

**UNIVERSITY OF READING**

**Department of Land Management and Development**

**Planning for the Reuse of Redundant Defence Estate: Disposal Processes,  
Policy Frameworks and Development Impacts**

**Joe Doak**

**Working Papers in Land Management and Development**

**No. 08/98**

**November 1998**

Working Papers in Land Management and Development

Copyright of this Paper remains with the author(s).  
Comments are welcome, but the Paper should not be quoted  
from or referenced without the permission of the author(s).

# **Planning for the Reuse of Redundant Defence Estate: Disposal Processes, Policy Frameworks and Development Impacts**

**JOE DOAK<sup>1 2</sup>**

## *Abstract*

This paper reviews recent research and other literature concerning the planning and development of redundant defence estate. It concentrates on UK sources but includes reference to material from Europe and the North America where it is relevant for comparative purposes. It introduces the topic by providing a brief review of the recent restructuring of the UK defence estate and then proceeds to examine the various planning policy issues generated by this process; the policy frameworks used to guide it; comparable approaches to surplus land disposal and the appraisal of impacts; and ending the main body of the review with an analysis of the economic, social and environmental impacts of military base closure and redevelopment.

It concludes that there is a significant body of work focusing on the reuse and redevelopment of redundant defence estate in the UK and abroad, but that much of this work is based on limited research or on personal experience. One particular weakness of the current literature is that it does not fully reflect the institutional difficulties posed by the disposal process and the day-to-day pressures which MOD personnel have to deal with. In doing this, it also under-emphasises the embedded cultures of individuals and professional groups who are required to operationalise the policies, procedures and practices for planning and redeveloping redundant defence estate.

1. Joe Doak is a Lecturer in Environmental Planning and Development in the Department of Land Management and Development at the University of Reading.
2. The author is grateful to the other members of the Fuller Peiser/University of Reading research team for their work on the project from where this material originates. Particular thanks go to Paul Roberts, David Green and Peter Bovill at Fuller Peiser and to Nick French at the University of Reading. The research project also benefited from a wide-ranging and active Central Government Steering Group and ministerial involvement from both the DETR and MoD.

## **1. The Peace Dividend and the Restructuring of the Defence Estate**

The Ministry of Defence (MOD) has the second largest estate in single ownership in the UK, second only to the Forestry Commission. It owns approximately 226,000 ha (557,000 acres) and leases a further 15,000 ha (38,000 acres) of land. This approximates to 1% of the total UK land area.

The rapid changes experienced by the defence sector over recent years has resulted in a series of policy initiatives undertaken by Central Government to review defence requirements. These include:

- The 'Options for Change' initiative, announced in 1990;
- The Defence White Paper in 1993; and
- The 1994 Defence Costs Study - 'Front Line First'.

Most recently, the Government has undertaken a Strategic Defence Review which was published in July 1998. As a consequence of the end of the Cold War, all these reviews have sought to reduce defence spending and rationalise military base requirements; the so-called 'Peace Dividend'. This has led to the closure or rationalisation of many military sites across the UK. As an indication of the size of the disposal programme, the MOD reports that in the year 1996-1997 disposals generated over £100M.

The response in the UK has been mirrored in most other NATO and the Warsaw Pact countries. Between 1990 and 2000 it is estimated that more than 8,000 military sites will be closed world-wide (BICC, 1996). Of particular importance to Britain has been the American rationalisation programme which has resulted in the closure of a number of US Airforce bases in the UK.

The closure of military bases clearly has major land use implications, particularly in parts of the country where there has been a historic concentration of military use. The land use implications are also emphasised by the spatial and physical diversity of the estate. For example:-

- many urban areas suffering from economic problems have substantial areas of defence estate;
- the estate has numerous airfields, army barracks and training grounds located in rural areas, some of which are targeted for regeneration;
- 21% of the estate is located in South East England;
- the estate includes over 700 listed buildings and scheduled ancient monuments;
- the estate in England contains around 160 Sites of Special Scientific Interest and the RSPB has identified around 40 MOD holdings with a significant ecological interest.

The Defence Estate is held in the ownership of the Secretary of State for Defence and the responsibility for matching the estate to operational needs rests with the MOD's 13 Top Level Budget Holders. These include the three operational services (Commander-in-Chief of the Royal Navy, Army Land Command and RAF Strike Command) together with the various support services and MOD Headquarters.

The Defence Estate Organisation (DEO) is a Government Agency which provides advice and guidance to the MOD on all estate matters including property maintenance and construction.

It also carries out the majority of property disposals. These disposals are handled by a network of regionally based Defence Land Agents assisted by private sector consultants and agents. The very strong influence of the operational requirements of the Services has led to, “aura of unpredictability hanging over all defence management at a time of contraction and restructuring, constant reviews and uncertain prospects ...” (HoC, 1994a, para. 10)

This paper provides a review of the recent research and literature on the disposal and reuse of the redundant defence estate in the UK. It also includes comparative material from Europe and the USA, where some of the policy responses and reuse programmes have been more proactive than those in the UK.

## 2. Planning Policy Issues, Opportunities And Conflicts

The increasing rate of land and property disposal by the MoD has not been without some well-publicised skirmishes with the town and country planning system. Examples of these include:

- RAF Bentwaters, Suffolk (Hansard 1996; Independent on Sunday 4/12/94 p.10);
- RAF Upper Heyford, Oxfordshire (Hansard 1997);
- The Naval Dockyard sites in Plymouth and Gosport (HoC 1994b, pp. 139-145 and 148-157);
- Peninsular Barracks, Winchester, Hampshire (Estates Gazette, 5/3/94 p.63; Independent 25/5/94 p. 6); and
- Woolwich Arsenal, London (Times 16/10/93 p.17; Daily Telegraph 14/4/94 p. 20).

