

Anticipated acquisition by Iron Mountain Incorporated of Recall Holdings Limited

Provisional findings report

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The Competition and Markets Authority has excluded from this published version of the provisional findings report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range. These are shown in square brackets.

Contents

	<i>Page</i>
Summary	3
Provisional findings	12
1. The reference	12
2. The market.....	12
Records Management Services	13
OSDP	15
RIMS for oil and gas customers requiring core storage	16
UK value of RMS, OSDP and specialist services to oil and gas companies	16
3. The companies	18
Iron Mountain.....	18
Recall.....	21
Other RIMS suppliers.....	24
4. The merger and relevant merger situation	26
The transaction	26
Rationale for the merger	27
Jurisdiction	27
5. The counterfactual	28
6. Market definition.....	29
Product market definition	30
Physical RMS and electronic alternatives.....	32
Physical RMS and physical OSDP	33
In-house provision of RMS and OSDP	35
Physical and electronic OSDP	36
Geographic market definition	37
Assessment.....	40
RIMS for oil and gas customers with specialist storage requirements	40
Conclusion on product and geographic markets.....	44
7. Assessment of the competitive effects of the merger.....	44
Introduction	44
Indicators of overall competition in RMS across the UK	47
Switching	47
Evaluation of competition in local markets for RMS	54
Supplier characteristics and identification of a filter tool of effective competitors.....	54
Local assessments and geographic coverage.....	57
RMS in Aberdeen and Dundee.....	58
Multi-site coverage	64
Entry and expansion in RMS in areas other than Aberdeen and Dundee	65
Overall conclusions on RMS	69
Countervailing buyer power	70
RMS for customers with international requirements.....	70
The effect of global competition on the terms offered	72
Conclusions	75
OSDP.....	75
OSDP Indicators of overall competition and supplier characteristics.....	75
Local assessments, entry and expansion, and geographic coverage.....	78
OSDP in Aberdeen	84
OSDP in Dundee	85

OSDP for customers with international requirements	85
Findings	86
RIMS for oil and gas customers that require specialist services in the Aberdeen area.....	87
Assessment of competition within the market.....	88
Assessment of competitive constraints from outside the market	89
Entry from RIMS providers based outside North East Scotland	91
Findings on RIMS to oil and gas customers with specialist requirements in Aberdeen.....	93
8. Provisional conclusions on the SLC test	93

Appendices

- A: Terms of reference and conduct of the inquiry
- B: Market definition
- C: Indicators of competition
- D: Supplier characteristics
- E: Local and network analysis
- F: Entry and expansion
- G: RIMS for oil and gas customers in Aberdeen with specialist requirements
- H: Customer views

Glossary

Summary

1. On 14 January 2016 the Competition and Markets Authority (CMA) referred the anticipated acquisition by Iron Mountain Incorporated (Iron Mountain) of Recall Holdings Limited (Recall) for an in-depth phase 2 investigation. The CMA is required to address the following questions:
 - (a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
 - (b) if so, whether the creation of that situation may be expected to result in a substantial lessening of competition (SLC) within any market or markets in the United Kingdom for goods or services.
2. Iron Mountain and Recall (the Parties) are principally engaged in the provision of records and information management services (RIMS). The RIMS which the Parties supply comprise the following:
 - (a) Records management services (RMS), consisting of the collection, transportation, storage and retrieval of paper documents and other physical records (eg microfiche).
 - (b) Off-site data protection services (OSDP), consisting of the collection, transportation and storage of records/data on physical electronic media such as magnetic tapes and discs, often for back-up or disaster recovery purposes.
 - (c) Specialist services for oil and gas companies. This includes storage of geological samples, such as 'cores' from drilling, and provision of viewing facilities for core samples.
 - (d) Ancillary services, such as photocopying, document scanning, sale of storage materials and document management consulting services. These services are mostly complementary to RIMS services and we have not addressed these separately.
3. Iron Mountain is an international RIMS supplier, headquartered in the USA, with a strong presence in North and South America and Europe. Across the UK, Iron Mountain has 46 sites, of which 37 offer RMS services and 16 offer OSDP services.
4. Recall is also headquartered in the USA but is listed in Australia. Recall is also international, with a strong presence in Australia and New Zealand and South East Asia. It also has sites in Europe and North and South America

although its presence in these areas is considerably smaller than that of Iron Mountain. Recall now has sites in 12 locations in the UK, at all of which it offers RMS services.¹ It offers OSDP services at five.

5. On 8 June 2015, the Parties entered into a binding Scheme Implementation Deed (SID) for Iron Mountain to acquire Recall by way of a court-approved Scheme of Arrangement in Australia (the Transaction). Upon completion of the Transaction, Iron Mountain will hold all of the ordinary shares of Recall, and Recall's existing shareholders will own approximately 21% of Iron Mountain's share capital. The enterprise value of the Transaction is approximately £1.59 billion. The Scheme of Arrangement is expected to be implemented shortly.
6. Iron Mountain said its primary reasons for acquiring Recall were to expand its geographic footprint and develop a more substantial presence in the emerging markets of Latin America and Southeast Asia, where Recall already has an established presence; and to achieve operating synergies and savings from the reduction of duplicative selling, real estate, and other costs in more developed markets.
7. There was no evidence that either of the Parties were considering substantial alternative sales or acquisitions, or were planning any significant changes to their operations in the United Kingdom immediately prior to the merger, and both businesses were profitable. Therefore we consider that the appropriate counterfactual for the assessment of the effects of the merger is the market conditions existing before the merger of the Parties, and following completion of the acquisition in December 2015 of Wincanton Records Management (Wincanton), a subdivision of Wincanton plc, by Restore plc (Restore).
8. The purpose of market definition in a merger inquiry is to provide a framework for the analysis of the competitive effects of the merger.
9. We found that RMS and OSDP lie in separate markets. No customers told us they would substitute between them. While it is possible for RMS suppliers to move into the provision of OSDP through additional investment in suitable storage vaults, we found no evidence that suppliers have the ability and incentive to quickly shift production assets between the two products. As a result, we have considered any constraint from this as possible entry or expansion rather than supply-side substitution.

¹ Throughout this report, we describe Recall as having 12 sites – in doing so we have considered the two adjacent buildings that Recall has in Aberdeen as a single site.

10. We have not included electronic alternatives in the same market as RMS or OSDP. It is possible for customers to digitise records and ensure new documentation is produced and stored electronically, and for records to be backed up using remote electronic rather than physical formats. However, we consider that changing to such systems involves significant investments or changes to working practices for customers, and we were told by customers and competitors that few customers would be willing to make such switches in response to the hypothetical price rise considered in our market definition framework, although they may do so for other operational reasons. Similarly, we were not persuaded that in-house provision of these services should be counted as part of the market. For example where customers outsource file storage in order to release valuable property, the evidence we obtained indicated that it is unlikely they will then contemplate taking it back in-house in response to small non-transitory pricing changes.
11. Based on the evidence provided by the Parties, and third parties, we provisionally conclude that in general RIMS providers compete effectively for customers within a radius of approximately 50 miles. Customers will typically seek the option of rapid return (at additional cost) of records if they need them urgently, rather than the more usual overnight delivery. Therefore they tend to be reluctant to consider suppliers outside this distance. In practice, many customers make very little use of a rapid retrieval service (and suppliers will often store rarely-accessed files at more distant sites) but nonetheless the desire for this option shapes customers' perceptions of viable suppliers.
12. We provisionally conclude that there is a separate market for the supply of RIMS to oil and gas customers with specialist requirements in the Aberdeen area. Such customers require facilities for the storage and on-site inspection of core geological samples (as well as additional records such as maps, technical drawings, seismic tapes, etc). Core samples will be laid out in inspection rooms for the customers' geologists to examine – a process we were told could take days or weeks depending on the nature of the analysis required. This is most likely to occur for oil and gas operations which are active and customers' teams are usually located in Aberdeen, and so need the RIMS facilities to be within easy travelling distance. We recognise that there are only small differences in the facilities required to provide these services. However, we were told that customers would be reluctant to use a new entrant for core sample storage, because of concerns about its ability to safely handle and store heavy but fragile samples. We also heard that oil and gas customers have a preference for sourcing their OSDP and RMS from the same provider as their core storage; we therefore consider RIMS to oil and gas customers as a whole including core storage, RMS and OSDP.
13. We provisionally conclude that the appropriate relevant product markets are:

- (a) RMS (excluding in-house supply);
 - (b) OSDP (excluding in-house supply); and
 - (c) RIMS to oil and gas customers that require specialist services in the Aberdeen area.
14. We provisionally conclude that local geographic markets for each of RMS and OSDP (including RIMS to oil and gas customers that require specialist services in the Aberdeen area) can be measured by radii of approximately 50 miles, wherever possible measured in terms of driving distance. Ideally these should be measured as catchments around customers; for reasons of practicality we have in most places considered catchments around the Parties' sites.
15. We now consider whether the loss of rivalry in these markets due to the merger would substantially reduce competition.

RMS

16. We obtained evidence that indicates that competition in RMS is restricted by barriers to switching, including exit or 'perm-out' fees (ie fees which may be equivalent to between one and three years' storage, levied if a customer permanently removes its stored boxes and charged in addition to normal retrieval and transport fees). We have taken account of perm-out fees by considering how they may affect the pool of competitors that is able to compete for switching customers, particularly large customers for whom total perm-out fees can be very high.
17. We obtained revenue data from many, but not all RMS providers, including all large RMS providers. From this data, we have calculated that Iron Mountain has a share of [30–40]% of known revenues, and is the largest supplier in the UK. Recall's share is [5–10]%, making it the sixth largest supplier by overall share. We note the possibility of there being many small suppliers that are not included in the data we have obtained. This means that their shares will, in fact, be smaller than our estimates. We have taken this into account in our overall assessment.
18. Iron Mountain's data on the destination of lost RMS customers indicated [redacted] alternative suppliers, with Recall ranked as [redacted] by revenues lost. Iron Mountain also provided data on large contracts it had competed for, where it had recorded the frequency with which competitors were encountered. Recall was [redacted] on the list. Iron Mountain's internal documents [redacted].

