The Continuing Need for Military Training
on Dartmoor

June 2005

RPS
Mallams Court
18 Milton Park
Abingdon
Oxon
OX14 4RP

Tel 01235 821888
Fax 01235 820351

Email rpsox@rpsgroup.com
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction and Background</td>
<td>1</td>
</tr>
<tr>
<td>2. The Demand for Light Force Training</td>
<td>7</td>
</tr>
<tr>
<td>3. The Training Resource</td>
<td>14</td>
</tr>
<tr>
<td>4. Reconciliation of Demand and Supply</td>
<td>26</td>
</tr>
<tr>
<td>5. Conclusions</td>
<td>33</td>
</tr>
<tr>
<td>6. Recommendation</td>
<td>35</td>
</tr>
</tbody>
</table>
Annexes (bound separately)

Annex 1.1   High Level Assumptions Paper
Annex 2.1   Generic 2 week Platoon Training Package
Annex 2.2   Generic 2 week Company C2 Training Package
Annex 2.3   Generic 3 week Company Tactical Training Package
Annex 2.4   Simplified Version of CUCTT
Annex 2.5   Ex Grand Prix
Annex 2.6   CTCRM Annual Training Requirement
Annex 3.1   Description of ATE
Annex 3.2   Location of Units and Major Training Areas
Annex 3.3   Dartmoor Training Area (DTA)
Annex 3.4   Kirkcudbright Training Area (KTA)
Annex 3.5   Otterburn Training Area (OTA)
Annex 3.6   Salisbury Plain Training Area (SPTA)
Annex 3.7   Sennybridge Training Area (SENTA)
Annex 3.8   Stanford Training Area (STANTA)
Annex 3.9   Training over Private Land (TOPL)
Annex 3.10  Excluded
Annex 3.11  Simulation
Annex 4.1   DGTS LWC Use of ATE - Directed Training
Annex 5     Glossary of Terms and Abbreviations
1. Introduction and Background

1.1 Dartmoor Training Area (DTA) comprises nearly 13,000 hectares of moorland within Dartmoor National Park. The topography, climate and management of the area have resulted in an upland landscape of open aspect with little cover from the elements and rapidly changing weather conditions. Accordingly, it provides facilities for arduous training in a natural environment on the UK training estate, within which the conditions and frictions of war can be experienced. It is prioritised for the training of light forces.

1.2 The majority of DTA is operated under licence from the Duchy of Cornwall. The present licence expires in 2012 and prior to its renewal the Secretary of State for Defence requires confirmation that there is a military need for its retention and that if it is to be retained, how this may best be achieved. The MoD must therefore demonstrate that:

i) There is a clear military need for both live firing and dry training on DTA; and

ii) The management of DTA for military activities will continue to be sensitive to the environmental issues, farming and public access, and is thus sustainable in the long term.

Aim

1.3 The aim of this report is twofold:

i) to consider the continuing need for military training on DTA; and

ii) to make recommendations.

Approach

1.4 The approach taken in this report is:

i) To define the demand for light forces training.

ii) To look at the resources that are available and could meet the identified training requirement, including Training over Private Land (TOPL), Simulation, Training Overseas and the acquisition of additional training land.

iii) To reconcile training demand with the resources which are both suitable and available.

iv) To draw conclusions.
v) To make recommendations.

Assumptions

A number of important assumptions underpin the assessments, conclusions and recommendations of this report, namely:

i) The implementation of the Future Army Structure (FAS);

ii) The concept of Super Garrisons;

iii) Developments on Collective Training

iv) The conclusions of the High Level Assumptions paper prepared by RPS;

v) The definition of light force units.

Future Army Structure (FAS)

The first assumption is that the FAS proposals will be implemented. Following the publication of the Defence White Paper in December 2003, proposals for re-balancing the Army were presented in the FAS. An update on the implementation of these proposals, particularly those regarding the re-structuring of the Infantry, was presented to Parliament by the Secretary of State for Defence on 16 December 2004. This re-balancing is underpinned by two complementary changes:

i) The move towards a more balanced force organised around two armoured brigades, three mechanised brigades, a light and an air assault brigade, in addition to the Royal Marines Commando Brigade (3 Cdo Bde); and

ii) A move towards making the Army more robust and resilient and able to sustain enduring expeditionary operations.

Specific measures include:

i) The re-roling of 4 Brigade from Armoured to Mechanised.

ii) The re-roling of 19 Brigade from Mechanised to Light.

iii) The Royal Armoured Corps (RAC) will reduce by seven Challenger 2 (CR2) Squadrons.

iv) An additional reconnaissance regiment will be formed providing each of the Armoured and Mechanised Brigades with its own reconnaissance regiment.

v) Armoured Regiments in Mechanised Brigades will have an interim ‘Light Squadron’ as the first step towards developing a medium armoured capability ahead of the introduction of the Future Rapid Effects System (FRES).
vi) The sixth AS90 Regiment will be re-roled to Light Gun in order to support 19 Brigade.

vii) An additional Regimental Headquarters and Engineer Squadron will be formed to support 3 Cdo Bde.

1.8 Changes to the Infantry reflect the move to larger, multi-battalion regiments, which will result in battalions fixed by role and largely by location. Within the framework of the regimental structure, this will be achieved by having regiments of more than one battalion and a reduction in the number of battalions from 40 to 36. This new structure is known as the Future Infantry Structure (FIS). The Director of Infantry’s Staff has confirmed that, despite this overall reduction, the number of Infantry Battalions based in the UK is likely to increase. This is partly because the Army Board aspires to having a UK based Army in the long term and assumes we would need to find basing locations for over 20,000 personnel returning from Germany prior to 2030. This report is based on Infantry Battalions and RM units outlined in the FAS implementation proposals.

**Super Garrisons**

1.9 The concept of Super Garrisons was introduced in the Strategy of the Army Estate (SAE) to meet the basing and estate challenges of an Army that is likely to be progressively UK based. This was followed by a paper whose purpose was to propose “an Army view of Super Garrisons and their possible locations to meet single Service and Defence estate needs and makes recommendations for subsequent work”. This paper recognises that whilst the Royal Marines (RM) are concentrated in the south-west, there are limited opportunities for single site Super Garrisons in the region. It proposes that further assistance should be provided to FLEET in their study to concentrate RM basing and suggests planning assumptions are required from DE, FLEET, DLO and Army in this respect.

**Developments on Collective Training**

1.10 The move to more regular commitments of UK armed forces (as highlighted in the Defence White Paper 2003) and FAS has required the consideration by the Army Board to prepare a ‘new approach to preparing force elements for contingent and

---

1 Army Board Meeting of 22 November 2001
2 ECAB/P(03)/20 dated 11 October 2003
3 ECAB/P(04)/13 dated 21 October 2004
enduring operations’. This paper considered that the present three-year Formation Readiness Cycle (FRC) would not be able to meet this requirement. In addition the term Collective Performance (CP) which linked performance with readiness states should be replaced by the concept of ‘Collective Training Competence (CTC)’ that resources all units and formations…to conduct a minimum level of collective training at an appropriate frequency’. This will guarantee a sound foundation from which forces could be drawn for specific eventualities and for high readiness. The value of training generically for ‘War’ to enable operational flexibility has been demonstrated by Op TELIC. In essence the approach now being developed is to create a training model that delivers a core competence level across the whole Army (training for War) and meets the requirement for specific operations (training for the War).