Although the media and political spotlight has inevitably fallen on examples where conflicts of interest and intent have been prominent, there has also been recognition that the disposal of redundant defence estate property provides a unique opportunity to support urban and rural regeneration, and/or sustainable development (Keeping and Comerford 1995; HoC 1994a, para. 6; and EAG/ECOTEC 1996, p.98; Griffiths 1997). In most of the cases of disposal there is a combination of ‘difficulties’ to be overcome and ‘opportunities’ to be exploited. The two debates in the House of Lords illustrated this point in the cases of RAF Bentwaters and Upper Heyford. However, they also raised a number of policy and procedural issues which the earlier House of Commons Defence Committee report also highlighted.

The main areas of concern raised by local authorities and others have been:

- the implications of the **timing and uncertainty** of the MoD disposal process for the effective consideration of land use and development options;
- the **balance of uses** sought for re-use and the **imbalance of consideration** given to economic and social regeneration and environmental and conservation priorities in the reuse process;
- the **inappropriate scale** of development often sought in reuse schemes given the planning policy and infrastructural constraints impacting on individual sites;
- the planning and sustainability implications of the relatively **remote location** of some bases;
- the need to **phase the release** and development/use of redundant defence estate over long periods of time which goes against the desire to dispose of property quickly;

- the planning and financial benefits to be gained by a **strategic approach** to site disposal in the face of the tendency to sell land on a site-by-site basis;
- the level of **MoD** commitment to take-on, or build-in, **responsibilities** for long-term environmental protection and/or clean up, and heritage protection and maintenance; and
- planning and financial implications of the **specialised nature** of many existing redundant military facilities, e.g. nuclear bomb-proof underground shelters, large areas of hardstanding, large aircraft hangars.

The House of Commons Defence Committee listened sympathetically to the MoD response to these areas of dispute and noted the problems that they faced due to the constant cycle of defence reviews and the requirement set by the Treasury guidelines to achieve the best possible price for their property assets. Its members noted that, “it will in reality be easier to respond to a call for more strategic planning when the recent period of continuous turbulence in defence is over”, (HoC 1994a, para. 10). However, they recommended that:

- No local authority should in future be taken by surprise by the vacation of a MoD site (ibid. para. 35);
- The MoD and DoE press ahead urgently in discussions over general planning guidance on reuse of MoD sites (para. 36);
- The rule requiring the best possible return must be applied with due acknowledgement of potential non-cash gains to the community (para. 42); and
- The detailed memoranda presented to the Committee should be compulsory reading for those taking-on responsibility for management of the estate, so that lessons can be learned from past failures (para. 30).

The consideration the Defence Committee gave to the variety of the defence estate was identified above. In particular the examples given remind us to be sensitive to the diversity of potential opportunities and issues which are likely to surface in any particular case.

Overall therefore, the major planning issues impinging on the disposal process appear to be:

- the opportunities it provides for regeneration, conservation and sustainable development;
- the constraints imposed by planning policies and the planning process;
- the apparent difficulties in integrating the disposal and planning processes; and
- the lack of emphasis given in the disposal process to wider socio-economic and environmental considerations.

### **3. Policy Frameworks and Mediation Devices**

Given the criticisms made by the Defence Committee and the House of Lords, which have been repeated elsewhere (Fyson 1994; Johnston 1993), it is useful to review the relationship and process of communication between the MoD and local planning authorities and other local interests (including the Government’s Regional Offices). The literature covers the four main ‘vehicles’ used to frame the discussions over base closure and the reuse of redundant defence estate:

- statutory development plans;
- site-specific planning briefs;

- area or sectorally-based conversion strategies and/or networks; and
- informal negotiation.

The relationship between defence estate disposal and the preparation of statutory development plans is not easy. The Defence Committee received evidence from the County Planning Officers Society and the RTPI which criticised the MoD for late and unsatisfactory responses to the plan-preparation process (HoC 1994b, p. 129 and p. 134, para. 18). Under-pinning this problem is the lack of a clear strategy for land and property disposal by the MoD, although the Defence Committee were well aware that uncertainty and, therefore, flexibility were almost structural characteristics of the disposal process (HoC 1994a, paras. 8, 10 and 34). Even in a case which involved substantial and wide-ranging consultation over the disposal and redevelopment of a MoD site (Keeping and Comerford 1995, p.149), the agreed scheme was only inserted into the local plan just before the consultation period.

The continual process of review and cost-cutting alluded to in the Defence Committee's recommendations, has made it very difficult for the MoD to forward plan its estate management and disposal process. This has inevitably meant that local Defence Land Agents have not been able to engage very effectively with the relatively long-term planning exercises carried out through structure and local plans. Examples of frustrated attempts to incorporate redevelopment and reuse issues into the local plan process were given to the Defence Committee by Plymouth City Council and Gosport Borough Council (HoC 1994b, pp. 148-157 and 139-145). This situation has thrust the focus onto shorter term, and often more difficult, planning exercises around site specific planning briefs or planning applications.

The use of (jointly prepared) planning briefs has long been the preferred route for dealing with the redevelopment of large areas of redundant defence estate (HoC 1994b, p.40, Q2450). These provide a relatively open and accountable framework for discussing and agreeing reuse and redevelopment options. They are openly supported by many authors who have examined these issues (e.g. EAG/ECOTEC 1996, p. 97; Network Demilitarised 1996, p. 6, para. 2.11). However, without clear planning policy support (at the local, strategic or national level) the negotiations have often been fraught with disagreements and misunderstandings. Examples of this are again provided by Plymouth and Gosport Councils in their evidence (HoC 1994b, p.149, para. 8 and p.142, para. 6.7). This is perhaps an inevitable consequence of the disposal of sites of such size and complexity.

Evans (1983, pp. 60-61)) found that planners and MoD's planning consultants working on redundant defence estate in the Metropolitan Green Belt sometimes agreed to use the policy guidance provided by Government Circular 12/91 for the National Health Service estate to guide the content of planning briefs. Another problem with relying on site specific planning briefs is that it mitigates against a strategic approach to land disposal and the possibility of cross-subsidising profitable and non-profitable forms of development and land use between redundant sites (HoC 1994b, pp. 120-121).

Conversion strategies and networks have evolved to try and manage the process of economic (and community) restructuring in defence-dependent towns and regions. Examples include the:

- Fife Defence Diversification Network and Programme;
- West of Scotland Defence and Aerospace Network;
- Portsmouth and South East Hampshire Defence Diversification Network;

- Edinburgh and Lothian Defence Diversification Initiative; and
- Lancashire Economic Development Partnership.

