

THE CONVERSION OF MILITARY SITES

A handbook outlining a commercial audit procedure to assist the re-use of former Defence Establishments.



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recording, without the written permission of the copyright holder.

This Handbook has been produced by Network Demilitarised, a grouping of authorities from Germany, the United Kingdom, Spain, the Netherlands and Greece which is funded by the European Union's RECITE programme.

The purpose of the Handbook is to assist those authorities and organisations who are faced with problems caused by reductions in defence expenditure and the conversion of former military bases to other uses.

The Commercial Audit Procedure is a methodology to assess the best commercial use of surplus land, buildings, specialised military facilities and infrastructure. This provides a way of generating and assessing commercial opportunities and reusing existing facilities and investment to benefit local and regional development.

Furthermore, experience from elsewhere shows that the closure of military bases can provide investors with unique investment opportunities and give communities the resources to regenerate their local economies.

The Handbook is primarily aimed at those within regional or local authorities, development agencies and government departments who have the responsibility of evaluating the potential of former military bases and defence sites. The Handbook will also provide investors and their professional advisors with a useful tool for assessing the commercial opportunities offered by a particular base.

In preparing the Commercial Audit Procedure, it became clear that one of the major challenges was the nature and uniqueness of many of the facilities that are found on military bases or sites.

An understanding of these and the reuse potential of the facilities lies at the heart of the proposed methodology.



Chapter Two of the Handbook looks at:

- scale of sites and buildings;
- specialist or diverse nature of buildings or facilities;
- condition of facilities;
- location;
- environmental factors;
- contamination;
- historic and heritage issues;
- security;
- timing;
- ownership; and
- employment loss.

Chapter Three reviews the lessons to be learnt from international good practice. Details of fourteen military sites from around the world are provided along with contact information for a further thirteen bases.

Chapter Four sets out the key principles of the Commercial Audit Procedure and provides details of the necessary steps to implement the audit. There are four stages. The first involves the review of the site and its special characteristics which is then used to develop alternative development options. The second stage involves the testing of the options using a range of variables whilst the third stage is used to compare and contrast the options which survive the testing stage. The fourth stage involves detailed feasibility studies and the implementation of the preferred scheme.

A supporting *Computer Disc Programme* provides the framework and detailed questions necessary for the in-depth examination of options and will greatly facilitate the audit process. For further information, contact Wiltshire or Kaiserslautern, (see page 37).

Chapter Five raises some of the practical ownership, disposal and management issues associated with the implementation of reuse strategies for former military sites. It also highlights the potential for partnership between the Defence Agency, local community, local authorities and commercial interests in implementing reuse strategies and the marketing of the opportunities.



1.1 The purpose of the Handbook is to assist those authorities and organisations who are faced with problems caused by reductions in defence expenditure and the conversion of former military bases to other uses. The Commercial Audit Procedure will help to assess the best commercial use of surplus land, buildings, specialised military facilities and infrastructure. The methodology provides a way of generating and assessing realistic development solutions and re-using existing facilities and investment to benefit local and regional development.

1.2 The philosophy which underlies this document demands that a positive attitude is adopted to the closure of military bases and industrial sites. Closure inevitably brings with it economic and physical stress but the short and medium problems must not be allowed to hinder forward thinking. Proper assessment techniques such as the one set out in this Handbook are a vital element in this process. The title **Commercial Audit Procedure** is carefully chosen to reflect the prime thrust of the Handbook which is to devise a robust procedure grounded in commercial realities. It highlights those factors which will affect development and indicates how constraints might be overcome to create commercial opportunities based on the reuse of military facilities. The experience from the United States of America, where bases have been closing for the last 25 years, shows that they offer considerable development and employment opportunities. The nature of the on-site facilities means that many of these bases will offer unique and exciting opportunities for investors.

Network Demilitarised

1.3 Network Demilitarised is a grouping of authorities from Germany, the United Kingdom, Spain, the Netherlands and Greece who are working together as a network funded by the European Union's RECITE programme. Members of the Network are listed on page 37. The purpose of the Network is to highlight the scale of decline of the defence sector and develop ways of dealing with the problems arising from a reduction in defence expenditure across the Community. There are three working groups studying these effects:

- Working Group 1 – unemployment and training issues;
- Working Group 2 – the re-use of military establishments; and

- Working Group 3 – planning, housing, environmental pollution and social change.

1.4 Statistics alone cannot convey the enormity of the problems caused by the former Soviet army leaving the new Lander in Eastern Germany in their hundreds of thousands. Elsewhere, the impact of the reduction in American forces has been severe and is being felt in places as far apart as Greece, Spain, Germany and the UK. Base closures resulting from defence cutbacks in individual countries are also having a devastating effect on local economies. For example, Wiltshire in the UK has already seen closure of, or major redundancy announcements at, 11 separate bases. Defence companies and their many sub contractors are also suffering as defence orders decrease and prestige defence projects are cut back. Major redundancy programmes affecting some of the most skilled members of the workforce have been compounded by the recession currently affecting Europe.

Military Facilities

1.5 Military sites naturally share some of the characteristics of any large area of land and buildings which become surplus to requirements. But in many ways they are very different and they present unique problems with which Europe has little experience. Sites can range from remote rural to city centre locations which may offer opportunities for international investment. Some of these differences are:

- specialised infrastructure and facilities – often with no civilian equivalent;
- scale – former bases are often very large;
- location – they are often remote from major population centres; and
- a dispersed pattern of development which has evolved in an unplanned way.

How the Handbook is Organised

1.6 The Handbook includes sections on the following:

- a review of the detailed issues that emerge during the preparation of base reuse strategies;
- international good practice, illustrating different approaches to military base conversion;
- a review of the Commercial Audit methodology along with the resources required to undertake an Audit. A key component of the Audit

is a **Strengths, Opportunities and Constraints (SOC) Analysis**. This is a technique for summarising the merits of different courses of action; and

- lessons for implementing base reuse strategies.

The Handbook is designed to cover a wide variety of circumstances including sites which could have international impacts and potential and be applicable across the European Union. The scale of problems which communities face will vary and dictate the level of response.

Who Should use the Handbook?

1.7 The Handbook is primarily aimed at those technical professionals within regional or local authorities, development agencies and government departments who have the responsibility of evaluating the potential of former military bases and defence sites. These professionals need not come from any particular discipline.

1.8 The Handbook also provides private sector investors and their professional teams with a useful aid to prepare development options in association with the public sector. Public and private partnerships will provide the most effective mechanisms for generating innovative solutions and commercial opportunities for the reuse of military facilities.



- 2.1** In preparing the Commercial Audit Methodology it became clear that one of the major challenges was the nature and uniqueness of many of the facilities that are found on military bases or sites. An understanding of these differences and the reuse potential of the facilities lies at the heart of the proposed methodology.
- 2.2** A further element which is of fundamental importance to the methodology is the inter-relationship between the problems, the constraints, the opportunities and the costs of realising them in the light of the special characteristics. Those using this Handbook must constantly remind themselves of the need to balance these issues and consider the inter-relationships when reviewing the opportunities for the conversion of military facilities.
- 2.3** This section highlights some of those special military characteristics which will hopefully be familiar to those who are reviewing the reuse potential of their own military facilities and help transform constraints into opportunities.

Scale of Sites and Buildings

- 2.4** The scale of many of the sites and facilities to be vacated is often huge by comparison with any normal industrial complex. For example, training and exercise areas can cover several hundred hectares and be characterised by a dispersed pattern of development. In these circumstances a reuse strategy will need to develop multiple use solutions for widely different areas within the base itself. For example, there will often be a conflict between restoration and the return of land to agricultural use and the need for new development to pay for clean-up costs. Given the scale of such opportunities it will be essential to develop an appropriate phasing strategy.
- 2.5** Good examples of these points include the large former Soviet exercise grounds in what was Eastern Germany. These are typified by scarred and blasted landscapes, with few and dispersed facilities and often located on poor quality land. Given such conditions, even the minimum restoration to agriculture or forestry is a daunting prospect. By contrast, large scale military installations such as those found at Subic Bay in the Philippines show how good use can be made of well equipped bases no matter how large.

- 2.6** In the U.S., the problem of scale is equally as relevant, with the Fort Devens army base covering 4,050 ha (40 sq. km.) approximately the size of the City of Cambridge, England. Development is being phased over a long period for a variety of uses including a federal prison in the former Army hospital, an intermodal (rail to truck) terminal, and a mixture of housing, industrial and commercial development as well as creating a wildlife refuge.

Specialist or Diverse Nature of Buildings and Facilities

- 2.7** Many of the buildings on military sites are of an extremely specialist nature that are not easily suited to most forms of civilian occupation. Runways, hangars, docks, underground bunkers or storage areas, submarine pens, barrack blocks and control towers are very difficult to adapt to viable commercial uses or community uses.
- 2.8** Although some of these facilities will have more obvious reuse possibilities than others it is important not to overlook the detailed specification of military infrastructure. For example, underground bunkers may be located tens of metres underground and be constructed from reinforced concrete and be supplied with a multitude of services. Similarly military runways and associated taxiways can cover large parts of otherwise semi rural sites and were built to high technical specifications to withstand high loadings and bomb damage. This results in concrete that is several metres thick which cannot be simply dug up and the land restored to agricultural use or used for housing development. At USAF Bentwaters in Suffolk, each of the large concrete shelters built to withstand a nuclear blast, would be very expensive to remove.

- 2.9** The costs of dealing with such items of infrastructure have an important bearing on site reuse. The reuse options for Nea Makri Navy base in Greece addressed this issue. A large concrete platform accommodating telecommunications aerials and buildings, highly costly to remove, was proposed to form the footprint for a regional cultural centre or theatre and existing sport and recreation facilities were included in a scenario for a leisure, recreation and conference centre.
- 2.10** On some large U.S. bases in Europe such as USAF Bentwaters, facilities commensurate with the needs of a small town exist. Similarly, the air

force base in Zweibrücken Germany, offers immediate occupation with fully carpeted, heated flats ready for reuse. These types of bases offer neighbouring communities a unique resource, although they may initially place a significant maintenance burden on the community. In contrast, at bases in Brandenburg, former Soviet barrack blocks are of such poor quality that in many cases, the buildings are not worth the cost of restoring or renovating and demolition is the only option.

- 2.11** Other more specialised facilities may have direct commercial value such as large scale paint or service bays and should be safeguarded and integrated into any reuse strategy. An essential part of the commercial audit procedure is to identify appropriate commercial uses for these specialist facilities. At Fort Devens in the U.S., the former Army hospital was proved to be a viable conversion to a prison.
- 2.12** The reuse of former air force bases as civilian or freight airports, as proposed at Chanutte Air Force Base in the U.S.A, USAF Bentwaters in Suffolk and at Vathy in France, will not always be feasible, resulting in vast areas of possibly useless concrete which is difficult to dig up. Proposals for reuse of the air force base at Ellinikon airport in Greece, included the innovative scenario of using airport runways and infrastructure as a major Athens Expo/exhibition/cultural site.
- 2.13** Finally, it is important to acknowledge the diversity of bases that require reuse strategies as well as the specialist facilities that are found on bases. In some regions, such as South West England organisations are confronted with the challenge of finding new uses for naval bases, army training grounds, barracks and airfields each with their own very specialised facilities.



Condition of Facilities

2.14 The condition of facilities varies considerably between those of a temporary nature and those more permanent ones often maintained to a very high level. Temporary facilities are often associated with the rapid expansion of bases or the return of troops from overseas postings. Even permanent buildings such as offices or barracks can be in poor condition and require modernisation prior to use by the private sector. Where demolition is required the cost of demolishing some types of facilities may have an impact on the viability of reuse strategies. In contrast, some modern largescale bases such as Fort Devens and Subic Bay offer a range of facilities maintained to a very high quality offering immediate reuse possibilities.

2.15 Many sites combine old and new buildings which are not necessarily maintained to the same standard. Some of these buildings can be of historic interest such as the Woolwich Arsenal and Plymouth Docks, both in England. These offer both a constraint but also a rare opportunity to open up previously secure and private buildings to a variety of public uses, such as tourism.

2.16 On bases where there is going to be a phased release of land and buildings there is a need to ensure the entire site is continuously maintained. A failure to deal with this issue can result in partial site dereliction which may delay or even discourage new investment. It will be important therefore that reuse strategies and landowners adopt a pro-active stance regarding the interim management of a site subject to phased release or even following closure and awaiting investment.

Location

2.17 It is not possible to generalise on the location of military bases since they can be found at the heart of cities as well as in the most remote parts of Europe. This locational aspect and the nature of surrounding land uses can have a profound impact on reuse strategies.