19. A small number of customers provided evidence on their tendering and benchmarking, which suggested Iron Mountain and Recall were likely to be the first and second ranked suppliers in their assessments. However, we have taken into account the fact that the companies which we approached were generally existing customers of the Parties and so not necessarily reflective of the wider market.
20. Overall, we consider that although Recall is a reasonably strong competitor to Iron Mountain, there are also other suppliers with a significant share of supply nationally that compete with Iron Mountain. These include the other suppliers making up with the Parties the largest 11 providers of RMS: Box-it, Capita, Crown Records Management, DeepStore, EDM, The Hill Company, PHS Data Solutions, Restore plc, and TNT Business Solutions. Additionally, competition is also provided by other smaller suppliers.
21. We considered whether any of the large RMS suppliers would be better or worse placed to compete for customers with more demanding needs, such as large customers, or those wanting higher standards of service or wanting suppliers with better reputations. Therefore, we looked at:
 - (a) suppliers' size, willingness and experience of assisting new customers with perm-out fees, and their experience of serving large customers; and
 - (b) their ability to meet a set of objective quality criteria and the subjective ratings they received from customers and competitors that responded to our inquiry.
22. From the evidence we obtained, while there are differences between them, there was nothing to suggest to us that any of at least the 11 largest suppliers was unable to compete effectively for customers. This does not mean that other suppliers are necessarily inferior or unable to compete.
23. We examined competition in the local catchment areas around each of Recall's sites. We found that in all local areas except Aberdeen and Dundee, there are a considerable number of RMS competitors: at least five rivals to the merged entity drawn from the largest 11 competitors, and at least seven confirmed RMS providers of all types. In the light of these findings, we focused our attention on Aberdeen and Dundee where the number of competitors is much lower.
24. We also considered whether customers who prefer to have a single supplier to serve their sites in multiple regions would be likely to have their options significantly affected by the merger. However, with the exception of Recall's Aberdeen and Dundee sites, Restore and Crown are present in all of the nine local areas around Recall's RMS sites. PHS and Box-it are additionally

present in eight of these areas in England. These providers all have a more extensive geographic RMS network than Recall and are likely to be able to provide similar services to customers who currently choose Recall, at least in England.

25. The number of RMS suppliers in the Aberdeen area is restricted by its location. Apart from Recall (C21 Data Services) and Iron Mountain, the only other large supplier of RMS to the non-oil and gas sector is Box-it, which expanded into the area around 18 months ago. United Supplies Ltd is a local Aberdeen supplier, [redacted]. In addition, we are aware of one other small RMS provider, KRC International.
26. Recall's facilities in Dundee largely support the service of customers in Aberdeen. It overlaps (on the basis of a 50 mile catchment) with Iron Mountain's facility in Inverkeithing, and Box-it. There is another Dundee competitor, S4U, and again an overlap with one other small provider, KRC International.
27. We also considered the constraints from entry and expansion. We provisionally conclude that while entry and expansion are possible, there are barriers to entry arising from the limited opportunities to attract customers to switch and the costs involved in helping those customers overcome switching costs, particularly perm-out fees. We also note there are currently declining charges for storage, reducing the attractiveness of the industry. While we have seen examples of investments in new facilities by established providers, this is usually based on securing a major customer in advance, and so it is very uncertain that this will be a generally applicable constraint. This explains why expansion is usually through acquisition of existing suppliers, in order to secure an existing customer base.
28. We have provisionally concluded that the proposed merger may be expected to result in a substantial lessening of competition in the supply of RMS in each of the local Aberdeen and Dundee areas.
29. We have not found any strong evidence to suggest that the existence of providers with global coverage gives customers with international RMS requirements increased bargaining power with respect to their purchase of UK RMS (above and beyond that which would be obtained by competition between all UK RMS providers). While we recognise the ability to globally single-source RMS provision may provide such customers with internal procurement and management efficiencies, there are many examples of customers choosing to forego these in order to contract with a UK-only provider of RMS. Moreover, we note that the merger is proceeding internationally meaning the number of international suppliers will reduce.

OSDP

30. Recall offers OSDP from five sites, all of which overlap with Iron Mountain sites. We looked at shares of supply among those providers where we could confirm OSDP revenues (this will miss some smaller suppliers). Iron Mountain was found to have by far the largest share of supply ([60–70]%) with Recall the third largest provider ([0–5]%).
31. We looked at the number of competitors in the local areas around Recall's sites. Looking at larger suppliers with shares of revenue of around 1% or more, we found several competitors in all areas except Aberdeen. There were also additional smaller OSDP suppliers in these areas. Moreover, we note that in the cases where there are fewer than nine existing large OSDP suppliers in the area, there are also some other OSDP providers present with large RMS revenues. We consider these are well placed to exert a competitive constraint through their ability to expand in OSDP, eg by cross-selling to RMS customers. We also found few barriers to expansion for the smaller OSDP suppliers already present.
32. In Aberdeen, the number of existing OSDP competitors is very small; the merged entity would only face local competition from Box-it. Box-it has expanded into the area and is considering investment in further capacity to build on the business it has already achieved with two customers. The only other competitor within 100 miles is S4U in Dundee. S4U has [X] OSDP capacity, and is located more than 50 miles away from Recall and Iron Mountain's Aberdeen sites. S4U also told us that it considered that it competes most strongly in OSDP [X] miles from its own site.
33. In the Aberdeen area, we provisionally conclude that the merger may be expected to lead to an SLC in the provision of OSDP to the general market, due to the reduction in the number of suppliers from three to two. There are two small RMS suppliers in the Aberdeen area who might be able to enter the supply of OSDP, but [X]. Therefore we have not attributed much weight to the competitive constraint the threat of possible entry either of these providers would be expected to exert.
34. In the Dundee area, we note that Recall does not currently supply OSDP; however, it is the only significant RMS supplier in the area that would be well placed to expand into OSDP as a potential entrant. There is one other small RMS supplier, but [X]. The effect of the merger is therefore to remove the constraint of potential entry from Recall, and we provisionally conclude that there may be expected to be an SLC in the supply of OSDP in the Dundee area due to the loss of this potential competition.

RIMS for oil and gas customers that require specialist services in the Aberdeen area

35. Aside from the Parties, only one other provider in the Aberdeen area, CGG Data Management, currently provides RIMS that includes the storage of core geological samples. The combined share of the merging Parties is high at approximately [X]% of customers, [X]% of annual revenue and approximately [X]% of storage capacity.
36. We have not seen any other evidence from the Parties or third parties that there is any differentiation between the three suppliers in the nature or quality of the services provided to oil and gas customers. This indicates Recall and Iron Mountain are close competitors, along with CGG.
37. We considered the constraint from general RIMS suppliers in the area.
38. United Supplies told us [X].
39. We heard from Box-it that it does not currently provide oil and gas customers with the storage of core samples. Nevertheless, it has identified this as a target area and it already has suitable facilities available.
40. However, competitors told us that the reputation and experience of handling geological samples was a key requirement for specialist customers. Customers confirmed that generally they would be unwilling to contract with a new entrant, citing a lack of expertise and/or experience in handling geological samples.
41. We did not consider that new entry was likely. Suppliers of specialist services elsewhere in the UK told us they had looked at the possibility of entry into the Aberdeen area but had rejected it, in part because of low oil and gas prices.
42. Because of the limited number of suppliers in the market, the fact that new entry is unlikely to be attractive, and that Box-it, although present, does not yet supply any customers with core storage, and customers appear averse to switching to new entrants, we have provisionally concluded that the merger may be expected to give rise to an SLC for the provision of RIMS for oil and gas customers that require specialist services in the Aberdeen area.

Provisional conclusions on the SLC test

43. We have provisionally concluded that the proposed merger may be expected to result in a substantial lessening of competition in the following markets:
 - (a) the supply of RMS in each of the Aberdeen and Dundee areas;

- (b) the supply of OSDP in the Aberdeen area;
- (c) the supply of OSDP in the Dundee area; and
- (d) the supply of RIMS services to the oil and gas sector for customers in the Aberdeen area.

Provisional findings

1. The reference

- 1.1 On 14 January 2016 the CMA, in exercise of its duty under section 33(1) of the Enterprise Act 2002 (the Act), referred the anticipated acquisition by Iron Mountain of Recall for further investigation and report by a group of CMA panel members (the inquiry group).
- 1.2 In exercise of its duty under section 36(1) of the Act, the CMA must decide:
 - (a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
 - (b) if so, whether the creation of that situation may be expected to result in an SLC within any market or markets in the United Kingdom for goods or services.
- 1.3 Our terms of reference, along with information on the conduct of the inquiry, are set out in Appendix A.
- 1.4 Iron Mountain is expected to acquire the shares in Recall shortly (see paragraphs 4.1 to 4.4). In accordance with section 37(2) of the Act, the CMA intends to treat the reference as if it had been made under section 22 of the Act in relation to a completed merger.
- 1.5 This document, together with its appendices, constitutes our provisional findings. Further information, including non-commercially-sensitive versions of the submissions from the Parties and summaries of evidence from third parties can be found on our website.²

2. The market

- 2.1 Iron Mountain and Recall are principally engaged in the provision of RIMS. RIMS encompasses a range of services relating to the management and use of records, including storing, securing, classifying, identifying, retrieving, copying, tracking and destroying data.

² See the Iron Mountain / Recall merger inquiry [case page](#).

- 2.2 The RIMS that the Parties supply comprise the following:
- (a) RMS, consisting of the collection, transportation, storage and retrieval of paper documents and other physical records (eg microfiche).
 - (b) OSDP, consisting of the collection, transportation and storage of records/data on physical electronic media such as magnetic tapes and discs, often for back-up or disaster recovery purposes.
 - (c) Specialist services for oil and gas customers. This includes storage of geological samples such as 'cores' from drilling and providing viewing facilities for core samples. Throughout this document, our discussion of specialist services is focused on that provided in the Aberdeen area, the area where the Parties overlap.
 - (d) Ancillary services, such as photocopying, document scanning, sale of storage materials and document management consulting services. These services are mostly complementary to RIMS services. Iron Mountain and Recall told the CMA that only a small proportion of non-RMS customers purchase ancillary services from them on a stand-alone basis. Therefore, we have not addressed ancillary services separately from RMS, OSDP and core storage.
- 2.3 Recall is also active in the provision of electronic OSDP, ie the storage of records and data on a network or cloud (electronic OSDP), as distinct from the physical OSDP described in paragraph 2.2(d).³ Iron Mountain [✂] from this service in the UK. Unless otherwise specified, references to OSDP in this report mean physical OSDP.
- 2.4 Recall offers shredding services but Iron Mountain sold its shredding activities business in the UK in November 2014 and does not currently carry out this service itself.

Records Management Services

- 2.5 We define RMS in the context of this merger as the storage and retrieval of paper and other physical records. RMS are typically provided from warehouses, with security protection (such as fencing, CCTV and biometric or

³ OSDP in the context of this merger is the storage and retrieval of electronic data stored on physical media such as tapes or disks. We distinguish OSDP of physical media, from electronic back-up of data, eg on servers or through 'cloud' hosting, which we refer to as electronic OSDP where appropriate.

other locking systems). Facilities are often located on the edge of, or outside, major commercial districts and cities.