These local initiatives are linked into larger national (ACP 1997b) and European (Network Demilitarised 1994) networks which have co-ordinated their activities. Network Demilitarised is funded by the EU and has produced a handbook to guide local authorities in their negotiations on reuse (Network Demilitarised 1994). This proposes the use of a Commercial Audit Procedure to research, co-ordinate and agree reuse strategies for individual sites. The approach stresses the importance of involving all relevant stake-holders through a working group arrangement with encouragement given to a joint-venture vehicle for implementation. Experience with this and other arrangements is discussed in a follow-up report (Network Demilitarised 1996). Wiltshire County Council is leading the base reuse work whilst Lancashire chairs the group working on economic conversion.

Informal negotiations around the consideration of planning applications and broader redevelopment issues have been an important mode of communication between the MoD and local authorities. In the past there has been criticism of the complex web of negotiations required within MoD in order to reach decisions about disposal and, to some extent, reuse. More recently, the Government's regional offices have played the role of go-between and there is evidence that this has improved co-ordination both between and within central government departments and between them and local authorities on major sites (DETR/MoD, 1997; and EAG/ECOTEC 1996, p.97). This is being helped by a more proactive and focused approach by the MoD's Regional Policy Unit and the Defence Estates Organisation, and further initiatives are currently under consideration.

Overall, the four main vehicles for communication offer different opportunities and give rise to different problems. Ideally, a strategic approach to the disposal and planning of redundant defence estate is required, and this has been advocated by most writers and commentators and many of those involved in the process.

#### **4. Comparable Approaches To The Disposal Of Surplus Land And Property**

The disposal of surplus land and property by government departments and agencies is not a new phenomenon. Over recent years disposal strategies and policy frameworks have been developed for local authorities (Eminton 1987); British Rail (Caudle 1995); the water authorities (Synnott 1986); the University sector (CVCP 1994); and the National Health Service (Montgomery 1986; NAO 1988; and Evans 1993). Indeed, throughout history the defence estate itself has constantly gone through forms of restructuring to cope with new demands and requirements (Bateman and Riley 1987).

The example of the National Health Service land/property disposal has often been mentioned in the same breath as the current MoD process (Hansard 1996 and 1997; Evans 1993). The House of Lords debates on the disposal of the RAF bases at Bentwaters and Upper Heyford led to strong suggestions that the planning policy framework used for the redevelopment of NHS hospitals in the green belt (DoE 1991a) should be applied to the reuse of redundant defence estate. Two Masters dissertations (Evans 1993 and Wills 1995) have researched these issues. Evans concluded that the key principles and land release criteria in Circular 12/91 had provided a useful framework for negotiations over redevelopment proposals and that this had

been missing in the case of green belt MoD land. Interestingly enough, he found two cases (Leavesden, Hertfordshire and White Waltham, Berkshire) where the Circular has actually been used for defence estate redevelopment.

It is not only UK comparable experience which provides useful lessons. In relation to defence restructuring and land and property disposal, a substantial body of literature has been developed based on experience in the rest of Europe and North America (BICC 1996 and 1997; Cunningham 1993; Cunningham and Klemmer 1995; Klemmer 1995; NATO-CCMS 1997c; Network Demilitarised 1994; Paukert and Richards 1991; and Sharp 1990; US DoD 1995a/b; US DoD/OEA 1993 and 1995). Although these authors emphasise the variety of local conditions and the importance of a flexible approach to deal with this, there is a broad consensus that early negotiations between a range of stakeholders is a key requirement for 'successful' disposal and reuse (though 'early' is not defined). The approach in the USA has been particularly noteworthy in that significant guidance and support has been provided by the Federal Government, although the specific decision-making process has been heavily decentralised to base managers and local communities. The US guidance (DoD/OEA 1995) places strong emphasis on the importance of forming some kind of public private partnership between the key interests involved and the benefits to be gained by utilising the commitment and drive of local communities.

An element of caution should be adopted in translating the lessons learnt in the US to the UK. It should be noted for example that in the US, bases are often extremely remote and settlements can be much more dependent on them than those bases in the UK. Moreover, there could be considerable drawbacks in devolving powers over closure to local unit commanders in the UK.

Nonetheless, the comparative literature on the disposal of redundant real estate indicates that:

- valuable lessons about disposal and the use of policy frameworks may be gained from considering the experience of other public sector bodies such as the National Health Service;
- experience from Europe and the USA stresses the advantages of having early discussions with a range of interests and use of some kind of public-private partnership (PPP) to co-ordinate policy and action; and
- there is a 'strategic' role to be played by higher levels of government in terms of guidance, finance and other support.

## **5. Approaches To Appraising Impacts**

Before we consider the actual impacts of the redevelopment or reuse of redundant defence estate, it is useful to overview the different approaches which can be applied to make this assessment. The literature is awash with models and techniques to appraise the impacts of development projects or changes in the type and intensity of land use, but the three main packages cover:

- **economic impacts** (including labour and property market impacts and development appraisals) (e.g. Batey et al. 1993; Lichfield 1996; Darlow 1988; RICS 1997a);

- **social impacts** (including changes in community, leisure and health provision and impacts on different social or cultural groups) (e.g. Edwards et al. 1988; Harte 1986; Lichfield 1996; Percy-Smith 1992); and
- **environmental impacts** (including effects at local, regional and global levels in terms of habitats and bio-diversity, waste and pollution; energy consumption; the use of natural resources; landscape; and the historic built environment ) (e.g. DoE 1993, 1994, 1995; Glasson et. al 1994; Hughes and Wood 1996; MacLaren 1996; and Therivel et al. 1996 and 1997; and Doak et al. 1998)

More recently these different components have been meshed together into a type of ‘sustainability appraisal’ which seeks to integrate the needs of current and future generations within the carrying capacities of the local and global environment. It is this kind of appraisal framework which is increasingly characterising the approach of local, central and international government to development proposals (Therivel et al 1996; MacLaren 1996; SERPLAN 1996; and Doak et al 1998).