1.11 Performance will be measured by reference to new Collective Training (CT) activities aimed at meeting specific end states. Achievement of these end states will allow a collective training competence to be declared. Subsequent papers have developed and refined definitions for CT level, indicative frequency and the replacement to the FRC to be known as the Training and Readiness Model (TRM). ECAB and later work agrees that essential basic grounding in collective training skills (CT1 and CT2) should be conducted in a single Arm environment context within a 12 to 15 month frequency. Field training (CT3 to CT5) should occur within a 24-36 month frequency in a combined Arms context.

High Level Assumptions (HLA) Paper

1.12 Prior to the preparation of this report RPS prepared an HLA paper (Annex 1.1). The third assumption is that the key conclusions from this paper, which are listed below, will inform the content of this report:

i) The Armed Forces will be of a broadly similar size and shape until 2050 unless there is a significant change in Foreign Policy.

ii) The training requirement is likely to become more demanding on the training estate as the ranges and capabilities of weapons and equipment increases particularly with the introduction of FRES.

iii) Simulation will enhance but not provide a substitute for live fire tactical training.

---

4 ECAB/P(03) 2006 dated 19 November 2003
5 APRC/P(04)34 dated 8 October 2004
iv) The general size and shape of the training estate will not change significantly but it will increasingly need to take account of environmental considerations.

**Definition of Light Force Units**

1.13 The assumption of this report is that Director General Training Support (DGTS) will move towards directed training and that light force training is defined as dismounted training by:

i) 3 RM Commando units (including the Amphibious Force) and the Fleet Protection Group Royal Marines (FPGRM);

ii) 36 Infantry Battalions (including the required dismounted training activity mandated on armoured and mechanised Infantry units);

iii) Infantry skills training for other Combat Arms (CA) (Army Air Corp (AAC) and Royal Armoured Corp (RAC)), Combat Support (CS) and Combat Service Support Units (CSS);

iv) Commando Training Centre Royal Marines (CTCRM) included due to its close proximity to DTA; and

v) The RAF Regiment.

1.14 There will be additional demands for military training on DTA but for the purposes of this report no account has been taken of the training demand for the following organisations:

i) Other regionally based units from all three Services where DTA provides the nearest, most suitable and cost effective training resource;

ii) Reserves, who on a local basis routinely require access to training areas for training nights and weekends and who annually require training areas for fourteen day camps;

iii) Cadets;

*(The training requirements for (i), (ii) and (iii) are expected to continue in accordance with historic usage but that requirement is not mandated and cannot be reported upon. Training is locally based and tops up the core training requirements undertaken by light forces as defined in chapter .)*

iv) HQ ATRA units (Royal Military Academy Sandhurst (RMAS), Infantry Training Centre (ITC) and Arms Schools);

*(Training for these units is directed to specific training areas)*
v) Collective training at CT4 and CT5 levels (see para 2.3).

(*CT4 and CT5 level training is directed to specific training areas including overseas*)
2. The Demand for Light Force Training

Introduction

2.1 The overriding principle of Infantry training is that it must support the mission, which is ‘To defeat the enemy through close combat’. Dismounted close combat is core to the training ethos of the infantry, which is necessarily robust and focussed on warfighting. At an individual and collective level this means that the light forces must maintain those core skills needed to achieve the infantry mission when called upon to do so. Commanding Officers (CO) are therefore required to ensure that individuals pass the Individual Training Directives (ITD) (normally conducted on local training areas and ranges) and progress through collective special-to-arm training in battle shooting, combat fitness, navigation, fieldcraft and tactics. In addition, the CO must ensure that they are operationally capable and safe to move onto the next stage which is combined arms training and operations.

2.2 The purpose of this chapter is to:

i) Outline the mandated collective training (CT) end state that determine collective training competence and hence the demand for light force training;

ii) Provide details of the CT1, CT2 and CT3 requirements (and equivalent for CA/CS/CSS units and CTCRM), including length of training programmes and size of training area required. It should be noted that separate end states have now been defined for CA, Cs and CSS units;

iii) Quantify the overall light force training requirement in terms of sub unit training weeks;

iv) Provide a summary of the demand for live fire and dry tactical training.

CT End States

2.3 CTC will be met when the following end states are reached:

i) **CT1/CT2 – Combat Arms (CA)**: a sub-unit competent in its core skills, ready to group with other Arms for integrated field training in a tactical context

   **CT1- Combat Support (CS)**: a team, detachment, section, troop or platoon competent in its core skills, ready to group together for sub unit training.

   **Combat Service Support (CSS)** - a team, detachment, section, troop or platoon competent in its core skills, ready to group together for integrated sub unit training
CT2 – CA: see above. CS: a sub-unit competent in its core skills, ready to group with other Arms for integrated training in a tactical context. CSS: a sub-unit or task organised element competent in its core skills that is ready to group with other Arms / Services and CSS functions in a tactical context.

CT3 – CA: a sub unit competent to train and operate within a BG context. CS: Tactical Groups competent in special to Arm skills ready to integrate into BGs for training or operations. CSS: groupings integrated into BG echelons, competent in their provision of service support.

CT4 – CA: a task organised unit of BG competent to operate in a combined Arms formation context. CS: CS elements competent in role and integrated fully within a BG/formation context. CSS: fully integrated CSS from first to third line.

CT5 – CA/CS/CSS: a brigade prepared to conduct operations across the spectrum of defence planning assumptions.

CT1, CT2 & CT3 Requirements (and equivalent for CA/CS/CSS units and CTCRM)

CT1

2.4 CT1 training comprises 3 elements and must include each of the phases of war:

i) SUPPORT WEAPONS. Support weapons (snipers, mortars, reconnaissance, assault pioneers and Javelin) are allocated 3 weeks training to complete both specialist collective training and live firing practices. These activities are usually conducted concurrently with company training.

ii) FIRE TEAM TRAINING. Team training (half a rifle section i.e. 4 men) must, as a minimum, cover Live Fire Tactical Team training and battle shooting. Teams must ensure proficiency in basic fire and movement techniques before moving on to platoon training.

iii) PLATOON TRAINING. This is the building block of all infantry training. Commanders are encouraged to maximise the training of platoons in the light role as the basis for any training programme. This both improves skills and saves finite resources such as track miles or helicopter flying hours for more advanced training. HQ Infantry recommends that, for the infantry, at least 2 days of field training are allocated to each of the phases of war. Training periods need not all be sequential. A generic programme showing how this training might be compressed into a 2 week period is shown at Annex 2.1.
2.5 Company training must only be conducted on the completion of all phases of the platoon training detailed above, i.e. after achievement of CT1.

2.6 There are 3 stages to successfully training a company to CT2:

i) **COMMAND AND CONTROL (C2).** A company must be proficient in all phases of war. It is recommended that these skills are practised first in the classroom building up to map exercises followed by a Command Post Exercise (CPX). A generic training programme for a company to conduct C2 training is shown at Annex 2.2. The programme aims to both revise and expand on existing skills. Much of this programme can be achieved concurrently with the dry tactical training outlined below.

ii) **DRY TACTICAL TRAINING.** A company commander has to ensure that his company is proficient in all phases of war as a minimum before conducting combined arms (CA) training. Training periods need not all be sequential. A generic programme showing how this training might be achieved in a 3 week period is shown at Annex 2.3. The periods include all phases of war.

iii) **LIVE FIRE TACTICAL TRAINING.** This is conducted in line with Army Operational Shooting Pamphlet 2003. Each infantry company must conduct an Infantry Field Firing Camp (IFFC) annually in order to teach a soldier to shoot effectively on operations as part of a team and section.