- 2.6 The most common form of RMS storage in the UK is that of paper records, stored in cardboard boxes. These are then stacked on large shelving units. A barcode, or similar system (such as an RFID tag)⁴ on each box identifies where the box is in the warehouse, and to whom it belongs. An IT system complements this which allows the customer the ability, typically through an online portal, to request boxes for return to its premises (or other services such as permanent destruction), and for the RMS provider to track boxes for retrieval and delivery.
- 2.7 A customer's request goes through to the warehouse, where the boxes are located using a barcode or equivalent system. The boxes can then be transported via a van, usually the next day, or immediately, depending on the customer's contract/retrieval time requirements, and the urgency of the customer's need. Rapid retrievals typically incur a higher charge. Customers will notify the RMS provider when a box is ready for recollection through the same online portal. As customers will typically retain in-house files that are frequently used, RMS storage is mostly used for archive purposes. Therefore rates of box retrieval are low. Recall submitted that retrieved volumes now account for only about [X] to [X]% of stored volumes annually.⁵ If a customer wishes to move its RMS holdings to a new supplier (or take them permanently in-house) there are typically three costs that they will incur, at or even after the end of a contract with the RMS provider. The customer will generally incur the usual withdrawal fee, and additionally an exit fee often referred to as a 'perm-out fee'. The customer will also have to pay for the costs of transporting their inventory to the new supplier. RMS providers charge a separate fee for permanent destruction of records.
- 2.8 Major customers for RMS include financial companies, law firms, government departments and NHS trusts. In many cases, demand arises from legal requirements for record-keeping. These may require the original documents or paper copies to be held, although in the majority of cases, the retention of paper, as opposed to electronic copies, is not a legal requirement.
- 2.9 The Parties told us there is a trend for customers to move from in-house, 'unvended', storage to outsourced, 'vended' storage of RMS. We heard this was partly driven by the need to release valuable storage space.

⁴ Radio Frequency Identification (RFID) tagging is an ID system that uses small radio frequency identification devices for identification and tracking purposes.

⁵ [Recall initial submission](#), paragraph 43.

2.10 There are no regulations specifically concerned with the provision of RMS services in the UK.

OSDP

2.11 OSDP is often used for disaster recovery processes. Many customers use a relatively small number of tapes that are overwritten at regular intervals, meaning that relatively little storage is used but there is frequent retrieval. OSDP is also used for archiving purposes.

2.12 OSDP services are very similar to those of RMS and often provided from the same facilities as RMS. Key differences between the services are the following:

(a) Retrieval activity for OSDP customers is generally higher than for RMS. For example, a typical OSDP user might be a firm that backs up its entire computer system daily or weekly as part of its disaster recovery procedures. In this instance the customer would request the old tape from the provider, over-write it and then send it back for storage, so they may only keep a few back-up tapes with the supplier and then each will be over-written in turn.

(b) Suppliers often use a fire suppression system that uses gas as opposed to water. This requires OSDP tapes and disks to be kept in a sealed chamber or vault, which might also be environmentally controlled to help protect tapes. This fire suppression system is more expensive than a standard sprinkler system. Some suppliers may use alternative, less-sophisticated systems to protect tapes, eg they may omit gas fire-suppression systems, or tapes may just be held in fire-proof safes with limited environmental control.⁶

(c) For transport, OSDP may require a slightly modified vehicle with a specialist unit to transport tapes and disks to protect them. This may be temperature controlled.

2.13 Unlike RMS, if a customer wishes to move its OSDP holdings to a new supplier it is usually only required to pay the removal costs. Perm-out fees are not common in contracts for the supply of OSDP.

⁶ Some particularly valuable or sensitive paper records are also kept in vaults with gas fire suppression systems, but in the main RMS records are kept in open warehouses which may be fitted with smoke detection systems and sprinklers.

RIMS for oil and gas customers requiring core storage

- 2.14 Much of the storage for oil and gas customers is of paper files in boxes (or other containers, eg maps and engineering drawings in tubes), identical to the services offered to other customers. There are some ‘specialist services’ offered by Iron Mountain and Recall to oil and gas customers, ie storage of seismic tape and core samples, which are samples of rock from drilling wells. These can be analysed to provide useful information on reserves and operations, and in any case there is a statutory requirement to keep such samples as a condition of licences to operate. Samples are typically slices of drilled rock kept in boxes around three feet long.⁷ RMS suppliers typically provide both storage and viewing facilities, where multiple samples can be laid out on benches for the customer’s geologists to examine on site.
- 2.15 Given the weight of core samples, their possible fragility, and the likely need to inspect multiple samples at once, customers typically send staff to examine the samples in viewing rooms provided at the storage facility, rather than requesting delivery of the samples.

UK value of RMS, OSDP and specialist services to oil and gas companies

- 2.16 In the absence of published data on the value of RMS and OSDP services, we sought evidence on the total value of outsourced RIMS from the Parties, other suppliers and customers. On the basis of those enquiries:
- (a) we consider, based on the average of providers’ estimates, that the total value of outsourced RMS may be in the region of £500 million, but we acknowledge there is considerable uncertainty over the total value of supply. In this report the shares of supply that we describe are based, conservatively, only on supply that was confirmed to us by known providers, worth £303 million (see Table 5). We acknowledge that there are likely to be many further suppliers although we believe that we have included all large suppliers of RMS;
 - (b) we found that providers’ estimates of the value of outsourced OSDP ranged from £50 to £200 million. The total revenue from OSDP among providers that responded to our enquiry was £48 million (see Table 11); and
 - (c) we did not attempt to estimate the UK value of RIMS to oil and gas customers requiring specialist services, since the Parties only overlap in this service in Aberdeen and Dundee. We found that the value of RIMS

⁷ Samples of rock, in the case of oil and gas customers taken from actual or potential oil and gas fields.

provision to oil and gas customers in Aberdeen and Dundee that require core storage is relatively small at around £[redacted] million of revenue across the providers that offer it.

2.17 UK revenues from RIMS are still increasing – providers told us that they expect growth. Recall told us customers constantly generate new volumes of records that may be placed with a RIMS supplier, whether in physical or electronic form. It also said many potential customers still have their own storage facilities but Recall thought that they may switch to a vended service in the future. However, various suppliers told us that prices per volume of storage are declining.⁸ We heard a variety of views on prospects for future growth in OSDP; while demand for storage of electronic data is expected to grow rapidly, innovation in tape technology will allow more data to be stored in less space, and some data storage will be transferred to ‘cloud’ solutions.

2.18 Table 1 sets out the Parties’ revenue from RMS, OSDP, ancillary services and RIMS to oil and gas customers.

Table 1: Parties’ UK revenue, split by type of RIMS

	<i>Iron Mountain, financial year 2014</i>		<i>Recall, financial year 2015*</i>	
	<i>Revenue (£m)</i>	<i>Percentage of total revenue (%)</i>	<i>Revenue (£m)</i>	<i>Percentage of total revenue (%)</i>
RMS	[redacted]	[redacted]	[redacted]	[redacted]
OSDP	[redacted]	[redacted]	[redacted]	[redacted]
<i>of which physical</i>	[redacted]	[redacted]	[redacted]	[redacted]
<i>of which electronic</i>	[redacted]	[redacted]	[redacted]	[redacted]
Ancillary services	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]†	100	[redacted]	100
<i>of which RIMS to oil and gas customers that require specialist services in the Aberdeen area</i>	[redacted]‡	[redacted]	[redacted]	[redacted]

Source: The Parties.

*Recall was able to provide more recent financial information than Iron Mountain.

†The difference between this revenue and the £170 million reported earlier is attributable to Iron Mountain’s shredding business, which it sold. See paragraph 2.4.

‡Iron Mountain revenues from the provision of RIMS to oil and gas customers that require specialist services in the Aberdeen area refer to 2015.

2.19 The Parties earn the majority of their RIMS revenues from RMS customers, with approximately [redacted]% of Iron Mountain’s revenue coming from RMS storage fees and [redacted]% of Recall’s revenue coming from RMS storage fees.⁹ There will be additional service revenue from RMS customers other than storage fees (such as withdrawal, transport and restocking fees).¹⁰ The provision of OSDP storage (and excluding additional service revenue from

⁸ See Appendix F, paragraphs 32 to 34.

⁹ Source: CMA analysis.

¹⁰ Iron Mountains profit and loss account information does not allow us to identify which service revenue is from RMS and OSDP customers.

these customers) accounts for [X]% of Iron Mountain's total revenue and [X]% of Recall's (note that the fees from service revenues are likely to be relatively larger for OSDP).¹¹ Total UK revenues earned by each Party from the provision of RIMS to oil and gas customers requiring core storage in Aberdeen or Dundee are [X] of overall UK revenues.

- 2.20 Approximately [X] of the Parties' combined total UK revenues is earned from the provision of ancillary services (ie photocopying, scanning of documents, sale of storage materials and document management consulting services). On average, from 2013 to 2015, perm-out fees accounted for less than [X]% of Iron Mountain's total revenue in the UK.