A more sensitive approach to property valuation has been developed by a team at the RICS (RICS 1997b) which seeks to balance the market concept of ‘price’ with the broader ‘worth’ of property assets to the organisation concerned.

In terms of appraising the impacts of the closure and reuse of defence establishments, most studies have tended to use, or advocate the use of, one or other of the three types listed above. However, the tenor of the arguments put to the Defence Committee was that all relevant considerations (i.e. economic, social, environmental and, not just, financial) should be taken into account in the disposal process. Another key point made by those who have studied relevant impacts, is that the appraisal should be sensitive to the range of local conditions and be disaggregated enough to pick-up the fine grain implications for different social groups. This becomes clear when the findings of these studies are examined.

## 6. Impacts of Closure and Redevelopment

Having made the case for an ‘integrated’ approach to impact evaluation, the following section takes the liberty of reviewing the existing literature by disaggregating the three components. In reality many of the reports and articles on the impacts of defence estate restructuring and disposal cover more than one component.

It has been the **economic** impacts of closure, reuse and redevelopment which have had most attention paid to them. Studies have been made of the impact on the economies of:

- the regions of the European Union (CEC 1992);
- Central and Eastern Europe (Cunningham, 1997)
- Germany (Cunningham and Klemmer 1995);
- communities in the USA (US DoD/OEA 1993);
- rural England (EAG and ECOTEC 1996);
- south west England (Braddon et al. 1991);
- the county of Oxfordshire (Oxfordshire CC 1992);
- the west of Scotland (Goudie 1997); and

- the cities and towns of Plymouth (Gripaios and Gripaios 1994), Kingston (Feloy et al. 1992), and Coventry (Quigley 1991).

This work includes and is closely allied to a group of studies looking at the impact of defence cut-backs on the defence industries (see also Lovering 1989; Dunne 1990; Abell 1990; Willett 1990; Hartley and Hooper 1990; Paukert and Richards 1991; Braddon et al. 1994; Booth and Udis 1994; and Dabinett 1994).

The studies concentrating on the economic impact of base closure and redevelopment have come to different conclusions, often emphasising the variety of outcomes for different places. Some of the key variables leading to either significant or limited economic impacts appear to be:

- extent of purchases by the military base from the local economy;
- levels of expenditure by military personnel in the local area;
- level of payments to local civilian employees at the base;
- multiplier effects resulting from the above three types of expenditure;
- the state of the local economy (i.e. whether it is able to replace lost employment quickly and easily);
- the rate of population growth (i.e. whether in-migrants can replace or compensate for lost spending power);
- the absolute and relative size of the base;
- the policy response and local capability to create new employment and business; and
- the ability and willingness to use the disused base for employment generating development.

A number of studies (e.g. CEC 1992; Braddon et al. 1994; and EAG/ECOTEC 1996) have emphasised that the concentration of military bases in some regions is likely to accentuate the local economic impact of base closures. The CEC study indicated that the UK (NUTS) regions with the highest economic dependency on *military bases* were:

- Hampshire/Isle of Wight (10th highest in EU);
- North Yorkshire (11th);
- Cornwall/Devon (15th);
- East Anglia (21st);
- Avon/Gloucester/Wiltshire (22nd); and
- Berkshire/Buckinghamshire/Oxfordshire (26th).

Cumbria (1st), Essex (2nd) and Lancashire (6th) were high on the list of *defence industry dependent* regions and Devon/Cornwall, Avon/Gloucester/Wiltshire and Hampshire/Isle of Wight were also in the top twenty (CEC 1992, tables 1.4 and 1.5).

The CEC study reiterated the point made above that, “in assessing the regional impact and response to defence cuts it is essential to take account of the adaptive capacity of the region affected”, (ibid. p. 103). This was a major reason why the RDC-commissioned study of base closures in rural England (EAG/ECOTEC 1996) found that the economically buoyant areas they looked at had suffered relatively little. This finding, however, must be contrasted to the more pessimistic results from surveys undertaken in Plymouth (Gripaios and Gripaios 1994) and Western Scotland (Goudie 1997) which found unemployment levels of 38% and 32%

respectively amongst defence workers made redundant by base rationalisation or closure. They also found evidence of particularly high levels of unemployment amongst older workers and de-skilling for those who did gain other employment. This emphasises the need to disaggregate the impact assessment, to take account of these distributional effects; a point forcibly made by Abell (1990) with regard to different ethnic groups in the US.

One or two studies have tried to evaluate the property market impacts of defence restructuring in Europe. The BICC report which looked at the implications of the closure and reuse of US bases in Germany (Cunningham and Klammer 1996) highlights the same kind of variability found with other economic impacts. The authors argue that property market impacts of base disposal will obviously depend on what type and scale of property is released or developed, but that this is in itself dependent on :

- the condition of the land and property on the base;
- the location of the base in relation to centres of demand;
- the type of site (the authors identify 18 types of military installation with often very different development opportunities, e.g. large rural air bases and smaller urban army barracks); and
- the state of the local economy and its related property markets.

Many commentators have cautioned against the tendency for Defence Ministries to flood the property market with redundant land and property in particular places or at one particular time (HoC 1994b p.133, para.9(e); Network Demilitarised 1994, p.8, para.2.33). This tendency is a perpetual danger given the regional concentrations described above.

**Social** impacts of base closure and reuse have not received much attention in the literature. The EAG/ECOTEC study considered the effects of the closure of medium-sized bases in buoyant rural areas on various social and leisure facilities and indicators of social stress and found minimal impact. The report concluded, however, that, “there may be a need in certain cases to draw out more of the social issues associated with reuse of housing, creating balanced communities, and providing/upgrading social infrastructure” (p.101). The greatest impact in the case studies examined in their study seems to have fallen on village pubs and shops, although it is often difficult to disentangle these from broader patterns of economic and social change occurring anyway.

