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UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

**The Convention on the Prohibition of the Use,
Stockpiling, Production and Transfer of Anti-Personnel
Mines and on Their Destruction**

Falklands Demining Programme Work Plan under Article (5)

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Introduction

1. Article 5(1) of the Ottawa Convention requires the UK to destroy all anti-personnel landmines in mined areas “*under its jurisdiction or control*”. On 29 March 2018, the UK submitted a request to the President of the Seventeenth Meeting of the States Parties to the Ottawa Convention for a second, five year, extension. This was granted and expires on 1 March 2024. This work plan sets out the clearance that has been carried out since submission of our extension request, and work expected to take place by the end of the Programme.

2. In summary, the UK has made significant progress in the clearance of the Falkland Islands and towards meeting its obligations under the Ottawa Convention. There is a funded programme in place to complete clearance. The programme continues to use the same methods and means of high quality land release processes and experienced contractors: the Demining Programme Office (DPO) under Fenix Insight Ltd provides quality assurance and SafeLane Global Ltd (SLG – formerly Dynasafe Bactec Ltd) conducts land release. We are on schedule to complete clearance well within the extended Convention deadline. Our aspiration is to complete by 30 December 2020, but this remains under review given the current COVID-19 pandemic and related restrictions.

Overview of progress

3. In our extension request, we reported that 40 suspected areas remained. The UK has now cleared 36 of these areas (see Annex A), including two areas within these that were not formally considered as mined but had been fenced off (Don Carlos Bay and Beatrice Cove), and two areas reported to contain booby traps. This clearance removed and destroyed 749 anti-personnel mines, 8 items of unexploded ordnance and released over 10,300,000 square metres of land. Of the 122 mined areas that existed in 2009, and as at 21 April 2020, only four remain to be cleared in the final phase of the Programme, all at Yorke Bay.

Technical survey outcomes

4. It was noted in the UK’s extension request and follow up reports to the Convention that nine mined areas on the Falklands had been subjected to technical survey in 2018. These nine sites at Yorke Bay were recognised as the most complex areas to be cleared, due to the difficult terrain and accessibility: wet ground with ponds containing organic material (dense vegetation, sand and mud), mines suspected to be buried under sand dunes of up to 10m in height, mines suspected to be in coves surrounded by rocks and sand dunes. Technical survey determined the most effective methods of clearance given the unique conditions of these minefields. The survey identified where block excavation down to the rock or clay layer could take place, suggesting a combination of techniques (mechanical and manual clearance where necessary) and types of equipment to use, including sifting buckets, dump trucks and screening machines. The survey also provided recommendations to factor in additional time to the programme to take into account the likelihood of high tides, flooded excavations, bogging in of heavy equipment and pausing of clearance work due to passing tourists.

Remaining clearance tasks

5. Yorke Bay is a beautiful natural landscape and its clearance is eagerly awaited by the Islanders. The remaining task areas comprise sandy beaches interspersed with rocky outcrops and backed by extensive dunes along the majority of its length. The challenges associated with Yorke Bay are both environmental and operational, including the presence of penguins (see Environmental Considerations section below) and the heightened risk of mine movement under the influence of wind, sand dynamics, watercourses and tidal action. Some minefields are located on the beach and others have been buried under sand dunes up to 10m in height, which have built up over thirty eight years.

6. There are also challenges with sand management at Yorke Bay including: ensuring that sand that has not yet been searched for landmines is kept separate from sand that has been cleared; preventing excavated sand blowing away in the strong winds; and the potential for morphological effects on the sand dune systems as a result of land clearance activities.

7. The 2017 Environmental Impact Assessment judged that there is potential for short-term impacts on the morphology of the sand dune systems. However, based on the land clearance methodology that will be used in these areas, the effects are not likely to be significant. This is because the method adopted will be a targeted lowering of the heights of the dunes.

8. The Land Release Contractor (LRC) is in close contact with the Head of Environmental Planning at the Falkland Islands Government to agree sand control methods to be delivered in this final phase. The requirement for sand remediation will be based on the following two objectives:

- no part of a sand dune will be left in an unstable condition which may lead to a collapse of sand into the excavated area. In such cases, a safe angle of repose shall be created. Trenches dug into the ground will be filled in post clearance and for quality control, to avoid people falling into them.
- Where it is reasonably practicable, excavated sand shall be placed or re-placed in a manner and location that allows a natural creation or reformation of sand dunes. So far as practically possible, this should be done concurrently within the clearance process.

9. It is suspected that many mines were washed off the beach by tidal action. However, incomplete records of previous clearances mean it may not be possible to reconcile what is found against the Argentine records. (See methodology to manage this risk below at paras 15 to 17).

