

Annexe C

UK case studies

December 2006

A report prepared for the Office of Fair Trading
by DotEcon Ltd

OFT861c

Note:

This report considers information provided to, and gathered by, DotEcon Ltd up to and including the end of April 2006. Such information includes annual accounts, website references, meeting notes and documents published up to and including the same date. All references to 'current', 'latest' etc. information relate to the same timeframe.

Information subsequent to the end of April 2006 may be obtained from the websites of the individual PSIHs and in the main include more recent financial information and accounts. In the particular case of Companies House, a new Companies Bill is in Parliament. In the case of Ordnance Survey, there has been a change in the value of the NIMSA to its operations (with a budget in 2006/7 of £1m) and the introduction of new Specific Use Contracts. In the case of the UK Hydrographic Office, there has been an amendment to its licence exemption policy which further clarifies the main terms. In the case of the Met Office, certain joint ventures have been terminated.

© Crown copyright 2006

This publication (excluding the OFT logo) may be reproduced free of charge in any format or medium provided that it is reproduced accurately and not used in a misleading context. The material must be acknowledged as Crown copyright and the title of the publication specified.

CONTENTS

<i>Chapter</i>		<i>Page</i>
1	List of abbreviations	1
2	Background and approach	3
3	PSI and PSIHs - six UK case studies	6
4	Competition in Psi	28
5	Access and wholesale services within PSIHs	36
6	Pricing practices within PSIHs	48
7	Guidance, monitoring and enforcement	61
8	Conclusions and best practice	67

1 LIST OF ABBREVIATIONS

AHL	Admiralty Holdings Limited
BGS	British Geological Survey
CAA	Civil Aviation Authority
CCBCs	County Court Bulk Centres
CCJ	County Court Judgment
CLG	Communities and Local Government
CRA	Credit Reference Agency
CRB	Credit Reference Bureau
CUPI	Commercial Use of Public Information
DCA	Department of Constitutional Affairs
DfT	Department for Transport
DNF	Digital National Framework
DNSOM	Director of Naval Surveying, Oceanography and Meteorology
DTI	Department of Trade and Industry
DVLA	Driver and Vehicle Licensing Agency
EC	European Commission
ECMRWF	European Centre for Medium-Range Weather Forecasts
ENC	Electronic Navigational Chart
FD	Framework document
GI	Geographical information
GIS	Geographical information systems
GPS	Global Positioning System
HMCS	Her Majesty's Courts Service
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
IFTS	Information Fair Trader Scheme
IMO	International Maritime Organisation
IPR	Intellectual property rights
KPT	Key performance target
LRIC	Long run incremental cost
MCA	Maritime & Coastguard Agency
MoD	Ministry of Defence
NDPB	Non-departmental public bodies
NERC	Natural Environment Research Council
NGIS	National Geoscience Information Service
NGIS	National Geoscience Information Service
NHP	National Hydrographic Programme
NIMSA	National Interest Mapping Services Agreement
NM	Notice to Mariners
NMP	National Meteorological Programme
NMPCG	National Meteorological Service Commissioning Group

NMS	National Meteorological Service
NWP	Numerical Weather Prediction
OFT	Office of Fair Trading
OPSI	Office of Public Sector Information
OS	Ordnance Survey
PAF	Postcode Address File
PMS	Public Meteorological Service
PSI	Public Sector Information
PSIH	Public Sector Information Holder
RTL	Registry Trust Ltd
SOLAS	Safety Of Life At Sea
SUC	Specific Use Contract
TFO	Trading Fund Order
TOID	Topographic identifier
UKHO	United Kingdom Hydrographic Office
VARs	Value-added resellers
WEND	Worldwide Electronic Navigational Chart Database
WMO	World Meteorological Organisation

2 BACKGROUND AND APPROACH

2.1 As part of its market study on the Commercial Use of Public Information (CUPI), the Office of Fair Trading (OFT) commissioned DotEcon Ltd to undertake detailed case studies on the operations and behaviour of six Public Sector Information Holders (PSIHs) in the UK.

Objectives

2.2 The objectives of the six studies were threefold:

- to identify potential impediments to the efficient operations of the information markets in which each PSIH operates
- to identify elements of best practice where these might arise
- to draw conclusions, both for each case study and across the studies.

2.3 In themselves, the studies are not intended to draw out evidence of potential breaches of either of the Chapter I or the Chapter II prohibitions of the 1998 Competition Act (nor of Article 81 or 82 EC Treaty), but rather to understand how the markets work, highlighting any impediments to their effective operations and drawing out any best practice.

Approach

2.4 The candidates chosen for the case studies are currently amongst the largest PSIHs in the UK – Companies House, Ordnance Survey (OS), the Met Office, the UK Hydrographic Office (UKHO), HM Courts Service (HMCS) and the British Geological Survey (BGS). In each of the cases, we considered in detail:

- the role of the PSIH
- the nature of the information that it gathers

- how it competes both at an upstream data collection level and a downstream value-added level
- the extent to which it competes with other providers in the various markets within which it operates
- the terms and conditions it imposes when granting access to information, and
- the nature and, where possible, the efficacy of guidance that it employs.

2.5 Our approach to undertaking the studies has had five main components:

- we met with and gathered detailed information from the PSIHs directly
- we met with and gathered information from a selection of business users that purchase information from the PSIHs
- we met with and gathered information from a selection of stakeholders who have an interest in the development of PSI regulations
- we gathered pertinent reports and information on PSI in the relevant sectors, and
- we reviewed best practice in terms of access in other markets characterised by significant economies of scale within a vertical structure.

Structure of the report

- 2.6 In this report we set out our general findings at the level of the individual PSIHs and across the set of case study PSIHs. In Chapter 3 we consider the role and activities of the PSIHs, in Chapter 4 we assess the extent of competition in the provision of PSI and other pertinent competition issues, in Chapter 5 we assess the provision of access and wholesale services within PSIHs, in Chapter 6 we consider individual pricing issues, in Chapter 7 we review guidance, monitoring and enforcement issues, and in Chapter 8 we note our conclusions, highlighting any best practice.

3 PSI AND PSIHS - SIX UK CASE STUDIES

3.1 In this chapter we set out the main findings of our six case studies and draw out conclusions that can be applied to PSIHS more widely.

Importance of PSI

3.2 Public Sector information (PSI) in its various forms generates significant revenues both from public and private sector users. A survey conducted by the OFT as part of the CUPI market study has estimated that, in 2005, the revenues from the sale of public information amounted to some £390m.¹

3.3 The value of such information lies not just in direct sales to individual end-users (for example, the use of a printed map by a hiker), but also as an input into other information-based products and services (for example, digital maps used within in-car navigation systems). Various studies conducted by individual PSIHS have valued the use (and subsequent re-use) of their data far in excess of the revenues earned. However, evidence from international markets suggests that the UK information market still has scope for further growth.

3.4 As such, access to and the use of PSI has been the subject of recent legislative change. A European Directive on the re-use of PSI (use of PSI as an input into other products and services) aims to, as summarised by the recently created Cabinet Office unit, the Office of Public Sector Information (OPSI):

¹ Source: OFT (2006), 'CUPI market study survey'. In addition, a HMT review noted that the total income from the release of Crown copyright information was around £340m in 1998/99 (HMT (2000), '*Cross-cutting Review of the Knowledge Economy Review of Government Information*').

'...encourage the re-use of public sector information by removing obstacles that stand in the way of (its) re-use. The main themes are improving transparency, fairness and consistency... (and in) doing so ... (to) help stimulate the development of innovative new information products and services across Europe, so boosting the information industry.'²

- 3.5 This Directive has been transposed in the UK through the Re-use of Public Sector Information Regulations 2005 (SI 2005/1515), referred to hereafter as the Re-use Regulations, which came into force on 1 July 2005. These regulations apply to many of the UK's PSIHS and are enforced by OPSI.
- 3.6 PSIHS can include government ministerial departments, agencies of government or non-departmental public bodies (NDPBs). What distinguishes these PSIHS from other private sector collectors and disseminators of information is that these bodies do so generally to fulfil an identified public function, in many cases also relying on some level of funding from taxation to pay for their activities. Some of the PSIHS will have statutory requirements on them to collect (and possible also to disseminate) information, others will non-statutorily collect and store valuable information as a means of supporting their various public activities.
- 3.7 Recognising the potential commercial value of the activities of some public bodies, the Trading Funds Act 1973³ paved the way for the provision of a number of traded services - including information - through designated quasi-commercial bodies known as Trading Funds. These

² Website of the Office of Public Sector Information (OPSI) www.opsi.gov.uk

³ As amended by the Government Trading Act 1990 and the Finance Acts 1991, 1993 and 2001.

Funds meet specific criteria and are designed and incentivised to act in a commercial manner, selling information to private or business users (and sometimes to other public bodies), while still publicly owned. Many of the Trading Funds have also extended their operations beyond their core duties,⁴ and are increasingly competing with private sector providers of information products.

- 3.8 As a result, questions arise around whether the way in which PSIHs supply information works well for businesses and consumers. In particular, there may be concerns that PSIHs have an unfair advantage when competing with private-sector companies who are reliant on the PSIH's raw data as an input into their own products and services. By their very nature, PSIHs may hold information that is difficult or even impossible to source elsewhere, and as such may be monopoly providers in their respective information markets. In addition, where raw data is being turned into value-added information, the pricing of the raw data and terms for accessing it have the potential to affect competition in subsequent value-added markets. These issues are the focus of this report.

Understanding PSIHs

- 3.9 In order to better understand PSIHs and the information markets in which they operate, we have assessed the current operations and behaviour of six PSIHs in the UK:
- Companies House - which maintains the official Register of limited companies within the UK

⁴ It is considered that 'most of the material originated (by Trading Funds) does not fall within the scope of material which is seen as being central to the process of government' (OPSI (June 2005), 'RIA: Regulations implementing in England, Wales, Scotland and Northern Ireland A Directive of the European Parliament and of the Council on the Re-use of Public Information').

- Ordnance Survey (OS) - which maintains an up-to-date geographical map of the UK
- the Met Office - which provides weather information and forecasts for both the UK and other parts of the world
- the UK Hydrographic Office (UKHO) - which provides vessels with navigational charts (covering the UK's waters and the rest of the world)
- Her Majesty's Courts Service (HMCS) – which manages the administration of the Courts in England and Wales and collects information on County Court Judgments (CCJs), and
- the British Geological Survey (BGS) – which acts as a national geological survey and holds significant earth science information.

3.10 Together, our six case study PSIHs had a combined turnover of over £400m in 2005 alone,⁵ with a part of these revenues being earned through the sale of information products.⁶ These case study PSIHs also account for the majority of total public sector information sales in the UK. Many of these PSIHs have also built up strong brands in the provision of their services, with their information products being widely used, even internationally (for example, the BGS competes internationally for commissioned geological research services).