2.7 Headquarters Infantry has quantified the resources required to deliver CP1 and CP2 level training to infantry units. This quantification remains valid for achieving the CT1 and CT2 end states. This requirements are specified as ‘The essential basic grounding in field skills that must be conducted annually in a single arm context as a minimum’. The end state of CT1 and CT2 training is that infantry companies are ready to group with other arms in a tactical context. The detailed break down of the mandated training to achieve CT1 and CT2 is set out in the Compendium of Unit Collective Training Tasks (CUCTT); a simplified version is at Annex 2.4. CUCTT will be replaced (pending further validation) by the Collective Training Implementation Plan (CTIP) which provides a 'list of generic and endorsed collective training definitions and resources associated with each activity in order to create a collective training programme for the post FAS era'. For the purposes of this paper CUCTT provides the most reliable data source for defining mandated training levels and is likely to be similar to CTIP.

---

6 APRC/P(04)34 dated 8 October 2004
CT3

2.8 The CUCTT includes a mandated 3-week training package to enable an Infantry Battalion to achieve CT3. Historically this has been completed, for light force units, as an Overseas Training Exercise (OTX). (known as Exercise Grand Prix, In the past this has usually been undertaken in Kenya, although increasing use is now being made of Belize for such training exercises. 2.9 A generic programme for Exercise Grand Prix is included at Annex 2.5. Excluding the preparation element unique for an OTX and the 2 week IFFC the exercise duration is of the order of 3 weeks.

2.9 CT3 must be achieved before an Infantry Battalion or sub-units can take its place, or take part in, a Combined Arms battle group exercise.

2.10 It is mandated that 10 light force Infantry Battalions should conduct CT3 exercises annually, 7 of which are undertaken overseas with an additional 3 exercises planned in the UK each year 7. In addition, 3 Cdo Bde undertake CT3 training from their ships on overseas exercises.

Infantry light force training for other Combat Arms (CA), Combat Support (CS) and Combat Service Support (CSS) Units

2.11 It is likely that, following lessons learnt from the Iraq War, a policy will be promulgated that all CS and CSS will be required to conduct Field Firing up to Section Level on an annual basis. The assumption is made that this Field Firing would be conducted in a sub unit framework, as the number of qualified instructors will be limited. Assuming an average of 4 sub units per unit and a total of 57 CA, CS and CSS units in the UK, this would lead to a new training demand of around 228 sub units requiring access to Field Firing facilities each year.

2.12 A one-week package would be required equivalent of Transition to Live Firing, Intermediate Battle Shooting Ranges (IBSR), Close Quarter Battle Ranges (CQBR), Pairs Fire and movement and section in defence. This requires an area similar to that for a platoon exercise.

Commando Training Centre Royal Marines (CTCRM)

2.13 CTCRM provide a wide range of courses to support the RM.

2.14 Recruit Courses last 32 weeks and are formed up every 2 weeks. Each course requires 2 weeks live fire tactical training and 2 weeks dry tactical training.

---

7 S02 OTX LWC
2.15 Other CTCRM courses only require limited live field fire facilities but have an annual requirement of about 10 weeks for dry tactical training. Details of the courses (numbers involved, duration, and land area required) are provided in Annex 2.6.

Units Required to Meet CT1, CT2 and CT3

2.16 All regular units (RM, Infantry Battalions, RAF Regiment) are mandated to achieve CT1 and CT2 (or the equivalent) annually; i.e. individual training and training at company or equivalent level. FAS states that there will be 36 Infantry Battalions based in the UK. In addition there are three RM units, one FPGRM and a single RAF Regiment, amounting to a total of 41 light force units, which are mandated to achieve CT1 and CT2. 10 light force units are required to reach CT3 – battalion level or higher each year.

Light Force Training Requirement (Sub Unit Training Weeks)

2.17 Light Force training can be expressed in sub unit training weeks as the majority of training is completed in a company context. A training week is defined as 5 days.

i) CT1 AND CT2 INFANTRY BATTALIONS, RM (including FPG) and RAF

The Director of Infantry's Staff require 4 weeks dry and live training to be undertaken in order to achieve CT1 and CT2. How this package is put together depends very much on the circumstances and commitments of the unit concerned. Ideally this 4 week training package would be conducted by the Battalion at one training area so that an efficient use could be made of training resources. It could be that circumstances will compel the package to be split in time, or indeed between different training areas. Headquarters Infantry has confirmed that it would be possible to break the requirement into three packages: Platoon and Company Command and Control, Company Tactical Training and specialist platoon training, and Company Field Firing.

The specific requirement for each of these training packages would be as follows. Details of duration, frequency, land area and facilities are included in Annex 2.4 (extract from CUCTT).

i) Support Weapons Platoons - 3 weeks specialist collective training and live firing: – concurrent with CT2 training.

ii) Rifle Platoon Training – 2 weeks minimum which would be conducted in a Company context and probably as part of a Battalion exercise in order to provide the administrative back up and training support in
order to maximise the training benefit. Within the framework of a company this would require 328 weeks (41 battalions x 4 companies x 2 weeks) sub unit training dry tactical training weeks with enough land to support the entire company (3 x 900 hectares = 2700 hectares).

iii) Company Command and Control Training - 2 weeks probably conducted concurrently with Rifle Platoon Training.

iv) Company Tactical Training - 2 weeks as part of a Battalion package - 328 sub unit training weeks (41 battalions x 4 companies x 2 weeks) within an area sufficient to support tactical training for four companies (4 x 900 hectares = 3600 hectares).

v) Each 1 week company IFFC would require access to a field firing area which would provide for at least 3 movement boxes - 164 sub unit field firing training week (41 battalions x 4 companies x 1 week) on 4500 hectares (5 x 900 hectares).

ii) **CT3 INFANTRY BATTALION AND RM TRAINING REQUIREMENT**

Using Ex Grand Prix as the template, CT3 exercises will involve 3 weeks of tactical training across 9000 hectares. For three battalions this would amount to an additional 36 sub unit tactical training weeks (4 companies per battalion on 3-week exercise) on 9000 hectares.

iii) **CTCRM:**

i) 23 sub unit (company) x tactical (dry) 2- week training package

ii) 23 sub unit (company) x live firing 2-week training package

iv) **CA/CS/CSS UNITS:**

i) 228 sub unit (section within company framework) x one-week live fire training package.

2.18 If these sub unit training weeks are not met then CT2 and CT3 mandated training objectives for RM and Infantry Battalions, CTCRM output and mandated infantry training for CA, CS and CSS will not be achieved. Military capability will therefore be at risk.
Summary

2.19 The overall demand for light force training, as defined in 1.13, will be:

i) 810 sub unit weeks for dry tactical training;

ii) 438 sub unit weeks for live fire tactical training.

2.20 This calculation is set out in Table 1 below.

Table 1: Demand for Light Force Training

<table>
<thead>
<tr>
<th>Minimum Requirement</th>
<th>Annual Sub Unit Training Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Weeks</td>
</tr>
<tr>
<td>Platoon Rifle (including Company C2)</td>
<td>2</td>
</tr>
<tr>
<td>Company Tactical (including Specialist Platoon Support)</td>
<td>2</td>
</tr>
<tr>
<td>Company IFFC</td>
<td>1</td>
</tr>
<tr>
<td>Battalion</td>
<td>3</td>
</tr>
<tr>
<td>CTCRM</td>
<td>2</td>
</tr>
<tr>
<td>CA/CS/CSS</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>
3. **The Training Resource**

**Introduction**

3.1 The purpose of this chapter is to assess the suitability and availability of the training resource to meet the training demand identified in Chapter 2 and to reach a conclusion as to how this demand can best be met. This resource can be divided into the following categories and each is examined in turn:

i) Army Training Estate land owned, leased or licensed by the MoD;
ii) Training on Private Land (TOPL);
iii) Overseas training facilities;
iv) Simulation or Synthetic training resources;
v) New training land.