10. The remaining four mined areas (an estimated total of 226,958 square metres) in Yorke Bay are contained within perimeter-marked and fenced areas, as required under Article 5(2) of the Convention. To date, there have been no civilian casualties and the clear marking will continue to mitigate against such an incident. Apart from the denial of access to the social amenity which will be alleviated by the clearance of Yorke Bay, there is no other impact. Hence, the Falkland Islands are considered to be 'mine-impact free'. The remaining mined areas pose negligible risk to civilians. In all phases of demining, safety is paramount. Environmental and community issues are also a high priority, and the project seeks to cause as little disruption to local residents and wildlife as possible. All demining efforts are conducted in close cooperation with the Falkland Islands Government.

Funding

11. In our last report, we noted that the total cost of the Programme was over £38million. Since 2018, we have sought additional financing to ensure the Programme will be fully funded through to completion. This will bring the total investment in Falklands Demining to £44million.

Work schedule

12. It was projected that clearance of the remaining mined areas on the Falklands would be cleared by 30 December 2020. However, we are checking this timescale with the LRC, DPO and FIG, in light of the impact of the response to the ongoing global pandemic caused by COVID-19. The Demining Programme was stood down on 26 March as part of temporary lockdown measures imposed by the Falkland Islands Government.

Risks to the Programme

13. The UK continues to work closely with the LRC and the DPO to formally assess and review risks associated with the final phase of demining, including commercial, health and safety and logistical factors. The major risks are:

- **Adverse weather conditions** on the Falkland Islands continue to pose a challenge to clearance and could impact the Programme's schedule. This is a particular risk with the remaining four minefields due to the nature of the terrain and the potential for water logging or flooding after rainfall. To mitigate this, the LRC redirects standing water to other areas using natural draining and pumps. In addition, these potential delays are factored into scheduling to ensure productivity is not impacted.
- Measures to contain **COVID-19** on the Falkland Islands has led to the temporary suspension of the demining programme. During the winter months on the Falklands, usual practice has been to stand down the Programme because of the potential risks to safety, quality and productivity. This is currently under review due to restrictions on travel which mean that demining staff must remain on the Islands, and the potential impact lockdown could have on delaying the work schedule. To reduce the potential impact of illnesses among staff, the LRC conducts regular health awareness checks.
- **Equipment:** Due to the challenging supply line to the Falkland Islands, a risk remains if key components of equipment break down. The LRC manages this risk by regularly replenishing their stock before exhaustion. This will be particularly challenging amid the backdrop of COVID-19. However, the LRC works closely with local companies and tradesmen when repairs are required to mitigate this risk.
- **Likelihood of further clearance tasks arising, or mine finds after programme completion:** This is a very low risk, but it remains a possibility as there is no complete record of mines laid on the Falkland Islands. All known and suspected minefields will have been cleared and our contractors have carried out thorough gap analysis work for further assurance. If a mine is found following the conclusion of the Demining Programme, it will be addressed by the Explosive Ordnance Disposal (EOD) team from the Royal Air Force Armament Engineering Flight on the Falkland Islands. In addition, the Island civilian population are aware of the risks of landmines, having grown up in their close proximity, and are instructed to follow a 'mark, leave, report' process on finding any unexploded ordnance.
- **Funding:** We are confident that all necessary funding will be in place to allow us to complete clearance, and will work to ensure that resourcing for the Programme remains a priority, even in the current climate.

Means used to release areas known or suspected to contain AP mines

14. IMAS standards are adapted to meet the specifics of the situation on the Falkland Islands to ensure that clearance work meets or exceeds those standards. The UK has followed the principles set out in IMAS 09.10 (Clearance Requirements) and is very conscious of the statement that "The beneficiaries of humanitarian demining programmes must be confident that cleared and released land is safe for their use. This requires management systems and clearance procedures which are appropriate, effective, efficient and safe." The UK and its contractors have used all reasonable effort to achieve the best practicable outcome. On the issue of post clearance safety, the UK continues to use the principles set out in UK

Health and Safety legislation to reduce the residual risk to As Low As Reasonably Practicable (ALARP) which is similar to the IMAS concept of 'all reasonable effort'¹.

15. For the remaining tasks on Yorke Bay, the process to reach ALARP has been modified to take into account its unique challenges as the environmental conditions mean it will not be practical to use the missing mine drill adopted in earlier phases. The LRC will deploy block clearance and excavation to the rock or clay layer. This will determine either that there is evidence that the mine that was laid no longer poses a threat or that the mine is missing. Once each excavation is complete, a detector search will be conducted over the newly exposed ground before sand is replaced.