⁵ £400m does not all relate to the sale of information products, and as such is higher than the £390m noted in paragraph PART I: 3.2 (which notably excludes revenue earned for registration services for the various Registers such as Companies House).

⁶ There are variations in relation to sources of income for the PSIHs: in the case of Companies House, income is also earned by registration fees, with the Met Office government provides contributions through the National Met Programme, with the HM Courts Service data sales limited to providing information to Registry Trust Ltd (discussed further below) and with the BGS funding is also received through the government's science budget.

Information held by, and statutory functions of, the PSIHs

- 3.11 The PSIHs both collect and store a wide range of often extremely detailed information. The information can take many forms, such as numerical data points or datasets, historic records, filings made by third parties or even physical samples.
- 3.12 Although the PSIHs are governed by requirements to collect and make this information available, there are not always explicit requirements set out in Acts of Parliament compelling them to do so. For example, although the tasks of the UKHO are predominantly governed by statute, the role of OS is predominantly non-statutory.
- 3.13 Table 3.1 below summarises the nature of the information collected by our case study PSIHs and the various statutory requirements upon them.

Table 3.1: Information held by, and statutory obligation on, the case study PSIHs

PSIH	Comment
Companies House	<p data-bbox="528 405 1305 674">Companies House collects information on all companies registered in England, Scotland and Wales. This information includes, amongst other things, the registration details of the company, the details of company officers, the registered address of the company and its annual accounts.</p> <p data-bbox="528 719 1305 1039">Most of the information collected and disseminated by Companies House is required by various Acts of Parliament. In particular, companies are required by statute to file information with Companies House. Companies House has the role of facilitating public inspection of any company information that may be relevant for them.</p>
Ordnance Survey	<p data-bbox="528 1084 1315 1308">As the UK's national mapping agency, OS collects geographic information on the UK via detailed surveys. This includes, amongst other things, topographic information, aerial photographs and information on structures and landmarks.</p> <p data-bbox="528 1352 1315 1630">OS operates within the parameters set by various documents (for example, its own framework document): there is also a general role conferred upon it as the national mapping agency for Great Britain to maintain definitive and up-to-date mapping coverage of Great Britain.</p>
Met Office	<p data-bbox="528 1675 1310 1812">The Met Office collects data for its own area and shares it with other meteorological offices, as they share with it (without charge). The result is that the</p>

Met Office holds and interprets meteorological data for the entire globe. Using this information, the Met Office forms weather patterns and develops a series of forecasts.

Under its obligations under the World Meteorological Organisation (WMO), the Met Office is required to release free of charge some of its data, including value-added, which is classed by the WMO as the key information 'essential' to the preservation of life and property. The Met Office is required by statute to provide basic weather forecasts, particularly in order to give accurate and early warning of extreme weather conditions. The remainder of its activities are not, however, required by statute.

UK Hydrographic Office	<p>Since the UKHO's core role is that of a manufacturer of hydrographic products and supplier of services, it has a more limited role in the collection of data and undertakes a minor surveying role. The majority of data received by UKHO covering the UK is provided to it by the Maritime and Coastguard Agency (MCA), an agent of the Department of Transport. As the MCA does not have its own vessels for the collection of data, a large part of the information is collected using MoD vessels. Much of the remaining data is provided to the UKHO by other surveying organisations.</p> <p>There are no explicit statutory obligations on the UKHO to provide these services. However, the UK government is required to comply with international Safety of Life at Sea (SOLAS) regulations by providing up-to-date charting information to vessels. This function has generally been fulfilled by the</p>
------------------------------	---

UKHO. In addition, the UK's seafaring history and consequent strengths in charting the seas, along with its international coverage, has led to a strong position of the UKHO in providing charts internationally.

HM Courts Service	The HMCS holds detailed information on all CCJs made in England and Wales. Such information includes, amongst others, the names and addresses of parties ordered to make a payment and the sum ordered by the respective court to be paid. More information is collected, for example, plaintiff information, than is made available in England and Wales, although this is available in Northern Ireland.
-------------------	--

Collecting such information is not the primary function of HMCS. Instead, it is under a statutory duty to ensure there is an effective and efficient system to support the courts in England and Wales. As such, the information that HMCS collects is a by-product of its core duties. Nonetheless, HMCS is subject to a statutory requirement to hold a Register of Judgments. This function is currently contracted out to a not-for-profit organisation, Registry Trust Ltd (RTL).

British Geological Survey	The BGS holds a wide range of samples and records relating to different geological features, predominantly from across the UK. The BGS maintains over 400 datasets containing around 20 million information items relating to the earth sciences.
---------------------------	---

The BGS is not under statutory obligation to collect or hold this data, and it is the only one of our case studies that is not covered by the Re-use

Regulations. However, the BGS has historically and continues to act as the UK's principal custodian of geoscientific data and samples. There are also legal requirements upon others carrying out various different types of activities to provide the BGS with samples. As such, it is also the only body in a position to maintain a complete detailed geological map of the UK.

3.14 On the whole, our case studies suggest that the information held by PSIHs can be both extensive and detailed. Previous studies have identified PSI as having an important role within the UK economy, providing services both directly to consumers and underpinning many other economic activities. The case studies in this report confirm strongly the importance of PSI, showing that in many cases PSI provides a small, yet critical, input into many large-scale economic activities and infuses many aspects of daily life. For instance:

- company performance data is crucial for business analysis and informing investment decisions of corporate bodies
- maps and mapping services are essential to infrastructure planning, construction and leisure activities
- meteorological data assists the assessment of insurance risks and weather forecasts inform many everyday decisions
- hydrographic charts are necessary for safety of life at sea and facilitate international trade
- CCJ information facilitates the provision of credit, and
- geological information and research expertise are critical to the likes of utilities or oil companies in considering the efficacy and impact of their activities.

3.15 It is also apparent that the PSIHs are not all required to collect and store information via statute. This, in turn, can potentially make it difficult to determine which pieces or types of information PSIHs actually hold by virtue of their public duties and, more importantly, what information is potentially available for use by consumers or re-use commercially (for example, by value-added providers). Recognising this, OPSI has launched a number of schemes including a voluntary requirement on PSIHs to develop a publicly available information asset register which would identify the information held by PSIHs, especially those that may potentially be of use to consumers or commercial re-users.⁷

Vertical structure of PSIHs

3.16 As Figure 3.2 below shows, in very basic terms, PSIH operations tend to have a natural vertical structure. At a first stage, they will collect data either directly through specialist activities or, in some cases, through requirements on others to furnish them with information. This data may take various forms (and indeed formats) and, as noted above, range from rainfall readings or core rock samples to individual CCJ records.

3.17 Following the collection of this data, PSIHs would normally cleanse it and put it into a more usable format. We call this process 'milling'. The extent and nature of these milling activities will vary from case to case, but might include, for example, the digitisation of paper documents or the basic interpretation of sonar readings and their mapping onto individual points on a chart.

3.18 Once treated in this way, the collated data effectively creates a database that may have various applications and uses. This database may also include historic data. Again, what form the database takes varies case by case. Sometimes it may be an explicit electronic database holding numerical or coded data, in other cases a looser grouping of holdings

⁷ Regulation 16(1)(c) also places an obligation on re-users of information to provide a list of the documents that are available for re-use.

(some physical and some electronic). Regardless of the details of how it is physically held, we call this collection the 'information database'.

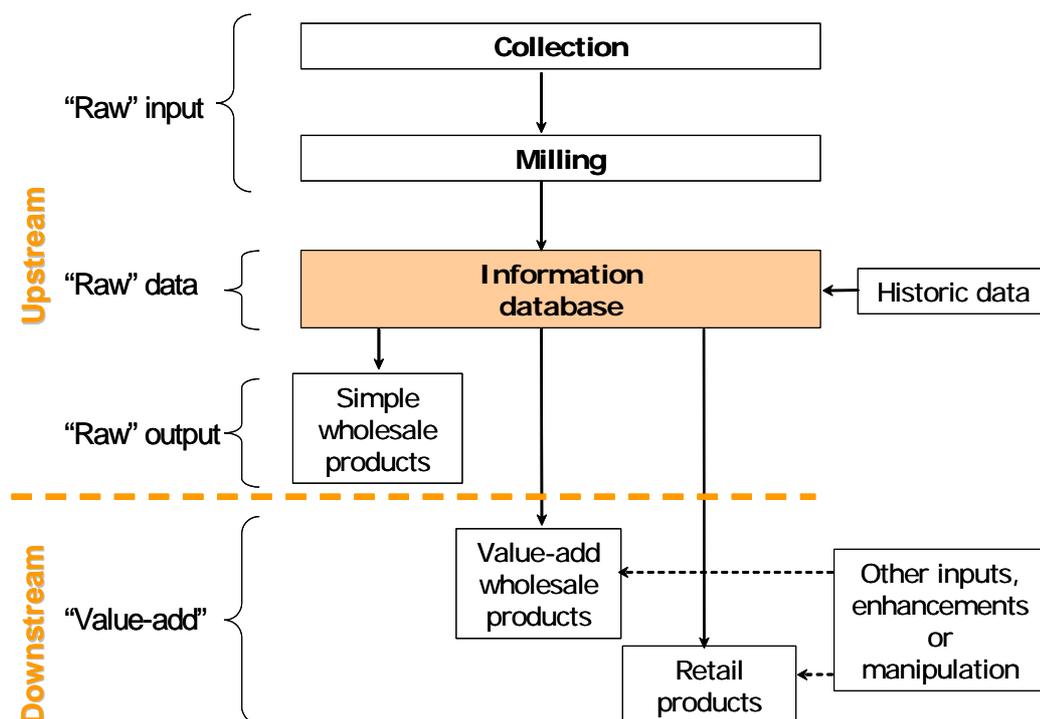
3.19 The information database can provide underlying inputs for a potentially wide range of products and services for its users. There are three principal services that a PSIH might provide:

- simple wholesale products
- value-added wholesale products, and
- retail products.

3.20 We can distinguish between retail and wholesale products. Retail products are generally considered to be those as purchased by end-users. These could be products purchased by public sector bodies or private sector firms for internal use, or for use by individual consumers. Wholesale products in this instance are those products that are to have value added to them by downstream providers by being used as an input into another product or service.

3.21 The distinction between simple and value-added products is discussed in more detail below.

Figure 3.2: PSIH activities



Source: DotEcon

3.22 Although this is a typical structure, there are variations in each of the cases we have considered, where certain of the levels in the structure are more or less important for the PSIH's operations. The actual activities that PSIHs need to undertake at each level vary greatly. For example, the UKHO does not actively collect sonar readings from vessels of its own but instead relies on readings provided to it by the Marine and Coastguard Agency. Meanwhile, OS itself collects significant amounts of data with over 350 field surveyors feeding back information to a central system. Nevertheless, all PSIHs appear broadly to conform to this vertical structure, creating information databases that support a variety of products and services, including meeting the public duties of the PSIH.