3.2 This land holding and other resources are retained solely to facilitate the delivery of military capability.

3.3 The existing size of these land and training resources are invariably based on legacy decisions and agreements founded upon historical training requirements. Changes in equipment, technology, tactics and emerging military threats together with increasing environmental considerations therefore necessitate a constant review of the demands on the training estate based on both suitability and availability.

**Army Training Estate (ATE)**

3.4 The most important element of the training resource is rural training land comprising the ATE. The UK Armed Forces are the primary users of the ATE but it is also used for weapons development and testing and by foreign forces and the police.

3.5 The ATE is responsible for the management of the majority (96%) of the UK training estate and is controlled and funded directly by DGTS who reports to Commander Field Army (Comd Fd Army).

3.6 The ATE is held in a number of ways:

i) **Freehold** land, which provides the bulk of the training resource;

ii) **Leased** land, which is used and managed by the MoD but belongs to a third party;

iii) **Licenced** land, which is used by the MoD, normally on a long-term basis, but where the MoD generally has few land management responsibilities. On licensed land the time available for training or the number of personnel
allowed to train at any one time is often limited as part of the license agreement.

3.7 ATE comprises 10 regions, which provide facilities for the training of all units and formations in the UK. The ATE provide users with a broad spectrum of training facilities, allowing both live fire and dry tactical training to be practised in conditions as close as possible to the reality of high intensity war fighting.

Suitability & Availability of ATE Land

3.8 The suitability and availability of training land whether owned, leased or licensed is constrained by environmental, seasonal and other factors. These factors increasingly impose real constraints upon utility by imposing thresholds on training activity and therefore the achievement of military capability. For example, Salisbury Plain Training Area (SPTA) is required to limit training to the extent that the percentage of bare ground should not exceed 4% of the land area in any training sub-compartment that is designated as a candidate Special Area of Conservation year on year, in order to protect internationally important flora (2004 Undertaking); live firing of artillery at Otterburn Training Area (OTA) is limited to 55 days per annum to reduce disturbance (2001 Undertaking) and live firing on all three ranges at DTA is limited to allow for public access.

3.9 DETRS 2004 identified five factors, which could affect suitability and availability:

i) Environment: within the MoD rural estate in the UK there are currently 196 Sites of Special Scientific Interest (SSSI). There is a MoD/Government agreed target to seek to improve the condition of these SSSIs to 95% favourable or unfavourable recovering by 2010, with an interim target of 68% by 2006. The estate also includes a significant number of Scheduled Monuments. In addition, approximately 30% of training land lies within the National Parks of England, Scotland and Wales, which act as the Planning Authority. The MoD is committed to achieving the Government’s targets for introducing Environmental Management Systems (EMS) across the rural defence estate. This commitment to sustainable management will be delivered through appropriate Integrated Rural Management Plans (IRMPs), Integrated Land Management Plans (ILMPs) and the EMS programme. The continued pressure to manage the rural estate in a sustainable way, together with increased emphasis on public access, will erode the utility and lower the capacity of key training areas within the UK.

---

8 The Defence Estate Training Review Study (DETRS) 2004

ii) **Legislation:** As a result of pressure to increase the quantity and quality of public access to the MoD estate, many training areas and ranges have restrictions that affect live firing activities and opening hours. These are administered under the Military Byelaws and other legal undertakings. There is particular pressure for public access to training facilities located within National Parks and those affected by the Countryside & Rights of Way (CROW) Act 2000 and the Land Reform (Scotland) Act 2003. There is also increasing concern over noise levels and future legislation may have an impact on military training activities over some areas of the UK.

iii) **Size and Shape:** In the UK there is no single training area of sufficient size to accommodate large formation exercises. Only SP can support armoured manoeuvre training, but numerous restrictions apply, realistically limiting its capacity to one battle group and an Opposing Force (OPFOR). In addition, environmental constraints can preclude the use of SP for these activities during wet weather. Large formation exercises on other training areas can be enhanced by the use of TOPL, although this is likely to be subject to constraints particularly with regard to live fire tactical training.

iv) **Physical Features and Facilities:** The make up of the rural training estate throughout the UK varies depending upon the geographical location in which it exists. Each area is therefore better suited for certain types of training. The type of training that land can support is dependent on a number of factors which include location, topography, climate, soil sub structure, terrain, vegetation and density of afforestation.

v) **Contractual Factors:** There are a number of contracts in place that impact on the availability of MoD owned land for training in the UK, including commitments to organisations such as QinetiQ and Dstl. In addition, the terms of leases and licences between MoD and other landowners and tenancy agreements between MoD and its agricultural tenants may affect the utility of land for military training.

3.10 There are other factors that can be added to this list, including, for example, economic issues and unforeseeable occurrences such as foot and mouth disease. Together, they will interact to determine the suitability and availability of the ATE to meet the identified training demand. Balancing the need to train in a sustainable manner against the increasing demands upon a finite resource is a complex matter.

---

RPS
June 2005

Continuing Need for MTOD
Suitability of Major Training Areas on ATE

3.11 The light force training demand identified in Chapter 2 requires certain resource requirements in order to satisfy the training needs. These primarily relate to the size of the training area and the nature of facilities that are provided. For the Infantry and the Royal Marines the minimum areas required in order to achieve the respective Collective Training levels, set out in Annex 2.4, are as follows:

i) **CT2**: Company level live and dry tactical training: 4500 hectares

ii) **CT3**: Battalion level tactical dry tactical training: 9000 hectares

iii) **CS and CSS section attack and section in defence**: 900 hectares

together with an array of facilities (fixed ranges, built-up areas, accommodation etc.) and a mixture of terrain (open & complex, urban, woodland, mountain etc.) and climate (temperate, arid, cold).

3.12 The major training areas within the ATE are listed in Annex 3.1. Their suitability to meet a specific training requirement is determined by:

i) **Location**: proximity to those units that need to use that resource;

ii) **Physical Features**: required to provide the diversity and testing environment within which to train;

iii) **Size and Shape**: to meet the safety requirements of weapons and tactical options for the activities and the ability of the environment to undergo the activity sustainably;

iv) **Facilities**: from fixed ranges to field firing areas and supporting infrastructure (accommodation etc).