In urban areas or where the military users have allowed access to leisure, sporting or other facilities, the opportunities to use these facilities or develop new ones can be a more important consideration. For instance, Keeping and Comerford (1995) report on the involvement of local residents and a sports association in securing recreation provision in the redevelopment of the Waltham Abbey Gunpowder Factory. In some cases local communities can be heavily dependent on social and leisure facilities provided within the defence estate (e.g. Plymouth and Gosport), and any redevelopment which reduces this provision could have a significant impact on provision, as could any proposed increase (see evidence to HoC 1994b, p.141, paras. 5.4-5.5).

Despite the anecdotal evidence provided to the Defence Committee and the inconclusive evidence arising from the RDC-commissioned research, it appears that there has been no systematic research of the social impacts of the reuse and redevelopment of the UK defence estate.

On the **environmental** front, the last systematic audit of the defence estate was undertaken for the 1973 Nugent Committee (HoC, 1973). Calls to update that were made at the Defence Committee proceedings but, apart from two environmental impact studies of the military use of training land at Otterburn and Salisbury Plain (Doxford and Savage, 1995; and Owens 1990), nothing much has been done. With regard to the environmental implications of base reuse, as opposed to existing land management practices, the best summary at the Defence Committee was provided by Mike Gwilliam of the County Planning Officer's Society (HoC 1994b, p. 130). The key issues raised by him and his colleagues were the:

- impact of reduced/removed security on natural and historical environmental features;
- uncertainty over future maintenance/management of these environmental assets;
- sensitivity of redundant sites to inappropriate developments;
- (missed) opportunities for environmental enhancement; and
- concern and uncertainty over levels of site contamination and MoD responsibilities for environmental clean-up.

These kind of concerns led the Committee to recommend that:

- There should be, at least, a brief environmental assessment of options in published consultation documents which include significant changes in the defence estate (HoC 1994a, para. 28);
- The greatest effort be devoted to documentation and physical examination so that the extent and nature of contamination is known and recorded; and that in these and related aspects, the MoD meets, in full, the standards expected of other public and private sector landlords (para. 48);
- There should be a formal obligation on the MoD to notify the appropriate authorities, and major voluntary nature conservation bodies, of possible disposals of SSSI and other land of equivalent interest, to facilitate environmental protection; (para. 64);
- That rights of first refusal should be given to those purchasers most evidently capable of preserving the natural heritage (para 64); and
- (Discussions should take place) between the new advisory group (on historic buildings within the defence estate) and the statutory authorities (to produce) a sensible approach to listing, along the lines followed by the NHS, whereby the one or two best preserved buildings of a particular class ... are identified, listed and properly preserved in return for consent to alter or demolish the others (para. 75).

The County Planning Officers Society and others also raised some broader issues about the sustainability of the scale and location of redevelopment proposals arising from base reuse. The key problem area here appears to be large (usually air) bases in relatively remote and/or poorly serviced rural areas for which major commercial development or new settlements are proposed (e.g. RAF Upper Heyford and Bentwaters). In more accessible locations (e.g. RAF Alconbury and the Royal Ordnance land at Burton Wood), the concept of sustainable development has been used to support integrated and mixed use reuse and redevelopment (Griffiths 1997 and Cass and Twehella 1997). Any consideration of the environmental impact of base reuse needs to consider these (and possibly other) sustainability dimensions of the proposals.

Much of the work in Europe and elsewhere (e.g. NATO-CCMS, 1996 and 1997a/b/c; Network Demilitarised 1994 pp.7-8; BICC 1996 and 1997; US DoD 1995a section 2.1.3) has concentrated on the issues around environmental contamination and clean-up strategies. Although the BICC argue that, “no military base enjoys a complete absence of environmental contamination” (BICC 1996, chapter 5), the key problems have arisen in Eastern Europe where the contamination left by the Russian forces is substantial and now the responsibility of the host nations and new states (under an agreement signed prior to withdrawal). In the UK the issue of contamination has been a problem in some places and the MoD provided a list to the 1994 Defence Committee of seventeen sites in the process of disposal which had significant contamination. A key conclusion made in many of these studies is that, “remediation of all but the most serious environmental hazards must be linked to economic development” (BICC 1997).

The other key ‘environmental’ resource covered in the literature is the historic built environment. The Defence Committee heard about the initiatives made by the MoD to audit (MoD 1994) and then co-ordinate the protection of its historic estate. Many of the problems and impacts identified by organisations like English Heritage and Save Britain’s Heritage reiterate points made earlier with regard to planning and environmental conservation issues (e.g. ongoing maintenance; inappropriate development proposals; etc.). The evidence at the Committee, whilst not completely positive, was generally supportive of the new arrangements which have been established. This should not, however, prevent the current research from evaluating the impact of redevelopment/reuse on the historic built environment or indeed the success of the arrangements established by the MoD and others. Indeed a recent evaluation of the issue (Clark 1997) still highlights ongoing tensions between MoD’s new commitment and the imperatives set by the (modified) Treasury rules.

Concluding this review of impact work, it appears sensible that any evaluation or appraisal should use a framework which tries to capture the range of effects and implications uncovered by the above studies and articles. This confirms the view that some kind of ‘holistic’ or ‘sustainability’ appraisal is the best way to evaluate particular cases of base reuse. This does not have to be a time-consuming and fully comprehensive analysis, but could be phased starting with a ‘strategic’ and focused appraisal, although it is also necessary to be as sensitive as possible to differential impacts on particular groups of people or sub-areas. The Fuller Peiser/University of Reading research team has produced a checklist of questions which can form a relatively robust model for evaluating the range of relevant impacts and collecting the necessary data during the process of base redevelopment. It is grounded in current Government appraisal work (HM Treasury, 1996; and DoE, 1991b) and applies the breadth suggested in the Network Demilitarise handbook (1994).

