279* *156,918*	13.51 *12.55* *0.96*
Areas without Evidence [2] (In the process of categorizing this as Cancellation/ the Cancelled Areas with Restriction: CAWR.)	4,027,868	24.58
Cancellation by NTS	10,163,208	62.03
Total 16,383,880 (18 SHAs+9 new SHAs, which becoming CHAs later)	16,404,273 (100%)	100.12%* (16,383,880)

* If the 18 existing SHAs (16,383,880 m^2) is considered 100%, when new found CHAs are added, the total will be more than 100%, (100.12%). This is also to show that the size of new found hazardous areas is relatively small, only 0.12%, comparing to the existing surveyed tasks.

C: NPA-HMAU 4 Part Completion Initiative (Pilot Land Release project in 2013-2015)

For the areas along Thai-Myanmar and Thai-Laos borders, NPA-HMAU 4's the "Part-Completion Initiative", a land release pilot project, was carried out in 2013-2015 in the Northern region. The result

[1] As of March 2017, the results are considered as preliminary results because completion survey reports have not yet been officially submitted to the Thailand Mine Action Center, in accordance to the Thailand National Mine Action Standards ' requirements. There is a possibility of some slightly changes in figures, but it will not affect the overall interpretation and conclusion of the findings.

[2] According to the Article 5 of Mine Ban Treaty, *each State Party shall make every effort to identify all areas under its jurisdiction or control in which anti-personnel mines are known or suspected to be emplaced and shall ensure as soon as possible that all anti-personnel mines in mined areas under its jurisdiction or control are perimeter-marked, monitored and protected by fencing or other means, to ensure the effective exclusion of civilians, until all anti-personnel mines contained therein have been destroyed*. The 'Areas without Evidence' from this survey results are the areas where no evidence of mines or threats was found. It should be cancelled according to the International Mine Action Standards. It's also no obligation stated in the treaty, after all reasonable efforts have been made and there is no known mines in the areas. However, TMAC, NPA and HMAU 3 are discussing how to eliminate fear from stakeholders and categorize these areas with full acceptance of all stakeholders in the country.

was that 99.78% of SHAs were cancelled, when 0.22% of SHAs containing landmines or unexploded ordnance (UXO) were cleared. Details of land release results can be found in the table below.

No	Task	Location	Cancelled Area m^2	Clearance m^2	Total Area m^2	Devices Found
1	713_01	Ban Nhong Luang Village, Nhong Luang Sub-district, Umphang District, Tak Province	4,411,153	0	4,411,153	AP = 13
2	997_01	BanNhong Luang Village, Umphang Sub-district, Umphang District, Tak Province	0	6,117	6,117	AP = 15
3	724_01	Ban Klor Tor Village, Mae Chan Sub-District, Umphang District ,Tak Province	5,240,945	0	5,240,945	AP= 43, UXO = 3
	724_01/01	Ban Klor Tor Village, Mae Chan Sub-district, Umphang District , Tak Province	0	41,417	41,417	AP = 52, UXO = 6
4	813_01	Ban Huai Fan Village, Khun Yuam Sub-District, KhunYuam District, Mae Hong Son Province	5,433,500	0	5,433,500	
5	774_01	Ban Na Mon Village, Muang Haeng Sub District, Wiang Haeng District, Chiangmai Province	3,354,380	0	3,354,380	
6	554_01	Ban Rom Klao Village, Namphang, Mae Charim Sub-District, Nan Province	2,653,871	0	2,653,871	AP = 1
		Total m^2	**21,093,849**	**47,534**	**21,141,383**	**AP = 124, UXO = 9**

D: Discussion/conclusion

The preliminary survey results identified the realistic scope of the landmine problem of the Ubonratchathani province as well as reliably a projection of the whole country's problem. The rough estimation of remaining confirmed hazardous areas (CHA) of Thailand may be about 13.5% of the existing SHAs. The findings also showed that there are some new identified confirmed hazardous areas located outside the existing suspected hazardous areas in present TMAC database, but the size is very small, 156,918 m^2 or around 0.1% of surveyed areas.

For the areas along Thai-Myanmar and Thai-Laos borders, NPA-HMAU 4's the "Part-Completion Initiative", a land release pilot project, carried out in 2013-2015 in the Northern region. The result was that 99.78% of SHAs were cancelled, when 0.22% of SHAs containing landmines or unexploded ordnance (UXO) were cleared.