3.13 The light force training requirements for Infantry Battalions, RM and RAF, CTCRM Troop courses and CA/CS/CSS units are set out against each of these generic factors in Table 2 below.
### Table 2: Light Force Training Resource Requirements

<table>
<thead>
<tr>
<th>Unit</th>
<th>Type</th>
<th>Travel Time between Infantry Unit &amp; Training Area</th>
<th>Natural Physical Features</th>
<th>Fixed Ranges</th>
<th>Field Firing Facilities</th>
<th>Size (ha) (See Annex 2.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infantry Battalions Royal Marines, RAF</td>
<td>Platoon (CP1)</td>
<td>2 hours travel time</td>
<td>Fixed ranges</td>
<td>Yes</td>
<td>No</td>
<td>900</td>
</tr>
<tr>
<td>Company C&amp;C</td>
<td></td>
<td>2 hours travel time</td>
<td>Fixed ranges</td>
<td>Yes</td>
<td>No</td>
<td>100 plus long insertion</td>
</tr>
<tr>
<td>Company FTX</td>
<td></td>
<td>2 - 4 hours travelling time</td>
<td>Variable &amp; demanding</td>
<td>Yes</td>
<td>No</td>
<td>3000</td>
</tr>
<tr>
<td>Company IFFC (CP2)</td>
<td></td>
<td>2 - 4 hours travelling time</td>
<td>Variable &amp; demanding</td>
<td>Yes</td>
<td>Yes</td>
<td>4500</td>
</tr>
<tr>
<td>Battalion (CP3)</td>
<td></td>
<td>4 - 8 hours travelling time</td>
<td>Variable &amp; demanding</td>
<td>No</td>
<td>No</td>
<td>9000</td>
</tr>
<tr>
<td><strong>CTCRM Recruit Courses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre FFX</td>
<td></td>
<td>2 hours travel time</td>
<td>Variable &amp; demanding</td>
<td>Yes</td>
<td>No</td>
<td>3000</td>
</tr>
<tr>
<td>FFX</td>
<td></td>
<td>2 hours travel time</td>
<td>Variable &amp; demanding</td>
<td>Yes</td>
<td>Yes</td>
<td>3000</td>
</tr>
<tr>
<td>FTX</td>
<td></td>
<td>2 hours travel time</td>
<td>Variable &amp; demanding</td>
<td>Yes</td>
<td>No</td>
<td>3000</td>
</tr>
<tr>
<td><strong>CS &amp;CSS Units</strong></td>
<td>Section Attack</td>
<td>2 - 4 hours travelling time</td>
<td>Open</td>
<td>Yes</td>
<td>Yes</td>
<td>900</td>
</tr>
</tbody>
</table>

3.14 Table 3 then assesses the suitability of each of the major ATE training areas to meet these requirements.
Table 3: Suitability of Major Training Areas for CP1, CP2 & CP3 Training

<table>
<thead>
<tr>
<th></th>
<th>Infantry Units within 80 mile radius</th>
<th>Natural Physical Features (Variable &amp; demanding)</th>
<th>Fixed Ranges</th>
<th>Field Firing Facilities</th>
<th>Size (Hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldershot</td>
<td>12</td>
<td>No</td>
<td>Yes</td>
<td>Limited</td>
<td>6570</td>
</tr>
<tr>
<td>Bovington/Lulworth</td>
<td>12</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>1062/3057</td>
</tr>
<tr>
<td>Castlemartin Range</td>
<td>2</td>
<td>No</td>
<td>Limited</td>
<td>No</td>
<td>2428</td>
</tr>
<tr>
<td>Catterick</td>
<td>10</td>
<td>Yes</td>
<td>Limited</td>
<td>No (Section only)</td>
<td>7870</td>
</tr>
<tr>
<td>Cinque Ports</td>
<td>12</td>
<td>No</td>
<td>Limited</td>
<td>No</td>
<td>1336 – ranges 3993 - dry</td>
</tr>
<tr>
<td>Dartmoor</td>
<td>5</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>13040</td>
</tr>
<tr>
<td>Kirkcudbright</td>
<td>4</td>
<td>Limited</td>
<td>Yes</td>
<td>Yes</td>
<td>1900</td>
</tr>
<tr>
<td>Otterburn</td>
<td>7</td>
<td>Yes</td>
<td>Yes (2006 onwards)</td>
<td>Yes</td>
<td>24119</td>
</tr>
<tr>
<td>Salisbury Plain</td>
<td>15</td>
<td>Limited</td>
<td>Yes</td>
<td>Yes</td>
<td>38200</td>
</tr>
<tr>
<td>Sennybridge</td>
<td>7</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>14974</td>
</tr>
<tr>
<td>Stanford</td>
<td>5</td>
<td>Limited</td>
<td>Yes</td>
<td>Yes</td>
<td>12150</td>
</tr>
<tr>
<td>Warcop</td>
<td>10</td>
<td>Limited</td>
<td>Yes</td>
<td>No (Platoon only)</td>
<td>9550</td>
</tr>
</tbody>
</table>

**Key**

- [ ] Meets all requirements
- [ ] Meets requirements in part
3.15 This assessment shows that only six of these major training areas are suitable in terms of physical features, size and facilities to meet these requirements in full or in part. These are:

i) Dartmoor Training Area (DTA)

ii) Kirkcudbright Training Area (KTA)

iii) Otterburn Training Area (OTA)

iv) Salisbury Plain (SP)

v) Sennybridge Training Area (SENTA)

vi) Stanford Training Area (STANTA)

3.16 Annex 3.2 shows the locations of the 41 Infantry Battalions / RM units and their proximity to each of these six training areas. This demonstrates that each one (except KTA) is located within an 80 mile radius from at least 5 of the 41 units and is therefore consistent with ‘Directed Training’ as expressed by DGTS (see Annex 4.1).

**Availability of major training areas on ATE**

3.17 Availability is derived from:

i) **Priority**: as set out in LANDSO 1406;

ii) **Disruption**: through needs for surge and pre operational training; and

iii) **Limitations to CT1 and CT2 (or equivalent) training**: arising from legal commitments, environmental management and present use.

3.18 Having identified six of the major training areas as being suitable to meet the training demand, a more detailed assessment of each was undertaken (see Annexes 3.3 to 3.8 inclusive). This includes an evaluation of availability for light force training after prioritised training requirements have been taken into account together with long term limitations such as non firing days. This evaluation is based upon discussions with the individual training area Commandants. The results are summarised in the Table 4 below.
Table 4: Training Availability

<table>
<thead>
<tr>
<th>Training Area</th>
<th>Priority *</th>
<th>Disruption</th>
<th>Limitation to CP1, CP2 (or equivalent) light force training</th>
<th>Available Sub Unit Training Weeks ** (concurrent live and dry training)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dry</td>
</tr>
<tr>
<td>DTA</td>
<td>CTCRM</td>
<td>Low</td>
<td>Non firing days: Okehampton – 240 days Merrivale – 180 days Willsworthy – 120 days</td>
<td>472</td>
</tr>
<tr>
<td>KTA (excluding TOPL)</td>
<td>EPORT (Trg for units based in NI) Trials</td>
<td>Low</td>
<td>Trials – 72 days I Coy Accom. Proximity to NI</td>
<td>0</td>
</tr>
<tr>
<td>OTA</td>
<td>Bde Ex Artillery Schools (e.g. AAC)</td>
<td>Low</td>
<td>AS90/MLRS – 55 days Non Firing – 70 days Apache – 84 days JFACTSU – 24 days</td>
<td>48</td>
</tr>
<tr>
<td>SENTA</td>
<td>LF Bde Ex IBS / RMAS / RM Phase 3</td>
<td>High</td>
<td>Low Priority High use for OPTAG and IBS</td>
<td>0</td>
</tr>
<tr>
<td>SP</td>
<td>Trials/ TESEX Arms Schools LWS</td>
<td>High</td>
<td>No Coy Specific Accom. Low Priority (22/26) High use for CT3 &amp; 4, TESEX and OPTAG (individual &amp; collective)</td>
<td>0</td>
</tr>
<tr>
<td>STANTA</td>
<td>Low Intensity OPTAG LF Bde Ex</td>
<td>High</td>
<td>Non Firing – 42 days Increasing use by 16 Bde</td>
<td>152</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>**672</td>
</tr>
</tbody>
</table>

* Priority 1 (Pre-Operational Training) will take precedence over these priorities as directed.