3.23 Proactive collection of their core information is a feature of three of the case study PSIHs, with OS collecting survey results, the Met Office

collecting meteorological information and HMCS collecting information on CCJs given its requirement to hold a Register of Judgments. Although collecting some information proactively, the other three of our case study PSIHs primarily receive information from other organisations or from third parties: Companies House receives information from companies in England, Scotland and Wales who are required to file information with them, the UKHO receives its information from the Marine and Coastguard Agency (and the Ministry of Defence and third parties), and the BGS receives information from organisations that have collected samples through the course of their own work.

- 3.24 All of our case studies undertake a significant amount of milling, assimilating gathered information into a coherent information database. Furthermore, all the PSIHs undertake significant maintenance activities on their databases (which in some cases are physical, whilst in others digital). Such activities include, for example, the maintenance of IT systems. In all cases the collection and milling activities account for a large part of the costs incurred by the PSIH.
- 3.25 In terms of product creation, all of the case study PSIHs offer a set of products derived from their databases. Some provide services based more directly on their information databases, whilst others undertake more value-added. Some of their services are retail and others wholesale. These, along with specific examples, are discussed below.

'Raw' and 'Value-added'

- 3.26 We have sought to assess competition issues by reference to such a common information database that can produce a number of downstream products and services. This allows us to move away from a largely semantic debate that has been waging around what constitutes 'raw' and what constitutes 'value-added' information within these markets.
- 3.27 Amongst other definitions, it has been argued that raw information is that which is collected, that which is collected and milled or indeed

those products which involve a basic extract from the information database.⁸ Even in our limited number of case studies, we have found that there are large differences in the understanding of what constitutes raw information. The term has been applied both to collected data and extracted information. Some PSIHs appear to think that raw data is only that which is collected and not milled, so that all products derived from the information database are (by this definition) to a lesser or greater extent value-added.

- 3.28 When considering the activities highlighted in Figure 3.2 above, raw information might be better viewed more as a series of activities and processes involving core inputs, stored data and outputs. Value-added products would be those where additional inputs are used to create a new product or where non-trivial enhancements or manipulation of the data has taken place that go beyond milling and basic extraction.
- 3.29 Basic extracts from the information database can be used to fulfil the functions of the PSIH, whilst at the same time feeding into other services, including those provided by other providers who might compete with the PSIH in providing retail products and services. Seen in this way, the 'raw input', 'raw data' and 'raw output' stages (shown in Figure 3.2) can be regarded as relating to the PSIH's 'upstream' activities, while the

⁸ The OFT considered definitions of raw and value-added PSI in the context of a recent CH case. In that case, the OFT did not contest the CH's use of 'the term 'raw information'... to indicate that Companies House does not itself interpret or edit any of the material it supplies'. However, it could be argued that not all of Companies House's products and services might be regarded as raw as some of these do involve other inputs. In addition, in the HM Treasury (HMT) 2001 guide 'Charges for information: when and how guidance for government departments and other crown bodies', HMT considered raw data to be 'information collected, created or commissioned within government which is central to government's core responsibilities' and value-added to be 'that where value is added to raw data, enhancing and facilitating its use and effectiveness for the user'⁸. In the terminology of Figure 3.2, raw data in the sense of the HMT guidance could include either upstream collected raw inputs or downstream extracted raw outputs. Our use of the term raw is broadly consistent with HMT's use.

creation of value-added products can be regarded as 'downstream' activities.

- 3.30 In some cases, additional data collection or milling activities may need to be undertaken to support specific value-added services. For example, the scope or quality of the information database might need to be extended beyond the minimum required for the PSIH's public duties. In this case, the additional costs of such enhancements should be considered as part of the additional cost of providing those services, rather than the common cost of providing the information database.
- 3.31 Table 3.3 sets out a summary of the types of products and services offered by the PSIHs noting where the PSIHs themselves consider their information to be raw or value-added (using their own definitions). Following that we have considered those that may be regarded as raw or value-added using the principles discussed above.

Table 3.3: Raw and value-added products and services of case study PSIHs

PSIH	Comment
Companies House	<p>In providing products and services, Companies House sells the information it collects and does so in a number of different ways. For example, it will generally disseminate information to large users in bulk as it is received and as a direct digital feed (the information submitted to Companies House is increasingly digitised).</p> <p>Companies House contends that all of its information products are 'raw' insofar as it does not manipulate any of the information contained within filings made by the companies.</p> <p>However, Companies House does provide various</p>

products and services, presenting information in different formats to its users – digitally, in paper form when requested as such etc. This leads to the question of whether or not all these forms of dissemination could be considered raw.

Ordnance Survey	OS provides products ranging from detailed mapping products to its larger users (sometimes in the form of digital layers), to basic printed maps used by individual customers. OS' view is that all its products are value-added according to its interpretation of HMT's definition of the term, insofar as all its individual survey inputs are collated in structured databases from which geographic data in any way meaningful to users can be generated.
-----------------	--

Met Office	From the data collected and acquired by the MO, it generates some basic forecasts in order to meet international requirements. Using this information the Met Office also makes detailed forecasts using various meteorological prediction models. As for its products, the Met Office supplies a mix of wholesale and retail services to its customers.
------------	--

The Met Office's view is that it provides both raw and value-added services. It considers raw products to be data 'essential' for the protection of safety of life and property which, together with other specified data, are licensed by the Met Office free of charge. It considers the primary value-added it engages in to be forecasting, though the Met Office does provide a tailored service to its users (for example, it offers specific services to the building trade and to insurance companies).

UK Hydrographic Office	The UKHO supplies a mix of basic navigational charts, regular updates to those charts and tailored products (for example, for its larger commercial or defence customers). The form in which this information can be provided varies with some charts being provided in paper form (and updates as patches to those charts) and some digitally.
------------------------------	---

The UKHO notes that all its products are value-added insofar as it has to interpret its individual readings and tag these to coordinates on a chart.

HM Courts Service	The HMCS itself does not provide any products to its users. It has instead designated its Registrar function to a not-for-profit organisation, Registry Trust Ltd (RTL). RTL verifies the information, makes it easier to use commercially and provides a customer service to the courts, credit reference agencies and the general public.
----------------------	---

RTL's view is that it only undertakes marginal value-add, cleansing the information which it generally passes on directly to its core users. However, RTL expects to be undertaking value-added activities increasingly in the future, such as competing with its customers at the fringes, marketing and packaging judgment records.

British Geological Survey	The BGS conducts various geoscientific research projects as part of the NERC's science programme and, from the resulting knowledge, creates a range of information products including the digital geological map of the UK. Mostly, however, the
---------------------------------	--

BGS engages in competitive tendering for bespoke services for its various customers. These might also take the form of providing advice on geological issues given the expertise of BGS staff.

The BGS has claimed that its physical sample library can generally be regarded as raw, whilst any products where interpretation or 'internal value enhancement' is needed (such as derived ground stability) and the creation of bespoke products for customers (such as their services supplied to tender) can be regarded as value-added.

3.32 It is clear that the PSIHs have different opinions as to which type of product can be regarded as raw and which value-added. Using our approach to their designation, we have considered where the services provided by the PSIHs might generally be regarded as raw and where, value-added:

3.33 The products provided by Companies House rely on predominantly unmanipulated data (with minimal additional inputs being used in creating their products) suggesting that most of their products can be regarded as raw. However, where Companies House seeks to expand the means through which they deliver information (even where the underlying data remains unmanipulated), and where customers are prepared to pay a premium for this, then some parts of the Companies House service may be regarded as value-added. For example, if mobile phone based dissemination services were introduced or where individual data-points were extracted from filings and inputted into a digital database in order to allow more sophisticated commercial usage, then these could be regarded as value-added.

3.34 OS has noted that its individual survey readings and aerial surveys cannot be readily disseminated as they would not be useful by themselves and they are not maintained in any permanent form as

survey readings. Part of its core milling or assimilation includes tagging survey inputs to map co-ordinates and this is generally conducted automatically, structuring the captured information in the relevant database.

- 3.35 On the whole, the products OS makes available for re-use could be regarded as value-added where they require additional inputs or more extensive manipulation. A significant amount of milling is undoubtedly necessary to make survey information meaningful, even to OS itself for use in its own products. However, once raw survey information has been milled, extracts from OS information databases are likely to be close to being raw data. Some business users have noted that OS does not provide a basic mapping product that is a direct extract from one of its information databases.
- 3.36 OS states that it undertakes a number of other activities to create its various products and that there is no common database from which all products are routinely created. For example, some printed maps still require a degree of manual manipulation and are not created automatically as an extract from a database of the UK's geographical features. Nevertheless, we understand that OS is increasingly moving in the direction of deriving all its products and services from such a common database.
- 3.37 Therefore, although it is could be argued that many of OS's products and services at present may be characterised as value-added, this is not some intrinsic feature of its operations. As such, it is possible to envisage access to raw data on geographical features that could allow third parties to create their own products and services.
- 3.38 The OS has stated however, that it considers many of its products to be practically direct extracts from its databases.
- 3.39 In concurrence with the Met Office's own view, its products can be regarded as both raw and value-added. The basic data readings (rainfall etc) are by themselves not particularly useful to an end-user. As such,

the Met Office needs to undertake some basic analysis to provide a simple forecast from the data. Where value is added is in providing more detailed forecasts (for example, long-range forecasts) or providing products tailored to the needs of the end-user, for example, services that the Met Office provides to the insurance sector (in order to verify insurance claims) relating to weather conditions at a particular location and time.

- 3.40 The UKHO tags information to specific chart co-ordinates. Without extensive milling activities the information would be meaningless to users, and indeed to the UKHO itself when creating its range of products. As such, using our interpretation of raw and value-added, these activities of the UKHO would not necessarily be considered as adding value. As with OS, we do not consider that just because an organisation has to undertake extensive milling activities all its products are necessarily value-added. Where the UKHO undertakes further activities that create products, for example, digitising the charts or updates to the charts using alternative means of dissemination then these could be regarded as adding value.
- 3.41 The HMCS does not actively sell any products, but instead passes on information to RTL which in turn verifies and adapts the information to offer in bulk to its main customers and make available to the general public at prices agreed with the Department for Constitutional Affairs. RTL's view that it currently undertakes minimal value-add would appear to follow our approach. However, as RTL moves towards competing at the fringes with its customers in terms of further packaging and marketing of its data, then these services could be regarded as value-added.
- 3.42 Where the BGS derives readings from samples and tags information to create relevant geological maps, then these activities would not necessarily be regarded as value-added. This is because this basic level of interpretation and tagging is necessary to make the information usable by both the BGS for its own products and for supply to some of its

users. It is clearly the case that bespoke services and more sophisticated mapping products can be regarded as value-added.