## **7. Conclusions**

This review has uncovered a significant body of work focusing on the reuse and redevelopment of redundant defence estate in the UK and abroad. Much of this work is based on limited research or on personal experience. In the UK context, there has been one significant study (EAG/ECOTEC 1996) and one important inquiry (House of Commons Defence Committee 1994a/b) into the nature and implications of reuse/redevelopment which provide a wealth of information, but also a range of viewpoints and some inconclusive evidence. The most comprehensive research on the reuse of redundant defence estate is due to

be published soon (DETR, forthcoming). This study involved not only a review of existing literature and practice (upon which this article is partly based) but also a critical review of relevant policy guidance, interviews and seminars with key interests and eight detailed case studies of the disposal process. Interestingly enough, it provides further evidence to support many of the points made in the existing literature, but also modifies and qualifies the some of the conclusions drawn.

In Europe and the USA other work helps to place the UK experience into a wider and comparative context (especially Network Demilitarised 1994 and 1996; and US DoD/OEA 1995). These can provide further lessons and examples of good practice which could be applied (in a modified form) in the UK. A range of options are currently under consideration by the Government and some of these could move to a more strategic and planned framework for base reuse.

One weakness of the current literature is that it does not fully reflect the difficulties posed by the disposal process and the day-to-day pressures which MOD personnel have to deal with. These include issues of parliamentary accountability and ministerial responsibility; the nature of the Government system in the UK and the links between Departments; financial aspects of the Public Expenditure Survey (PES) system and MOD's internal financial mechanisms; and how propriety and regularity in the conduct of Government business is to be protected. A further contextual aspect of the institutional framework within which the reuse process operates is the embedded cultures, both in central and local government professional groupings, which interpret and operationalise the policies, procedures and practices of planning and development according to values, assumptions and 'ways of doing things' which will take more than just paper reforms to change!

## References and Bibliography

Abell, J.D.. (1990) 'Defence spending and unemployment rates', in *Cambridge Journal of Economics*, Vol. 14, pp. 405-419.

Association of County Councils, Association of District Councils, Association of Metropolitan Authorities (1992) *The Impact of Reduced Military Spending on Local Economic Activity: A Case for European Community Assistance*, London: ACC.

Arms Conversion Project (1997a) *Fife Diversification Network*, (on WWW at <http://www.gn.apc.org/acp/fifediv.html>).

Arms Conversion Project (1997b) *A Proposal for A Defence Diversification Agency*, (on WWW at <http://www.gn.apc.org/acp/ukdiv.html>).

Arms Conversion Project (1997) 'Military base conversion', in *Networker*, No. 22, pp. 6-8 (on WWW at <http://www.gn.apc.org/acp/networker.html>).

Bateman, M. and Riley, R. (eds.) (1987) *The Geography of Defence*, London: Croom Helm.

Batey, P.W.J., Maddon, M. and Scholefield, G. (1993) 'Socio-economic impact assessment of large scale projects using input-output analysis: a case study of an airport', in *Regional Studies*, Vol. 27.3, pp. 179-191.

Bonn International Centre for Conversion (1997) *Summary of the International Conference on 'Military Base Closure: A Global Challenge'*, (on WWW at <http://bicc.uni-bonn.de/bases/events/mayors/summary.html>).

Bonn: Bonn International Centre for Conversion (1996) *Conversion Survey 1996: Global Disarmament, Demilitarisation and Demobilisation*, Oxford: Oxford University Press (and also on WWW at <http://bicc.uni-bonn.de/general/survey96/survey96.html>).

Booth, S. and Udis, B. (1994) Swords into ploughshares? Managing conversion in the defence industry, *University of Reading, Dept. of Economics WP No. 280*, Reading: University of Reading.

Braddon, D.L., Kendry, A.P., Cullen, P.J., and Dowdall, P.G. (1991) *The Impact of Reduced Military Expenditure on the Economy of South West England*, Bristol: Research Unit in Defence Economics, Bristol Polytechnic.

Braddon, D.L., Dowdall, P.G., and Kendry, A.P. (1994) 'Employment in the UK defence industry: structural change and market analysis', *University of the West of England, Department of Economics WP No.11*, Bristol: UWE.

Brommelhorster, J. (1997) 'Konver II: Fostering of Conversion by the European Union, *BICC Report No. 9*, Bonn: Bonn International Centre for Conversion.

Cass, R. and Trehella, G. (1997) 'Regal restorations: after a close shave', in *Planning* 29/8/97, p. 14-15.

Caudle, J. (1995) 'Urban renewal', in *Public Policy Review*, Vol. 3.4, p. 60.

Clark, C. (1997) 'A model transition: new uses for defence heritage sites'. in *South Talk* (the Newsletter of the RTPI Southern Branch), No. 52, pp.8-9.

Committee of Vice Chancellors and Principals (CVCP) (1994) *Town and Country Planning and the University Estate*, London: CVCP.

Commission of the European Communities (CEC) (1992) *The Economic and Social Impact of Reductions in Defence Spending and Military Forces on the Regions of the Community*, Brussels: CEC Regional Development Series No. 5.

Cunningham, K. (1993) *Base Closure and Reuse: 24 Case Studies*, Report of the BENS (Business Executives for National Security) Defense Transition Project, Washington DC: BENS.

Cunningham, K. and Klemmer, A. (1995) 'Restructuring the US military bases in Germany: scope, impacts and opportunities', *BICC Report No. 4*, Bonn: Bonn International Centre for Conversion (also on WWW at <http://bicc.uni-bonn.de/bases/report4/content.html>).