2.18 Additionally, site access arrangements and infrastructure capacity, which tend to be a function of the location, will also have an impact on reuse opportunities and on market value. In many cases defence establishments are located in rural areas which are not adjacent to other forms of economic activity

or settlements. This remoteness compounds the difficulties of finding suitable commercial uses. Within rural areas it is often necessary to achieve a balance between generating new employment and maintaining the overall rural character and social characteristics of an area. For example, the existing rural road network or sewerage facilities may not have the capacity to accommodate a new business park or new settlement and the local community may not favour growth of this nature. Some economic activities however, such as tourism, can benefit from such locations and help create jobs whilst maintaining the rural character of the area.

2.19 In the conversion of USAF Bentwaters, the isolation of the site and nature protection designations have necessitated careful consideration of the proposed housing and employment to create a viable civilian settlement. A more significant problem can concern the new level and cost of infrastructure that might be required to support new development of the site. Chilmark in Wiltshire is a good example of this problem. The reuse study undertaken as part of the testing of this Handbook focused on uses that would complement the existing rural communities and enhance local employment prospects. At the outset however, there was a recognition that much of the site would retain a rural wooded character with limited development opportunities.

2.20 On the other hand, city centre barrack sites can offer unique development opportunities where land is at a premium. Woolwich Arsenal in London is an example of a city centre location where reuse opportunities could provide a mix of uses including offices, tourism and some residential. Holtzendorff Barracks in Kaiserslauten, is suitable for high quality industrial, business and service uses because it is strategically located in the east of the city with direct access to the motorway.

2.21 Similarly, sites which are located on major strategic road, rail, air or shipping routes such as Chanute air Force Base in the U.S.A. and Subic Bay base in the Philippines, are well located to attract significant investment following closure.

Environmental Factors

2.22 The rural nature and environmental and landscape quality of many military bases or their wider surroundings are important considerations for those preparing reuse strategies. A number of training grounds are located within National Parks such as Dartmoor in England or are located on sensitive coastal locations. The restricted access arrangements for such areas have resulted in the development of relatively undisturbed ecosystems which environmental groups can be keen to preserve. In such situations there may be a presumption against new commercial development.

2.23 At Chilmark in England, the scenic and conservation value of the area, signified by environmental protection policies and the presence of significant fossil beds, uncommon orchids and a bat colony, restricted the range of viable development on much of the site. The limited access from the narrow winding roads further discouraged many options. Largescale training grounds in Germany have resulted in the development of relatively untouched ecosystems which are being promoted for statutory protection. In such cases reuse opportunities are reduced.

Contamination

2.24 Site contamination and associated removal costs have proved significant impediments to the reuse of former military sites. It also influences the nature of uses to which the land can be put and often requires high levels of development to meet the costs. In an ideal situation the specialist treatment that may be required should be the responsibility of the disposing authority.

2.25 The Eberswalde-Finow military airport in Brandenburg, Germany contains inestimable levels of contamination from neglected fuel stores and subterranean kerosene pipes. The site will require a complex clean-up operation and will be very expensive to rehabilitate. The reuse of the site will therefore require a strategy which is economically realistic in light of the extent of contamination. Similarly, extensive former soviet training grounds, also in Brandenburg are littered with used ammunition which will need to be removed prior to reuse.

2.26 Major military bases such as Fort Devens in the U.S., with a large range of facilities, also has its accompanying range of contaminants, in the form of fuels, chemical substances, ammunition and explosives, many of which require specialist treatment and clearance. Fort Devens has been declared a Superfund site as a result. This will prevent development and reuse of the site until it is cleaned to the standards of the federal government of the U.S.. Many parts of the site will take a long time to bring forward. The size of the site, 4,050 ha, has enabled phased redevelopment and use of the cleaned up parts as they become available.

2.27 The Chilmark base includes 45 semi-underground concrete storage buildings spread across the site and an area of burnt ground where explosive testing was carried out. The Ministry of Defence will clear the site of any hazardous material and leave it safe and secure before disposal, although this will not necessarily mean removal of all the bunkers.

Historic and Heritage Issues

2.28 In a small number of sites there are buildings of great historic or architectural importance. Such factors have an important impact on the possible reuse alternatives. This can often mean there is a presumption against the demolition of buildings and facilities regardless of their current condition. This can affect the development value of a particular site but it can also provide the organisations responsible for devising a reuse strategy with a unique opportunity.

2.29 The Woolwich Arsenal site includes 20 separate listed buildings, many overlooking the River Thames, within a larger Conservation Area which covers a wealth of military heritage going back over 400 years. At Peninsula Barracks, Winchester, England for example, the attractive 1900's barracks blocks, representing years of regimental history combined with the history of the site itself, which included a former Saxon town, the site of a castle and the Kings Palace, have contributed to a complex planning process and the resulting proposed use as a mixed business/college campus and public park. Historic dockyards, such as at Plymouth and early air force bases such as Bentwaters, offer historic context and associations with past military events, which can influence the reuse options. At the Furstenberg base in Brandenburg, the presence of the former concentration camp of Ravensbruck in the immediate proximity, has required a sensitive approach. The neighbourhood has declared the site a memorial and use of the bordering areas will need to be sympathetic.

Security

2.30 On some sites, the military will continue to have a presence whilst parts of the base are sold or leased for other uses. This will place constraints on reuse. Security will have to be maintained and may require segregated areas and additional fencing. In order to redevelop such sites careful consideration must be given to the phasing of land release. Any restrictions on public access will result in substantial problems in achieving reuse.

2.31 The phasing of land and/or buildings release may form part of a strategy which seeks to parcel up land and identify interim uses for the site. Such interim uses help maintain a presence on a site, would assist in meeting maintenance and security costs and would create employment opportunities.

2.32 Federal agencies were given priority to use parts of Fort Sheridan, in Illinois, U.S.A., when it was closed. This has led to a continuation of some military use, with the U.S. Army Reserve using part of the site and some Navy housing retained. Other uses have complemented these and provided security. The Veterans Administration is using part of the site for a national cemetery and the U.S. Fish and Wildlife Service has taken part for a nature reserve. Very little private sector investment has occurred.



Timing

2.33 As a result of the way in which rapid political changes resulted in the widespread decisions to reduce military spending throughout Europe and the United States there are a very large number of defence establishments for which alternative uses will be sought over the next few years. The sheer amount of land coming onto the market, sometimes concentrated in relatively small geographical areas, such as Brandenburg or South West England will place a great strain on local and regional property markets. These problems will be particularly exacerbated during a time of economic recession and uncertainty, resulting in sites lying vacant and possibly becoming derelict.

2.34 It is important to emphasise that not every site will be suitable for a new regional airport or business park. There will be a need for far more low key pragmatic solutions in order for sites to contribute towards local economic development. Innovative approaches, which tend to be site-specific, maximise the potential of existing facilities or are carefully phased and programmed, appear from the case studies identified to be more successful. For example, the concept of the Free Port Zone at Subic Bay in the Philippines, with economic incentives to encourage investment, and the intermodal terminal or "inland port" to take advantage of the hub of rail and motorway junctions at Fort Devens in Massachusetts, U.S.A..

2.35 One further consideration regarding the closure of bases and the timing of the release of land is the number of bases which are closing in the local or sub regional economy. A review of the impact such closures will have on the local economy may be an important issue and constraint which should be highlighted to the relevant Defence Ministry.



Ownership

- 2.36** Although sites will normally be owned by the Defence Ministry there may be ownership complications or covenants affecting disposal or the terms upon which they can be released. This ownership problem is particularly acute following reunification in Germany. It is also a common problem in those areas where bases were developed rapidly prior to or during World War Two and are therefore common across Europe.
- 2.37** The State of Brandenburg's Conversion Guidelines note that all land and facilities made available by the withdrawal of the former Soviet military forces will be returned to civilian use. During wartime, sites were brought into use rapidly and documents giving the original owners rights to buy back the land in the event of disposal were drawn up. However, at Furstenberg military base for example, fires destroyed many of these documents and the ownership investigations have only just commenced. Situations like these complicate and slow down the entire process of establishing civilian reuse of the bases. In Brandenburg applications for the restitution are currently still pending and until these issues are clarified the implementation of all reuse proposals will be delayed.
- 2.38** Issues such as ownership and the timing of the release of land have a clear impact on the implementation of reuse strategies. In some cases it may be possible to reduce uncertainty and bring forward land sooner by looking at the parcelisation of development opportunities within the site. This approach can also help to overcome some of the problems associated with the development of sites with sensitive environmental problems. A good example of this approach is found in the Chilmark base reuse strategy.

Employment Loss

- 2.39** One of the biggest challenges facing those preparing reuse strategies is the loss of employment, which in some cases can be considerable. The problem is not new, for example, the Woolwich Arsenal employed 80,000 people at its peak in 1914. This figure has declined ever since and in 1994 will be reduced to zero. Subic Bay employed as many as 35,000 in the 1980's but the base has now closed. The current level of base closures will, however, lead to severe economic problems across many parts of Europe.

- 2.40** In some cases it is not possible to identify reuse strategies which can replace high levels of employment in situ. There are numerous reasons for this, including nature or landscape protection, poor access, site contamination and distance from markets or population centres. Where there is a pressing need to generate new jobs it may be appropriate to release land elsewhere either locally or within the region which might accommodate new employment more easily.

Conclusions

- 2.41** The work of the Network has highlighted the defence-related problems that are facing a number of countries across Europe. One of the major concerns is the timing and the sheer amount of work that is required to commence the conversion process. It is also worth noting that several of the issues highlighted above may be concentrated on a single site, greatly increasing the problems of identifying a suitable and commercial reuse solution.
- 2.42** The headings used in this section can also be used to form the framework for the preparation of the site summary checklist which forms one of the early stages of the Commercial Audit Methodology which is explained in Section 4.0. The next section sets out some examples of international good practice in preparing and implementing base reuse strategies. This will illustrate how various organisations have dealt with particular issues and balanced the problems and opportunities which exist on individual sites and give ideas to those trying to regenerate regional and local economies.





Introduction

3.1 The purpose of this section is to provide readers with examples of base reuse strategies and economic initiatives from Europe and elsewhere with the aim of highlighting issues which may be of relevance to others faced with a similar situation.

There is currently considerable activity in this field and this section can only provide an overview of some of the issues that need to be faced and the variety of approaches that have worked elsewhere.

The selection of projects is intended to illustrate the different types of military activity as well as highlighting the varying size of military facilities.

Each project summary includes basic factual material about the base, identifies ways in which the specialised military material has been reused and identifies interesting organisational approaches and lessons for good practice. The projects reviewed in this section are set out below:

Army

- FURSTENBERG
- FORT DEVENS
- HOLTZENDORFF BARRACKS – KAISERSLAUTERN

Airforce

- CHANUTE AIR FORCE BASE
- CHILMARK ROYAL AIR FORCE BASE
- USAF BENTWATERS
- EBERSWALDE – FINOW
- BASE DE VATRY

Navy

- NEA MAKRI NAVAL BASE
- SUBIC BAY NAVAL BASE
- PLYMOUTH NAVAL DOCKYARD
- WILHELMSHAVEN
- LORIENT

Other

- ROYAL ARSENAL – WOOLWICH

Additional Projects

3.2 The above projects represent only a small selection of the military bases that have gone through the reuse process. Additional examples which have come to the attention of the Network Demilitarised, together with contact details, include:

Army

- **Potsdam Barracks**, GIW Postfach 810155, 14431 Potsdam, Germany. Tel: 010 49 331 8871542
- **Mulhouse Barracks**, Hotel de Ville, 2 Rue Pierre Curie, BP 3089, 68062 Mulhouse Cedex., France. Tel: 010 33 89 32 58 58
- **Saint Lo**, Hotel de Ville, Place du Général de Gaulle, 50000 Saint Lo, France. Tel: 010 33 33 575 701
- **Fort Sheridan**, Fort Sheridan Commission, Galena, Illinois, U.S.A. Tel: 010 1 815 777 1690
- **Peninsula Barracks**, Winchester City Council, Avalon House, Chesil Street, Winchester, Hampshire, SO23 8HU, UK. Tel: 0962 840 222
- **Trecwn RNAD**, West Wales Task Force, Haverfordwest, Pembrokeshire, SA61 1QZ, UK. Tel: 0437 764 591

Airforce

- **Royal Air Force Brawdy**, West Wales Task Force, Haverfordwest, Pembrokeshire SA61 1QZ, UK. Tel: 0437 764 591
- **Greenham Common Airbase**, Newbury District Council, Development Services Department, Council Offices, Market Street, Newbury, Berkshire RG14 5LD, UK. Tel: 0635 42400
- **Zaragoza**, Municipality of Zaragoza, Plaza del Pilar 18, 50071, Zaragoza, Spain. Tel: 010 34 7 63 95 877
- **Myrtle Beach Air Force Base**, Air Base Redevelopment Commission, 1181 Shine Avenue, Bldg. 500, Myrtle Beach, SC 29577, USA. Tel: 010 1 803 238 0681
- **Ellinikon Airport**, Municipality of Ellinikon, Vouliagmeni Street 38B, 16777 Ellinikon, Greece. Tel: 010 30 1 9610 353

Navy

- **Portland Harbour**, Weymouth & Portland Borough Council, Planning Department, North Quay, Weymouth, Dorset DT4 8TA, UK. Tel: 0305 761 222
- **Chatham Docks**, English Partnership, Chatham Maritime, Chatham, Kent ME4 4UF, UK. Tel: 0634 830010

3.3 FURSTENBERG

Background

The four Furstenberg military sites are located in Land Brandenburg in what was formerly East Germany. Overall armed forces, numbering approximately 20,000, were spread over 1,984 ha in 28 facilities in the Municipality of Furstenberg. The withdrawal of Soviet Forces left 33% of the municipal lands abandoned.