The increasing importance of value-added products and services

- 3.43 There is considerable potential for PSIHS to broaden the range of products and services they already provide and to find new uses for their information assets. Analysis we have undertaken separately suggests that there is significant scope for the expansion of services using PSI in the UK.⁹
- 3.44 With digitisation and the widespread availability of computers, high-speed data networks and mobile communications, there are ever-increasing ways in which information can be exploited and presented in new formats. For example, geographical data can be exploited to provide a variety of mapping, guidance and location-based services through mobile phones, in-car navigation systems and so on. Likewise, users in estate agency services have noted a desire to use more detailed mapping products (for example, providing visuals and aerial shots) for potential property buyers.
- 3.45 All of the case study subjects have been expanding the range of products and services that they offer in recent years. OS has recently created a MasterMap product (a fully digitised map that can be amended as new survey readings feed in and that is comprised of different layers of information to be put onto a base map). Both Companies House and RTL are digitising their historic filings and records. They are also developing databases that allow more sophisticated uses of their data,

⁹ Our own report of August 2006 'Commercial use of public information - Economic value and detriment analysis' notes that the economic value of PSI is currently around £0.5bn and that the detriment caused by possible behaviour of PSIHS and the lack of exploitation of this PSI has the potential for increasing this further.

by allowing users to scan for certain items of data or to group records or filings based on their specific needs.

- 3.46 Overall, the case studies suggest that it is typical of PSI provision that many uses can be made of PSIHs' information assets. Clearly making one use of information does not preclude others. The situation is more one of joint production, where data collection and milling activities enable many actual and potential products and services. Upstream information gathering and milling activities are common to all the services and products provided by the PSIH. As such, the common costs of these upstream activities must be spread across the various services. In turn, services should recover any downstream costs specific to the service (that is, the costs of extracting data and translating to an appropriate format and any additional data gathering specific to that product or service) and make a contribution to the recovery of upstream costs.
- 3.47 Innovation that brings new products and services can generate large benefits for customers. Given that commercial exploitation of PSI can help to recovery some of the costs of gathering and providing PSI in the first place, allowing certain commercial freedoms for PSIHs and seeking to make wider use of the information they hold could indeed be beneficial.

4 COMPETITION IN PSI

Barriers to entry upstream

- 4.1 In the event that barriers to other firms entering the market are low or that scale economies are weak at each level of the value chain, there is potential for competition from private competitors to PSIHs who can offer directly competing products and services. In such a situation, competition would be expected to protect end-users from any potentially exploitative behaviour.
- 4.2 However, PSI is likely to exhibit aspects of natural monopoly, principally in gathering or creating the underlying information assets which may be most efficiently done by a single organisation. Indeed, PSIHs may not have come into being in the first place if the essential information that they provide for public functions would in any case be provided by the private sector (although there may be some exceptions to this, for example in the case of national security, government currently relies on information being handled by the UKHO rather than purchasing information from international Hydrographic Offices). In general then, from an economic perspective, the fact that an organisation is involved in the provision of PSI in itself suggests that the scope for competition in those markets was and is likely to be limited.
- 4.3 All of the case studies demonstrate this feature to a lesser or greater degree. PSIHs may be protected from end-to-end competition through barriers to entry in upstream collection and milling activities. The clearest instance of this is provided by registries where information must be lodged by statutory requirement. It would be inefficient to duplicate such a registry and, in any case, the statutory requirement to lodge data will very likely create an absolute entry barrier for a competing provider. Companies House and HMCS provide good examples of this situation. Although HMCS currently effectively outsources its registry function, this does not change the conclusion that the registry function is likely to be a natural monopoly.

- 4.4 Even where a PSIH is not a formal registry, statutory obligations on others to provide information can be essential to its function and constitute an absolute entry barrier. For example, the BGS relies on statutory obligations on those undertaking exploration for mineral and water resources to provide borehole logs to fulfil its functions. A third party trying to replicate the BGS's activities would not have this benefit.
- 4.5 Even when information gathering does not rely on statutory obligations on others, there may nevertheless be significant scale economies in certain activities. For example, building and maintaining comprehensive geographic or hydrographic information for the UK would be costly to duplicate from scratch and OS and UKHO rely to a large extent on regularly updating historical data. In such a case, once a PSIH is providing its public function, strong scale or scope economies may make end-to-end duplication of its activities uneconomical and inefficient.
- 4.6 Table 4.1 below sets out a summary of the position of the operators in their various upstream markets and the likely scope for the development of alternative providers of the primary information.

Table 4.1: Position of PSIHs in their respective upstream markets

PSIH	Comment
Companies House	Companies House is the principal collector of information upstream. The legal requirement on companies to file information with Companies House, mean that the establishment of a rival collection function upstream is extremely unlikely.
Ordnance Survey	Although there is limited scope for competition in the collection of local information, there may be significant scale economies in keeping a full UK map up-to-date. As such, OS has maintained a monopoly position upstream. Other operators in the market have developed some maps although covering

limited geographic areas.

Nonetheless, alternative means of gathering the information (satellite and aerial photography) and new digital techniques might allow a greater role for competition going forward.

Met Office	The costs of collecting meteorological information are high. As such, scope from competing private sector operators in the collection of information is limited. However, there is the possibility of competition from international meteorological offices. There is also the scope for competition in forecasting functions. Indeed, some competition in forecasting already exists.
------------	--

UK Hydrographic Office	The UKHO receives information from the Marine Coastguards, the MoD and other international hydrographic offices that have recorded information and mariners that report required corrections to these records. The UKHO itself has significant expertise in interpreting the information that it receives.
------------------------	--

As such, the UKHO has a strong position in its market. Nonetheless, competition from international hydrographic offices is conceivable (although possibly not for defence customers).

HM Courts Service	The collection of information from the courts and a legal requirement on the HMCS to maintain a Register lends it and RTL to being a natural monopoly. Nonetheless, there is scope for competition in alternative primary predictive information that may be held by alternative players
-------------------	--

in the credit market (for example, defaulters of bank loans information are currently held by banks).

British Geological Survey	The obligation on third parties to provide information to the BGS limits the scope for competition upstream. However, there is competition in value-added activities (for example, in interpreting samples and readings), that is, for commissioned research for independent bodies. Nonetheless, the BGS has developed a strong reputation in the experience and expertise of its staff which reinforces its position upstream.
---------------------------	--

Scope for competition downstream

- 4.7 Not only does contestability upstream in data collection and milling activities limit the scope for end-users being exploited, it also limits the possibility of competition problems further downstream. Conversely, however, a lack of potential competition upstream does not automatically mean that the scope for competition downstream will also be limited. Competition may be well placed to develop downstream with innovative value-added or niche services given access to the PSIH's information database.
- 4.8 Our case study markets all benefit from a number of competitors downstream offering a wide variety of value-added services based on data purchased from the respective PSIH. In none of the case studies did there appear to be particular products or services where there were strong scale or scope economies downstream, once given access to the underlying 'raw' information database had been secured. Therefore, whilst full end-to-end competition with the PSIH from private sector providers is unlikely to be feasible in many cases, competition in provided value-added services often is feasible.

The nature of possible competition problems

4.9 There are two main types of potential competition problems that could arise if upstream data collection and milling activities are subject to monopoly provision. These include:

- the PSIH leveraging market power from its upstream monopoly to hinder the development of competition in downstream services, or
- the PSIH excessively charging its end customers and over-recovering the costs of producing information assets (in particular due to lack of contestability upstream).

4.10 Considering the first type of problem, where a PSIH also operates in the provision of downstream value-added services, then non-discriminatory access to PSI for commercial uses is vital for the efficient operation of the downstream markets. Private sector organisations may rely on data from PSIHs as irreproducible inputs into their own products and services. Indeed, the PSIHs may also be the only source of the raw data in the first place. In this way, the terms on, and manner in which, data is made available to users are critical for the development of competition downstream. Particular forms of anti-competitive conduct could include:

- refusal to supply: where the PSIH is the primary collector and holder of raw data and the data cannot be replicated in other ways then access to such might be considered an essential facility. Refusal to supply in these cases could be regarded abusive of a dominant position where there is no objective justification for the refusal. PSIHs may also constructively refuse supply indirectly through failing to offer specified products

- tying/bundling: where PSIHs can combine or package information before passing it on, they may be able to limit development of competition in the market. This may also be relevant where a number of PSIHs choose to combine material. Competitors are likely to be at a significant disadvantage in these cases as they cannot access just the information they need to offer their products and services (that is, they are forced to purchase products that they do not need)
- predatory pricing and margin squeeze: PSIHs may be able to incur a short-term loss deliberately or squeeze margins to force other competitors out of the market or prevent others from becoming established with the hope of reaping gains from market power later. To the extent that predation and margin squeezing can only be maintained where the organisation can incur or later re-coup losses, PSIHs that are able to fall back onto public funds may allow such behaviour to be more easily sustained
- discriminatory pricing or access: here a PSIH can unduly discriminate between different customers or offer itself preferential terms on the use of the information, then concerns on discrimination may arise. Discrimination can be in terms of the quality of service that the PSIH offers to its downstream customers, and
- undue licensing or contractual obligations: the PSIH may impose undue terms on value-added users that limit their operations in some way. Examples of this might include extremely short notice periods or involve excessive penalties for minor infringements.

4.11 Worryingly, some of the incentives for such behaviour might well be stronger for a PSIH than for a private sector company with a clear profit motive. Where a request for access to information assets by a value-added provider is denied or discriminated against, a private sector company would be limiting the size of the market for products and services derived from those assets or eliminating a provider who could exploit the information assets more efficiently than it could itself. It

would not matter if the hypothetical private company were itself active in value-added markets, as it earns its profits on its wholesale products.

4.12 However, a PSIH does not have the same incentive to grant access to alternative value-added providers to increase its profits. To the extent that its objectives might well be at least in part organisational growth, it could have a stronger incentive to deny access and undertake value-added activities itself than would a private sector company with a pure profit motive. Alternatively, the added complication and management effort necessary to provide wholesale services might be a disincentive in an organisation where additional profits were not a motivation. Therefore, there is a strong a priori case to be vigilant about distortions of competition in value-added services where public sector bodies control the nature and pricing of wholesale services.

4.13 It is clearly not possible to predict where there might be potential future breaches of competition law and by which PSIH, this is not the purpose of this study. However, where competition in the market has - and continues to be - limited, where barriers to entry are considered high or where there has been a history of anti-competitive behaviour on the part of the PSIH, then it may be the case that the PSIH possesses some degree of market power, suggesting there is a strong a priori case to be vigilant about distortions on competition in value-added services.