3. The companies

Iron Mountain

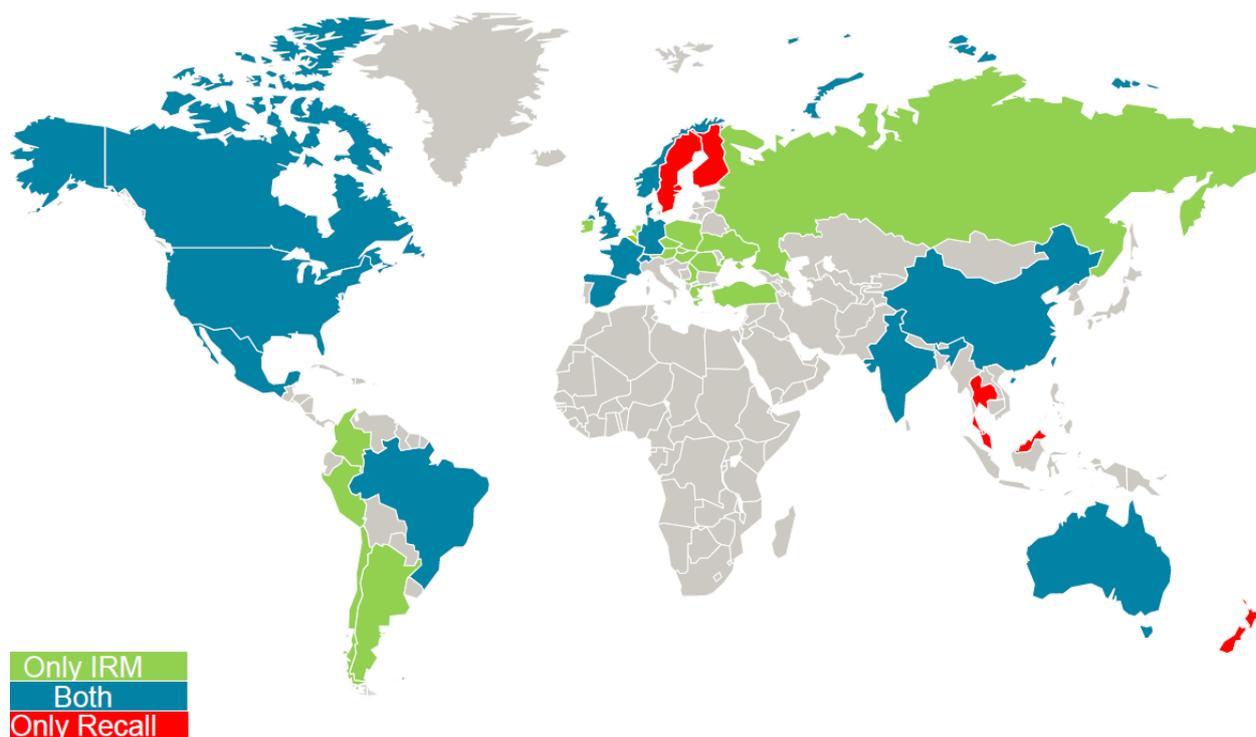
- 3.1 Iron Mountain is currently structured as a Real Estate Investment Trust, listed in the United States and headquartered in Boston, Massachusetts.¹²
- 3.2 Iron Mountain has over 1,000 facilities worldwide. According to its website, Iron Mountain currently stores more than 425 million cubic feet of paper records and 65 million computer backup tapes.¹³
- 3.3 Iron Mountain has a strong presence in North America, South America and Europe with a weaker presence in South East Asia, Australia and New Zealand. See Figure 1.

¹¹ Average calculated over the three financial years ending 2013, 2014 and 2015. Excludes non-storage fee OSDP revenue.

¹² See the [Iron Mountain website](#).

¹³ See the [Iron Mountain website](#).

Figure 1: Iron Mountain and Recall global presence



Source: Iron Mountain.

3.4 Iron Mountain's UK business operates through two wholly owned subsidiaries:

- (a) Iron Mountain (UK) Limited – reports the revenues and costs of Iron Mountain's UK storage activities.¹⁴ This subsidiary makes up about 90% of UK operations by revenue.¹⁵
- (b) Iron Mountain (UK) Services Limited – service activities, such as imaging services and product sales.¹⁶

3.5 Across the UK, Iron Mountain has 46 sites, of which 37 offer RMS services and 16 offer OSDP services. Iron Mountain leases the majority of its estate but it owns 16 of these facilities.¹⁷

3.6 Iron Mountain has a total RMS capacity in the UK of approximately [X] million cubic metres, of which [X]% is currently used.¹⁸ Iron Mountain's largest single site, [X], has a total RMS racked capacity of [X] million cubic metres. Iron Mountain's OSDP capacity is around [X] Data Protection Units (eg an

¹⁴ Storage activities includes both storage revenues and retrieval revenues.

¹⁵ Source: CMA analysis of Iron Mountain's profit and loss data.

¹⁶ Iron Mountain sold its shredding business, so it does not carry out destructions on site.

¹⁷ This includes counting adjacent buildings as two sites.

¹⁸ Figure based on total capacity, not racked capacity.

individual tape would count as one unit) of which approximately [x] % is currently used.¹⁹

3.7 Iron Mountain told us its strategy in the UK is to seek to maintain [x] % growth in the UK, position itself as a high quality provider and build customer relationships that foster loyalty.

3.8 Table 2 sets out the financial performance of Iron Mountain’s UK business, derived from figures for its UK subsidiaries over the past three years. Over this period, Iron Mountain’s revenues have been in excess of £[x], with a peak of £[x] in the financial year ending [x]. On these revenues Iron Mountain has consistently earned a margin²⁰ of over [x] %. Iron Mountain UK’s financial performance over this period has been strong.

Table 2: Summary of Iron Mountain financial performance 2013-2015²¹

	£		
	FY13	FY14	FY15
Revenues			
Storage	[x]	[x]	[x]
Services	[x]	[x]	[x]
	[x]	[x]	[x]
Cost of sales	[x]	[x]	[x]
Gross profit	[x]	[x]	[x]
Overheads	[x]	[x]	[x]
Other*	[x]	[x]	[x]
EBIT	[x]	[x]	[x]
Net margin	[x]	[x]	[x]

Source: Iron Mountain.

*[x]

3.9 Storage revenue for both RMS and OSDP has slowly increased over the period with associated retrieval revenue for both slowly falling year on year.²²

3.10 The largest costs to Iron Mountain in the UK are the following:²³

(a) Rent and facility costs which make up about [x] to [x] % of their total cost base. From financial years 2013 to 2014, there was approximately a [x] % reduction in rental costs as Iron Mountain closed down two relatively high cost facilities and moved into two lower cost facilities.

¹⁹ Figure based on racked capacity.

²⁰ Earnings Before Interest and Tax (EBIT margin).

²¹ Financial results represent the financial performance of both UK Iron Mountain subsidiaries.

²² Physical OSDP makes up approximately [x] % of its storage revenue, with RMS making up the remaining [x] % of storage revenue.

²³ Other costs include indirect service costs such as sales and marketing, overheads (such as HR, finance, IT etc), bad debts and one-off costs.

- (b) Direct service costs of [X] to [X]% of its total cost base, the largest proportion of which are staff costs.
 - (c) Transport costs of around [X]% of the total cost base.²⁴ Transport costs have [X].
- 3.11 Iron Mountain has reduced costs in recent years, for example by closing two high cost sites and [X].
- 3.12 It has made the following recent acquisitions:
- (a) Secure Records Management (Derby), November 2011;
 - (b) Vintage Archives (Essex), February 2013;
 - (c) File Express (West Sussex), February 2015; and
 - (d) Professional Archive (London), September 2015.

Recall

- 3.13 Recall is headquartered just outside Atlanta, Georgia, United States of America and is a publicly owned company whose shares are traded on the Australian Securities Exchange.²⁵
- 3.14 Recall operates in 25 countries from over 300 operating facilities. Recall has a strong presence in Australia and New Zealand and South East Asia. Recall also operates in Europe and North and South America where its footprint is considerably smaller than that of Iron Mountain. It has a stronger presence than Iron Mountain in Scandinavia. Its geographic footprint is illustrated in Figure 1.
- 3.15 Recall told us its strategy in the UK is focused on increasing its business in [X].²⁶ [X]
- 3.16 In the UK Recall principally operates through three subsidiaries with one parent company, Recall Limited (UK): Preferred Media Limited, C21 Data Services Limited (C21), and Recall GQ Limited (UK).²⁷

²⁴ CMA analysis. Based on results for financial years 2013-2015.

²⁵ [Recall initial submission](#), paragraph 6.

²⁶ [Recall initial submission](#), paragraphs 60–61.

²⁷ Recall GQ Limited largely relates to the activities of Recall's [X] site, while Preferred Media, acquired in June 2015 was a business providing media storage services globally. The latest significant acquisition of Recall UK was C21 Data Services, which was purchased in July 2015. C21 is a RIMS provider based in Aberdeen and Dundee that also provides core storage and core viewing services to Oil and Gas customers.

3.17 Table 3 sets out the financial performance of Recall in the UK over the past three years (excluding C21) from 2013 to 2015. Over this period Recall's revenues have been in excess of £[redacted] every year with a peak in [redacted] of £[redacted]. On these revenues Recall has earned an EBIT margin on average of just over [redacted]%. Recall UK's financial performance looks strong over the last three years; [redacted].

Table 3: Recall financial performance 2013-2015

	£		
	FY13	FY14	FY15
Revenues			
Storage	[redacted]	[redacted]	[redacted]
Services	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]
Cost of sales	[redacted]	[redacted]	[redacted]
Gross profit	[redacted]	[redacted]	[redacted]
Gross profit	[redacted]	[redacted]	[redacted]
Overheads	[redacted]	[redacted]	[redacted]
Other	[redacted]	[redacted]	[redacted]
EBIT	[redacted]	[redacted]	[redacted]
Net margin	[redacted]	[redacted]	[redacted]

Source: Recall.

3.18 Recall's storage volumes have grown steadily over the last decade. Recall's largest customer in the UK is [redacted], which accounts for almost [redacted]% of its UK revenue.²⁸ Recall describes its relationship with [redacted] as [redacted].

3.19 The largest costs for Recall are its [redacted] costs, which each account for approximately [redacted] to [redacted]% of Recall's total costs.

3.20 Recall has made various acquisitions since the beginning of 2010, including the following:²⁹

(a) [redacted]

(b) December 2013: Recall acquired Ibex Information Management in Preston, a business providing physical storage for customers in the North West of England.

(c) November 2014: Recall acquired the assets of The Clear Group, a business providing scanning services to the public sector and physical storage to a local NHS Trust.

²⁸ Recall initial submission, paragraph 32.

²⁹ Recall initial submission, p6, Table 1.

(d) June 2015: Recall acquired Preferred Media, a business providing media storage services globally.

(e) July 2015: Recall acquired C21 Data Services, a business providing data storage solutions in Scotland out of four sites in Aberdeen and Dundee.

3.21 In addition to acquiring existing RIMS businesses, Recall has opened its own new facilities such as its Heywood facility in February 2011 to serve the North West of England.

3.22 Consequently, across the UK, Recall now has 12 sites,³⁰ of which all offer RMS services and five offer OSDP services – see Table 4. [X] from which Recall has a total racked (ie shelved) capacity of approximately [X] million cubic metres of which approximately [X]% is currently used.³¹ Additional further unracked capacity is available – approximately a further [X] million cubic metres.

Table 4: Recall's UK facilities

Site		OSDP
Scotland (Aberdeen)*	AB11 9QQ	Yes
Scotland (Dundee)	DD2 3XH	
Scotland (Dundee)	DD2 4SW	
North West (Heywood)	OL10 2TT	Yes
North West (Warrington)	WA5 7YP	
West Midlands (Birmingham)	B76 1AF	Yes
West Midlands (Rugby)	CV21 1ST	
East Midlands (Northampton)	NN4 7BW	
East of England (Hoddesdon)	EN11 0RF	Yes
London (Kidbrooke)	SE3 9BY	
London (Stockwell)	SW4 6RA	
London (Bloomsbury)	WC1E 7ER	Yes

Source: Recall.