Unique Features of the Site

The four sites were used for a mixture of military administration, training purposes and housing an Infantry unit. These uses are generally less contaminating than storage and maintenance and repair. Parts of the site continue to be in military use. It is estimated that almost 70% of the buildings will need to be demolished whilst 30% could be restored for housing and administration offices. The external infrastructure of Furstenberg's military sites is in good condition. By July 1993, the unemployment rate in Furstenberg Municipality was as high as 22.6%, showing a considerable excess labour supply. A skilled workforce is also available.

The former concentration camp of Ravensbruck is located adjacent to one of the military sites. This is now an historical memorial of international importance and any reuse of surrounding areas must be sympathetic to this memorial.

Organisations/Community involved/Process for Reuse

The political sensitivity of the former concentration camp in proximity to one of the military sites has meant a larger degree of community involvement.

The authorities of Furstenberg and district administration have taken responsibility for the reuse study, but are constrained by lack of public financial support from Land Brandenburg. The government of Brandenburg put forward Furstenberg for EU financial support in the KONVER programme. Working groups for conversion have been established and strong interest has been shown by the administration and community.

Reuse of the Site

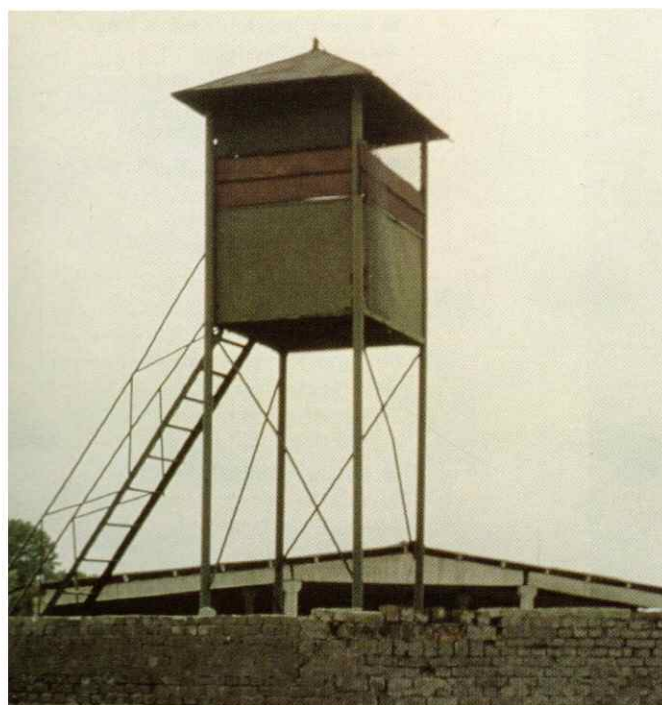
The Municipality of Furstenberg is in need of sites for housing, industry, business and tourism, and it is hoped these military sites will be able to serve such requirements. The reuse study workshop focused on these needs, and additionally, administration offices. The proximity of the neighbouring former concentration camp, will require a sensitive solution to reuse and a buffer zone around the memorial site.

Lessons for Good Practice

- In cities where there is a strong need for jobs and housing, these closing military bases become an opportunity, as long as the cost of restoration and regeneration does not prove prohibitive.
- Identify impacts of sensitive issues, such as Ravensbruck, at an early stage of the reuse process.

Contact Organisation:

**Staatskanzlei des Landes
Brandenburg, Streitkräfte
und Konversion,
14473 Potsdam, Germany.
Tel: 010 49 331 866 1245**



3.4 FORT DEVENS

Background

Fort Devens is located in eastern Massachusetts, U.S.A., approximately 50 kilometres from downtown Boston. It is planned for closure in September, 1995. The site is divided into three parts: the North and Main Posts, which total approximately 1,620 ha in size and the South Post, totalling about 2,430 ha.

Unique Features of the Site

Proximity to the capital city of the state of Massachusetts and direct access to a major east-west arterial road and north-south and east-west rail corridor, enhance the site's reuse potential. The base contains a small airfield, administrative, training and personnel support facilities, including an Army hospital and an area for training purposes. There is an historic area with significant buildings associated with the Fort and an important wildlife area including the flood plain of the Nashua River. Conflicts have arisen over environmental protection versus development. Fort Devens is a Superfund site, which produces a set of constraints related to contaminated land clean-up.

Organisations/Community involved/Process for Reuse

The organisations involved in the process of evaluating the reuse options for the base include federal, state and local government agencies and the community from four affected towns. The State Government Land Bank and a civic organisation sponsored a series of planning community workshops.

Reuse of the Site

The existing Army Hospital closed in 1993 and a federal minimum security prison is planned to be operational by 1995. Other planned uses include: an intermodal (rail to truck) terminal, which will serve as an inland port facility; an Innovative Technology Centre, including research & development and "incubator businesses", offices etc.; more housing and industrial uses; environmental remediation businesses and industry; a full service film and video production complex; and open space including a U.S. Fish and Wildlife Nature Reserve. Army Reserves is retaining the training facilities and some family housing areas. The opportunities offered by the nodal location of this site have influenced the reuse strategy.

A homeless advocacy group is requesting use of the Fort Devens Base to develop a Homeless Centre which would include transitional housing, basic housing, job training, alcohol recovery assistance and schooling for homeless people. Two native American groups are pursuing plans for part of the base which would include a museum on Native American Culture and a casino to finance it.

Lessons for Good Practice

- Close involvement of the community in the planning process and continuing the communication as reuse plans are implemented, through newsletters and meetings.
- Utilise inherent advantages of the site, such as proximity to transport routes, wildlife, historic site value and proximity to urban area and transport connections rather than trying to develop completely new facilities.

Contact Organisation:

**The Massachusetts Government
Land Bank, One Court Street,
Suite 200, Boston,
Massachusetts 02108, U.S.A.
Tel: 010 1 617 727 8257**



3.5 HOLTZENDORFF BARRACKS – KAISERSLAUTERN

Background

The Holtzendorff Barracks are located in the city of Kaiserslautern in Germany. The city lies in a valley with the French military installations, including the barracks, at the eastern end while American military facilities are located at the western end. The barracks were built in the 1930's to house the German regional armies. After the Second World War, the entire compound was taken over by the French forces. The site of the Holtzendorff Barracks covers 68 ha of which 42 ha are in current use and 26 ha are forested. The gross floor-space is about 100,000 sq. m. of which only 20,000 sq.m. are fit for redevelopment.

Unique Features of the Site

The site is strategically located at the eastern entrance to the city with direct access to the motorway. It has the added advantages of proximity to existing residential land use and forested areas. The barracks blocks have received little new investment but the 1930's structures have been maintained and generally improved. Some accommodation blocks have new double glazing. There is no visible evidence of major environmental pollution except for spillage around petrol points and vehicle maintenance areas.

Organisations/Community involved/Process for Reuse

The federal government is responsible for the site but site redevelopment will probably result from private sector investment. The Ministry of Defence is currently compiling a new database on all military bases in Germany.

Two consultancies were employed to co-ordinate the process of developing alternatives for reuse of the site. This included a workshop, participants at which were mostly professionals from the private and public sector. The consultants presented their objectives and work method and then divided the whole group into two working teams dealing with physical and planning aspects and economic aspects. Ten alternatives developed by the consultants were then scrutinised by the teams and a reduced set of alternatives and conclusions were obtained.

Reuse of the Site

The initial alternative options for the site included: hotel and conference centre; service centre - logistics; Centre for Services and Administration; industrial area with mixed use; industrial area; functional mix- working and living in the park; Technology Centre for small enterprises and crafts; Centre for Research and Development; American Service Centre; and a Design Centre. The overall conclusion was that the site is suitable for a high quality industrial, business and service sector use. The final alternatives for the site were: a service and administration centre; a technology park for small businesses and crafts; a centre for contractual research and development; an American Centre; and a Design Centre.

Lessons for Good Practice

- Innovative workshops can be tailored to suit the community and local authorities and to address more effectively the site and its problems.
- Local authority appointed and coordinated a panel of planning and economic experts to review reuse options.
- The barracks provide the model case study for Working Group Three of the Network Demilitarised on environmental and ecological issues.

Contact Organisation:

**Stadtverwaltung Kaiserslautern,
Amt für Stadtentwicklung;
Statistik und Wahlen,
67653 Kaiserslautern, Germany.
Tel: 010 49 631 385 1121**



3.6 CHANUTE AIR FORCE BASE

Background

Chanute Air Force Base is located in the village of Rantoul, Illinois, U.S.A.. The base, which is 850 ha in size, opened in 1917 as one of the top training centres for the Air Force, providing training in aviation-related equipment repair and maintenance. It closed in October 1993. The site will be in government/public agency ownership following conversion.

Unique Features of the Site

Facilities include an airport with a 1,800 metres runway and associated facilities, 4 hangars, and 20 reusable buildings, totalling 111,500 sq.m., which include classrooms, labs, and hangars and workshops. The runway is convertible to general aviation uses and there are extensive aeroplane maintenance and training facilities. Transportation access includes the Illinois Central railway line with station and sidings on site, the airport and three major arterial roads which are less than 2 km from the site. The University of Illinois' main campus, to the south of the base, offers a potential labour work force for prospective businesses using facilities on site.

The workforce is drawn from a population of 505,000 within 80 km radius.

Organisations/Community involved/Process for Reuse

The State of Illinois, the Office of Economic Adjustment, the U.S. Air Force and representatives from the community worked together to achieve a consensus plan and implementation strategy for conversion of military facilities to civilian uses. A market analysis and physical survey of facilities was undertaken to determine suitability for identified potential uses. The closing of Chanute had significant economic consequences for the local community which have been addressed, in part, by federal grant money.

Reuse of the Site

To date, major areas of the base have been closed and tenant leases are being implemented by the Rantoul Conversion and Development Office. Use of facilities is diverse and examples include:

- the runways will become part of a civilian airport;
- an Aeronautical Museum at Chanute is proposed to open in April 1994;
- automobile parts production takes place in the old supply building;
- speciality windows are produced in the old AGE maintenance building;
- the Illinois National Guard is operating in one of the old 1000 person dormitories;
- a scrap metal recycling yard has leased the old test cell facilities; and
- an organisation for homeless children plans to use old accommodation blocks for housing.

Lessons for Good Practice

- A Conversion and Development Organisation such as the one for Rantoul, can co-ordinate and facilitate implementation of the reuse strategy and maximise the opportunities provided by existing military facilities.
- Location of a base in a suburban area requires sensitive community consensus planning, but has the advantage of proximity to work force, transport and other commercial activities.

■ Indicates how a base can combine a variety of new and different uses;

■ A number of development incentives have been put forward including: Enterprise Zone designation; low interest loans through County planning commission; lowest tax rates in region; Job Training Partnership Act programme; A Community Development Assistance programme; Illinois Development Finance Authority.

Contact Organisation:

Rantoul Conversion and Development Office,
333 S.Tanner Street/P.O. Box 38,
Rantoul, Illinois 61866, U.S.A.
Tel: 010 1 217 893 1661



3.7 CHILMARK ROYAL AIR FORCE BASE

Background

Royal Air Force Chilmark is located approximately 20 kilometres from Salisbury in Wiltshire, England. The base is approximately 120 ha in size and lies in an area that is characterised by an attractive rural landscape. Royal Air Force Chilmark is owned by the Ministry of Defence. It was opened in 1937 as a munitions storage, explosives testing ground and administration centre. The base is proposed for closure by March 1995. The exact date however, is reliant on the clearing of the base, decontamination procedures and making it secure.

Unique Features of the Site

The site contains a large number of storage buildings and a narrow gauge railway system and sidings which link to the main gauge railway at Dinton. Explosives and munitions were stored in sunken concrete bunkers spread across the site, and also in caves. There is a contaminated and degraded explosives-testing ground. The base lies within an environmentally sensitive area where special policies of restraint apply. Sites of Special Scientific Interest are also present on the base, associated with an historic natural stone quarry, jurassic insect fossil beds, bats and flora.