4.14 The case studies have identified some PSIH activities that might be considered to be potentially distorting downstream competition. These include:

- through criteria denying access to wholesale customers whose value-added products compete with those of the PSIH, or might compete with the PSIH's future products
- through making a certain range of wholesale products available and expecting value-added providers to conform their demand to the set of standard products at a particular set of terms and conditions that may not meet their needs, and

- through imposing conditions on how PSI might be used, such as providing only short duration licences for use of the information.

- 4.15 Information goods are likely to be characterised by high fixed collection costs. These high fixed costs are generally combined with low reproduction and dissemination cost (which might be in digitally transmitting information to customers, photocopying a document or allowing customers access to physical samples at a particular site). Clearly there are many ways in which these collection costs could be recovered across the various products and services derived from the data. The costs could be met by the government departments or agencies required by statute to gather the information to fulfil their duties. Likewise, prices of the products and services derived from the PSI could be set at the marginal cost of its reproduction or dissemination. Alternatively, PSIHs could rely on a combination of payments through public funding and recovery from product sales.
- 4.16 In selecting the most appropriate pricing structure, a judgment is required as to which particular use should contribute to the costs common to the products (in the US, public bodies are required to provide products at marginal cost, whilst in the UK many products are priced to recover the full costs associated with the products). Whichever approach is adopted, the key concern is that the PSIH should not be allowed to over-recover for its services, or exploit particular types of users (for example, those that may be captive).
- 4.17 The case studies demonstrate that the first of these potential competition problems (access terms and pricing distorting downstream competition) as being much more significant than the second (generally high prices leading to high profits). These two issues are discussed in turn in the next two chapters.

5 ACCESS AND WHOLESALE SERVICES WITHIN PSIHs

5.1 Given concerns on the need for downstream competitors to access information, our case study assessments considered the following questions:

- are downstream value-add competitors able to access PSIH information?
- if so, on what terms is this access granted?
- where the PSIH also competes downstream, is access to competitors provided on similar terms as to the PSIH's own downstream business?

5.2 Our findings are that access is typically being granted to competitors downstream even though there is limited scope for competition upstream. However, the terms and conditions on which access is granted are not consistent across the PSIHs. In some cases, there is no clear distinction between the PSIHs' upstream and downstream activities, which is important to implement non-discrimination between services provided to other providers and those supporting the PSIH's own commercial activities. There is significant variation between PSIHs in the care with which commercial and non-commercial activities are distinguished.

5.3 Table 5.1 sets out a summary of our findings on the access and wholesale issues in relation to our case study PSIHs.

Table 5.1: Access and wholesale terms of case study PSIHs

PSIH	Comment
Companies House	<p data-bbox="512 353 1327 900">Companies House currently offers full access to the filings that it receives and we were not made aware of any specific cases of it refusing to supply services to any access seeker. The information is generally sent to larger customers (for example, market information firms) by way of a live electronic data feed, which include digitised photocopies of the filed documents as and when filings are made and been scanned into Companies House's own system. Companies House is a positive example of making nearly all of its information available to users.</p> <p data-bbox="512 945 1327 1594">Companies House offers set contracts to its subscribers and the terms of these differ between low-usage (single unit) and high-usage (contract) products. Some users have noted that the contracts appear to afford significant flexibility to Companies House (for example, by reserving the right to terminate the contract or to change the price mid-term.) Companies House has noted that the reason for a right of termination on notice is given as a matter of public law, where the Secretary of State may not fetter his discretion. Companies House has also noted that it employs standard terms contracts for an unlimited period, terminable by either party on notice.</p>
Ordnance Survey	<p data-bbox="512 1639 1327 1818">There is currently no separation between the upstream and the downstream activities of OS, neither at a business unit nor an accounting level. There is currently no distinction between OS's</p>

upstream and downstream arms, making it difficult to determine whether there is non-discriminatory pricing of upstream services between OS's own retail activities and those of third parties.

OS licenses the use of its information through a series of specific use contracts (SUCs) based on the subsequent use that the customer intends to make of the products (there are currently 13 such contracts that potential users can sign up to and include for example the 'Publishing products' and 'Fleet Management' contracts). OS has also put in place a detailed licensing policy alongside these contracts that would apply to the licensee.

OS's licensing policy reflects its view on those types of users that it will license, and sets out requirements on the user to demonstrate a business case for the product being offered. There are two noteworthy conditions within the licensing policy – firstly, OS' policy is that it may refuse to license the use of its information to partners where the user will create a product that OS is itself providing to the market or may wish to provide in the future, and secondly, OS may refuse to license information where the user is in dispute with OS. OS notes that the first condition applies only to its partner licences, and not to its distributor licences.

Although the first condition may be legitimate under current competition case law, it may be an explicit refusal to supply information where it might limit the operations of OS downstream and, in our view, this policy is inappropriate for a public sector body. The second condition may also be of concern where any

dispute is only minor in nature but the user is being refused access to the information. This may discourage legitimate complaints from actual and potential users. OS stated that the exception is intended only to apply to serious disputes and that OS has never yet invoked this exception.

The terms associated with the various specific use contracts vary, although most contain similar terms, for example around conditions of use. Variations include those in the prices charged for re-use of the information. As such, prices of its products (as noted above) are generally a starting point for determining prices for re-use which will vary, for example, according to the number of click-uses envisaged via a website. Some business users have noted that the 13 contracts do not reflect the growing diversity of business types.

In addition, users have noted that the contracts may not reflect their particular needs. These could be legitimate concerns on the part of users where a fixed menu of contracts may be insufficient to permit the wide and varied uses that could be made of geographical information. However, OS has noted that it attempts to meet user requirements by asking users to explain their needs in order that an amendment may be made to existing contracts or a new SUC created.

OS has also developed a set of TOIDs (topographic identifiers), which generally represent a feature on a map (a hospital, road etc). Some industry players have highlighted the difficulty of TOIDs being used by a number of players and at the same time being under the control of one market player holding an

apparent strong position (such as that of OS), given that there is no obligation for changes to the TOIDs to be reflective of perceived benefits for the industry overall. Third parties consider this to present an unbearable risk for those offering services based on OS data as they may be adversely affected if the specification of these interfaces changes.

OS however, has stated that OS Mastermap TOIDs are only one of a number of unique identifiers used in the geographic industry and are not an industry standard. For example, another unique identifier is the UPRN used in the National Land and Property Gazetteer (NLPG), used by local authorities. The OS considers that any of these alternatives could be used to aggregate user-defined groups of TOIDs and/or other unique identifiers.

Met Office	The Met Office currently operates under a well-developed wholesale and retail split. Indeed, it also has an internal arm's length relationship with its business units so that it treats its own downstream business in the same manner (relying on internal transfer charging mechanisms) as it does its other customers. This is a positive example of practice in clearly separating upstream and downstream activities.
------------	---

The Met Office relies on a system of licensing to value-added players. These are licensed to add value and are restricted from passing on the information to end-users in the form in which they received it. Although this creates an additional level of judgement (and enforcement) to determine that value is being added, users we met with did not

raise this as having limited competition in the downstream market (there are currently a large variety of value-added providers operating in the market downstream).

The Met Office has a series of specific contracts which it uses for particular type of services. However, it negotiates with a number of its larger customers and provides bespoke services where required.

UK
Hydrographic
Office

The UKHO licenses the use of its information through a series of standard contracts for commercial users and for non-commercial users. Aside from this, the UKHO also contracts with various distributors for its basic navigational products.

The contracts for commercial use include a series of standard terms, for example around rights and obligations.

The UKHO has also noted that it seeks to ensure confidentiality internally between departments responsible for licensing to commercial customers and its other business units.

HM Courts
Service

The HMCS does not supply raw information to users, but rather passes it on to RTL under contract. This contract has recently been renewed (April 2006), and HMCS is considering whether or not it would be appropriate to bring the functions of RTL in-house when the contract comes up for next renewal.

RTL supplies the full set of data to credit reference

agencies and other users of the information. RTL also grants access to the general public to information on a judgment by judgment basis. One issue worth noting in relation to RTL is that a number of the main credit reference agencies also sit on the Board of RTL. Given this, and coupled with the not-for-profit status of RTL, it may not have the incentive to maximise the use of the information that it holds and thus may limit the development of competition in the credit reference market.

The terms on which the information is passed on to end-users or value-added users are, however, set by HMCS. All exceptions to the contracts are referred back to HMCS for decision. The terms include standard conditions, amongst others, on termination and copyright. Users have not noted any particular difficulty with the terms and conditions established by the contracts.

British Geological Survey	<p>The BGS allows access to its physical samples, allowing users to visit their facilities to view these if they wish. This service is open to end-users and downstream business users. The BGS also licenses the use of its milled information. These licences will vary, depending for example on the duration for which it is sought or the information being covered. For example, digital seismic information will include terms on the real-time transmission of updates.</p> <p>Copyright of products resulting from the BGS's activities (such as geological maps) lies with its parent body the Natural Environment Research Council (NERC). The terms and conditions of</p>
---------------------------	---

contracts under which BGS operates are set by the NERC.

In some instances contracts will be case specific, in particular for the case of bespoke commission pieces of work that they might undertake for users. However, where BGS and other firms compete for a piece of commissioned research, and where tenders are won by other firms, the BGS allows access by these firms to its publicly held sample stores (via a licence). This is positive example of licensing of information even where there is clear competition downstream.

- 5.4 In summary, access to the information collected by the PSIHs is generally permitted. Nevertheless, there are questions around the manner and the terms to which information is made available. We have noted the use of certain licensing policies that might prevent the licensing of information where this led to products that might compete with the PSIH downstream. This can clearly have a detrimental effect on competition, and ultimately customers, and there might be benefit in reviewing this. There are also questions around the various terms and conditions that the PSIHs apply to granting access and the use to which their information can be put, in particular around where terms differ amongst operators and as between operators and the PSIH's own downstream business.

Access analogy with regulated network industries

- 5.5 When considering access to the information, there is a useful analogy to network industries (for example, telecoms, gas distribution) where a common network provides a variety of services. PSIHs build information assets that may then support a wide range of products and services. As with network industries, access can enable competition to occur at some

levels of the vertical structure even if competition cannot occur at all levels. Access to raw information database can allow competition in the provision of value-added products and services even if data gathering and milling is not amenable to competition.¹⁰

- 5.6 This analogy is useful in that we observe sectoral regulators (in industries such as telecoms) seeking to ensure that there is access to networks on terms that allow competition between incumbent and alternative providers. This situation is very similar to PSIHs where information assets are not reproducible by potential competitors who could otherwise compete in value-added activities given access to these information assets.
- 5.7 The challenge with PSIHs is to find appropriate and proportionate measures to ensure that access is available to others and that competition in value-added services can take place between a PSIH and other parties in an undistorted manner. However, regulating network industries such as telecoms and gas distribution requires significant resources, is specific to the industry and is highly interventionist. Such a regulatory model is not likely to be proportionate for much smaller public bodies such as PSIHs.