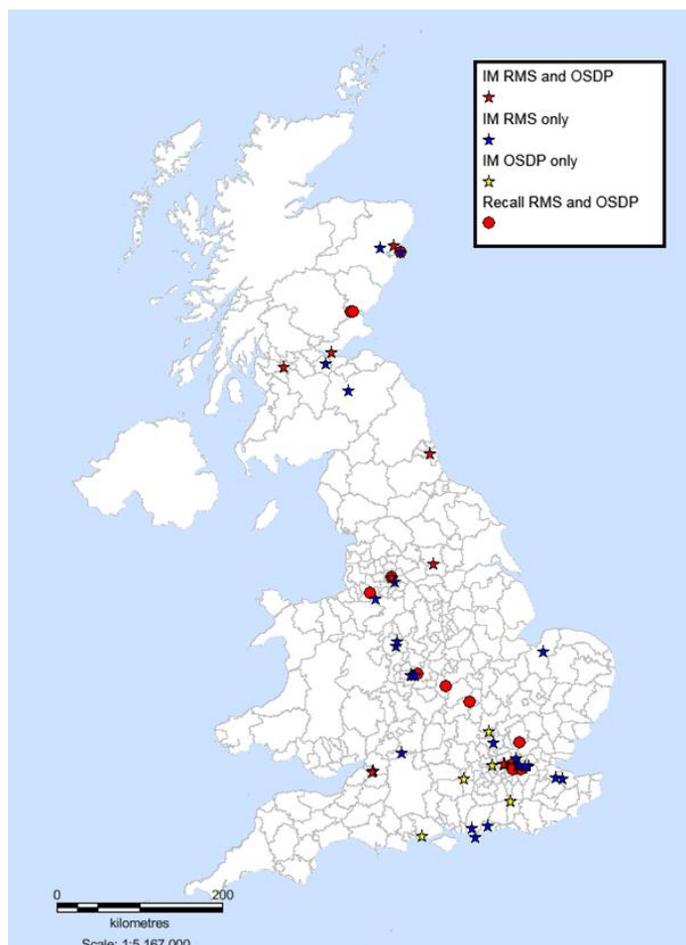
*Two adjacent facilities.

3.23 Figure 2 shows the current location in Great Britain of Recall's and Iron Mountain's sites. Iron Mountain also has facilities in Northern Ireland. Figure 2 indicates that Iron Mountain has a broader geographic coverage than Recall. Recall is present in Greater London and the South East, the Midlands along the M40 and M6 motorway corridor and to the North West, as well as in the C21 facilities in the north east of Scotland. In contrast, Iron Mountain is more broadly geographically dispersed.

³⁰ Two adjacent facilities (which we have counted as one site) in Aberdeen are accounted for separately.

³¹ Recall does not record OSDP capacity separately from RMS capacity.

Figure 2: Map of Iron Mountain and Recall sites in Great Britain



Source: CMA mapping based on postcodes provided by the Parties.

Other RIMS suppliers

- 3.24 We now briefly describe some of the other large RIMS suppliers in the UK. Information on their relative sizes is set out in Table 5. There are additionally many other small and medium sized RIMS suppliers.
- 3.25 Box-it Data Management Limited (Box-it) describes itself as a document management company that can help customers of all sizes meet their document storage, scanning, outsourcing and shredding needs. Box-it operates under a franchise model and currently provides RIMS from 14 sites in GB.³²
- 3.26 Capita Business Services Limited (Capita) is an international business process outsourcing and professional services company. Capita has a document and information services division that lists its services as document

³² See Box-it's [Company overview](#) webpage.

storage, retrieval, archive and destruction. It also advertises its service for digitising this information. Capita offers records management services from five sites in the UK.³³

- 3.27 Crown Records Management Limited (Crown) is a global provider of RIMS operating in 43 countries from 174 facilities, and is part of a wider group. In GB, Crown provides RIMS from 18 sites. Crown describes its services as document management, media management, digital imaging, consultancy, IT integration and secure destruction.³⁴
- 3.28 DeepStore Limited (DeepStore) operates from two facilities in the UK. One of these facilities is an old salt mine in Winsford, Cheshire that has a capacity of over 1.8 million square metres. DeepStore also has a traditional RIMS facility in Bromley, London.³⁵
- 3.29 EDM describes its services as information management services including archive storage, live file management, scan-on-demand, document scanning and image hosting, Digital Mailrooms and associated logistics. Its website states 'We're trusted by some of the best-known organisations in the private and public sectors, including Nationwide Building Society, NHS Trusts, Avis and HM Revenue & Customs.' EDM has nine locations across the UK.³⁶
- 3.30 The Hill Company Limited (the Hill Company), according to its website, is the largest privately run records management company in the UK. It operates from four sites in London, Essex, Runcorn and Livingston.³⁷
- 3.31 PHS Records Management Limited (PHS) is part of the wider PHS Group that provides commercial facilities management services. PHS lists its services as scanning, storage (which includes both documents and tapes), shredding, work-flow management and IT recycling. PHS operates from eight facilities across the UK.³⁸
- 3.32 Restore provides both document management and relocation services in the UK. Restore is the second largest provider of RIMS in the UK, including both RMS and OSDP services, and provides RIMS from 32 sites in GB. Restore has been expanding in recent years through both organic growth and acquisition, having acquired 26 companies since 2010.³⁹ One of Restore's

³³ See Capita's [Document storage, retrieval, archive & destruction](#) webpage.

³⁴ See Crown's [About us](#) webpage.

³⁵ See DeepStore's [homepage](#).

³⁶ See EDM's [What we do](#) webpage.

³⁷ See The Hill Company's [About](#) webpage.

³⁸ See PHS' [Document and data storage solutions](#) webpage.

³⁹ See Restore's [Acquisition history](#) webpage.

most significant acquisitions was the recent acquisition of Wincanton in December 2015. Wincanton was another large RIMS provider in the UK with five operational sites and revenues of £22 million⁴⁰ in the financial year ended 31 March 2015.⁴¹

- 3.33 TNT Business Solutions (TNT) is part of TNT UK Limited. TNT lists its services as records management (both RMS and OSDP), mail room management and scanning.⁴² TNT operates from five sites in the UK largely located in the Midlands and in the South of England.

4. The merger and relevant merger situation

The transaction

- 4.1 On 8 June 2015, the Parties entered into a binding SID for Iron Mountain to acquire Recall by way of a court-approved Scheme of Arrangement in Australia (the Transaction).⁴³ Upon completion of the Transaction, Iron Mountain will hold all of the ordinary shares of Recall, and Recall's existing shareholders will own approximately 21% of Iron Mountain's share capital. The enterprise value of the Transaction is approximately £1.59 billion.⁴⁴
- 4.2 Iron Mountain told us that, pursuant to the terms of the SID, Recall's shareholders will receive 0.1722 of an Iron Mountain common share and US\$0.50 in cash for each Recall share. Alternatively, Recall's shareholders may elect to receive A\$8.50 in cash for each Recall share (with preferential access to the cash pool for the first 5,000 shares owned by each shareholder), subject to a cash consideration cap of A\$225 million.
- 4.3 Iron Mountain announced on 30 March 2016 that it had received approval of the transaction from the Australian Competition and Consumer Commission,⁴⁵ and on 31 March 2016 that it had received approval of the transaction from the United States Department of Justice (DOJ) and the Canada Competition Bureau (CCB),⁴⁶ subject to divestments in each case.

⁴⁰ Of the 26 acquisitions made since 2010, only 13 were predominantly Records Management businesses. Of the Wincanton revenues, around £8 million were not in the UK, and this non-UK business was sold earlier this year.

⁴¹ See Restore press release (6 November 2015): [Acquisition of Wincanton Records Management and Placing of new Ordinary Shares to raise £34 million](#).

⁴² See TNT's [Secure document storage & archiving](#) webpage.

⁴³ Under Australia's Corporations Act 2001.

⁴⁴ [Iron Mountain initial submission](#), paragraph 1.3.

⁴⁵ See Iron Mountain press release (30 March 2016): [Iron Mountain Announces ACCC Approval of Proposed Undertaking in Australia and CMA Approval of Hold Separate Consent in the United Kingdom in Connection with Recall Transaction](#).

⁴⁶ See Iron Mountain press release (31 March 2016): [Iron Mountain Announces Regulatory Outcomes in US and Canada; Updates Synergy and Accretion Estimates Related to Proposed Acquisition of Recall](#).

4.4 The scheme of arrangement is expected to be implemented shortly.

Rationale for the merger

4.5 Iron Mountain told us that it began [REDACTED]. Iron Mountain said its primary reasons for acquiring Recall were:

- (a) to expand its geographic footprint and develop a more substantial presence in the emerging markets of Latin America and Southeast Asia, where Recall already has an established presence; and
- (b) to achieve operating synergies and savings from the reduction of duplicative selling, real estate, and other costs in more developed markets like the UK.

4.6 Iron Mountain estimated that, following integration of the Parties' operations over a five-year period, the proposed acquisition would yield world-wide approximately US\$155 million in annual synergies, covering [REDACTED].⁴⁷

4.7 Iron Mountain said the acquisition of Recall was preferred to other forms of expansion or an acquisition of other RIMS providers, because of Recall's size, geographic footprint and financial performance outside the UK.

4.8 Recall said Iron Mountain's bid offered significant value for Recall's shareholders and so, believing that this transaction would be in the best interest of its shareholders, the Board accepted the proposal. Recall estimated potential synergies close to US\$[REDACTED] million.

Jurisdiction

4.9 Under section 36 of the Act and pursuant to our terms of reference (see Appendix A), we are required to investigate and report on certain statutory questions, the first being whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation. Section 23 of the Act provides that a relevant merger situation has been created if two or more enterprises have ceased to be distinct within the statutory period for reference and either the turnover test or the share of supply test (or both) specified in the Act is satisfied.

4.10 Section 129 of the Act defines an 'enterprise' as 'the activities, or part of the activities, of a business'. A 'business' is defined as including 'a professional practice and includes any other undertaking which is carried on for gain or

⁴⁷ [Iron Mountain initial submission](#), paragraph 1.4. This estimate was made in advance of competition clearances worldwide.

reward or which is an undertaking in the course of which goods or services are supplied otherwise than free of charge'. We consider that both Iron Mountain and Recall are enterprises since each operates a business which supplies RIMS.

- 4.11 As a result of the Transaction described in paragraphs 4.1 to 4.4, Iron Mountain will have ownership and control of Recall. Therefore, we are satisfied that both enterprises will cease to be distinct for the purposes of the Act.
- 4.12 The turnover test is satisfied where the value of the turnover in the UK of the enterprise being taken over exceeds £70 million. The turnover for Recall generated in the UK in the financial year ended 30 June 2015 was approximately £[~~80~~] million. We therefore consider that the turnover test is not satisfied.
- 4.13 For the share of supply test to be satisfied, the merger must result in an increase in the share of supply (or acquisition) of goods or services of a particular description and the resulting share must be 25% or more. The Parties estimated in their merger notice to the CMA that their post-merger share of the supply of RIMS would be between [~~25~~]% and [~~30~~]% on a national basis. We have no reason to believe that this is an overestimate – see Tables 5 and 11. We therefore consider that the share of supply test is met. In the light of the above assessment, we consider that the merger will result in the creation of a relevant merger situation. Consequently, we consider that the jurisdictional test is satisfied.