Organisations/Community involved/Process for Reuse

The working group comprised the organisations interested in the base and its future and included County and District Councils and local community members. The MoD's Defence Land Agent and Central Disposals Unit, also in the working group, have the responsibility of selling the base. These representatives have been involved in a series of workshops to determine a reuse strategy, including a strengths, opportunities and constraints analysis. Royal Air Force Chilmark, and the process of evaluating reuse options, was part of the testing of the Handbook for the Network Demilitarised.

Reuse of the Site

Monies from a successful European Commission KONVER bid are being used to implement a business and training centre in one part of the site, utilising existing large brick workshop/storage buildings. The storage buildings on another part of the site are proposed for use as storage with the area closest to the existing housing of Dinton village, gradually to be developed as low income/affordable housing.

Lessons for Good Practice

- Phased, short term and long term, development options enabled a more realistic re-use strategy.
- Realisation from outset that large parts of the site would not be developed and would remain wooded/rural in use.

Contact Organisation:

**Industry and Employment Service,
Chief Executive's Department,
Wiltshire County Council,
Trowbridge, Wiltshire BA14 8JN,
England.
Tel. 0225 713 021**



3.8 UNITED STATES AIR FORCE BASE, BENTWATERS

Background

Bentwaters is located near Ipswich in Suffolk, England. It is a self-contained community with around 180,000 sq. m. of accommodation on about 450 ha. The base is very close to the Royal Airforce Base at Woodbridge. Bentwaters USAF was created at the outset of the Second World War and is currently in Ministry of Defence (MoD) ownership. The base closed in October 1993.

Unique Features of the Site

There are two parts to Bentwaters. There is the "domestic base", with a hospital, superstore, chapel, theatre, gymnasium, bowling alley, Burger King and 660 homes, mostly privately owned. There is also the "technical base", which includes a 2,400 metre runway, hangars, distribution sheds, and a variety of operational buildings. The buildings are well built and in good condition but the isolation of the site will make it difficult to attract businesses away from Ipswich. There are a large number of military buildings spread around the airfield which are a problem for reuse and/or demolition. The huge concrete shelters designed to withstand a nuclear blast would be very expensive to dismantle. Most of the base is located within an environmentally sensitive area (Suffolk Coast and Heaths AONB) where special policies of restraint apply.

Organisations/Community involved/Process for Reuse

The process for developing a reuse strategy for the site has involved the MoD, the county and district authorities and the local community. A Planning Brief was prepared by the local Council which outlined the proposed reuse of the base and was used to initiate public consultation. A community development worker has been appointed to aid the transition to a civilian community.

Reuse of the Site

Both the Council and the MoD aim to create a new civilian community which can support the surplus amenities and technical accommodation. Current planning policies suggest 1,200 homes on the site. A range of options have been proposed for parts of the site including a new university, and an aviation facility.

Lessons for Good Practice

■ The cost of demolishing such permanent military facilities as large concrete shelters, explosive storage bunkers and runways is often prohibitive. Unless a highly commercial reuse can make demolition viable, the solution may be to leave it in situ and screen the structure.

Contact Organisation:

Planning Department,
Suffolk County Council, Ipswich,
Suffolk IP4 1LZ, England.
Tel. 0473 230 000



3.9 EBERSWALDE – FINOW

Background

The Finow military airport, 433.8 ha in size, is located in the Eberswalde-Finow Municipality, Brandenburg, Germany. In the district of Eberswalde, 28 military sites will be released by the end of 1994. One of these is the military airport at Finow.

Unique Features of the Site

A constraint of Finow airport and many other released sites of the former Soviet Army, is the degree of contamination and lack of financial resources to clean it up. The runways and taxiways are in good condition and can be used immediately. In fact this part of the airport is already used by civilian planes. There are 57 concrete shelters on the site which will need to be demolished. One building is in good enough condition to be reused but the rest of the airport-associated buildings and structures are in a poor condition. The municipality of Eberswalde-Finow is looking to diversify its industrial base to create future employment. Released military sites would appear to be suitable for such industrial reuses, however for this particular site it may not be so appropriate as a new industrial park was recently developed in the municipality. There is a large labour supply with a high level of unemployment - in the district of Eberswalde the rate of unemployment stood at 15.1 % in May 1993.

Organisations/Community involved/Process for Reuse

The authorities of the Eberswalde and Finow districts, the conversion group, comprising interested individuals and professionals, and a number of study groups were involved in the reuse evaluations and goal setting for this site. Eight options were developed, discussions and evaluations within working groups and then the Eberswalde District Assembly decided on the preferred reuse option.

Reuse of the Site

The eight options developed for the Finow military airport site included: transform the site into a forest, housing, industry and business, a regional airport, a historical aviation museum, a waste recycling facility, an industry and business park in combination with leisure park, recreational flying etc., to develop an airport in connection with industry and business. The preferred reuse for the site was to develop a regional airport in combination with small industry, business, hotel,



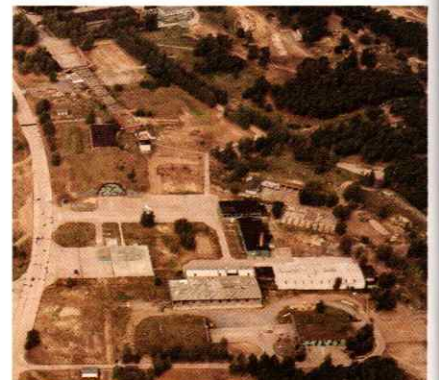
historical aviation museum and some leisure use compatible with the context.

Lessons for Good Practice

■ The reuse of former military airports as civilian airports, is usually desirable considering the existing infrastructure. With costs of clean-up, demolition and restoration, the viability may be reduced. A proposal, such as for Finow airport, to have a mixed development associated with a civilian airport may be a more feasible option.

Contact Organisation:

Staatskanzlei des Landes
Brandenburg, Streitkräfte und
Konversion, 14473 Potsdam,
Germany.
Tel: 010 49 331 866 1245



Background

The Base de Vatry is an air force base constructed by the Americans as part of their NATO activities. It is located in the Reims - Chalons-Marne region of France. It was abandoned by the U.S.A. in the 60's. In the early 70's, part of the site was to be used as a civil airport and hangars, control tower and lighting system for take off and landing were installed. This operation driven by the Chamber of Commerce and Industry of Chalons-sur-Marne, was quickly aborted and the site was once again abandoned until a group of investors decided to convert it into a freight airport.

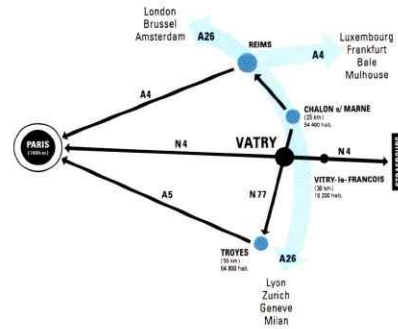
Unique Features of the Site

The base's most obvious features are the extensive ex-NATO airport facilities - which includes a 2900m runway. The base is located on the plain of Champagne-Ardenne, a cereal production area, characterised by very few inhabitants. The site is well located with respect to communication. Situated 150 km from Paris, it is connected by two autoroutes and is also well situated in terms of rail lines including the T.G.V. Paris-Strasbourg-Germany.

Reuse of the Site

The feasibility study concluded that the site should be redeveloped as a transmodal airport, devoted to freight services. A number of factors favour this proposal; the congestion of existing airports, notably those in Paris (Roissy and Orly), the difficulty of access to these airports and the rapid growth in air freight transport.

The project is installing facilities and equipment for storing and stocking merchandise with automatic handling and transferral of goods on the airport site and also on the 300 ha surrounding it. The total investment is valued at about 6,000 million FF. The first phase, 1,500 million FF, will allow the extension of the runway, installation of ILS system, restoration and upgrading of the control tower and the construction of stocking buildings, stores and goods-handling facilities.



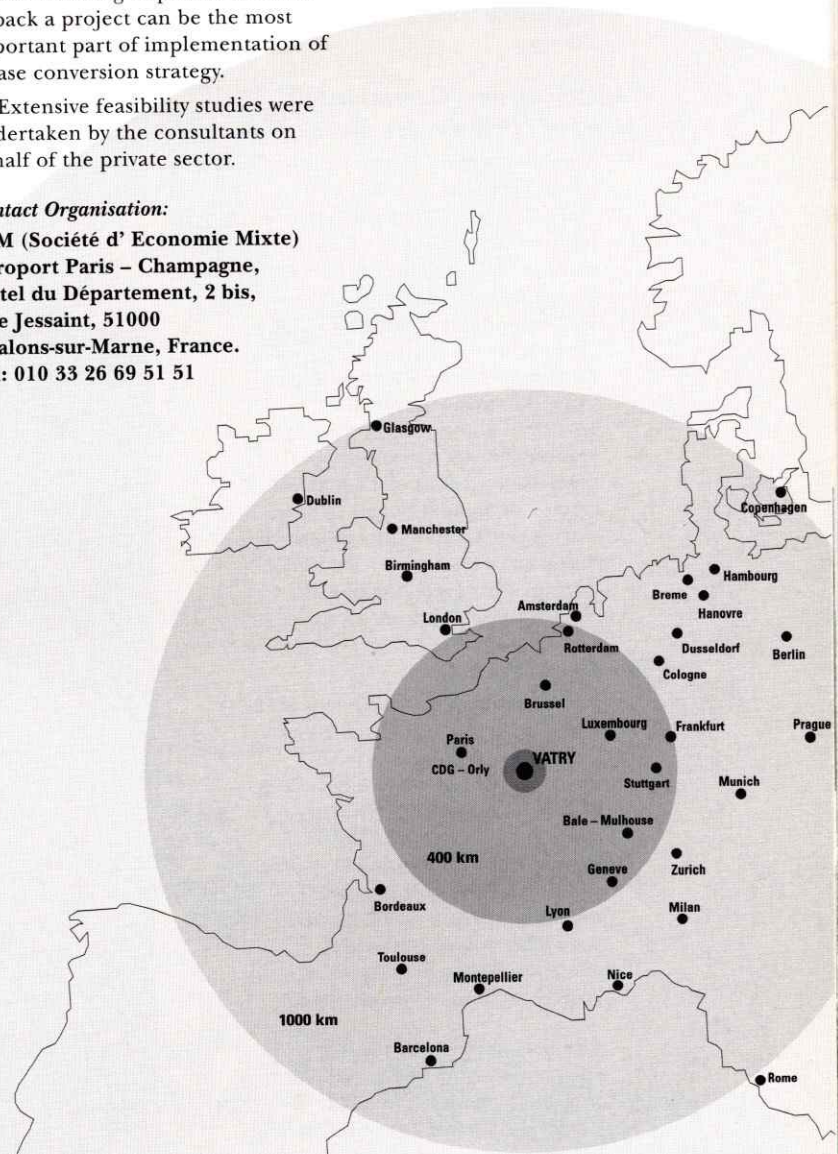
Lessons for Good Practice

- The securing of private investors to back a project can be the most important part of implementation of a base conversion strategy.
- Extensive feasibility studies were undertaken by the consultants on behalf of the private sector.

Contact Organisation:
SEM (Société d' Economie Mixte)
Europort Paris - Champagne,
Hotel du Département, 2 bis,
Rue Jessaint, 51000
Chalons-sur-Marne, France.
Tel: 010 33 26 69 51 51

Organisations/Community involved/Process for Reuse

The initiative to reuse the Vatry base was started by a group of private investors, representing some of the most important investment groups in France. They undertook the first feasibility studies and promoted the site with French and European authorities, particularly those concerned with authorising and regulating transport and public interest investments. The project has now been taken on by the General Council of the Department of Marne which is an organisation comprising a mixture of major local communities in the region (Champagne-Ardenne region, cities of Reims and Chalons-Marne) and economic players such as Electricity de France, Chamber of Commerce and Industry and private investors.



3.11 NEA MAKRI NAVAL BASE

Background

The ex-U.S. base, Nea Makri is located in the East Attiki Region of Greece, north east of Athens. It is located on the coast, 3 kilometres from the Port of Rafina. The base is relatively small measuring only 22 ha. The U.S. Navy base was closed in 1990 and is now controlled by the Greek Navy but the Ministry of Economics now owns the site. The base was mainly supporting naval forces with telecommunications facilities.

Unique Features of the Site

The site includes an ammunition depot, telecommunications station, a heating power station, fire station, fuel storage station and a number of sporting facilities, such as a swimming pool, athletics track, ball field, tennis courts and playing fields. The proximity of the site to the sea is a major opportunity. There are archeological ruins 40 metres outside the site boundary and an archeological protection zone which overlaps the edge of the site.