Ineffectiveness of current anti-discrimination measures

- 5.8 Simply requiring PSIHs to not discriminate in the prices they set for wholesale services sold to value-added providers is not sufficient to ensure that there is effective and non-distorted competition in the provision of value-added services. There are two main problems:

¹⁰ This analogy works closely for most of the case study subjects. The only significant feature that it misses is the two-sided nature of registries, where charges are made both for lodging and for retrieving information. We return to the question of two-sided markets below.

- where the PSIH itself provides competing value-added activities, there needs to be similar terms and conditions for access to the PSIH's upstream information assets for the PSIH's downstream business and competing value-added providers. Simply ensuring that all value-added providers receive the same terms is not sufficient to protect against competition concerns. Without a distinction between the PSIH's upstream and downstream (that is, value-added) activities, it may be impossible to verify whether there is discrimination or not as amongst other operators and between other operators and the PSIH's own operations downstream
- even where there are standardised wholesale products for value-added providers that are available to all-comers at the same price, the design of these products may be unfavourable for competing wholesale providers. For example, services may be bundled or licensing may be short-term and incompatible with making long-term investments in the development of value-added services. Therefore, standardisation could just as much be used as a way of implementing constructive refusal to supply as in achieving non-discrimination.

5.9 There are a wide range of non-price means by which PSIHs could affect competition in value-added services, even if they offer all value-added providers identical terms. This is strongly analogous to the problem of opening up networks to access requests for competitors. Consideration must also be given to terms and conditions of access, not just price.

5.10 In regulated network industries such as telecommunications, incumbents must meet reasonable requests for access. This does not mean that numerous requests for access of many different types must be met, as without some standardisation of access products there will be a loss of scale economies. However, incumbents must offer wholesale products at prices that are cost reflective and meet the reasonable needs of competing providers. Therefore, it is necessary for the regulator to consider the range and definition of wholesale products, a process that typically requires extensive consultation with users.

- 5.11 In certain of our case studies, there appears not only to be a set of wholesale products which is potentially restrictive with regard to value-added providers' needs, but also little ability for value-added providers to express their future needs. PSIHs' future business plans with regard to upstream data collection and milling activities are typically not transparent to users of their wholesale services. It is not sufficient for PSIHs simply to offer a fixed range of wholesale products on standardised terms unless there is some degree of confidence that these are indeed the range of wholesale products most suitable for the development of value-added services.
- 5.12 In some cases we have seen case studies limiting the range of access products and terms available to its users on the grounds that it believes this is necessary to avoid discriminating amongst wholesale users in any way. In effect, they take the approach that the requirement not to discriminate forced it to offer only a standardised range of wholesale products that it could not vary. In particular, this may rule out offering new products to meet specific needs of wholesale users. This approach is not necessarily compatible with meeting reasonable requests for access.

Difficulties in practical application of competition law

- 5.13 There is good reason to expect complaints by value-added providers under competition law to be an ineffective discipline on PSIHs unless there is already some degree of vertical separation within the PSIH. This is given the likely cost and burden of determining whether the complaint against the PSIH is justified. Where there is no transparency of where costs are incurred at the various levels of operation within the PSIH, it is extremely difficult to verify whether the PSIH's own downstream value-added activities are being treated more or less favourably than an independent competitor. Trying to establish a system of cost allocation to verify or refute a complaint is burdensome for the complainant without some cost information already being available.

5.14 Pursuing again the analogy with regulated network industries, having cost allocation in place already makes easier the investigation of complaints about predation and discrimination. Accounting separation is often used as a first step where there are competition problems, before imposing more onerous obligations such as cost-oriented access pricing. With accounting separation already in place, third parties have greater ability to bring competition complaints.

Need for some form of vertical separation

5.15 As noted above, where competition is not possible at every level within a vertical structure, access arrangements matter for the development of competition at other levels. Regulated network industries have typically adopted a range of measures to tackle the problem, including price regulation, cost-based access pricing, non-discrimination requirements, accounting separation and even structural separation. Some of these measures would be disproportionate if applied to a PSIH as they involve a heavy regulatory burden.

5.16 Nevertheless, clearly it is feasible for PSIHs to operate cost allocation systems that allow identification of the costs of building information assets separately from the costs associated with exploiting them through value-added services. A number of the case study PSIHs operates such systems. There is a strong case that other PSIHs should adopt similar approaches as best practice (subject, of course, to the issue of proportionality in each case).

5.17 With at least accounting separation of upstream and downstream activities it becomes possible to test whether independent value-added providers are paying a similar amount for access to the PSIH's information database as the PSIH is charging its own value-added operations. Competitors would have a firmer basis for complaint if unfairly treated relative to how the PSIH treats its own downstream activities. An additional step would be arms length separation of upstream and downstream business functions (not just accounting separation).

6 PRICING PRACTICES WITHIN PSIHS

- 6.1 Many PSIHS already sell their data either in its raw form or as value-added information that has been refined or packaged in some way. At one end of the spectrum, pricing policies based on incremental dissemination costs would be insufficient to cover the total incurred by the information collector, which would then need to be publicly funded. However, at the other end of the spectrum, the costs of information gathering could be covered by commercial exploitation of the information, possibly even meeting the PSIHS' duties without needing public funding. In considering pricing, PSIHS should not be permitted to over-recover the costs of building their information assets (that is, both through public funding to cover public service obligations and through re-selling making the upstream activity excessively profitable).
- 6.2 In practice, there are currently a number of models of pricing for PSI in different jurisdictions. For example, United States bodies (including Federal Executives, Agencies and Local Government) must make data available at incremental cost, with the US Freedom of Information Act noting that:¹¹

'(I) fees shall be limited to reasonable standard charges for document search, duplication, and review, when records are requested for commercial use

¹¹ It is important to note that there are differences between freedom of information rules and the use and re-use of information as considered in the UK versus the US. In the UK, the Freedom of Information Act 2000 does not grant rights to re-use information.

(II) fees shall be limited to reasonable standard charges for document duplication when records are not sought for commercial use and the request is made by an educational or non-commercial scientific institution, whose purpose is scholarly or scientific research, or a representative of the news media, and

(III) for any request not described in (I) or (II), fees shall be limited to reasonable standard charges for document search and duplication'.¹²

6.3 This incremental cost-only model contrasts with cost-recovery models generally practised in the UK and other European countries (although note recent case law such as the KPN decision¹³ that has promoted the incremental cost only model in the context of a private-sector database provider with dominant positions). In the UK, this is achieved by ensuring a large proportion of PSI is held and released by the Trading Funds.

6.4 The Government Trading Act 1973 (and subsequent amendments to it) is the principal legislation governing the behaviour of Trading Funds (which cannot be established without approval of Parliament). All Trading Funds are required to prepare detailed business plans that have to be approved by the Minister of their relevant department. Ministers are also responsible for the setting of strategic objectives in respect of financial performance and standards of customer service. In particular, Trading Funds are required to comply with guidance issued by the Treasury on fees and charges. These include guidelines on cost reflectivity, cost accounting and the need to earn a rate of return for government. These issues are discussed further below.

¹² The United States 'Freedom of Information Act' 5 U.S.C. § 552, as amended in 2002.

¹³ Judgment of the Court (First Chamber) of 25 November 2004 - KPN Telecom BV v Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA) Case C-109/03.

- 6.5 Although a number of restrictions are placed on Trading Funds, there is no specific guidance in terms of each individual Trading Fund, neither is there a requirement on them to make all information relating to their operations available publicly (for example, in the form of business plans). These Trading Funds differ from central government to the extent that they deliver services that go beyond the scope of the government's own needs and thus ought not to be funded through taxation but rather through self-initiated commercial revenue generation. These Trading Funds then rely on HMT guidance on setting their charges which notes that 'each service should have a financial objective... The financial objective should usually be full cost recovery'.¹⁴
- 6.6 Where the activities are not primarily for the benefit of the department in question then there is less of a case for government to bear the full burden of the data collection without being at least partially compensated by other users. Cost recovery models would then generally entail second-best pricing, for example with Ramsey pricing necessary to recover data collection costs efficiently across different classes of user.
- 6.7 Given the non-rival nature of information, overall efficiency of use of PSI might prove better with public subsidy to cover data gathering costs. This avoids the difficulty of inefficiently pricing of potential users who value data more than the costs of extracting the data they use, but not sufficiently to pay charges including a contribution to data gathering.¹⁵ This is a version of the standard argument that pricing for public goods should reflect the incremental cost of use (often zero if there is no rivalry for consuming a public good).

¹⁴ HM Treasury 'Fees and Charges Guide', paragraph 2.8.

¹⁵ This is a problem because real-world pricing structures cannot finely discriminate amongst users according to willingness to pay.

- 6.8 Often, however, incremental cost charging is not feasible for policy reasons and could have poor incentive properties. Government subsidy to cover common costs might create poor incentives for cost reduction in those activities. For example, delegating budgets to PSIHs and engendering some commercial discipline may improve efficiency relative to central government providing an open-ended funded commitment. Such considerations have underpinned policies of privatisation. Furthermore, we must also recognise that there are incentive costs to raising public finance (for example, due to distortions created by taxation) and there may be indirect costs to subsidising PSIHs that should be balanced against the distortions of charging above incremental cost.
- 6.9 There are also significant problems with the subsidy model where the PSIH might need to make investments to meet customers' needs where these exceed the data collected for government use. The PSIH should be incentivised to undertake such investments where efficient, but appropriate incentives may be too difficult to set up if government rather than users are funding such developments. For example, it has been suggested that the US Geological Survey has poor incentives to produce up-to-date information because collection costs are met through public funds and it cannot charge more than dissemination costs, regardless of the quality of the service.
- 6.10 We find that although full-cost recovery mechanisms are widely used across PSIHs, their methods of allocating costs to the various products (both at a retail and wholesale level) differ significantly. Table 6.1 sets out a summary of the way in which PSIHs are financed at present. Following that, Table 6.2 describes the pricing practices within each of our case study PSIHs.

Table 6.1: Funding of case study PSIHs

PSIH	Comment
Companies House	<p>Companies House operates in a two-sided market where it is able to charge both registering companies and users of information (two-sided markets are discussed further below). The last annual accounts for Companies House had a revenue split of £41.1m for registration services and £14.2m for the sale of services.</p> <p>As a Trading Fund, Companies House is also required to meet a specified rate of return of 3.5 per cent taking one year with another and Companies House recovers the full costs of its services plus this rate of return from those registering and those purchasing products. Companies House has met or exceeded its target in the past four years, although only by one per cent in the last financial year.</p>
Ordnance Survey	<p>As a Trading Fund, OS is required to earn a rate of return of at least 5.5 per cent. OS has exceeded its targets in 2004/5 earning a rate of return of 18.6 per cent. OS has noted however, that its required return is to be taken one year with another. Since becoming a trading fund in 1999, OS has earned an average return of 6.5 per cent annually.</p>
Met Office	<p>The Met Office also receives income from government as part of the National Meteorological Programme (NMP). In the 2005/6 financial year, the Met Office received approximately £78m of funds from the NMP (accounting for 46 per cent of</p>

the Met Office's total income for the year).