** This represents a maximum availability but due to use of part weeks by existing priority users, adequate blocks of training may not be available to meet CP1, CP2 or CP3 requirements.

TOPL

3.19 The MoD makes extensive use of privately owned land to supplement its own rural estate. TOPL takes place across the whole of the UK through a variety of different agreements, which are characteristically short term in nature. It is used for everything from sniper ranges to Adventurous Training (AT) and on occasions the use of tracked vehicles, parachute landings and river crossings. The availability of TOPL for live firing and tracked vehicles is however considered exceptional and by far the greatest use of TOPL is for Tactical Exercises without Troops (TEWT) and ‘walkover’ rights.

3.20 Significant numbers of TOPL exercises take place within National Parks (NP). In Wales, over 80% of TOPL is conducted in NPs, amounting to some 200,000 man training days (MTDs) in 2003. TOPL is therefore faced with the same training issues as those relating to the ATE where it is located in NPs.
3.21 In this respect the DETRS report concluded that “…the main pressure for the removal of training from NPs is focused on live firing and danger areas, as our use of them for these purposes precludes access for the public. It is not anticipated that we would be able to re-provide these by the use of TOPL, except in some remote areas of Scotland…It is considered that the greater the reliance that is placed upon TOPL then the higher the price that will have to be paid. In the longer term however there would be no guarantee that there would be security of tenure”. In addition, the restrictions that may be placed on the use of TOPL under the CROW Act and the inability to pursue byelaws to facilitate live firing impedes its use for military training activities.

3.22 Annex 3.9 provides an assessment of the value of TOPL to training in general. This shows that it should be regarded as a limited resource to meet the identified light force training needs due to:

i) Landowner’s activities – farming, lambing or game shooting and landowner imposed limits that restrict the number of day’s usage and/or the type of use (i.e. often not allowing use of blanks and rarely the use of live ammunition) and other seasonal restrictions;

ii) Environmental restrictions – much of the land carries similar environmental status as the ATE and may also be subject to linear or area public access;

iii) Planning restrictions which may stipulate that such uses should not extend to more than 28 days per annum unless planning consent is granted;

iv) Lack of security - since most agreements are short term there is the potential loss of a resource at short notice (e.g.. withdrawal of TOPL in response to hunting legislation).

**Overseas Training (OTX) Facilities**

3.23 The MoD has access to some large overseas training areas used under agreements negotiated with host governments. LWC has completed a review of such training opportunities and the demand for OTX Training. This is attached at Annex 3.10. CT1 and CT2 training, for UK based units, does not take place overseas for logistical and financial reasons.

3.24 LWC now require 2 rather than 3 light forces Collective Training exercises each year. Light forces training at battlegroup level will in future be focused on Kenya and Belize, although there are political constraints to training in Africa. In addition LWC has retained the ability to use Wainwright in Canada on a ‘pay as you train’ basis, supported from British Army Training Unit Suffield (BATUS). The intention is that 7 light roled infantry battalions will achieve CP3 overseas each year. Armoured and
Armoured Infantry Battlegroups will continue to use BATUS where the space, targetry and simulation equipment offer a unique combination. Whilst the Army Board aspires to a UK based army, MoD policy on the return of troops from Germany has not yet been defined and as long as substantial numbers are stationed there, the UK will need to retain access to training areas in Germany and Poland. Formation and logistic brigades will in future train in the UK and Poland. In addition to this overseas requirement there will be a need for up to 3 light roled infantry battalions to achieve CP3 in the UK annually.

3.25 FLEET see a continued need to train overseas to meet the amphibious training requirement and to satisfy the RM need to operate in different climates and environments.

3.26 The main criteria to be assessed with regard to overseas training exercises for light forces relate to availability, certainty and cost. BATUS is the main overseas resource but is prioritised for armoured training and Kenya is politically sensitive and therefore does not provide the required degree of certainty. In all cases the costs associated with overseas exercises are very high and therefore cannot be justified as a viable alternative to light force training within the UK.

3.27 In conclusion, to quote from the Estate Strategy, “Overseas training facilities are essential, particularly for joint force training, but cannot replace UK-based training and are significantly more expensive”\(^{10}\). It is therefore not a viable alternative to meet the light force training demand set out in this report.

**Simulation or Synthetic Training Resource**

3.28 Simulator-based training can make a contribution to the achievement of training objectives and is used by the MoD to complement other forms of training. This is driven by many factors, including the pressure on finite training resources; improvements in realism; the need to enhance the quality and timeliness of training and the introduction of the digital battlefield. Annex 3.11 provides a summary of current and future developments in simulation.

3.29 DETRS defined three discrete categories of simulation:

i) **Constructive simulation** such as the Combined Arms Staff Trainer (CAST) where commanders manoeuvre simulated units within a simulated environment;

ii) **Virtual simulation** such as the Combined Arms Tactical Trainer (CATT) where real people operate within a simulated environment using simulated equipment and simulated effects; and

iii) **Live simulation** such as Tactical Engagement Simulation (TES) where real people operate in a real environment with real equipment, but with simulated effects.

3.30 However, simulation cannot be regarded as a replacement for live fire tactical training using the training estate. Indeed TES requires the training estate to facilitate use of the simulation. Simulation complements the training process allowing armed forces to be at a higher level of competency when undertaking a specific tactical or live exercise. There is no substitute for live fire tactical training and consequently it is not foreseen that simulation will have a significant impact on the requirement for the training estate in the foreseeable future.

3.31 In conclusion, it can be seen that whilst simulation can complement other training exercises it “falls well short of the realism provided by field training” \(^{11}\) and cannot provide a substitute for live fire tactical training or produce realistic and challenging conditions which reflect the frictions of war particularly essential to the training of light forces.

**New Training Land**

3.32 An additional training resource is available through the purchase of new training land. However, notwithstanding financial considerations, the need to satisfy the military training suitability criteria (location, physical features, size and shape, facilities) listed in 3.12 and the need to overcome associated environmental, social and economic factors associated with the acquisition of a substantial new training area within the UK, MoD policy clearly states that the rural estate should be no larger than is necessary and that “*We do not envisage any future major acquisitions of training land*” \(^{12}\).

3.33 An adherence to this policy was illustrated by the recent MoD decision not to authorise the purchase of additional land to form an extension of the SPTA.

---

\(^{11}\) Ibid. 2, page 12

\(^{12}\) Ibid. 2, page 31
Conclusion

3.34 An assessment of the training resource available to meet the identified light force training demand demonstrates the inadequacy of the following options:

i) TOPL is limited by landowner activities and restrictions, environmental restrictions, planning restrictions and low security of tenure. In addition, the CROW legislation may limit its potential for live firing further.

ii) OTX offer limited availability due to extant training priorities and/or uncertainty due to political considerations and are significantly more expensive than UK-based training facilities.

iii) Simulation based training complements other training exercises but cannot provide a substitute for “live” tactical training or produce conditions that reflect the frictions of war.

iv) Current MoD policy, articulated in the Strategy for the Defence Estate, restricts the potential acquisition of major new areas of training land.

3.35 The only resource capable of meeting the light force training requirements is therefore the ATE and in particular the six major training areas listed at 3.15, which have the necessary spatial and physical attributes. The reconciliation of their availability against the identified light force training demand is undertaken in the next chapter.
4. Reconciliation of Demand and Supply

Introduction

4.1 The demand for light force training for those units listed at 1.11 has been identified in Chapter 2 and in total produces a requirement for 810 sub unit weeks for dry tactical training and 438 sub unit weeks for live fire tactical training. Chapter 3 has concluded that only 6 of the major ATE training areas are capable of meeting the majority of training requirements.