- Cunningham, K. (1997) 'Base Closure and Redevelopment in Central and Eastern Europe', *BICC Report* No. 11, Bonn: Bonn International Centre for Conversion.
- Dabinett, G. (1994) 'Markets and the state and the role of local regeneration strategies: a case study of the defence sector in the UK in the 1980s', in *Local Economy*, Vol. 8.4, pp. 338-351.
- Darlow, C. (ed.) (1988) *Valuation and Development Appraisal*, London: Estates Gazette.
- Department of the Environment (1991a) *Circular 12/91: Redundant Hospital Sites in Green Belts: Planning Guidelines*, London: HMSO.
- Department of the Environment (1991b) *Policy Appraisal and the Environment: A Guide for Government Departments*, London: HMSO.
- Department of the Environment (1993) *Environmental Appraisal of Development Plans: A Good Practice Guide*. London: HMSO.
- Department of the Environment (1994) *Good Practice on the Evaluation of Environmental Information for Planning Projects - Research Report*, London: HMSO.
- Department of the Environment (1995) *Preparation of Environmental Statements for Planning Projects that Require Environmental Assessment: A Good Practice Guide*, London: HMSO.
- Department of the Environment, Transport and the Regions and Ministry of Defence (1997) *Guidelines for the Joint Working of Ministry of Defence and Regional Government Offices on the disposal of Surplus MoD Property*, London: DETR.
- Department of the Environment, Transport and the Regions (forthcoming) *Development of the Redundant Defence Estate*, London: NSO
- Doak, J., Stott, M. and Therivel, R. (1998) 'From SEA to sustainability: the life and times of the SERPLAN Sustainability Panel', in *Regional Studies*, Vol. 32.1, pp. 73-78.
- Doxford, D. and Savage, J. (1995) 'The proposed development of Otterburn Military Training Area in Northumberland National Park: A national perspective', in *Journal of Environmental Planning and Management*, Vol. 38.4, pp. 551-560.
- Dunne, P. (1990) 'The political economy of military expenditure: an introduction', in *Cambridge Journal of Economics*, Vol. 14, pp. 395-404.
- Economists Advisory Group and ECOTEC (1996) *The Impact of the Peace Dividend on Rural England*, London: Rural Development Commission.
- Edwards, M., Leopold, E., Ive, G., Mitchell, J., Geddes, M. and Waxman, A. (1988) *Alternatives for Kings Cross: A Report on a Pilot Social Audit*, Unpublished Report to London Boroughs of Camden and Islington (available from The Bartlett School of Architecture and Planning, University College London).

Eminton, S. (1987) 'The selling of Thamesmead: a model for the Government's Housing Bill' in *Municipal Journal*, Vol. 95.36, pp.1620,1622.

Evans, N.P.D. (1993) *Necessary Medicine? The Re-use of Redundant Hospital and MoD/Airfield Sites in the Metropolitan Green Belt*, Unpublished Dissertation for MPhil in Environmental Planning, School of Planning Studies, University of Reading.

Feloy, M., Field, P. and Dickinson, P. (1992) 'Assessing the impact of a plant closure: a case of the BAe Kingston site closure', in *Local Economy*, Vol. 7.3, pp. 248-260.

Finch, J. (1993) 'Company-led strategies in defence sector restructuring: implications for local economic development', in *Local Economy*, Vol. 7.4, pp. 334-346.

Fyson, A. (1994) 'Jackboot tactics', in *Planning Week*, 1/9/94, p.7.

Glasson, J., Therivel, R. and Chadwick, A. (1994) *Introduction to Environmental Impact Assessment*, London: UCL Press.

Goudie, I.S. (1997) *The Restructuring of the UK Defence Industries*, Glasgow: Arms Conversion Project (also on WWW at <http://www.gn.apc.org/acp/restruct.html>).

Griffiths, B. (1997) 'Coming into land at the home base', in *Planning Week*, 13/2/97, p.8.

Gripaios, P. and Gripaios, R. (1994) 'The impact of defence cuts: the case of redundancy in Plymouth', in *Geography*, Vol. 79.1, pp. 32-41.

Hansard (1996) *RAF Bentwaters: Sale Procedure*, House of Lords Debate 14/6/96, Columns 2005-2028, London: HMSO (on WWW at <http://www.parliament.the-stationary-offi.../ldhansrd/pdvn/nineties/text/60614-18.html>).

Hansard (1997) *RAF Upper Heyford*, House of Lords Debate, Columns 895-916, London: HMSO (on WWW at <http://www.parliament.the-stationary-offi.../ldhansrd/pdvn/lds97/text/70123-28.html>).

Hart, G. (1986) 'Social accounting in the local economy', in *Local Economy*, Spring (1), pp.45-56.

Hartley, K. and Hooper, N. (1990) 'Costs and benefits to the United Kingdom of the US military presence', in Sharp, J.M.O. (ed.) (1990) *Europe After an American Withdrawal*, Oxford: Oxford University Press.

HM Treasury (1997) *Appraisal and Evaluation in Central Government: 'The Green Book'*, London: NSO

House of Commons Defence Committee (1994a) *The Defence Estate: Volume 1 - Main Report*, London: HMSO.

House of Commons Defence Committee (1994b) *The Defence Estate: Volume 2 - Minutes of Evidence and Memoranda*, London: HMSO.

House of Commons Defence Lands Committee (1973) *Report of the Defence Lands Committee (The Nugent Report)*, London: HMSO.

House of Commons Public Accounts Committee (1987) *Control and Management of the Defence Estate: Ministry of Defence: Property Services Agency*, London: HMSO.

Hughes, J. and Wood, C. (1996) 'Formal and informal environmental assessment reports: their role in UK planning decisions', in *Land Use Policy*, Vol. 13.2, pp. 101-113.

Institution of Professional Managers and Specialists, Manufacturing Science Finance, and the Transport and General Workers Union (1990) *The New Industrial Challenge: The Need for Defence Diversification*, London: IPMS.

Johnston, B. (1993) 'Paying the peace dividend', in *Planning*, No. 1004, p.12.

Keeping, M. and Comerford, J. (1995) 'How to dispose of a 'problem site' - conferring allowed', in *Town and Country Planning*, May/June 1995, pp.148-149.

Klemmer, A. (1995) 'United Nations publications related to the subject of conversion: an annotated bibliography', *BICC Paper* No. 2, Bonn: Bonn International Centre for Conversion (also on WWW at <http://bicc.uni-bonn.de/general/paper2.html>).

Lichfield, N. (1996) *Community Impact Evaluation*, London: UCL Press.

Lovering, J. (1989) 'Diversification policies in defence-dependent local economies: current British experience', in *Local Economy*, Vol. 4.2, pp. 113-124.

MacLaren, V.W. (1996) 'Urban sustainability reporting', in *American Planning Association Journal*, Vol. 62.2, pp.184-202.

McCoubrey, H. (1994) 'Security, planning regulations and defence establishments', in *Journal of Planning and Environmental Law*, Dec. 1994, pp.1075-1087.