As a Trading Fund, the Met Office has a target rate of return of 3.5 per cent over a five year period commencing 1 April 2004. In the most recent financial year it earned a return of 5.3 per cent. This rate of return varies – in 2004/5 it was 7.6 per cent, more than twice as high as the 3.5 per cent target.

UK Hydrographic Office	As a Trading Fund, the UKHO was required to earn a rate of return of nine per cent in its most recent financial year. The UKHO exceeded this, earning 16.2 per cent.
HM Courts Service	The HMCS is funded as part of the overall Department for Constitutional Affairs Departmental Expenditure Limit. HMCS supplies the CCJ information to RTL, in the most recent year at a rate of £1.44 per judgment. The HMCS has noted that this may decrease in the future as it takes action to reduce its costs overall.
British Geological Survey	The BGS receives funding from government's science budget. As a not-for-profit organisation, the BGS has not earned a rate of return as such, though some of its costs are covered in part through funding from government (through the national science budget).

- 6.11 Four of our six case studies are Trading Funds. These have been subject to requirements to earn a rate of return by their parent departments. In all cases, the PSIHs have met or exceeded the targets. Indeed in the case of OS and the Met Office, the rates of return in 2005 have been at least twice as high as the target set.

6.12 As not-for-profit organisations, RTL and the BGS have not earned a rate of return as such, although these have covered their costs through in part funding from government (in the case of the BGS through the national science budget) and from data sales (in the case of RTL through the sale of CCJ information).

Table 6.2: Pricing practices and cost allocation of case study PSIHs

PSIH	Comment
Companies House	<p data-bbox="528 353 1350 584">Companies House charges a variety of rates for its services based on a detailed cost allocation and recovery mechanism. These prices might range from £1 for access to a single filing for an individual user through to £48,000 for some bulk data products.</p> <p data-bbox="528 629 1350 853">Companies House has also noted that increased efficiencies, derived as a result of developing its electronic system, means that the incremental costs of filing and extracting data is expected to fall going forward.</p> <p data-bbox="528 898 1350 1077">Companies House has a detailed cost allocation process in place, where costs are tagged to the registration of information and to the dissemination of information.</p>
Ordnance Survey	<p data-bbox="528 1122 1350 1301">OS charges all its users based on a full cost recovery mechanism. All cost incurred by OS are spread across their various products, although OS has no specific cost allocation mechanism in place.</p> <p data-bbox="528 1346 1350 1615">The prices that OS charges differ widely, for example some basic printed maps for consumers at £6.50 through to a £4.99m per annum usage fee for the topographic layer of their bulk MasterMap product (the core product used by its business users).</p>
Met Office	<p data-bbox="528 1659 1350 1839">The Met Office is obliged to offer certain information free of charge under international WMO obligations. The Met Office is also the UK member of ECOMET, an economic grouping of 20 European National</p>

Meteorological Services. As part of this it is required to set out a catalogue for certain products.

The Met Office charges various rates for its other services and does so by type of data (for example, a single site radar image is charged at €2.33, whilst lightning detection information for the North Atlantic region would be €14.5k).

The Met Office has a well-developed upstream and downstream costing model and cost allocation system with internal upstream costs reflected in prices of downstream services.

UK
Hydrographic
Office

The UKHO has noted that its prices fully cover their costs and are based on guidelines issued by HM Treasury.

The UKHO's pricing for use of its products and services differ from those it charges its licensees for re-use. The UKHO's own products and services are priced in two ways. New products and services are priced commercially. Legacy products have roughly followed inflationary pressures on the UKHO and financial pressures to become cost recoverable by 1995.

Charges for use of UKHO products and services can range from approximately £18 for a standard navigational paper chart to £6k for full world coverage of its digital navigator folio.

HM Courts
Service

The HMCS has a detailed cost allocation in place when determining its charges to RTL.

As a not-for profit organisation RTL charges cost

reflective prices to the credit reference agencies, although it does not have a detailed cost allocation system in place. In the last financial year, this amounted to some £273k per year for information on consumers and £43k for information on companies. The charges for access to individual judgments by the general public are set by statute. As of April 2006, charges for the public range ranged from £8 for a single search of one register to £30 for a complete search of all sections of the register.

British Geological Survey	<p>The BGS has noted that it charges for its services based on a principle of full economic cost recovery. The total overhead is calculated which is then priced into all projects. That is, the BGS allocates percentages of its total cost to its different areas of business. For services, the full economic cost is then calculated by adding together the raw staff cost and an overhead rate. This amount is used as a minimum cost of the service.</p> <p>The BGS recovers the allowable marginal costs in making available raw data and uses cost recovery as a basis for calculating the prices of its value-added information products. The BGS also provides a significant amount of data on its website for use for which there is no charge.</p>
---------------------------	--

- 6.13 Our case studies suggests that PSIHs differ significantly in their pricing behaviour: earning a range of rates of return in the case of Trading Funds, receiving subsidies from government in some cases, being driven by a not-for-profit motive or pricing based on a cost or market basis. Given these different models, it is difficult to extrapolate findings relevant to PSIHs more widely. Nonetheless, one key feature of some of

our case studies is the impact of the Trading Fund model and we have considered these in more detail.

Pricing and the Trading Fund model

- 6.14 It is difficult to say whether or not there is evidence of high pricing leading to high profitability in upstream data gathering activities in our case studies. Some of our subjects are currently demonstrating relatively high returns, but by no means all. However, the Trading Fund model relies on a target return, so there should be little incentive for public bodies to behave in a way that leads to excessive returns. Nonetheless, it is possible that high profits could be masked by inefficiency and high costs (for example, where legacy cost structures still prevail). Indeed, the very nature of the Trading Fund model might encourage such possibilities.
- 6.15 The Trading Fund model is in some ways a form of rate of return regulation. Therefore, it may create incentives for PSIHs to increase their asset base to reduce the achieved rate and return and bring it into line with targets. Indeed, the incentives of PSIHs could be geared more toward organisational growth than to profitability, unlike a private sector body with a clear profit motive. Therefore, there appears little to restrain the possibility of excessive investment in generating information assets. For example, the quality or range of services might be increased beyond that which users require, with users picking up the bill.
- 6.16 These issues are a particular concern given that there is little scrutiny of the business objectives and investment plans of PSIHs. In particular, the PSIHs in our case studies typically treat business plans as being commercially confidential. Although agreed with sponsoring departments, these plans are typically set without consultation with users (both end-customers and wholesale customers). Whilst there might be a case that a PSIH's plans for its downstream valued-added activities might need to be confidential, there is no reason for its plans for its upstream data collection and refining activities to be treated in this way.

6.17 This combination of potential incentives for gold-plating (that is, incurring more costs than strictly necessary to supply the products) coupled with little scrutiny of PSIHs' business plans and objectives by wholesale customers is potentially worrying.

Inefficient financing structures due to the Trading Fund model

6.18 Some case study subjects, for example OS, appear to finance investments primarily out of cash flows, as the Trading Fund model required the PSIH to go back to HMT to raise finance. Given that the PSIH's customers appeared to be reliant on the products (continuing to demand these despite price increases), this created a situation in which the PSIH appears to set prices with a view to its future investment plans. This situation may be undesirable as:

- there is no obvious discipline on the investment programme (as there is little competition upstream) and costs (and in turn prices) may be higher than is necessary or appropriate, and
- an efficient private provider would presumably use debt and equity to finance investment and recoup these costs from customers spread over time rather than all at once.

6.19 OS however, has noted that it must agree its business plan every year with its parent department (Communities and Local Government) and this plan includes details of its investments. Therefore OS considers that it does face external discipline relating to the investment plan and costs.

6.20 We raise the question of whether some PSIHs might be more efficient if given greater commercial freedom, but subjected to greater regulatory control on pricing. There is an analogy here to privatisation of regulated industries, which raise capital independently to fund investment but are subject to periodic price controls. Such arrangements are used specifically to foster internal efficiency, as with a periodic price control the regulated firm can keep cost savings until the next review. Investment costs are recouped gradually over time. The merits of this model may be worthy of further exploration, though obviously price

control may be burdensome and disproportionate in the case of managing all PSIHs.

Two-sided markets

- 6.21 Finally, we note that some of case study subjects are registries and so operate in two-sided markets, in other words they can make charges both for lodging and retrieving information. This is most obviously the case for Companies House. When considering the vertical structure set out in Figure 3.2, Companies House has 'users' both at the collection stage and at the dissemination of products stage.
- 6.22 Where a PSIH makes charges for lodging information as well as retrieving it, this raises the question of how the costs of the database are shared between the two sides of the market. In general, the question of optimal cost recovery in two-sided markets is difficult and there are few general conclusions that can be made. Provided that information retrieval is available to value-added competitors on similar terms as the PSIH itself accesses its information to supply value-added products, there is unlikely to be a strong case for intervening on this issue. Subject to this proviso, the PSIH should have reasonable incentives to split the costs across the two sides of the market in a way that promotes its products and services and to ensure that there is transparency in costs and the pricing between the two sides of the market.
- 6.23 However, clearly this conclusion is dependent on the PSIH not being able to favour its own value-added services relative to competitors. Without proper implementation of non-discrimination, the PSIH could have an incentive to load costs onto retrieval activities and away from charges for lodging data.

7 GUIDANCE, MONITORING AND ENFORCEMENT

7.1 The PSIHs use various pieces of guidance when informing their practices, including those for internal monitoring and enforcement. These include:

- guidance issued by the European Commission in relation to the re-use of public information¹⁶
- guidance issued by OPSI, the government body charged with advising on and regulating the operation of the re-use of PSI regime in the UK¹⁷
- guidance issued by HM Treasury, in relation to Trading Funds,¹⁸ and
- internal guidance issued by the PSIHs themselves.

7.2 These various pieces of guidance relate to a number of areas, most notably the re-use of public sector information, the use of licensing (for example, Click-Use licensing), the fees and charges that can be used for the services offered and internal accounting practices.

¹⁶ See European Commission website and documents related to the European Directive on 'the Re-use of Public Sector Information' which was implemented by the Re-Use of Public Sector Information Regulations 2005 (SI 2005/1515) which came into force on 1 July 2005.

¹⁷ See OPSI (June 2005), 'The Re-Use of Public Sector Information: A Guide to the Regulations and Best Practice'.