Organisations/Community involved/Process for Reuse

The Ministry of National Economy are the decision makers and responsible for financing reuse, the Ministry of Defence are the current users of the Base and the Ministry of Economics are the owners. These bodies have the responsibility for finding re-use options for the site. Meetings were held with a range of organisations including the Ministries above, local authority representatives, the mayor, local community groups and a number of other government bodies in order to discuss potential re-use options. Nea Makri was a case study used in the testing of the Handbook for the Network Demilitarised.

Reuse of the Site

The scenarios which came out of the initial meetings included: an East Attiki Region Cultural Centre; executive housing; a Greek College of Cinematography; a Recreation Centre; a Leisure park; and a Research and Development centre with technical support to small-medium enterprises. Following a strengths, opportunities and constraints analysis these were narrowed down to two scenarios.

The first scenario emphasised culture and employment, leisure and recreation. It aimed to re-use the existing infrastructure as much as possible and included an omnimax

cosmo theatre, conference centre, research and development centre including offices and commercial space, a sports and recreation centre, a leisure development and an archaeology museum. The second scenario was housing and culture oriented. It comprised approximately 125 housing units of varied plot sizes, an East Attiki Regional Cultural Centre, a conference centre, and an archaeology museum or cultural exhibition space. These scenarios are now being used as the basis for further discussion and evaluation to narrow down the options again.

Lessons for Good Practice

■ The initial consultation stage must be flexible to enable different communities and groups to decide the most effective method. For example, with Nea Makri, meetings were held with individuals rather than in large groups as in the U.S. examples.

Contact Organisation:

**Municipality of Nea Makri,
Marathonos Avenue, 19005,
Nea Makri, Greece.
Tel: 010 30 2 94 91 272**



3.12 SUBIC BAY NAVAL BASE

Background

Subic Bay, a former US naval base is located on the island of Luzon, Philippines, about 100 kilometres from Manila. It is approximately 6,000 ha in size and employed 35,000 Filipinos when operational. The Military Bases Agreement for Subic Bay was terminated in September 1991, ending 91 years of American military presence. Withdrawal took place in December 1992, when the U.S. facilities of the Subic Naval Base were turned over to the Government of the Philippines.

Unique Features of the Site

Subic Bay has a natural deep water and sheltered harbour with an economic strategic location, ready-made infrastructure, available skilled workforce and features as a free port zone as provided by law. Existing facilities on the base include housing, warehouses, a golf course, swimming pools and a 2.4 million barrel fuel storage facility.

The forests of Subic Bay Naval Base facility represent some of the last remaining virgin lowland rainforest habitat on the island of Luzon. Conservation of this area is important due to its biological diversity, as a watershed for surrounding areas, and as a home to indigenous Aeta native communities that live there.

Organisations/Community involved/Process for Reuse

The Subic Bay Metropolitan Authority is a government body that was created to oversee the privatisation of what was once the U.S. military's largest overseas base. A Subic Economic and Free Port Zone (SEFPZ) covering the Subic Base lands and adjacent municipalities was established which aims to accelerate the conversion of military sites and provides funds for the authority to convert and develop the site.

Reuse of the Site

The Subic Conversion Programme's objective is to establish a Free Port Zone with world class facilities for tourism, industrial, commercial, civil aviation, and maritime complexes. It will feature incentives such as: tax and duty-free importation of certain goods; tax-exempt conditions within the zone; no controls for foreign exchange, gold, securities and futures; and be managed as a separate customs territory for free flow of goods and capital.

Subic Bay has attracted mainly light manufacturing firms so far. Several tourism-based firms have set up in the Base's complex, including two hotels, a casino and several duty free shops. Federal Express plans to open an air-freight trans-shipment centre at Subic Bay in 1995. Coastal Petroleum Corp. of the U.S. has leased the base's fuel storage facility and another U.S. company, Enron Corp., is building a 105 mega-watt power plant in the base area on a build-operate-transfer basis. Protection of the Subic Forest in conjunction with these developments – its biodiversity, water supply and native peoples – is being recommended by the World Wildlife Fund Inc. and Government.

Lessons for Good Practice

- Economic incentives provided by law to attract businesses and investment can accelerate private sector commercial reuse of former bases.
- Major facilities marketed internationally and the establishment of a public private sector initiative.

Contact Organisation:

**Subic Bay Metropolitan Authority,
229 Waterfront Avenue, Subic Bay
Free Port Zone, Philippines. 2200.
Tel: 010 63 47 222 2731**



3.13 PLYMOUTH NAVAL DOCKYARD

Background

The Plymouth Naval Dockyard, the largest in Western Europe, is located in Devon, south west England. The historic dockyard was expanded after World War II following severe bombing. It comprises several sites located on the Plymouth waterfront. In the last decade it has undergone a process of privatisation and rationalisation with the Dockyard now managed by a private management firm, DML Ltd. and the Plymouth Development Corporation. Three of the former supporting military sites, the Royal William Yard, Mount Wise and Mount Batten have been closed and reuse strategies are being prepared.

Unique Features of the Site

The Royal William Yard, about 7 ha, was a self contained victualling yard. It is a complex of 13 buildings, the majority of which are historic, dating from the early 19th Century, with policy restrictions on redevelopment (Scheduled Ancient Monuments or listed Grade 1). The Yard is recognised as one of the most important surviving, virtually intact, groups of maritime buildings in the U.K. Future reuses must be compatible with the historic buildings requiring minimal physical change. The Yard provides about 47,000 sq m of accommodation which is built around a dock.

Mount Wise covering about 5 ha, has a prime position overlooking the River Tamar and Plymouth Sound. It has a 1930's art deco style swimming pool, married quarters, the site of Admiralty Headquarters and a number of boat houses.

Mount Batten, covering about 31 ha was a naval flying boat base. It has a Scheduled Ancient Monument in the form of a castle, and has numerous buildings, including 3 large hangars for flying boats. The site is constrained by some contamination, including aircraft fuel and domestic refuse. It has very difficult road access but good water frontage overlooking Plymouth Sound and South Harbour.

Organisations/Community involved/Process for Reuse

The Plymouth Development Corporation was set up to manage the transfer of the Ministry of Defence lands to civilian uses. Contributions of £20 million from the Ministry of Defence, £20 million from the Department of the Environment and funds from the City Council enabled formation of the Corporation and essential infrastructure to be provided. The Corporation provides the necessary focus to achieve regeneration, with the City Council as local planning authority ensuring that development is of a high quality and meets local community needs. Development plans are currently being prepared for the three sites. The Royal William Yard has also been marketed under the Department of Environment Private Finance Initiative, which is designed to attract private investment into high profile government-backed projects.

Reuse of the Site

Royal William Yard is planned for redevelopment as a mixed use development with housing, commercial and business uses, leisure and tourism. Mount Wise is proposed to become a housing area with some commercial and recreational use. 100 houses are planned to be completed by 1999. Mount Batten is to be regenerated with 120 new houses, marine-based light industries, a new pub and a water taxi service operation.

Lessons for Good Practice

- The management and implementation of the reuse of the former military sites as they close is undertaken by the Plymouth Development Corporation, run by a board representing local agencies and the community. The Ministry of Defence contributed funds to enable essential infrastructure to be provided. The Corporation provides a high profile focus for regeneration.

- Imaginative use of the Private Finance Initiative.

Contact Organisation:

Plymouth Development Corporation,
Plymouth, Devon, England.
Tel: 0752 256132



3.14 WILHELMSHAVEN

Background

Wilhelmshaven was developed as the national naval port of North West Germany on the North Sea coast and is today the largest naval port in the Bundesrepublik. Naval and port developments were closely linked to the development of the city. The national reduction in armed forces means that the navy will be reduced by 30% from its present size. The reduction in troops and administration stationed at Wilhelmshaven has meant that a broad range of sites and buildings in various locations have been freed for conversion. Examples are Materials Depot 2, the Banter Barracks and Wiesbaden Bridge in the Main Port.

Unique Features of the Site

The former Materials Depot 2 covers an area of 15ha in the south west of the city, adjacent to an existing business park. On the site are storage units and sheds of various sizes. They are mostly old buildings. The condition of the buildings and infrastructure is poor.

The Banter Barracks, a former marine barracks, are at present occupied by an army training centre, to be relocated in 1997/8. The barracks themselves, built in 1937, are worth protecting. They are located adjacent to a former wartime basin, which was converted into a recreational area after World War Two and are in close proximity to the city centre.

The Wiesbaden Bridge is located in the main port area. Up until World War Two, it was used to provide ships with fuel. The Wiesbaden Bridge juts out into the main port and has also been used for residential and recreational purposes since the 1970s. The condition of the buildings on the Wiesbaden Bridge is good. As a result of its location and condition, the area has a high economic value.

Organisations/Community involved/Process for Reuse

The available marine estates in Wilhelmshaven are gradually being transferred from military to civil administration. The Civil Estates Department is represented locally. The National Estates Department aims to sell its estates on the open market. For certain social or cultural projects, prices are reduced. The City of Wilhelmshaven is charged with the planning and legal aspects of conversion. It has tried to participate actively in the conversion process by joining public/private



partnerships. The actual conversion has, however, mainly been carried out by private investors.

Reuse of the Site

The Material Depot 2 is to be gradually integrated into the business park in the south west of the city. The city plans to develop a business centre in the existing buildings since building completely new infrastructure, even with public subsidy, would render the project uneconomic. Existing green spaces of particular value will not be included in the development.

The Banter Barracks and Wiesbaden Bridge should be gradually integrated into the city's development concept for the South and Main Port. Residential, leisure, educational, water sport and water sport related services are being considered. Land Saxony has decided to award financial assistance for feasibility studies for the conversion of sites.

Lessons for Good Practice

- The city has tried to link the infrastructural planning of the port and city and convert the military estates as quickly as possible in an economically viable way.
- Since the port is of such importance in Wilhelmshaven, particular strategic and political moves have been made to overcome the problems arising from disarmament.
- Schemes have been developed within the framework of a city action plan.

Contact Organisation:

**Stadtverwaltung Wilhelmshaven,
Postfach 1140,
26328 Wilhelmshaven, Germany.
Tel: 010 49 4421 16 1855**



3.15 LORIENT

Background

The submarine base is 35 ha in size and is situated on the Bay of Lorient in south-western Brittany, France. The base was opened in 1942 by the Germans to serve as the principal Atlantic base for submarines. After the war, the French army used the site as a repair and maintenance base for standard submarines. With the development of nuclear-propelled submarines, the base at Lorient became less useful and was used more and more by the navy arsenal, for maintenance and repair of engines and fabrication of hulls and fuselages. The base will close completely in 1997. With 600 jobs on site, the impact on local communities will be a major issue.

Unique features of the Site

There are three large indestructible hangars, 100m x 100m and 35m high and seven submarine docks for sheltering the vessels. These buildings are considered important for their historical significance. The site has several lightweight buildings used for the restoration and docking of submarines. The base is located near the third largest fishing port in France, which is also an important business port with a navy arsenal under the responsibility of the Ministry of Defence, where navy armaments are constructed. The location of the site within an existing urban area and its attractive character offer potential for tourist accommodation or holiday homes. The Paris region is only 4 hours by car and the TGV rail line will soon be extended to Lorient. Coastal conservation policies tightly control development on the French coast.

Organisations/Community involved/Process for Reuse

The base is owned by the Ministry of Defence, although certain people were able to buy back land after the war when it was returned to the public domain under the supervision of the Ministry of Development. The Ministry of Defence is currently engaged in a study on the reuse of the site which involves the City of Lorient, the Prefecture, the Chamber of Commerce and Industry and the Arsenal. The Ministry of Defence has funds to convert the site, but their impact will be limited to a ceiling of 20 million francs or 30% of expenditure.

Reuse of the Site

Different plans for reuse have been proposed. An extension of the city is one proposal with an emphasis on housing. The existing buildings would provide foundations for new apartments constructed to overlook the sea. Some of the submarine shelters and the area around the docks could be used for storing yachts with up to 30-35 metre masts, museum, exposition and shops, boat maintenance areas, nautical school, a pleasure port, hotel and restaurants. This option responds to an identified market but requires strong support from the private sector. It is also a break from the traditional industrial use of the site and does not address the creation or maintenance of jobs.