5. The counterfactual

- 5.1 Before we turn to the effects of the merger, we need to assess what we expect would have been the competitive situation in the absence of the merger. This is called the 'counterfactual'.⁴⁸ The counterfactual is an analytical tool used to provide a benchmark against which the expected effects of the merger can be assessed. The counterfactual takes events and circumstances and their consequences into account to the extent that they are foreseeable.⁴⁹
- 5.2 Iron Mountain stated that 'Iron Mountain believes that the current status quo (including Restore's recent acquisition of Wincanton, now completed) is the appropriate counterfactual in this case'.⁵⁰

⁴⁸ [Merger Assessment Guidelines \(CC2/OFT1254\)](#), paragraph 4.3.1

⁴⁹ [CC2/OFT1254](#), paragraph 4.3.2.

⁵⁰ [Iron Mountain initial submission](#), paragraph 1.5.

- 5.3 Recall is a profitable and growing supplier of RIMS in the UK, see Table 3. No evidence has been put to us that its business was failing. Recall continues to operate business as usual in the UK, and there was no indication from Recall's planning and intentions that it was contemplating withdrawing from operating in the UK. Recall told us that the UK business is implementing Recall's strategic plans for Europe. We have no other evidence of pre-acquisition intentions by either Party to significantly expand their businesses or change their activities in the UK in the foreseeable future.
- 5.4 The proposed acquisition was instigated by Iron Mountain approaching Recall. There is no evidence that the acquisition of Recall was contemplated by any other potential purchasers and there has been no evidence presented that alternative purchasers would be likely to acquire Recall in the foreseeable future.
- 5.5 We also received no evidence that, absent the transaction, the position of Iron Mountain would be likely to alter materially.
- 5.6 We also took account of the merger between Wincanton and Restore, two other RIMS suppliers.
- 5.7 We provisionally conclude that the pre-merger market conditions, following completion of the Restore/Wincanton merger, are the appropriate counterfactual.

6. Market definition

- 6.1 The purpose of market definition in a merger inquiry is to provide a framework for the analysis of the competitive effects of the merger.⁵¹ Market definition is a useful analytical tool, but not an end in itself, and identifying the relevant market involves an element of judgement.
- 6.2 The boundaries of the relevant market are determined by whether consumers (and suppliers) would switch demand (or supply) between different products and geographical areas in response to small but significant and sustained changes in relative prices, thus providing a competitive constraint. The CMA's Merger Guidelines state:⁵²

The boundaries of the relevant product market are generally determined by reference to demand-side substitution alone. However, there are circumstances where the Authorities may

⁵¹ [Mergers: Guidance on the CMA's jurisdiction and procedure \(CMA2\)](#), paragraph 5.2.1.

⁵² [CMA2](#), paragraph 5.2.17.

aggregate several narrow relevant markets into one broader one on the basis of considerations about the response of suppliers to changes in prices. They may do so when:

- production assets can be used by firms to supply a range of different products that are not demand-side substitutes, and the firms have the ability and incentive quickly (generally within a year) to shift capacity between these different products depending on demand for each; and
- the same firms compete to supply these different products and the conditions of competition between the firms are the same for each product; in this case aggregating the supply of these products and analysing them as one market does not affect the Authorities' decision on the competitive effect of the merger.

6.3 The Guidelines indicate that the boundaries of the relevant market do not determine the outcome of the analysis of the competitive effects of the merger in any mechanistic way. In assessing whether a merger may give rise to an SLC, it is possible to take into account constraints outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others.⁵³

6.4 In this section, we set out the relevant market in which we have assessed the effects of the merger. We first define the product market. Then we define the geographic market.

Product market definition

6.5 The Parties overlap in the provision of :

- (a) RMS;
- (b) OSDP;
- (c) specialist storage for oil and gas companies (including storage and viewing facilities for core samples); and
- (d) certain ancillary services such as scanning.

6.6 As noted in paragraph 2.2(d) we have not considered ancillary services separately from RMS and OSDP. For those customers that require an

⁵³ [CMA2](#), paragraph 5.2.2.

ancillary service as a complement to the main services provided, any competition concerns arising from the merger in relation to RMS or OSDP could apply to ancillary services as well, depending on what competition is offered by a wider set of suppliers. If purchased on a standalone basis, we note there is a range of national and local alternative suppliers for services such as scanning who can provide these services on a standalone basis.

6.7 Iron Mountain said it believed that the relevant product market is most appropriately defined as encompassing both RMS and OSDP.⁵⁴ It told us that this is because both of these services are provided by the same suppliers and involve the same basic equipment and facilities⁵⁵. It said RIMS cannot meaningfully be segmented by the type of business or industry served. For example it said that there is nothing unique about the services provided to oil and gas companies, and the facilities and equipment that are used to service such customers are essentially the same as are used to provide RIMS to customers in other sectors and industries.⁵⁶

6.8 Similarly, Recall submitted that the relevant product market is that for the provision of all RIMS.⁵⁷ It said many suppliers of RIMS supply both RMS and OSDP and can readily adjust their service mix if competitive conditions warrant. It said there are no economically appreciable differences between the supply of RIMS for the oil and gas industry and the supply of RIMS in other sectors.⁵⁸

6.9 In relation to product scope, we consider whether there are:

- separate product markets for physical RMS and electronic RMS (whether in-house or outsourced);
- separate product markets for physical RMS and physical OSDP;
- product markets for outsourced RMS and OSDP services, separate from in-house provision of this services; and
- separate relevant product markets for physical OSDP and electronic OSDP (whether in-house or outsourced).

6.10 We also look at the geographic scope of markets. Thereafter, we consider a separate relevant product market for RIMS to oil and gas customers (distinct

⁵⁴ [Iron Mountain initial submission](#), paragraphs 1.10–1.13.

⁵⁵ [Iron Mountain initial submission](#), paragraph 1.10.

⁵⁶ [Iron Mountain initial submission](#), paragraph 1.12.

⁵⁷ [Recall initial submission](#), paragraphs 17–21.

⁵⁸ [Recall initial submission](#), paragraphs 17–21.

from services to other customer types) in the geographic area around Aberdeen.

Physical RMS and electronic alternatives

- 6.11 Here we consider whether physical RMS (generally boxes of paper files) lies in the same relevant market as electronic alternatives. Customers could switch from physical to electronic RMS either by producing and maintaining new materials in digital form, or by digitising (through scanning) paper materials. Digital media may be maintained in-house on customers' servers, or outsourced for example through cloud solutions.
- 6.12 The Parties submitted that customers can and do substitute between paper and electronic storage, and that they believe this trend will increase in the future, although there will always be some documents that need to be stored in paper form for legal or regulatory reasons.⁵⁹
- 6.13 We asked customers whether they would be likely to switch from physical to electronic storage of records in response to a small but significant price rise in the former. The majority of those who responded told us that it was unlikely that they would do so.⁶⁰
- 6.14 We asked competitors whether they anticipated that customers would make such a switch. Most of those who responded told us that it is unlikely that they would do so.⁶¹ Some submitted that this was because it would not be cost effective and would not save the customer money in the medium term.⁶² Some told us that for existing materials, exit fees and the cost of digitisation act as a barrier so that a small price rise would be unlikely to cause such a switch.⁶³ Iron Mountain told us that the cost of scanning old paper files to transfer them into electronic records would be prohibitive. It said the costs would equate to the costs of between 25 and 40 years of storage of hard copy documents.
- 6.15 We were told by the parties about measures being taken to digitise NHS records. However, we were told that moves to electronic alternatives are generally driven by factors other than the cost of storage, and while some

⁵⁹ [Recall initial submission](#), paragraph 18; [Iron Mountain initial submission](#), paragraph 1.24.

⁶⁰ 69% of customers that responded to the CMA said they were unlikely to switch from physical to electronic RMS in response to a small but significant increase in price (SSNIP). See Appendix B, Table 2.

⁶¹ Ten out of 15 competitors who responded to the CMA on this believed that either no customers or few if any customers would switch from physical to electronic RMS in response to a SSNIP. See Appendix B, Table 3.

⁶² [REDACTED]

⁶³ [REDACTED] provided comments regarding perm-out fees and [REDACTED] and [REDACTED] commented on the costs of digitisation.

customers would switch in response to a price rise the proportion involved would not be large.⁶⁴

- 6.16 Based on the evidence set out above, we provisionally conclude that there is a separate relevant market for physical RMS, separate from electronic alternatives.

Physical RMS and physical OSDP

- 6.17 The Parties submitted that RMS and OSDP should be considered as a single relevant market. They said on the demand-side customers can and do substitute between paper and tape storage, and will increasingly do so.⁶⁵ They told us that this occurs when customers switch from paper records to electronic storage, and then meet any need for off-site archiving through OSDP services (ie tapes).⁶⁶
- 6.18 The Parties also submitted that there is supply-side substitution because many suppliers of RIMS supply both RMS and OSDP and can readily adjust their service mix⁶⁷ if competitive conditions warrant.⁶⁸
- 6.19 However, on the demand side, the majority of customers who responded to the relevant part of questionnaires told us that they would not switch between RMS and OSDP in the event of a small but significant increase in the cost of RMS.⁶⁹ Such a switch would involve a fundamental change in storage policy. This may happen for operational reasons but we did not find evidence that customers would be likely to make these changes because of variations in the relative prices of RMS and OSDP. 13 customers stated that these services were distinct and noted that paper records often had to be stored for legal or regulatory reasons.⁷⁰

⁶⁴ [REDACTED]

⁶⁵ [Recall initial submission](#), paragraph 18.

⁶⁶ [Recall initial submission](#), paragraph 18.

⁶⁷ As set out in the CMA's [Merger Assessment Guidelines](#), paragraph 5.2.17, the relevant test is whether production assets can be used to supply both products and the firms have the ability and incentive to quickly (generally within a year) shift capacity between these products.

⁶⁸ [Recall initial submission](#), paragraph 19.

⁶⁹ Ten out of 13 customers that responded to the CMA's questions on this said they were unlikely to switch from physical RMS to physical OSDP in response to a SSNIP. We note that this is based on a small sample size. See Appendix B, Table 1.

⁷⁰ For example, [REDACTED] and [REDACTED].