16. If the total number of mines found at the end of the task, including any known to have been removed since 1982, does not match the number shown on the Argentinian record, the LRC and the DPO will assess whether all reasonable effort has been taken to locate or explain the missing mine(s). This will include an analysis assessing the most likely reason for the discrepancy.

17. There is evidence that mines have been washed into the sea and then moved by wind and tidal action along the seashore, sometimes coming to rest in rock outcrops. To reach ALARP for this specific issue, the entire shoreline and rock outcrops from the eastern end of the completed minefield SA004 to the western end of the restricted area behind the Yorke Bay fence under Gypsy Cove has been visually searched at low tide.

18. Given the movement of sand since 1982, the normal requirement of subjecting each mined area to battle area clearance (BAC) has been modified. Once all the clearances have been completed, a BAC search, using detectors on low setting, will be conducted over the entire area behind the Yorke Bay fence accessible on foot. The method chosen will reflect the nature of the ground and the type of explosive threat (landmines or unexploded ordnance).

19. Techniques have also been developed to cope with the varied conditions of rock screes, peat – both dry and very water-logged – mined areas laid at the edge of the sea, beach and sand dunes. With the passage of thirty eight years, some of the markings made when the mines were laid, and shown on the Argentine minefield records, have proven difficult to find. However, the LRC and DPO have developed methodology to analyse the ground, based on analysis of the Argentine method of laying mines, which gives a reliable basis for identifying the orientation of the minefield.

20. The LRC employs a range of equipment, which, whilst not unique to the Falkland Islands, is making an important impact on progress. Within Yorke Bay, the use of heavy mechanical assets such as bulldozers, excavators and sifting systems have been essential for safety, quality and productivity.

Environmental considerations

21. The Falkland Islands contain sensitive flora, fauna and fragile terrain requiring careful consideration prior to commencement of any clearance work. The main environmental considerations on Yorke Bay are resident breeding Magellanic penguins in the west, breeding and non-breeding Gentoo penguins located on the eastern extent of the site, mainland Tussac and the possibility of legally protected plant species.

¹ "All reasonable effort has been applied when the commitment of additional resources is considered to be unreasonable in relation to the results expected."

22. In our extension request, we reported on the mitigation principles the LRC deploy to reduce the potential impact of mine clearance on Magellanic penguins in task areas. The LRC has also agreed the following measures that are specific to Gentoo penguins, as recommended in the 2017 environmental impact assessment, to ensure impact is limited to the minimum practicable:

- not operating heavy plant within 50m of the colony;
- not operating lighter plant within 20m of the colony;
- manual procedures occurring no-closer than 6m to the colony;
- demining within 6m of a nesting site will occur out-of-season or once all chicks are sufficiently mobile to move away from activities (February onwards);
- work carried out in blocks providing free movement along the Gentoo highway at morning, noon, and at dusk, or increased intervals if large numbers of birds are queuing; and
- activities near loafing or moulting birds on the beach will be conducted in accordance with low-impact behaviour guidance.

23. These measures may impose some delays to task scheduling. To mitigate this risk, the LRC has factored this into task planning for the final phase of clearance and will schedule some work into the early winter period if practicable.

Oversight and Assurance

24. The Land Release Contractor (LRC) and the Demining Programme Office (DPO) have both worked on the Programme since Phase 1. This has allowed for continual improvements to the Programme, learning lessons from previous phases to increase performance and productivity. The LRC and DPO both undertake internal quality assurance and quality control for each clearance task, with the aim of achieving ALARP in each minefield and to reduce the possibility of non-conformities. The DPO is responsible for implementing the policies of the National Mine Action Authority (NMAA) and monitors land release activities on the Falkland Islands.

25. The NMAA regulates, manages and co-ordinates mine action on the Falkland Islands. The NMAA ensures that mine action is conducted in accordance with UK and Falkland Islands' legislation, and its approval is required to before cleared areas are declared competed. The NMAA is chaired by the Foreign and Commonwealth Office and comprises representatives of the FCO, MoD, the Falkland Islands Government (FIG) and the Programme's Strategic Advisor. It meets at least every six months. The LRC and DPO attend to brief the NMAA, as appropriate.

26. The Suspect Hazardous Area Land Release Committee (SHALARC) was formed after Phase 1. The SHALARC is based on the Falkland Islands and is not a decision making committee: it discusses land release processes and progress of the project are discussed. It provides an opportunity for the LRC and the DPO to discuss issues which may be of interest or concern to the Committee. It also provides an opportunity for the contractors to explain the approach being taken to ensure that any residual risk is reduced to as low as reasonably practicable and that the land subject to the land release process can be released for public use. The Committee comprises a wide range of local officials and a representative of the UK military.