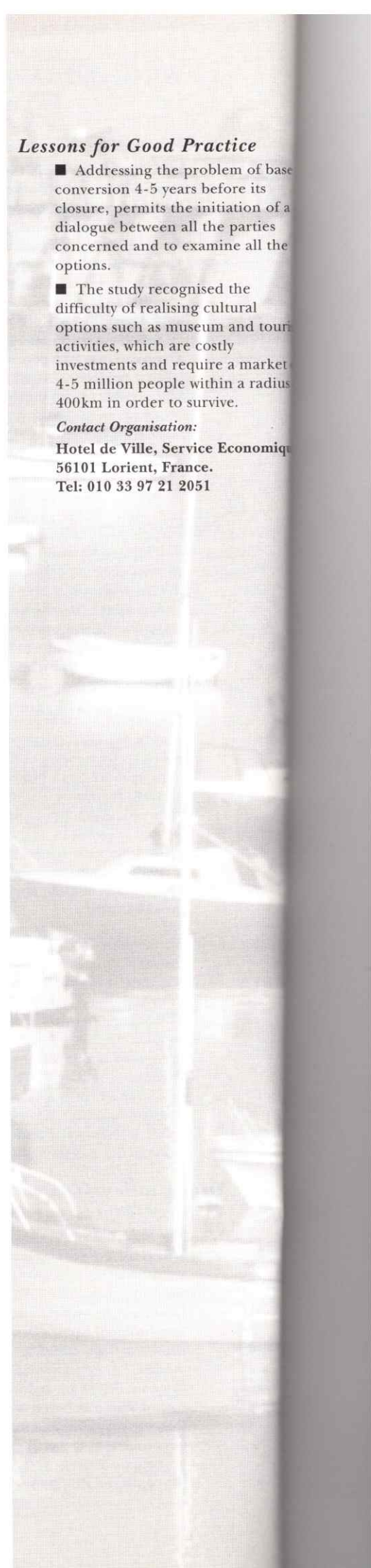
The second option is to conserve the industrial activities of the site and reuse the buildings and submarine docks for the maintenance and repair of boats, boat building, such as hulls, or casting of boat parts, and a centre for small-medium enterprises in the boat industry. The difficulty with this option is its financing.

Lessons for Good Practice

- Addressing the problem of base conversion 4-5 years before its closure, permits the initiation of a dialogue between all the parties concerned and to examine all the options.
- The study recognised the difficulty of realising cultural options such as museum and tourist activities, which are costly investments and require a market 4-5 million people within a radius 400km in order to survive.

Contact Organisation:

**Hotel de Ville, Service Economique
56101 Lorient, France.
Tel: 010 33 97 21 2051**



3.16 ROYAL ARSENAL – WOOLWICH

Background

The Royal Arsenal is located in Woolwich town centre, in the London Borough of Greenwich, south east London, U.K. The Arsenal is over 30 ha in size and lies on the River Thames. Woolwich has had an important defence role for over 400 years and was a significant military workshop. At its peak in World War One, the Royal Arsenal employed over 80,000 and was the major employer in south east London until the 1950's. Employment in recent years has fallen to only a few thousand and the site will close completely in 1994. The owners of the site, the Ministry of Defence, intend to control disposal of the site to achieve a high quality and integrated development.

Unique Features of the Site

The site contains a wealth of military heritage, including 20 listed buildings and is a designated Conservation Area. The history, quality buildings, relationship to Woolwich town centre and prime river frontage are opportunities to be utilised. The site is considered by the London Tourist Board to be the last great opportunity for heritage-led development of this type in London. It is also an opportunity to open up previously inaccessible river frontage to the public. The problems of contamination linked with former military uses are being addressed in the redevelopment of the site.

Organisations/Community involved/Process for Reuse

The Woolwich Revival programme is being managed by the Greenwich Waterfront Development Partnership. This agency brings together Greenwich Council with local businesses, such as STC, Submarine Systems Limited, community organisations, landowners and agencies, including the Ministry of Defence, the University of Greenwich, Woolwich College, the Royal Artillery Museum, South Thames Training and Enterprise Council, the Greenwich Enterprise Board and English Heritage. The Woolwich Town Centre Agency has been set up to oversee the revival of the Arsenal and town centre.

Reuse of the Site

The Woolwich Arsenal is proposed to be converted to a mixed use development including a tourism flagship project. The aim is to revive the Woolwich town centre and realise the heritage potential of the Arsenal. The Woolwich Revival Programme contains five key elements including heritage development, site rehabilitation and environmental improvement, business development, training, and research and development. Other potential uses that have been identified are retail uses, educational uses with the potential for University use, leisure and entertainment uses, business uses, residential uses, public pier and

riverside walk. The Woolwich Revival programme aims to bring new life to the area, bring former military land back into full public use and regenerate the local economy. The entire Revival project will be £1.5 million in size and will receive over £600,000 of aid from the European Union's KONVER programme.

Lessons for Good Practice

- The management model provided by the Greenwich Waterfront Development Partnership and the Town Centre Agency is a good example of public/private sector partnerships spearheading regeneration.
- Highlights the role military heritage can play in generating new uses such as tourism.

Contact Organisation:

European Office, London Borough of Greenwich, London, England.
Tel: 081 853 0077



REVIEW SITE AND PREPARE OPTIONS

Select Project Team

4.3 The Project Team should be comprised of senior professional members drawn from the organisations, public and private, which are most affected by the closure or run down of the base or facility. This Team should initially only comprise 3-4 individuals and their primary role will be to provide the technical support to the Working Party.

Prepare Site Summary

4.4 The first task for the Project Team is the preparation of a site summary. This should contain basic information about the site and its characteristics with a particular emphasis on the nature of the military and other specialised on-site facilities. The information required can be generally assembled by a single site visit and the use of available data. A pro forma is set out at Appendix One which lists the data to be collected. If items are not available no specialist research should be undertaken. Information gaps can be addressed at a later stage. The purpose of the site summary is to ensure that all interested parties and, in particular the members of the Working Group, have access to basic site information.

Establish Working Group

4.5 It is strongly recommended that the Commercial Audit Procedure is made the responsibility of a Working Group which will supervise and drive the whole process. The composition of the Working Group will vary from site to site but could be drawn from organisations of the type listed below:

- local authority/regional authority;
- politicians/councillors;
- development agencies;
- defence ministry;
- local trade organisations;
- environmental groups;
- potential private sector investors/developers; and
- community groups.

4.6 The most important consideration in assembling the Working Group is to ensure that it contains the most energetic people from each organisation. Assembling an effective Group is not easy. It will require a nominated person from within the Project Team to take responsibility for this task who commands respect from senior people both within and outside the lead organisation. The role or

interest of different groups will vary, for example, bases close to existing settlements will generate strong opinions amongst the existing community who will wish to play an important role on the Working Party.

4.7 Authorities with a number of sites within their area should give serious consideration to auditing two or more sites simultaneously. This will allow a greater understanding of comparability between sites and explore the potential for competition. A single Working Group may well be able to co-ordinate a Commercial Audit Procedure on a number of sites, thereby maintaining an overview and perspective. A Working Group responsible for a series of connected sites will be able to make informed judgements about priorities and the use of in-house and outside consultant resources.

Determine Goals and Objectives

4.8 The Working Group's first task will be to define a set of goals and objectives for the reuse of the site. These would be defined in a Project Workshop and could be orchestrated by co-ordinating consultants. The goals and objectives of the members of the Working Group may well conflict. Political and other preferences may also be expressed. This is not a problem at this stage of the process. If possible the objectives should be expressed in ways that enable them to be measured and quantified. The outcome of the workshop needs to be carefully documented as it forms an essential part of the monitoring and feedback of the process.

(Example: Defence Ministry may want to achieve maximum financial returns from sale of a site; local authority may want early job creation; and environmentalists wish to restore the site to a previous natural state. These are acceptable goals at this initial stage of the process.)

The Development of Broad Options

4.9 Once the definition of goals and objectives is complete the initial concepts for the site proposed by members of the Working Group should be developed into a number of broad development options based on the site summary and other existing information. The options should aim to cover the spectrum of views and opinions articulated within the Working Group. The output of Stage One is a brief description of up to around four broad options.



TESTING OF OPTIONS

4.10 The tasks to be undertaken in Stage Two are highlighted in the diagram.

Testing of Options

4.11 The main purpose of Stage Two is to test the options developed at the Project Workshop. The testing procedures/questions are grouped under six headings. These are as follows:

- Economic factors;
- Property market;
- Planning and Policy Context;
- Environmental factors;
- Community input; and
- Site facilities and infrastructure.

The characteristics in pursuing each area of investigation are:

- The 6 main subject headings which permit a wide range of investigation;
- Varying levels of detailed questioning;
- A series of structured questions which focus the audit and allow the user to decide easily which issues are important and identify gaps in the information base.

4.12 The testing of the options is to be undertaken by the Project Team sometimes in tandem with consultants appointed by the Working Group. The primary purpose of this stage is to test and review options in the light of commercial realities and reduce the number of reuse options for further consideration.

First Review of Options

4.13 There is the potential for an audit procedure to become unwieldy and unnecessarily lengthy if the options are not reviewed in light of what is already known by the Working Group at the first opportunity. A test at this stage is simply to determine whether a particular area of investigation is worth pursuing following initial study.

4.14 An audit procedure which seeks to analyse and incorporate every available piece of information will not work. The recommended methodology seeks to eliminate those factors which have minimal impact on the real decision making process as soon as possible. To investigate international demands/trends for a remote base where demand for space will be limited to a few local companies would clearly be inappropriate

(Example: If it is clear that planning policies would prevent development of a Business park and the commercial demand for such use is low then there is no point in pursuing that line of investigation. If however planning policies are favourable towards employment growth and there is market demand then the investigation should be pursued further.)

4.15 Throughout this stage of the procedure it is important to cross reference between the areas of investigation and establish linkages, particularly between economic and physical factors. This ensures that existing material is always fed into the process and that tasks are not duplicated.

(Example: Existing on-site leisure facilities may provide an opportunity for the local community or form the basis of a commercial leisure development.)

4.16 The six headings identified are intended to provide a comprehensive framework for investigation. For many sites, however, the development of broad options by the Working Group will eliminate certain scenarios at a very early stage. Where the realistic alternatives are limited, evaluation may be possible using a grouping of the six headings as set out below along with a set of critical early questions.

1. Economic Factors

Are there economic factors which will encourage or eliminate any potential reuse option?

Labour Supply/Demand

Existing Skills

Linkages and Impact on International/Regional/Local Economy

Special Economic Initiatives

2. Property Market

Is a commercial reuse of all or any of the site a realistic possibility, and what types of use would the market sustain?

Housing

Office/Business

Retail

Industry

Leisure/Recreation

3. Planning and Policy Context

Are there any planning or policy factors which will limit or influence reuse possibilities?

4. Environmental Factors

Are there any environmental factors which will encourage or prevent particular reuse options?

5. Community Priorities

Does the proximity of existing communities limit reuse potential?

Does the community have a preferred reuse strategy?

Are there any priority community facility requirements?

6. Site Facilities and Infrastructure

Are there any site characteristics which will prevent or facilitate commercial reuse?

Site

Buildings and Facilities Inventory

Internal Infrastructure

External/Supporting Infrastructure

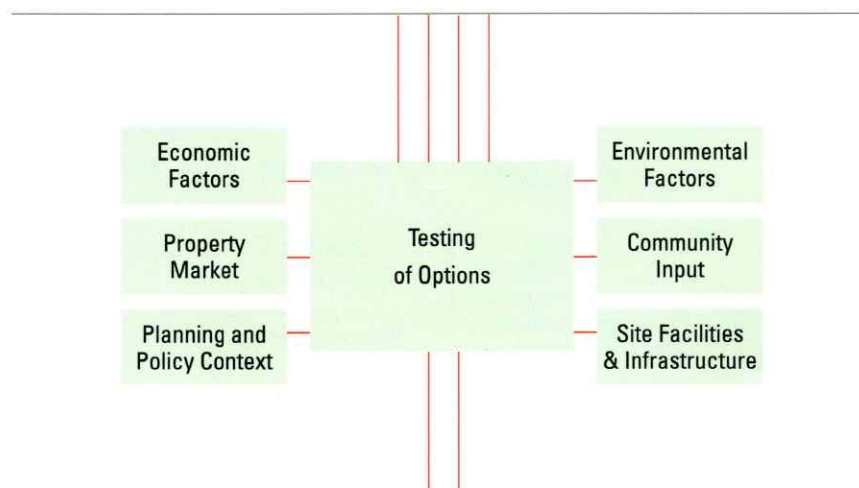
Communications Network

Are there any special/large-scale uses seeking to locate within the area?

Are there particular items of military infrastructure which lend themselves to commercial reuse?

Special Uses/Military equipment

Other Military or Government Uses



Next Level of Analysis

4.17 More detailed questioning will be directed at those options which have succeeded in passing the first sieve and will provide a more robust and thorough testing of the options. **Full details of the type of questions that should be examined at this stage are set out on a separate computer disc available in English and German versions. Contact Wiltshire or Kaiserslautern at the addresses given on page 37 for further information.**

The computer disc programme provides the framework and detailed questions necessary for the in-depth examination of options. The programme will greatly facilitate the audit process by ensuring all data is gathered and presented in a structured format, cross referencing between the various categories is simplified and it improves the management of the audit procedure by controlling the amount of information that is gathered.

4.18 Some examples of the relevant issues and questions are as follows. For various sectors of the property market, such as housing or business space it will be necessary to address the following issues:

- international and national market trends;
- regional supply and demand;
- local supply and demand;
- relevance of existing facilities; and
- impact of existing planning policies.