- 6.20 In respect of demand-side substitutability in the opposite direction, from OSDP to RMS:
- (a) no customers or competitors suggested that a move from OSDP to physical storage of paper would be likely in response to an increase in the relative cost of OSDP; and
 - (b) we consider that paper records cannot act as a feasible solution for the back-up and disaster recovery of customers' computer systems.
- 6.21 In assessing supply-side substitution we note that the assets which appear to be common to OSDP and RMS are: warehouse space; a distribution system: trained staff; and a barcode tracking system. However, OSDP is likely to require specialist vaults and different racking. Of the 38 customers that responded to our questionnaire and who purchase both OSDP and RMS, 53% told us that they use different suppliers for RMS and OSDP. A competitor told us that while many suppliers offer both RMS and OSDP, the physical conditions required for storing paper records and electronic media differ.⁷¹ Electronic media, such as tapes, are generally stored in a vault with temperature and humidity control in order to prevent the media from deteriorating. No competitors told us they substituted storage between RMS and OSDP facilities.⁷² Although we were told that the same staff may work on both RMS and OSDP, one exception to this is that Recall told us that effective [REDACTED].
- 6.22 Thus, while it may be possible to convert RMS storage space into space for OSDP, this would require up-front investment in new assets.⁷³ Existing RMS suppliers would be no better placed to substitute into the supply of OSDP than suppliers in other sectors who might be involved in warehousing and transport. Therefore, a potential constraint from RMS suppliers diversifying into OSDP is better considered under the category of entry and expansion, where we can evaluate whether any barriers to entry apply.
- 6.23 While we found evidence of overlap in the provision of RMS and OSDP, not all providers offer both services and shares of supply differ considerably between them. Given this and the lack of evidence of demand-side substitution between the two products, we provisionally conclude that RMS

⁷¹ [REDACTED]

⁷² The CMA also attempted to test whether margins on RMS and OSDP were comparable to understand a supplier's incentive to switch between the provision of these services but the Parties were unable to provide margin information to the CMA .

⁷³ No party indicated that substitution from OSDP into the supply of RMS was likely. RMS is likely to require more space than OSDP.

and physical OSDP are in separate markets. Any constraint from RMS on OSDP is more appropriately considered under the category of entry.

In-house provision of RMS and OSDP

- 6.24 The Parties submitted that in-house RMS and OSDP are a demand-side competitive constraint. Iron Mountain customer terminations data over the period 2013-2015 indicates that approximately [REDACTED]% of lost RMS and OSDP accounts ([REDACTED]% of lost RMS revenue and [REDACTED]% of lost OSDP revenue) belonged to customers that brought their services in-house.⁷⁴ However, it is unclear whether such moves to in-house provision were driven by (or would occur in response to) a price increase (or equivalent reduction in service quality) rather than other reasons such as a change in data protection strategy.
- 6.25 We therefore asked customers and competitors whether customers would respond to a small but significant change in relative prices by moving RMS or OSDP in-house.
- 6.26 In respect of RMS, a small number of customers indicated that it was possible or likely that they would bring their RMS provision in-house in response to a small but significant increase in the price of outsourced RMS.⁷⁵ However, the majority told us that they would not.⁷⁶ Competitors stated that it is very rare or unheard of for customers to take RMS work in-house, and that this is because of space limitations, the cost of paying 'perm-out fees' and the risks associated with keeping documents in-house.⁷⁷ In light of third party replies, we provisionally conclude that in-house RMS is not in the same product market as outsourced RMS.
- 6.27 The purpose of outsourcing RMS is usually to reduce costs and release storage space, as well as to benefit from providers' expertise in managing records. Clients' facilities are likely to be more costly than RMS providers' warehouses. This suggests that customers would be reluctant to take records management back in house absent a substantial cost increase.
- 6.28 In respect of OSDP, a few customers told us that they might bring their OSDP services in-house in response to a 5% price increase.⁷⁸ However, many

⁷⁴ See Appendix B, Tables 5 & 6.

⁷⁵ Four out of 55 respondents said this was likely and further five indicated they would possibly do so. See Appendix B, Table 7.

⁷⁶ Of the 55 customers that responded to this question, 80% said they were unlikely to bring their RMS requirements in-house. See Appendix B, Table 7.

⁷⁷ [REDACTED]

⁷⁸ For example, [REDACTED]. See Appendix C, Table 8.

customers and competitors who responded to us considered it unlikely.⁷⁹ Reasons included that some OSDP was outsourced for disaster recovery purposes and hence in-house provision was not suitable,⁸⁰ and that the customer did not have the necessary facilities or space.⁸¹

- 6.29 Therefore, in light of customer and competitor replies, we provisionally conclude that in-house OSDP is not part of the product market for outsourced OSDP.

Physical and electronic OSDP

- 6.30 We now consider whether electronic OSDP (such as storing disaster recovery electronic data on in-house or outsourced servers) is an effective constraint on physical OSDP.
- 6.31 The Parties submitted that the OSDP product market includes both physical and electronic OSDP. Iron Mountain's OSDP contract termination data showed that around [X] % of lost accounts (accounting for around [X] % of lost revenue) changed to a different OSDP solution rather than just switching provider (see Appendix C, Table 6).
- 6.32 However, there was no evidence to demonstrate that this switching occurred in response to a price increase. Of the customers who responded to our questionnaire, 14% said they were in the process of moving away from tape back-ups, although this was not for reasons of changes in relative prices. Of the remaining respondents, only 6% said they would be likely to switch away from physical OSDP in response to a small but significant relative price change, although others said they would need to undertake a review to reach a decision.⁸²
- 6.33 When asked what proportion of customers would switch to electronic OSDP if the price of physical OSDP went up by 5%, nine out of the 14 competitors who responded to our questionnaire said they did not expect any customers to switch or few if any to switch.⁸³ The reasons competitors gave for why few if any customers would switch included: that a switch would not be cost-

⁷⁹ Of the 27 customers that responded to this question, six considered it was possible and 21 indicated it was unlikely. See Appendix B, Table 8.

⁸⁰ [X]

⁸¹ For example [X].

⁸² See Appendix B for more detail.

⁸³ See Appendix B, Table 4.

effective due to the cost of converting data and contract termination costs;⁸⁴ and due to customers' fear of losing physical control of their back-up data.⁸⁵

6.34 Some suppliers of electronic OSDP (and/or RMS) also offer physical OSDP.⁸⁶ However, very different assets and expertise are required to offer electronic as compared to physical OSDP services and many of the major electronic OSDP providers (including IBM, Microsoft and Oracle) have no physical OSDP presence and do not appear well placed to develop this. Given the differing facilities required, and the very different range of firms involved in electronic OSDP, supply-side substitution is unlikely.

6.35 In light of the above, we provisionally conclude that electronic OSDP is not a part of the same product market as physical OSDP.

Geographic market definition

6.36 Geographic markets may be local, regional, national or wider.⁸⁷ The Parties told us that competition should be assessed on a regional/local basis, for the following reasons:

- (a) Customers require a RIMS provider to be reasonably close to their location to enable a relatively rapid collection and return of stored documents. We were told many customers require the option for documents to be returned within as little as two to three hours ([REDACTED]).⁸⁸
- (b) Suppliers provide services on a regional basis, with different regions supplied by different groups of vendors.⁸⁹

6.37 The Parties proposed that a 45 to 50 mile catchment area to consider competition around Recall sites would be appropriate, for both RMS and OSDP.⁹⁰

6.38 However, the Parties also submitted that while customers traditionally have regarded the proximity of a vendor's warehouse as important for pick-ups and retrievals, the practical significance of this is increasingly limited for many customers, given the fact that retrieval rates are generally low.

⁸⁴ [REDACTED]

⁸⁵ [REDACTED]

⁸⁶ [REDACTED]

⁸⁷ [CC2/OFT1254](#), paragraph 5.2.5.

⁸⁸ [Recall initial submission](#), paragraph 22; [Iron Mountain initial submission](#), paragraph 1.14.

⁸⁹ [Recall initial submission](#), paragraph 22.

⁹⁰ [Recall initial submission](#), paragraph 22; [Iron Mountain initial submission](#), paragraph 1.14 .

- 6.39 The Parties told us that while some customers may require service at multiple sites and may prefer to deal with a supplier who has various facilities across the country, they did not consider that there is a national market for RIMS. The Parties said that while customers might want to deal with a single supplier, in practice many customers used multiple local suppliers in different areas. We address customers who require delivery to multiple sites in different areas of the country in paragraphs 7.85 to 7.88.
- 6.40 Customers and competitors confirmed that typically there are a range of retrieval times that customers may require, from two hours to 48 hours.⁹¹ Based on submissions made to us by competitors, we saw that retrieval time requirements vary between customers and can vary across industry segments, but there are no general rules. For example, we were told by competitors that NHS trusts and law firms are more likely to require short retrieval times.⁹² We were also told that short retrieval times are common for OSDP (which is often used for disaster recovery).⁹³ In contrast, some customers that do not regularly require their records to be retrieved are more likely to be content with long retrieval times and for their documents to be in 'deep storage' at more remote locations.⁹⁴ We were told that some customers are happy to use scanning and emailing on demand to meet their more urgent retrieval needs, but this is a long way from universal.⁹⁵ One competitor described this as 'still an emerging information delivery option which has still not been taken up by a significant number of companies/organisations'.⁹⁶
- 6.41 Some competitors provided evidence on how far from the customer they can be while meeting customer retrieval time requirements.⁹⁷ These responses indicate that providers can meet the shortest retrieval times of two hours at a distance of 30 to 50 miles.⁹⁸
- 6.42 We asked competitors over what distance they could compete effectively for customers. Their responses suggest a catchment area of up to 30 to 50 miles although the closer a customer is, the more strongly a provider can compete for it.⁹⁹

⁹¹ Based on the responses of 76 RMS and 14 OSDP customers that provided information on their retrieval time requirements, and eight competitors that provided information on the retrieval times they offer.

⁹² [REDACTED]

⁹³ [REDACTED]

⁹⁴ [REDACTED] In order to optimise use of storage space, RMS providers may move boxes between locations where rapid retrieval is unlikely to be required.

⁹⁵ [REDACTED]

⁹⁶ [REDACTED]

⁹⁷ See Appendix B, Table 10.

⁹⁸ See Appendix B for detail.

⁹⁹ See Appendix B, Table 10.