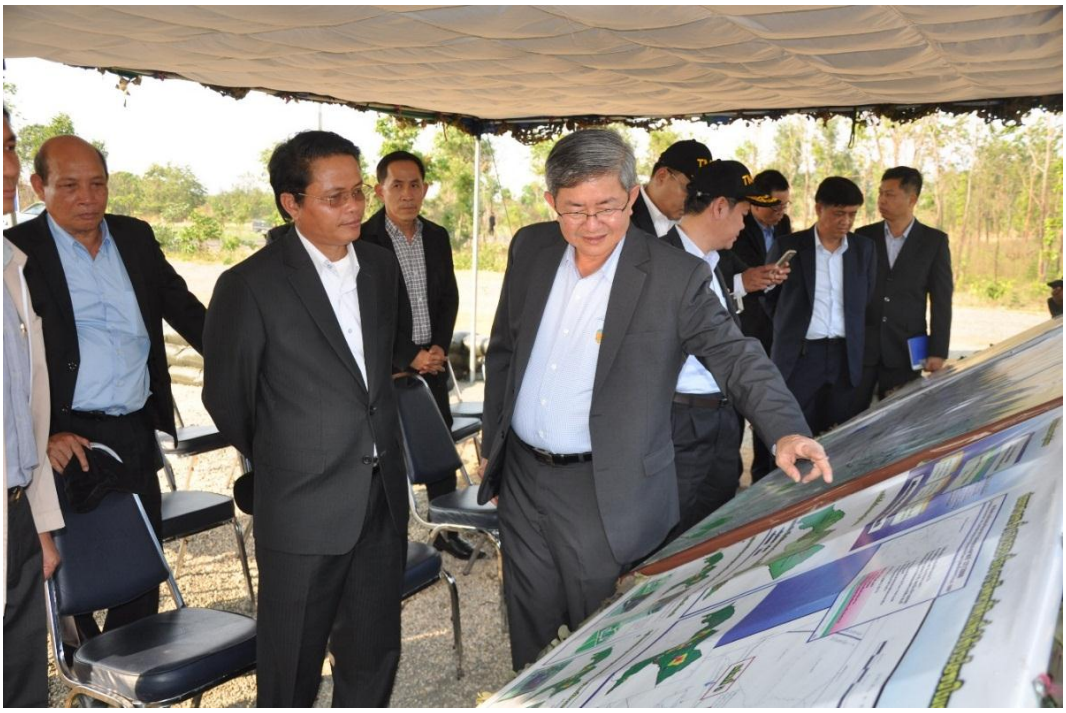
The findings clearly indicate that Thailand has a much smaller landmine problem than what was originally perceived. A complete evidence based survey in Thailand is likely to justify cancellation of as much as 80 - 90% of the remaining mine suspected areas, and in the areas bordering Myanmar and Lao PDR even up to 95 – 99% cancellation. Assuming this holds through for all current suspected hazardous areas it can be calculated with a fairly high probability that Thailand will be left with only around 40 km^2 of confirmed hazardous areas.

Based on existing data for TS and clearance operations in Thailand it is further calculated that the CHAs that are created from the pilot baseline survey might only need approximately 3 - 5 % of full clearance while the rest of the CHA will be released through TS. The amount of TS required for a CHA is in average estimated to be around 5 - 7%. This will bring the total need for TS and clearance down to around 8 - 12% of 40 km^2 or between 3,2 – 4,8 km^2 for the whole of Thailand's remaining landmine problem.

5. Activities and International Cooperation

CMAC Delegates visited TMAC to discuss possible cooperation 2-5 August 2016

Discussion on possible coordinated demining



TMAC visited to NRA Laos 18-22 July 2016

TMAC Director General attended the 15th Meeting of States Parties

Discussion during 15 MSP with Representatives from CMAA

NTS Training Cooperation with NPA and Local Official in Ubon Ratchathani

Discussion with Provincial Governor whose Province is affected by landmines

Vietnamese National Mine Action Center visited TMAC HQ

EOD Training with MARFORPAC

20 March – 9 April 2017

EOD Course with Personnel from Lao PDR and MARFORPAC

during 17 April – 6 May 2016

GICHD Official Visit to Thailand
during 13 – 15 December 2015

ISU’s visit to TMAC to provide advice for Thailand’s upcoming Extension Request during 13-15 March 2017