4.19 The environmental factors will need to be examined by addressing the following issues:

- protective designations;
- ecology;
- fauna and flora;
- restoration potential; and
- climatic issues.

In all cases it will be important to cross reference the results from the different sets of questions.

The Special Military Dimension

4.20 In pursuing the areas of investigation it is the military dimension which must be kept to the forefront as some aspects of the Commercial Audit Procedure are applicable to any site or building. The essential part of the investigation is to determine the commercial potential of former military plant, buildings and equipment. For many former military sites the immediate future will be a temporary re-use of existing buildings by local companies seeking cheap premises or use of equipment. The number of major users, such as new regional airports, will be limited. The essential purpose of the methodology is to ensure that unrealistic solutions are rejected early in the process.

Development Options

4.21 At the end of Stage 2 the options will have been reduced in number. Those remaining will have survived this initial testing and will have been transformed into worked up development options. This means that if commercial re-use possibilities are being considered development options will be specified in terms of amounts of new floorspace; re-use of some existing buildings and an indicative estimate of infrastructure requirements.

STRENGTHS, OPPORTUNITIES & CONSTRAINTS ANALYSIS

4.22 The later stages of the Commercial Audit are concerned with drawing together the results of the previous stages.

What is a Strengths Opportunities and Constraints Analysis (SOC)?

4.23 The methodology emphasises the importance of the SOC Analysis. It is suggested that this is one of the stages of the Commercial Audit Procedure where the input of co-ordinating consultants would be most valuable. After the investigation of the development options the SOC analysis will enable the Working Group to monitor the outputs of the Commercial Audit Procedure against the goals and objectives defined at the outset. A simple definition of these terms is set out below:

Strengths: These are the economic factors or physical circumstances of a site which make it suitable for a particular use.

(Example: A strong demand for residential units and the existence of vacant accommodation on a base are self reinforcing strengths.)

Opportunities: These are provided by gaps in the market which development of a base might be able to exploit.

(Example: A major international operator may be seeking to locate an air freight terminal in a particular country)

Constraints: These can be physical, policy or economic in character and are factors which inhibit the re-use of a site, requiring heavy expenditure to overcome and influencing development viability. The SOC will identify what actions need to be undertaken to overcome these constraints.

(Example: A site may be heavily contaminated which will require major expenditure from the public sector before any private sector investors will be interested and may even preclude certain uses from ever locating on the site. eg housing.)

Purpose of SOC

4.24 The SOC Analysis provides a way of summarising the results of the Commercial Audit Procedure at the end of Stage Two. It has been recognised from the outset that there will be conflicts over goals and objectives within the Working Group and that this is a situation which is to be expected. It is at the SOC stage that some of these conflicting goals and objectives need to be resolved or at least made explicit. SOC will test the goals and objectives defined at the outset in the light of the findings from the Stage Two analysis. The aim of the SOC Analysis is to build consensus among the participating elements. The evaluation of scenarios against a series of objectives is illustrated in the diagram below which shows a SOC Evaluation Framework.

Undertaking SOC

4.25 A SOC should be undertaken in a second Project Workshop which is attended by all members of the Working Group, its support group of officers and members of the consultant team who will structure and record the session. A SOC could last from a half to two days, depending upon the scale of the site, complexity of issues and interest from outside groups.

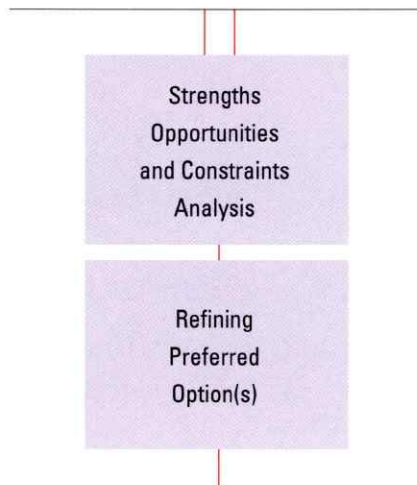
4.26 The task for the Working Group will be to consider a series of papers which will have been prepared by the Project Team. These papers will set out the Strengths, Opportunities and Constraints which relate to the options that emerged from Stage Two.

4.27 The purpose of the workshop is to analyse the merits of each option and discuss and resolve obvious conflicts. From this session it will be possible to identify a preferred option(s) which can be tested in Stage Four. The success of the SOC will depend upon the willingness of participants to enter into wide ranging discussion.

A Typical SOC Analysis

4.28 In order to illustrate how the development options might be evaluated a conceptual framework is set out below:

4.29 The SOC Evaluation Framework shows a typical composition of the Working Group with five main elements – **landowner** (who is likely to be the Defence Ministry); **local authority** (or authorities if different levels of government are involved); **the community** (local residents groups and other representative organisations); **environmentalists** (who may represent local or national interest groups depending on the nature of the environmental issues) and **private investors** (who will be interested in securing commercial opportunities). This approach may not be necessary on all sites; it will be most valuable where there are many possible scenarios.



Interest Group	Landowner				Local Authority				Community				Environmentalist				Private Sector			
	L1	L2	L3	L4	A1	A2	A3	A4	C1	C2	C3	C4	E1	E2	E3	E4	P1	P2	P3	P4
Detailed Objectives																				
HIGH	H+																			
	H-																			
MEDIUM	M+																			
	M-																			
LOW	L+																			
	L-																			

4.30 Each of these elements may have different detailed objectives. Some examples of hypothetical objectives for each group are set out below.

Landowner

- L1 Achieve maximum land value
- L2 Sell site quickly
- L3 Minimise decontamination costs
- L4 Avoid legal/ownership problems

Local Authority

- A1 Increase employment
- A2 Solve highway/access problems
- A3 Increase local tax base
- A4 Minimise public sector expenditure

Community

- C1 Provision of low cost housing
- C2 More open space
- C3 Use existing recreation facilities
- C4 Minimise traffic generation

Environmentalists

- E1 Retain woodland
- E2 Conserve Area of Scientific Interest
- E3 Return land to former use
- E4 Protect buildings of character

Private Investors

- P1 Clean land deal
- P2 Early release of development parcels
- P3 Minimise reclamation
- P4 Easy route through planning system

Evaluating Development Options

4.31 The SOC Evaluation Framework set out above provides a technique for evaluating different options. Three are shown below and it is unlikely that there will be any merit in ever seeking to evaluate more than four because it will lead to unnecessary complexity. Each should be perceived as a realistic option in its own right. There is no point, and indeed it is wasteful, to generate options just for the purpose of testing. Each option is then evaluated against the detailed objectives of each participant in the Working Group.

4.32 In order to illustrate this technique three simple re-use options are presented, all dealing with the potential re-use of an air-base.

Option 1: Re-use site as commercial airfield

Option 2: Re-use site as new village

Option 3: Re-use site for recreation and nature conservation purposes

4.33 These are then evaluated by plotting the attributes of each option against the stated objectives of each of the interests which comprise the Working Group. In the interests of clarity only clear-cut and comprehensive reuse alternatives have been illustrated. The practical reality is that the development options will be less clear-cut and more incremental in character.

4.34 For instance Option One might score well in terms of Landowner Objectives because it yields a high land value for an employment use. It might score badly in terms of Environmental Objectives because achieving that use would damage an area of ecological importance. Option Two might fare well in terms of community objectives. It is important that the SOC Evaluation Framework does not become too complex. Each option is rated as scoring high, medium or low against each objective. The matrix shown below merely provides an explicit graphic tool for assessing the benefits and dis-benefits of one option against another. It does not in any way attempt to suggest which option is the best in any particular set of circumstances. That choice still rests with the Working Group using the expertise and advice of its Project Team and technical advisors.

Monitoring and Feedback

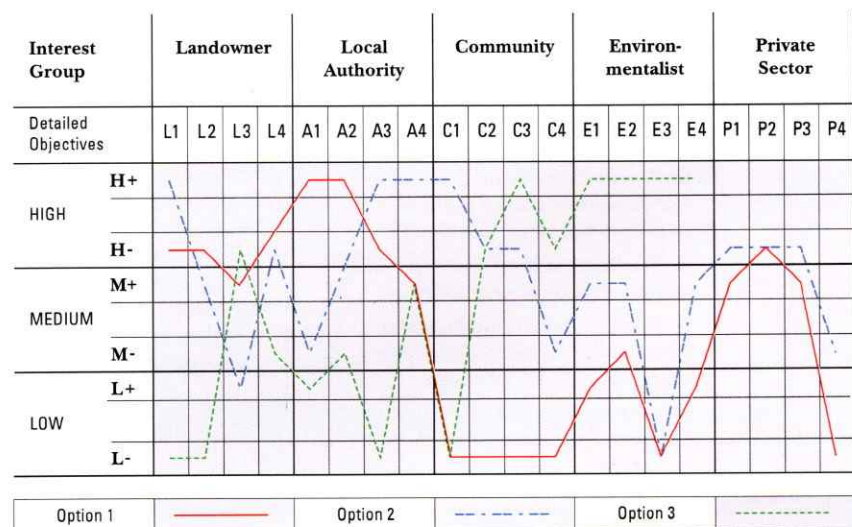
4.35 Underlying the whole process described within the Handbook is the need for continual monitoring and feedback. It is particularly important that this process occurs after the SOC Analysis. The SOC will lead to the revision of goals and objectives, originally set at the First Project Workshop, in the light of the evaluation of various options.

(Example: An objective to maximise the value of land sales is unrealistic if it becomes clear that environmental and planning policy constraints will prevent the commercial re-use of a particular site or, alternatively there is no current commercial market for the site.)

Outputs from SOC

4.36 The main outputs from SOC will be a series of summary papers which deal with the following topics:

- the development options considered;
- the strengths, opportunities and constraints which attach to each;
- summary of the discussions; and
- a specified preferred development option(s) for further testing.



INVESTIGATION OF PREFERRED OPTION AND IMPLEMENTATION

4.37 The tasks to be undertaken are highlighted in the diagram.

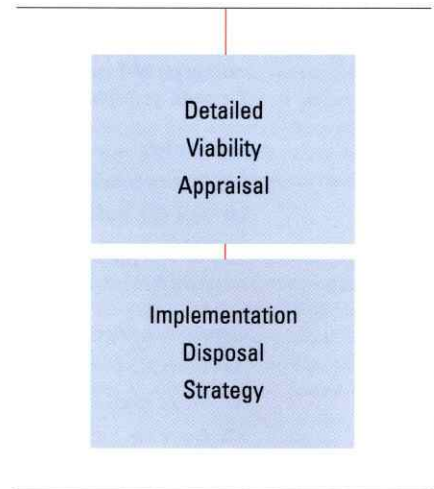
Detailed Viability Appraisal

4.38 The detailed testing of one option, (or perhaps in special circumstances two), should only take place after completion of the SOC Analysis and re-evaluation of the original goals and objectives. Undertaking a detailed viability and appraisal exercise for one particular option will require inputs from an extensive professional team. One of the main objectives of the Commercial Audit Procedure is to ensure that this stage of the procedure is not carried out and resources wasted without some certainty that it is the most appropriate option that is being developed in detail.

Implementation and Disposal Strategy

4.39 The purpose of the Commercial Audit Procedure is not simply to identify and test development options. Development options are of no real use unless they are implemented.

It is therefore important that an implementation and disposal strategy is prepared. The details and issues likely to emerge at this stage are dealt with in the next chapter.



RESOURCE REQUIREMENTS FOR UNDERTAKING THE AUDIT

4.40 The Commercial Audit Procedure is a complex process and should not be undertaken without an appreciation of the staffing, timing, financial and expertise implications. Staffing and resources for all stages will depend upon the issues which attach to each site and in particular, the size of the base and scale of the facilities. Three to four professionals should form the basis of the technical support team for the duration of the project. Other professionals can be brought into the team at appropriate times; in the same way consultant expertise can also be used to supplement in-house resources.

Stage 1

4.41 It is envisaged that the following resources might be required to accomplish the tasks in Stage 1. The resources relate to a typical base, say 100 hectares, with a mix of facilities in an urban or semi rural location.

- Preparation of Site Summary: Site Assessment and Facility Review (10 days of professional time)
- Establishment of Working Group (6 days of professional time)
- Setting Goals and Objectives (2 days of professional time plus time from Working Group)
- Developing options (5 days of professional time)

The above should be completed within 4 weeks of elapsed time.

Stages 2 and 3

4.42 Again the resources required will depend on the size of the site. It is envisaged that Stages 2 and 3 could be completed within a four month period. It is not possible to identify the resources required to accomplish the tasks in stages 2 and 3 without prior knowledge of the site. A four month period allows for 80 working days. Most sites will require multi-disciplinary teams to review the commercial opportunities. An indicative input would range between 40 and 150 days, very much depending upon the complexity of the issues involved. This figure would be apportioned between in-house staff and outside consultants.