Ministry of Defence (1994) *Defending Our Heritage: Historic Military Buildings in the Defence Estate*, London: HMSO.

Ministry of Defence (1996) *UK Defence Statistics 1996*, London: HMSO.

Montgomery, J. (1986) 'The privatisation of public sector land holdings: the example of health authorities in London and the South East', in *Planning Practice and Research*, Vol. 1.1, pp.23-27.

National Audit Office (1988) *Estate Management in the National Health Service*, London: HMSO.

National Audit Office (1987) *Ministry of Defence and the Property Services Agency: Control and Management of the Defence Estate*, London: HMSO.

National Audit Office (1997) Ministry of Defence: *The Sale of the Married Quarters Estate*, London: TSO.

NATO Committee on the Challenges of Modern Society (1996) *Environmental Guidelines for the Military Sector*, Brussels: NATO.

NATO Committee on the Challenges of Modern Society (1997a) *Methodology, Focalisation, Evaluation and Scope of Environmental Impact Assessment: Fifth Report - Strategic Environmental Assessment in Landuse Planning*, Brussels: NATO.

NATO Committee on the Challenges of Modern Society (1997b) *Description of Environmental Management Systems in the Military Sector: Progress Report of Pilot Study*, Brussels: NATO (on the WWW at <http://ech.s.ida.org/ccms/s33/report/progress.html>).

NATO Committee on the Challenges of Modern Society (1997c) *Environmental Aspects of Reusing Former Military Lands: A Pilot Study*, Brussels: NATO (on the WWW at <http://ech.s.ida.org/ccms/pilot/pilot.html>).

Network Demilitarised (1994) *The Conversion of Military Sites: A Handbook Outlining a Commercial Audit Procedure to Assist the Reuse*, Trowbridge: Wiltshire CC.

Network Demilitarised (1995) *A European Partnership of Defence-Dependent Regions*, Trowbridge: Wiltshire CC.

Network Demilitarised (1996) *Military Base Conversion: The Lessons from Experience*, Trowbridge: Wiltshire CC.

Owens, S. (1990) 'Defence and the environment: the impacts of live firing in national parks', in *Cambridge Journal of Economics*, Vol. 14, pp.497-505.

Oxfordshire County Council (1992) *The Economic Impact of Defence Cuts in Oxfordshire*, Oxford: OCC.

Paukert, L. and Richards, P. (eds.) (1991) *Defence Expenditure, Industrial Conversion and Local Employment*, Geneva: International Labour Organisation.

Percy-Smith, J. (1992) 'Auditing social needs', in *Policy and Politics*, Vol. 20.1, pp.29-34.

Planning Exchange (1996) 'Network Demilitarised', *LEDIS: Local Initiative Sheet* No. A564, Glasgow: Planning Exchange.

Planning Exchange (1990) 'Cumbrian Technology Transfer Initiative', *LEDIS: Local Initiative Sheet* No. A417, Glasgow: Planning Exchange.

Planning Week (1994a) 'MoD criticised for excessive secrecy over defence estate decisions', in *Planning Week*, 28/7/95, p.7.

Planning Week (1994b) 'Winning the economic war after the troops pull out', in *Planning Week*, 1/9/95, p.11.

Quigley, P.M. (1991) 'Diversification in Coventry's military industry: implications for a decentralised conversion strategy', in *Local Economy*, Vol. 6.3, pp. 211-223.

Ramsay, H. (1990) 'Defence strategies: local authority and union co-operation in a battle for jobs in munitions', in *Local Government Policy Making*, Vol. 16.4, pp. 16-22.

Roe, W. (1992) 'Piecing together the peace dividend: managing change in communities dependent on defence expenditure', in *Local Economy*, Vol. 7.2, pp. 163-169.

Royal Institution of Chartered Surveyors (RICS) (1997a) *Commercial Investment Property: Valuation Methods - An Information Paper*, London: RICS.

Royal Institution of Chartered Surveyors (RICS) (1997b) *Calculation of Worth - An Information Paper*, London: RICS.

SERPLAN (1996) *Strategic Environmental Assessment: A Methodology and Appraisal Framework for the Review of the Regional Strategy*, SERP 68, London: SERPLAN.

Sharp, J.M.O. (ed.) (1990) *Europe After an American Withdrawal*, Oxford: Oxford University Press.

South East Economic Development Strategy (SEEDS) (1994) *Defence, Research and Development, and Diversification*, Stevenage: SEEDS.

Synnott, M. (1986) 'Change and conflict in the local planning/water authority relationship since 1979', in *Planning Practice and Research*, No. 1, pp.14-18.

Therivel, R., Doak, J. and Stott, M. (1997) 'Desperately seeking sustainability', in *Town and Country Planning*, December 1997, pp. x-x.

Therivel, R., Wilson, E., Thompson, S., Heaney, D., and Pritchard, D. (1994) *Strategic Environmental Assessment*, London: Earthscan.

US Department of Defense (US DoD) (1995a) *Base Closure and Realignment Report (BRAC95)*, Washington DC: GPO.

US Department of Defense (US DoD) (1995b) *Department of Defense Base Reuse Implementation Manual* Washington DC: GPO.

US Department of Defense, Office of Economic Adjustment (US DoD/OEA) (1993) *Civilian Reuse of Former Military Bases: Summary of Completed Military Base Economic Adjustment Projects*, Washington DC: GPO.

US Department of Defense, Office of Economic Adjustment (US DoD/OEA) (1995) *Community Guide to Base Reuse*, Washington DC: GPO.

Wells, P. (1987) 'The military scientific infrastructure and regional development', in *Regional Studies*, Vol. 19.12, pp. 1631-1658.

Wheatley, M. (1991) 'Dockyard blues', in *Management Today*, June 1991, pp.88-90.

Willett, S. (1990) 'Conversion policy in the UK', in *Cambridge Journal of Economics*, Vol. 14, pp. 469-482.

Wills, S. (1995) 'The redevelopment of redundant RAF bases', *Oxford Brookes University School of Planning Studies WP No. 157*, Oxford: Oxford Brookes University.