¹⁸ See HM Treasury (March 2004), 'Fees and Charges Guide', HM Treasury (May 2004), 'Guide to the Establishment and Operation of Trading Funds', HM Treasury (July 1998), 'Selling Government Services into Wider Markets: Policy and Guidance Note', and HM Treasury (July 2001), 'Charges for Information: When and How'.

EC and OPSI guidance

7.3 Our case study PSIHs have relied on EC documents when considering definitional issues. In addition, they have considered OPSI's guidance entitled 'The Re-use of Public Sector Information: A Guide to the Regulations and Best Practice'. The document is aimed at providing practical guidance on applying the Re-use Regulations,¹⁹ and highlights areas such as the definitions of a PSIH's public tasks (as opposed to for example, commercial services), what might be regarded as raw and as value-added, non-discrimination,²⁰ the advantages of the Information Fair Trader Scheme (IFTS)²¹ and the role of information asset lists.²² It should be noted that, although some PSI does not fall under the scope of the Re-use Regulations, PSIHs holding documents that fall outside the scope of the Re-use Regulations are still able to follow these guidelines (and can apply for IFTS Accreditation or Online Assessment).

HM Treasury guidance

7.4 The Trading Funds rely heavily on guidance issued by HM Treasury, in particular the 'Fees and Charges' and 'Charging for Information' guides. These define different types of services for which different pricing principles can be adopted:

- statutory services: where there is a provision in statute to recover a fee and the fee or charge

¹⁹ SI 2005 No. 1515.

²⁰ Regulation 13 states that public sector bodies must not discriminate in the conditions applied between applicants who re-use documents for similar purposes.

²¹ Introduced in 2002 to support various UK policy initiatives sought to encourage the re-use of Crown copyright material and other public sector information.

²² Regulation 16 contains an obligation to publish a list of main documents available for re-use.

- inter-departmental services: where a government department, NDPB, or NHS body provides a discretionary service to another government department, NDPB, or NHS body
- intra-departmental services: where one part of a government department provides a discretionary service to another part of the same department, and
- commercial services: where, in the absence of a specific fee-setting power, a government department (including NDPBs, and most public corporations) sells discretionary services to the wider public sector or to the private sector.

7.5 For example, statutory services are expected to be charged in order to recover full cost plus a profit margin dictated by HM Treasury. For commercial services, public bodies are required to charge a market price, including a profit element. This profit rate is to be set depending on the extent of competition in the provision of those services.²³

²³ 'a) where a body provides a low risk commercial service, perhaps in support of an activity required by Statute, and there is no competition and no realistic likelihood of competition from the private sector, it is appropriate for the body to recover cost of capital of 3.5 per cent (that is to achieve an average real return on capital of 3.5 per cent), b) where there is or may be competition from the private sector, an average real return on capital employed should be set, to reflect market pricing. The exact rate should take into account: - market prices, - the level of risk associated with the activity (for example, low, low to medium, or medium, etc) and the cost of capital experienced by private sector competitors in the relevant market, - past performance and any known specific issues, which may be expected to affect future performance.' HMT (2006) Fees and Charges guidance.

7.6 The guidance also sets out the principle of cost reflectivity in the provision of individual services and notes that the Trading Funds should be mindful of potential anti-competitive behaviour²⁴ and that commercial services should recover average variable and short run marginal costs. In relation to both inter- and intra-departmental services, Trading Funds are still required to price on a full cost recovery basis and the guidance also notes that customers should not be tied to individual sources of supply.

Internal guidance

7.7 PSIHs also develop and use guidance themselves (for example, internal procedures manuals) and also use guidance issued by parent departments or other government departments (for example, the Met Office also uses guidance issued by the Ministry of Defence). These pieces of guidance are more tailored and in some cases more detailed, for example in setting out approaches to cost allocation or the extent to which sales teams have flexibility in offering deals to customers.

Effectiveness of guidance

7.8 In our investigations, no PSIH or business user has reported explicit conflicts as amongst the various pieces of guidance that have been issued. However, it is the case that the different government objectives in relation to public sector information create tensions, particularly in the case of promoting the re-use of information and the requirement to act commercially and to make a rate of return.

²⁴ Section 7.3.2: 'In allocating costs, for example between 'wholesale' and 'retail' services, public bodies should consider whether the method might be interpreted as an aid to anti-competitive behaviour. Where a public body is a dominant undertaking in an upstream 'wholesale' market, and also supplies key input to its own downstream 'retail' operation, it should be careful to avoid 'margin squeeze'. This would arise where the dominant body was not allocating costs appropriately between its upstream and downstream activities so that the relationship between its 'wholesale' and 'retail' prices was such that an efficient competitor could not operate profitably'.

7.9 In addition, it has been noted that there is a lack of consistency in the interpretation and application of the guidance by the various PSIHs. It has also been noted that guidance in the more technical areas of cost allocation and pricing would be helpful to the PSIHs.

Monitoring and enforcement

7.10 At present, forms of monitoring of PSIH behaviour amongst the case studies consist of formal internal complaints procedures operated within each of the case study PSIHs, external complaints procedures (operated by both OPSI and APPSI) and the IFTS verification and re-verification process. With regard to enforcement, maintenance of an internal complaints procedure is a requirement under IFTS accreditation criteria, and more recently under the Re-use Regulations.

7.11 A monitoring and redress system is also a key feature of a complaints process, as it is a means of informing the PSIHs and others such as OPSI of where wider remedies may be beneficial. With respect to other measures of enforcement, IFTS accreditation, which is awarded subject to meeting standards of good conduct in given areas is a requirement for most of the case studies, the only case study candidate holding documents falling outside the scope of the Re-use Regulations, the BGS, has joined the Scheme voluntarily.

7.12 Our main observations in relation to the individual PSIHs are as follows:

- **Companies House:** Companies House has noted that it has internal measures in place to meet the requirements of the various pieces of legislation and also has a complaints procedure in place.²⁵ Companies House has noted that it has not had any complaints in relation to wholesale products, there have, however, been queries in relation to its contract terms.

²⁵ Available from: www.companieshouse.gov.uk/about/tellUs_complaints.shtml

- Ordnance Survey: OS has internal measures in place²⁶ to monitor its activities and also has a designated complaints procedure and team. In terms of complaints, a number have been registered and handled by its Customer Service Centre over the past year.
- The Met Office: The Met Office has detailed internal procedures, including one on complaints, in place. The Met Office has noted that it does not receive a large number of complaints and that those that are received relate primarily to the non-delivery of information (rather than the price of the information by itself) for example where the information is not supplied on time.
- The UK Hydrographic Office: The UKHO has a complaints procedure in place. It noted that complaints received from other operators in the sector have predominantly been in relation to services within the leisure sector.
- The HM Courts Service: The HMCS has internal procedures in place (including those created by its parent department the Department for Constitutional Affairs). RTL has also noted that it has a process in place for handling complaints. In relation to complaints, HMCS has noted that any made relate primarily to people or entities being on the Register that ought not to be.
- The British Geological Survey: The BGS is our only case study candidate that holds documents not covered by the Re-use Regulations. The BGS does, nonetheless, hold IFTS Accreditation. The BGS notes that there have been no serious complaints made to it by users or re-users of its information holdings.

²⁶ Available from: www.ordnancesurvey.co.uk/oswebsite/aboutus/servingyou/
The procedure also includes reference to making complaints under IFTS.

8 CONCLUSIONS AND BEST PRACTICE

8.1 Our case studies have shown a mixed picture, in terms of how PSIHS operate and are organised. Differences arise in the nature of information collected, the statutory requirements on the PSIHS, the extent to which information is proactively collected or received through third parties, the costs associated with the various activities undertaken by the PSIH and the demand for the products and services offered by the PSIHS. As such, expecting these case study PSIHS (let alone the countless other PSIHS currently operating within the UK) to conform to a single model may not be realistic.

8.2 We have noted that in basic terms all the PSIHS conform to a vertical structure where access to a common information database can allow third party value-added providers to compete. The need for PSIHS to grant non-discriminatory access to their information so that alternative down-stream value-added operators can operate effectively in their markets is key in all cases. This depends on making information available in the first place, licensing policies, terms and conditions on which access is granted and the price on which this is made available. We have seen significant differences in the operations of the PSIHS in these key areas. Some best practice does emerge:

- all of the PSIHS have a strong reputation in the quality of the information that they collect and their role in data collection and milling
- the BGS operates a very open licensing policy, granting access to all commercial re-users even where they compete directly with the BGS for the same contracts
- Companies House and RTL make nearly all their information immediately available to users, both to end-users and commercial re-users
- the Met Office and the UKHO have well developed cost allocation processes in place and operate with an arms-length relationship

between upstream and downstream businesses. This ensures that all downstream users access upstream information on the same terms and conditions, and

- OS has a well developed suite of relevant operational guidelines, many issued by itself, for use by its staff.

8.3 In Table 8.1 below we set out a summary of performance on the case study PSIHs against six criteria that we consider to be key for the development of the various information markets. These questions are likely to be equally relevant for other PSIHs.

8.4 Is there a clear split as between the upstream and the downstream activities of the PSIH? This may be in the form of an actual separation, such as in the case of HMCS's split from RTL, business unit separation or a separation of activities in accounting terms, such as in the case of the Met Office.

8.5 Does the PSIH offer its users a basic wholesale product based on which value-added providers can operate effectively within the downstream market?

8.6 Does the PSIH operate an open licensing policy making the information available to any user seeking it? In particular, are there any non-compete conditions with the PSIH's licensing policy that effectively restrict competition downstream?

8.7 Is the PSIH earning returns on its products in line with that required of it? We have considered returns to be potentially excessive where these are two times the target set out by HM Treasury.

8.8 Does the PSIH have a detailed cost allocation system in place to ensure that the prices it charges itself downstream are the same as those it charges value-added providers, or in the case of two-sided markets that there is transparency across the two sides of the market?

8.9 Does the PSIH use the relevant guidance to inform its activities and supplement this with a complaints procedure?

Table 8.1: Snapshot of case study PSIHs against key criteria

	Transparent split between upstream and downstream	Basic wholesale product made available to user	Open licensing policy (for example, no non-compete clauses)	Current returns not far exceeding HM Treasury targets	Detailed cost allocation systems in place	Use of guidance and complaints procedures
Companies House	✓	✓✓	✓	✓	✓	✓✓
Ordnance Survey	✗	✗	✗	✗	✗	✓✓
Met Office	✓	✓✓	✓	✗	✓✓	✓
UK Hydrographic Office	✓	✓	✓	✓	✓✓	✓
HM Courts Service (Registry Trust)	✓✓	N/A (✓✓)	N/A (✗)	N/A	✓ (✗)	✓ (✓)
British Geological Survey	✓	✓✓	✓✓	N/A	✓	✓✓

Key to table: ✓✓ - established system, ✓ - basic system in place, ✗ - no system in place, N/A – not applicable