4.2 This chapter reconciles the identified demand against the available resource at these six training areas, taking account of agreed prioritisation and long term limitations.

Background

4.3 Several studies have considered the overall requirement for training land to enable the MoD to deliver military capability. These include LANDREST, SPATE, DE (Report of the Rural Elements of the Estate Strategy (REES) project) and DETRS. These studies have consistently shown that the demand for training land exceeds supply. The 2003 DE REES report also proposed a means to manage this requirement in the long term (in order to meet an objective set in the Estate Strategy 2000 – In Trust and On Trust). The DETRS study made specific conclusions indicating that Operations in Built-Up Areas (OBUA) villages, CQBR, IBSR, anti-tank ranges and some small arms ranges are in short supply. This was supported by low priority users reporting problems in booking facilities.

4.4 Against this background MoD has developed a booking system based upon nationally defined prioritisation, which seeks to ensure the availability of the ‘best fit’ training resource to the highest priority user. However, this means that availability on some training areas may be limited to lower priority users, even where their specific training requirements can be matched. Implementation of the DE’s REES report cascades this booking system down to management of training demand at individual ATEs. Together with recent commitments to implementing more ‘Directed Training’ (see Annex 4.1) the MoD is already developing an improved management system to allow better matching of a scarce training resource to those units which have the highest priority, although this can only achieve a certain increase in efficiency.
Estimating the Demand and Supply Equation

4.5 Against the identified demand outlined in Chapter 2, the supply of training facilities available on the 6 major ATE training areas is as follows.

**DTA**

4.6 DTA is prioritised for the training of light forces, helicopter and dismounted exercises. It comprises 3 individual training areas on the north moor at Okehampton, Merrivale and Willsworthy and 2 dry training areas at Cramber and Ringmoor, to the south of Princetown. These areas provide the facilities required to carry out all stages of training for light forces from initial grouping practices to the most advanced forms of team battle shooting.

4.7 DTA can support light force dry tactical training up to battalion level and live fire tactical training up to company level on Okehampton (2 companies concurrently) and Merrivale (1 company) and platoon level on Willsworthy.

4.8 DTA provides an important resource to CTCRM based at Lympstone and consequently central to the annual DTA training programme is the 2 weekly throughput of CTCRM recruit troops completing their live fire and dry tactical training packages. Other high priority users include infantry units, CINCFLF, RMAS, BRNC, FOST and RM (3 Co Bde), although light force training by RM is variable according to specific deployments. However, an analysis of supply shows that if the RM training is to take place primarily on overseas exercises. DTA is the only training area that is both suitable and available for CT3 light force battalion level exercises, where all phases of combat can be practiced.

**KTA**

4.9 KTA is the smallest of the 6 training areas assessed and can only offer training to battalion level if the nearby TOPL facilities at the Galloway Forest (50kms to west) and at Dalbeattie (15kms to east) are utilised. However, co-ordinated booking of training activities can be problematic since these TOPL facilities are not administered by KTA but have to be booked independently. Using the sea danger it can accommodate one ITTC.

4.10 KTA is prioritised for field firing and for the training of units on operational tours of Northern Ireland (EPORT). The facilities are readily accessible for EPORT exercises and consequently KTA is currently utilised for around 26 weeks of the year for this training. Following FAS this will be replaced, in part, by 19 Brigade when re-roled as a light unit. It is also used regularly for trials which utilise the whole training area for one week every month. Whilst KTA is the main field firing training area in Scotland, only
one IFFC can run at any one time. In addition there is sufficient camp accommodation for only a single company providing no accommodation for safety staff. There is potential availability for additional light force training at KTA, which under directed training would predominantly be utilised by infantry units in northern England and Scotland. The topography of predominantly lowland grassland does not fully provide the necessary arduous or varied natural training conditions.

**OTA**

4.11 OTA is prioritised for Artillery live firing (AS90 and MLRS), Apache pilot qualification courses, fighter ground attack training (JFACTSU), together with the training of infantry recruits from the Infantry Training Centre at Catterick and Army Foundation College (AFC) at Harrogate. A maximum of 3 live company level exercises can be undertaken at any one time together with 2 additional company level dry training areas. When artillery, Apache and fighter ground attack are live firing, around 66% of the training area is out of bounds for other uses. There are no FIBUA facilities and no off road training for vehicles. OTA can house 2 battalions in camped accommodation.

4.12 OTA prioritised training is not significantly disrupted by pre-operational training requirements but receives continual requests for training from other units that are accepted on a first come first served basis. Under agreement with the National Park Authority, there are 17 non-firing days every year and no live firing is undertaken during the lambing period from 15 April to 15 May.

4.13 Taking account of existing priority commitments and non-firing periods, OTA has a potential capacity to provide the necessary natural arduous training for other light force training for a maximum of 60 days per year. As a result of Directed Training in the future this spare capacity should primarily be utilised by units located in the north east the number of which are set to increase under FAS.

**SENTA**

4.14 SENTA is the principal light force training area in the UK for training up to and including CT3 with SP being used for CT 4 and 5. It provides training exercises for light force brigades and regular training courses for the Infantry Battle School (IBS) at Brecon, the RM (Phase 3 career training) and the RMAS. Pre-operational training (OPTAG) takes priority at the present time. It can offer training up to Brigade level and 7 live fire company exercises can be undertaken concurrently. SENTA provides a total of around 400,000 man training days per annum.

4.15 SENTA is currently running at near full capacity. It is open 365 days a year without restriction and is presently booked out to the end of 2006. The ranges are in constant
use during the day and are also used on 3 evenings per week and 2 weekends per month.

**STANTA**

4.16 STANTA is prioritised for low intensity conflict operational training (OPTAG) for units deploying to Northern Ireland, Bosnia, Afghanistan, Iraq etc. It also has a high priority for training by 16 Air Assault Brigade based at Colchester, the RMAS and the training wing of the RAF Regiment based at RAF Honnington. OPTAG training utilises the whole of STANTA for 15 weeks per year and there is increasing use by 16 Air Assault Brigade, who book the training area on an average of 36 sub unit training weeks which puts the whole training area off limits for live firing. Camp accommodation is available for 1242 at STANTA, with a further 500 at nearby Beckingham. STANTA is rarely used by the RM.

4.17 STANTA is open for 355 days per year and provides a total of around 400,000 man training days over that period. The danger area can accommodate exercises up to Brigade level and whilst it is technically possible to run 2 IFFCs concurrently it does pose logistical problems. There are no restrictions on live firing except for the 6 week lambing period during March and April.

4.18 STANTA also offers facilities for artillery firing. This is generally restricted to mortars, although there is an increasing use by light guns. It is under continuous pressure for additional training and presently accommodates some of the training that SP is unable to accept. Any spare capacity tends not to be in large blocks and is presently utilised by local units. It is anticipated that STANTA should therefore be able to meet a proportion of the new requirement for CA, CS and CSS units, but has limited utility for additional CT2 mandated training given current priorities.