Stage 4

4.43 The time inputs required for Stage 4 cannot be estimated independently of a site specific application and the development options being tested. The range of impact assessments and feasibility studies could be extensive and be required to deal with a wide range of circumstances. They could vary from the development of a new regional airport to the return of the site to agricultural use.

Introduction

- 5.1 This document has highlighted the great variety of military bases that exist and the reuse challenge that faces organisations across Europe. In many cases, the implementation and disposal issues are the same as any other piece of land or building but given the unique characteristics of military facilities there are factors that will influence the way reuse strategies are implemented and sites disposed of.
- 5.2 This section raises some of the practical ownership, disposal and management issues associated with the implementation of reuse strategies for former military sites. It also highlights the potential for partnership between Defence Agency; local community, local authorities and commercial interests in implementing reuse strategies and the marketing of the opportunities.

Who Initiates the Implementation Process

- 5.3 The initiator of the implementation process will vary depending on the nature of the opportunities provided by the site and/or the problem caused by the closure. Where reuse values are potentially high, for example land suitable for a new settlement, the landowner, the Defence Ministry, and their professional team will often take the lead in the implementation process. In other cases a desire to replace the lost jobs, regenerate the local economy or improve the environment will often result in the local or regional authority playing a more proactive role along with the local community.
- 5.4 In the United States the government hands the entire reuse and conversion process over to the local community which then has responsibility for managing the implementation process. In many cases a joint venture company is formed to lead the process and market and dispose of the assets. For example, at Chanute AFB in the U.S.A., the reuse strategy is being implemented by the Rantoul Conversion and Development Office which oversees the conversion of facilities.
- 5.5 The Commercial Audit Methodology, which is focused on identifying viable reuse strategies, provides the foundation for a joint approach to implementation. This will commence with the Working Party and may go on to result in the establishment of a formal joint

venture company or agency which is able to balance the various competing demands or needs of the base and the surrounding local economy. Joint ventures, either formal or informal, can take many forms but they provide a well tested vehicle for involving other players such as the local community or their representatives. This approach also provides opportunities for securing funds from both the private and public sector which can help enhance the implementation process. For example, the removal of derelict buildings or contaminated land. The review of international good practice shows that the most successful reuse strategies have been pursued via a public private joint venture or partnership.

Implementing the Commercial Audit Outputs

- 5.6 The outputs from the Commercial Audit Procedure will vary depending on the nature of the base, the preferred option and the results of the appraisals and feasibility studies. The next sections highlight some of the more complicated military situations that may affect the implementation process.

Dealing with Military-Related Problems

- 5.7 The previous chapters, in particular chapter 2, have shown how specific military issues can influence the implementation process. These are discussed below.

Information Availability

- 5.7.1 The availability of site specific information as well as the results of the Commercial Audit Methodology are essential elements of the implementation process. In some cases, possibly because a base closure is going to be phased over a number of years, military authorities will be reluctant to provide full details of the base. This will make it very difficult to complete the Commercial Audit Methodology and will undoubtedly hinder the implementation of reuse strategies. In such circumstances the entire process including the establishment of a Working Group may need to be delayed until sufficient information is available. It is generally not advisable to commence the preparation of reuse strategies without adequate information.

Site Ownership

- 5.7.2 The ownership of the site has a fundamental impact on the implementation of the reuse strategy. In some cases land which is to return to non military use has to be offered back to its previous owners. In some countries, such as Germany, the identification of the previous owners is a daunting task. Elsewhere, foreign owned bases have initially to be returned to the national government and sometimes, depending on the original method of purchase, offered back to the original owners. The ownership issue is a fundamental priority for those planning for the reuse of the base. If it is not resolved at an early stage it can delay or even undermine the entire reuse process.

- 5.7.3 Earlier stages of the Commercial Audit Procedure will have identified legal constraints and covenants which restrict the nature and extent of development. In certain circumstances it may be desirable to renegotiate these covenants.

Contaminated Land

- 5.7.4 Feasibility studies may have identified the existence of contaminated land. This will have an impact on the value of the site, it may constrain certain types of uses and will impact on the availability of the land. The type of contamination can vary from firing ranges where there might still be live ammunition to areas where obsolete equipment/ammunition was destroyed or burnt. In these circumstances the relevant parties, joint venture or possibly the Working Group will need to discuss who should undertake the clean up operation and whether site decontamination should be undertaken by the Defence Ministry or by the next occupier. The examples from Brandenburg illustrate the range of difficulties that will be faced, including dealing with sub-standard buildings and surveying extensive areas to identify areas of contamination. The absence of precise records will often make this task particularly difficult and eventually expensive.

Site Clearance

5.7.5 Although site clearance is a problem encountered on development sites everywhere, the specialised nature of certain military facilities can cause additional problems. Deep concrete bunkers or submarine pens are difficult facilities to identify new uses for and are very expensive to remove. In some cases the facilities can be sealed but this can lead to the creation of a sterilised development zone, which on some sites could be a significant area which impacts on the viability of development appraisals.

Site Characteristics

5.7.6 In addition to specialised military facilities, bases sometimes incorporate historic structures or buildings and protected landscapes. These issues will have been highlighted by the Commercial Audit Procedure and will probably be of great interest to local communities. The existence of these types of facilities will impact on the time it takes to secure relevant development consents. The Woolwich Arsenal, for example, with the proposed renovation and conversion of 20 listed buildings to a mixed use development, will require detailed discussions with conservation bodies before redevelopment can progress.

Development Phasing

5.7.7 In many cases the Defence Ministry will retain some interest in adjacent land or buildings either in perpetuity or simply to enable a phased withdrawal. This has implications for the security and general site management of the remaining facilities and may impact on the image and type of developments that could be attracted. On some bases the facilities have been shared. For example, at Ellinikon, Greece, the Greek air force continues to use part of an ex-U.S. air force base, and the regional airport will continue to operate until closure. A phased development programme will also affect the nature of the reuse strategy and constrain site preparation and infrastructure development. In these circumstances, the parcelisation of the site may provide the best way of bringing forward development opportunities at an early stage.

Marketing the Opportunities to the Private Sector

5.8 The marketing approach will depend on the nature of the commercial opportunity. The simplest option is where a standalone building, say an office or residential block, is vacated and can be simply put on the market and offered to prospective buyers or tenants. In this situation there is generally no need to undertake detailed feasibility studies or secure additional consents. An example of this is at Peninsula Barracks, Winchester, where one of the former military administrative buildings, requiring minimal upgrading work, is proposed for immediate business use.

5.9 The next level of complexity concerns a standalone piece of uncontaminated and vacant land that may be available for development. The detailed feasibility studies will have determined the most desirable uses for this land which in turn will have identified the need for new planning consents. The requirements of the planning authorities may necessitate the preparation of plans and other material to secure the relevant consents. In the case of large sites with a mix of uses, masterplan-type drawings may be prepared. This will also be useful in the marketing process. In some circumstances masterplans or concept plans may have been generated at an earlier stage of the Commercial Audit Procedure.

5.10 One useful way of identifying the most appropriate marketing strategy is to classify the commercial opportunities under one of the following headings:

- international;
- national;
- regional; and
- local.

5.11 For example, the existence of a high quality harbour or airport with associated facilities, such as Subic Bay in the Philippines, would fall into the first and second category. The sale of significant tracts of land for a business park or residential development, such as USAF Bentwaters in Suffolk, would fall into the second and third category. Smaller scale sales or letting opportunities, such as Royal Air Force Chilmark in Wiltshire would be more suited to the third and fourth category.

5.12 The category will then help determine the appropriate marketing strategy and materials. For sites with the potential of attracting international interest this will include the preparation of comprehensive sales brochures which would include details of the specialised military facilities that are available. This would be supported by widescale advertising and in some cases, particularly remote sites, the preparation of a video. Less expensive techniques are appropriate for local marketing. Much of the material required for marketing the site would have been generated as part of the Commercial Audit Procedure, for example technical details on the specialised military facilities, site plans, photos, floorspace schedules and a reuse strategy master plan.

5.13 It is important to emphasise that the marketing effort should be undertaken against a background of certainty. A failure to resolve some issues such as ownership, closure programme and site contamination could undermine even the most comprehensive marketing strategy and may deter early investor interest.

Finance

5.14 Finance issues will require special consideration at the following stages:

- Costs of, and commitment to, undertaking the Commercial Audit Methodology;
- Role of organisations in a joint venture or other management role;
- Contribution to implementing strategies either through input to joint venture or meeting some of the costs, such as decontamination.

5.15 It is difficult to generalise about the precise costs of any of the above but in many cases contribution in kind, for example offering staff to work on the Commercial Audit Methodology or secondment to a joint venture partnership, can reduce the actual cash contributions.

5.16 In many cases, local authorities will have access to special central government or European funding programmes. These will provide resources to help undertake the Commercial Audit Procedure and also commence the implementation process. The European Union's KONVER programme is a good example of this type of funding. Public sector resources should also be used to lever in private sector investment.



5.17 In a number of cases, the commercial opportunities identified by the reuse strategy will have led to private sector interest being expressed when the base closure was originally announced. Where there is strong developer interest, the challenge for those involved will be to channel that interest in a way that meets the goals and objectives set by the Working Party. In areas where there is less interest from the private sector, local partners will need to devise innovative financial packages based on a cocktail of funds and identify ways in which commercial opportunities can be created to attract investors. Local partners should also seek ways in which private investors can participate in the reuse process. Sometimes, the private sector may form part of the Working Party and may also be willing to help meet part of the costs associated with the preparation of the reuse strategy.

Forms of Disposal

5.18 The nature of the reuse strategy will guide the form of disposal in conjunction with professional advice. In certain circumstances a freehold sale of land may be appropriate. The phased release of land may suggest that leases or licences should be issued. These forms of disposal ensure the vendor has a greater degree of control over the development and the future tenants.

On-going Site Management

5.19 Once part of the military base has been sold or let to a non military use it is sensible that some form of overall site management organisation is in place. Some bases are maintained to a very high level whilst in military use, but it may not be possible to continue when military activity begins to decline. A management organisation could therefore coordinate a temporary, voluntary or community aided arrangement until disposal of all assets has taken place. If the entire site is sold to a developer it is likely that some form of management body will be created. The ideal situation for implementing the reuse strategy would involve the establishment of a management organisation which would co-ordinate:

- sales, leasing and marketing; and
- property management.

5.20 Where land release is going to be phased over a number of years there is a case for the establishment of a pro-active management company. The roles and responsibilities could also include the marketing and promotion of the remaining plots of land. The potential exists to create a body which could play an important role in local or regional economic development and marketing. Equally, these functions could be undertaken by a body which was already involved in these matters. The joint venture route highlighted in section 5.4 could also provide the organisational structure to undertake these tasks.

5.21 Property management responsibilities would focus on meeting the needs of tenants and ensuring the landscape and remaining buildings are maintained to a high standard. The membership of the management organisation would vary from purely professional to one that incorporated local community interests aimed at promoting economic development.

Managing the Political Process

5.22 Political considerations play an important part in the conversion of military establishments. This starts when the decision to close the base has been sanctioned by politicians and then the level of influence thereafter depends on a number of factors. Some of these include:

- Size of base and economic impact may force politicians to phase closure to mitigate impacts;
- the economic impact may require the development of specific financial or development incentives, such as Enterprise Zones;
- favoured reuse strategies may require the relaxation of certain policies such as nature protection;
- dealing with one-off conversion costs, such as decontamination, may require funding; and
- the establishment of a public private partnership.

The Working Group will need to consider how best to influence this process, in the form of lobbying or other measures if the reuse strategy is to be successfully implemented.

SiteName of Site:
_____Name of Working Group Co-ordinator:
_____Contact Address:
_____Telephone:
_____Fax:
_____**General Data**Opened:
_____Scheduled Closure Date:
_____Ownership:
_____Current Use:
_____Area:
_____Activity:
_____**Employment Data**Previous level of employment (military and civilian):
_____Current level of employment:
_____**Existing Accommodation***Immediately available for*Office:
_____Industrial:
_____Residential:
_____R & D:
_____Leisure:
_____*Any planned development for*Office:
_____Industrial:
_____Residential:
_____R & D:
_____Leisure:
_____**Specialised Operational Infrastructure**List all specialist operational items eg; hangars, runway length and conditions, specialist vehicle facilities, fuel storage tanks, etc.

_____**Accessibility**Principal highway connections:
_____Nearest railway/railway station:
_____Nearest airport:
_____Nearest port/waterway:
_____**Population Workforce***Population within* 10 Km:
_____11-50 Km:
_____*Workforce within* 10 Km:
_____11-50 Km:
_____Nearest large settlement:
_____**Plan/Aerial Photograph**Attach good quality plan of the site showing boundaries and adjacent settlements/development.
If possible an aerial photograph should be attached as well.

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