**SP**

4.19 SP can provide the necessary land and facilities but is prioritised, and will have an increasing usage, for CT4 and CT5 exercises for light armoured and mechanised battle groups and formations, together with formation/brigade level pre operational training. Accordingly, there will be little opportunity to utilise it for CT1, CT2 and CT3 training for light forces. There is also limited availability of specific company size accommodation (accommodation is more orientated to unit size). The Infantry Platoon Commanders Battle Course has been moved to STANTA due to the lack of time and space at SP to meet training requirement. This confirms the lack of existing and future availability for land at SP to meet light force training requirements.
Conclusion

4.20 The above reconciliation demonstrates that the 6 training areas are capable of providing varying levels of light force training for the following reasons:

i) DTA (3 sub unit Field Firing Area (FFA) concurrent with 2 sub unit dry training area)

: Is prioritised for light force training.

: Is capable of undertaking dry tactical training to battalion level and limited live fire tactical training to battalion level.

: Has availability for CT1 and CT2 training exercises.

: Under Directed Training any spare capacity will be utilised by units based in the south.

: Fulfils the criteria for naturally arduous (variable & demanding) training.

ii) KTA (1 sub unit FFA with no concurrent dry training possible)

: Is prioritised for field firing and currently for units on operational tours of Northern Ireland (EPORT) and trials. Post FAS it will also be prioritised for 19 Brigade when re-roled as a light unit.

: Is too small for a battalion exercise without recourse to TOPL.

: Has limited availability for either live fire tactical training or dry tactical training.

: Has limited accommodation

: Under Directed Training any spare capacity will be utilised by units based in the north.

: Partly fulfils the criteria for naturally arduous (variable & demanding) training.

iii) OTA (3 sub unit FFA concurrent with 2 sub unit dry training area)

: Is prioritised for artillery training (AS90/MLRS, Apache, JFACTSU).

: Has the largest impact area in the UK.

: Has availability of around 60 days per year for live fire tactical training and varied availability for dry tactical training.
Under Directed Training any spare capacity will be utilised by units based in the north.

Fulfils the criteria for naturally arduous (variable & demanding) training.

iv) **SENTA (7 sub unit FFA)**

- Is prioritised for ‘other’ light force training.
- It can offer training up to Brigade level and 7 live fire company exercises can be undertaken concurrently.
- Has no availability.
- Fulfils the criteria for naturally arduous (variable & demanding) training.

v) **STANTA (2 sub unit FFA concurrent with 1 sub unit dry training area)**

- Is prioritised for OPTAG training and is increasingly utilised by 16 Air Assault Brigade based at Colchester.
- Can accommodate exercises up to Brigade level and manage 2 IFFCs concurrently.
- Has limited availability for live fire tactical training and varied availability for dry tactical training.
- Under Directed Training any spare capacity will be utilised by units based in the east.
- Partly fulfils the criteria for naturally arduous (variable & demanding) training.

vi) **SP (2 sub unit FFA concurrent with 4 sub unit dry training area)**

- Is prioritised for Combined Arms manoeuvre training.
- Is capable of accommodating 2 IFFCs concurrently.
- Has no availability.
- Partly fulfils the criteria for naturally arduous (variable & demanding) training.

4.21 Of these 6 training areas DTA is the most significant in terms of suitability and availability to meet identified light force training needs. It is prioritised for light force training, it is within the recommended 2-4 hours travel distance to units located in the
south and it can deliver all elements of CT1, CT2 and CT3 training for the identified light force units.

4.22 However, even DTA cannot meet this requirement in its totality. After supply on DTA and the other training areas has been utilised, there is still an overall national shortfall in light force training of 138 sub unit weeks of dry tactical training and 238 sub unit weeks of live fire tactical training, as illustrated in Table 5 below. This demonstrates that even if MoD policy on the release of any of its main training areas altered 13, they would not be in a position to relinquish the important facilities provided for light forces at DTA, which consequently remains a key part of the ATE.

Table 5: Training Areas with Availability

<table>
<thead>
<tr>
<th>Training Area</th>
<th>Maximum Available Sub Unit Training Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dry</td>
</tr>
<tr>
<td>DTA</td>
<td>472</td>
</tr>
<tr>
<td>KTA</td>
<td>0</td>
</tr>
<tr>
<td>OTA</td>
<td>48</td>
</tr>
<tr>
<td>STANTA</td>
<td>152</td>
</tr>
<tr>
<td>Total Resource Available</td>
<td>672</td>
</tr>
<tr>
<td>Total Demand</td>
<td>810</td>
</tr>
<tr>
<td>Net Shortfall</td>
<td>-138</td>
</tr>
</tbody>
</table>

13 Ibid. 2 page 15 “…it will not be possible to release significant areas of the UK rural estate”.
5. Conclusions

5.1 The demand for light force training set out in this report is dismounted training by:

ii) 3 RM Commando units (including the Amphibious Force) and the Fleet Protection Group Royal Marines (FPGRM).

ii) 36 Infantry Battalions (including the required dismounted training activity mandated on armoured and mechanised Infantry units).

vi) Infantry skills training for other Combat Arms (CA) (Army Air Corp (AAC) and Royal Armoured Corp (RAC)), Combat Support (CS) and Combat Service Support Units (CSS).

vii) Commando Training Centre Royal Marines (CTCRM) included due to its close proximity to DTA.

viii) The RAF Regiment.

[para 1.13]

5.2 This training demand has been defined in terms of sub unit training weeks for dry tactical training and live fire tactical training. These have been estimated at 810 sub unit weeks of dry tactical training and 438 sub unit weeks of live fire tactical training, as a minimum. [para 2.19]

5.3 If these training weeks are not met then CP2 and CP3 mandated training objectives for RM and Infantry Battalions, CTCRM output and mandated infantry training for CA, CS and CSS will not be achieved. Military capability will, therefore, be at risk. [para 2.18]

5.4 The majority of this training must be undertaken on the ATE in the UK and cannot be delivered through TOPL, OTX, simulator-based training exercises and the opportunities to acquire new training land is limited under current MoD policy. [para 3.34]

5.5 The DETRS study made specific conclusions indicating that Operations in Built-Up Areas (OBUA) villages, CQBR, IBSR, anti-tank ranges and some small arms ranges are in short supply. This was supported by low priority users reporting problems in booking facilities. [para 4.3]

5.6 It has been demonstrated that only 6 of the main training areas in the UK are capable of meeting this training requirement. A reconciliation of the demand for and supply of training resources on these training areas shows that five of these are either prioritised for other military training uses or do not satisfy the requirements for
arduous training. There is some availability at KTA, OTA and STANTA but under Directed Training any spare capacity will be utilised by units based locally. In addition, KTA and STANTA only meet the requirements for arduous training in part. There is no availability at either SENTA or SP. [para 4.20]

5.7 Of these 6 training areas DTA is the most significant in terms of suitability and availability to meet identified light force training needs. It is prioritised for light force training, it is within the recommended 2-4 hours travel distance to units located in the south and it can deliver all elements of CT1, CT2 and CT3 training as defined in CCPAM for the identified light force units within an arduous and varied environment. [para 4.21]

5.8 The information provided in this report demonstrates that there is an increasing demand for light force training in the UK to meet MoD mandated training requirements. This will lead to a net shortfall of 138 sub unit weeks for dry tactical training and 238 sub unit weeks for live fire tactical training. In view of this shortfall it is not plausible for the MoD to release any of its existing main training areas, a position already articulated in the Estate Strategy. DTA makes an essential contribution to the delivery of light force training (about 70% of available dry training and 53% of live training area) and therefore remains a key asset of the MoD estate. [para 4.22]
6. Recommendation

6.1 This report has concluded that there is a continuing need to retain DTA to meet a significant proportion of the increasing light force training demand. It is therefore recommended that the licences with the Duchy of Cornwall and others should be renewed.