- 6.43 Actual retrieval times are set out in Appendix B, Table 11. This indicates that many customers make very little use of their options for rapid retrieval. However, this does not of itself contradict what we were generally told, that having the option for rapid retrieval is often important to customers when they choose a supplier.¹⁰⁰
- 6.44 The Parties provided us with data on the distances over which retrieved documents were sent from each of their sites. In particular this data presented the distance from the Parties' site of the customer that, when ranked by distance, accounted for the 80th percentile of retrievals activity from that site,¹⁰¹ and is summarised in Appendix B, Table 12. This data shows that for RMS, customers can be located a very long distance from the facility (but somewhat less for OSDP).¹⁰² Iron Mountain told the CMA that the large distances seen for RMS are driven by inactive customer records being moved to distant facilities. However, this does not tell us anything about the customer's decision making process in deciding which suppliers to employ, as we heard that many customers are not aware of where the actual records are stored. Iron Mountain stated that from the customer's perspective, all RIMS services are essentially local, because records placed in Iron Mountain's warehouse system are collected and returned through local facilities that are close to the customer's location.
- 6.45 We note that for the majority of Recall's sites and a significant number of Iron Mountain's sites, the distance defined by the 80th percentile for retrievals is much narrower than the 45 to 50 mile catchment area proposed by the Parties. However, Recall also submitted that 80% of its customers by volume (as opposed to retrievals) are located on average within [X] miles from the storage facility.¹⁰³
- 6.46 Multi-site customers also told us that they require RMS and OSDP provision to several locations which may be located a considerable distance apart. As discussed in paragraph 7.18, we found that customers were very unwilling to adopt a policy of multi-sourcing from different suppliers, but instead they had a strong preference for procuring all services from a single supplier with multiple sites where possible (although sometimes multi-site customers will need to rely on suppliers who do not necessarily have facilities within 50 miles

¹⁰⁰ Around 40% of the 75 RMS customers responding to this part of our questionnaires said that they require an option for same day retrieval (or sooner). The equivalent figure for the 27 OSDP customers responding to this part of our questionnaire is around a third.

¹⁰¹ See paragraph 5.2.25 of the [Merger Assessment Guidelines](#) for general information on our use of catchment areas in market definition.

¹⁰² [X]

¹⁰³ [Recall initial submission](#), paragraph 22.

of all locations). While customers do multi-source, we found that this was usually for legacy reasons rather than as a result of a deliberate policy.¹⁰⁴ A supplier will therefore be better able to serve an individual customer if it is present within as many as possible of the multiple local areas in which the customer requires service.

- 6.47 We have not defined a separate market for ‘national’ customers (or national providers). However, in assessing competition within each local geographic market we have taken account of the fact that there may be customers present in that geography who also want local services elsewhere and as such may have a preference for providers that can provide wide geographic coverage.

Assessment

- 6.48 The evidence set out above suggests that many customers require retrieval times that are most cost-effectively met by providers within a 30 to 50 mile distance from the customer’s sites. Some may also have a preference for their provider to be close to their site(s), whether or not they make use of rapid retrieval times in practice.
- 6.49 Within our competitive assessments of RMS and OSDP we have focused on local frames of reference with radii of 50 miles, wherever possible measured in terms of driving distance. Ideally these should be measured as catchments around customers; for reasons of practicality we have in most places considered catchments around the Parties’ sites. Of course, in practice some customers may choose to consider suppliers outside these radii, and some will only consider ones that are nearer, and this could also depend on specific local circumstances. However based on the evidence received we consider that 50 miles is a reasonable representative frame of reference for local geographic markets.

RIMS for oil and gas customers with specialist storage requirements

- 6.50 There are some ‘specialist services’ offered by Iron Mountain and Recall to oil and gas customers – storage of seismic tape (a type of OSDP), storage of core samples (a type of RMS), and core sample viewing facilities. Oil and gas customers also use standard RMS and OSDP services. We heard that oil and gas customers have a preference for sourcing their OSDP and RMS from the

¹⁰⁴ Of those multi-sourcing customers that responded to our question, only two did so to obtain the required geographic coverage and nearly half did so as a result of historic or legacy reasons.

same provider as their core storage;¹⁰⁵ we therefore consider RIMS to oil and gas customers as a whole including core storage, RMS and OSDP.

- 6.51 The only concerns raised about specialist services for oil and gas customers (including core storage) have been in relation to oil and gas customers in the Aberdeen area.
- 6.52 The Parties submitted that the facilities required to offer services to specialist customers are not materially different from RIMS facilities in general, and therefore, on the basis of supply-side substitution, that services to oil and gas customers should not be viewed as a distinct market.
- 6.53 The Parties told us the following:
- (a) Some RIMS providers (like Iron Mountain) configure their warehouses with relatively heavier-duty racks (to store core samples, which are heavier than paper records), wider aisles (to facilitate handling of cores and large-scale films/drawings), and records inspection rooms (which might have heavy-duty tables, brighter lighting, and equipment like a microscope, UV box, water sprays, and hand tools (eg hammers and chisels)).
 - (b) Other RIMS providers (including Recall/C21) do not do so. For core samples, Recall uses the same kinds of racks and aisle layout as for other types of material. Recall stores core samples on the lowest shelves of its standard racking, manoeuvres core samples and records tubes in standard-width aisles, and makes these materials available for customer inspection on heavy wood tables in the same type of warehouse space it provides for other types of records.¹⁰⁶
- 6.54 [REDACTED] However, Recall offers all of its customers the possibility to store cartons of various sizes, including non-standard size cartons and tubes. It said that the viewing rooms at Recall's C21 facility may be slightly better than the viewing rooms at other facilities, but that this is not difficult to provide. [REDACTED]
- 6.55 The Parties submitted that a provider who wanted to use an existing RIMS warehouse to serve oil and gas customers (ie supply-side substitution) need not make any specialised investments or have specialist expertise and, in any

¹⁰⁵ Of the oil and gas customers who told us about their multi-sourcing versus single sourcing preferences, most expressed a preference for single-sourcing their core storage and OSDP and RMS from the same provider.

¹⁰⁶ Nor do the Parties use specialised personnel to service oil and gas customers. The parties submitted that some providers (like Iron Mountain) promote the fact that they have specially trained workers who are experts in data cataloguing and can work with a customer's geologist in handling core samples for later inspection. However, the Parties stated that these workers receive their 'special' training on the job, in roughly six months.

event, could install any ‘special’ features (if it wanted to promote those in efforts to win new business) quickly and at very low cost.¹⁰⁷

- 6.56 Iron Mountain told the CMA that ‘to the extent that Iron Mountain (or others) might advertise “special” facilities/capabilities, this simply reflects efforts to promote high-quality services that nonetheless must compete with more basic offers from other vendors’.
- 6.57 Most oil and gas customers that responded to the CMA noted the need for a viewing room and other specific requirements.¹⁰⁸ Customers rated suppliers that were able to provide good core storage and viewing facilities more highly than suppliers who were not able to provide such facilities.¹⁰⁹ No competitors or customers told us that special viewing rooms were provided in facilities for general RIMS customers (ie non-oil and gas customers). This suggests that demand-side substitution from specialist to non-specialist services is not likely.
- 6.58 We also considered supply-side substitution – ie whether firms have the ability and incentive to shift capacity quickly (generally within a year)¹¹⁰ – to serve oil and gas customers that require core storage in Aberdeen. The storage facilities that Iron Mountain and Recall use for oil and gas [REDACTED] are very similar to those for other customers. We acknowledge that adapting storage facilities and providing viewing rooms (large rooms with strong tables, and in the case of Iron Mountain a small amount of simple equipment), would be inexpensive and quick to develop.
- 6.59 The only other significant RMS supplier within 50 miles of Aberdeen, Box-it, told us that it already has rooms available to use for the viewing of core samples [REDACTED] that these could be modified depending on individual customer requirements. We asked the two other non-specialist RIMS providers that are based in Aberdeen whether they have considered entering the supply of specialist services; [REDACTED].¹¹¹ We heard that entry into this sector was currently unattractive given the low current prices for oil and gas, meaning that customers were pressing for pricing reductions. A competitor¹¹² and some customers have told us that they have negotiated a freeze or reduction in prices as a result of the downturn in profitability in the oil and gas sector.

¹⁰⁷ Recall initial submission, paragraph 20.

¹⁰⁸ Of the 22 oil and gas customers that responded to the CMA’s questionnaire, 18 noted the need for a viewing room and other specific requirements.

¹⁰⁹ For example, [REDACTED].

¹¹⁰ See paragraph 5.2.17 of the Merger Assessment Guidelines.

¹¹¹ [REDACTED]

¹¹² CGG.

Similarly, [REDACTED] RIMS services to oil and gas customers in South East England¹¹³ told us [REDACTED]. This suggests incentives to enter are low.

- 6.60 A competitor told us that reputation and experience of handling [REDACTED] samples was a key requirement for its specialist customers and that because of this a non-specialist RIMS provider was unlikely to win tenders where there is a technical member of staff on a customer's procurement panel. This competitor also stated that it has no experience of its own customers threatening to switch to non-specialist RIMS providers.¹¹⁴ This suggests that diversification into serving oil and gas customers with specialist services would be unattractive as customers would be reluctant to switch to a new provider. Some customers confirmed to us that reputation and experience were important and they would not be willing to place business with a new entrant.
- 6.61 The Parties told us that Recall had entered the market in the Aberdeen area following winning [REDACTED], by purchasing an existing Aberdeen supplier (C21). However, we note this was a transfer of ownership, not new entry increasing the range of competitors available. In addition, we note the [REDACTED] contract was just for the provision of paper records storage; it did not cover core samples. Therefore, we do not consider that this shows an example of entry or supply-side substitution into the provision of RIMS to customers with specialist requirements in the oil and gas sector.
- 6.62 In terms of geographic market definition, we note that demand for specialist oil and gas services is different because rather than records being returned to the customer for examination, the customer often goes to the supplier's facility to examine physical records such as cores. Customers told us that their geologists might often need to spend several days or even weeks examining and analysing core samples. As their teams were all based in Aberdeen, it was essential that the viewing facilities were within easy reach of Aberdeen. Some customers expressed the view that Dundee (at 66 miles away by road) would be too far away to be an attractive location, as disruption to traffic, especially in winter, could mean it would take longer to travel than normal. One customer told us they would look for a provider to be at most 20 miles from Aberdeen.¹¹⁵ These responses imply, at the most, a similar-sized geographic catchment for the provision of RIMS for oil and gas customers with specialist storage requirements as for RMS and OSDP in general (ie a radius of 50 miles).

¹¹³ [REDACTED]

¹¹⁴ [REDACTED]

¹¹⁵ [REDACTED]

6.63 Therefore, we provisionally conclude that it is appropriate to separately assess provision of RIMS services to customers in the oil and gas sector with specialist requirements (such as the storage of core geological samples) in the Aberdeen area as a separate geographic and product market. We will take into account in the competitive assessment any possible constraint provided by the threat of entry from operators that serve other types of customers in the area or oil and gas customers elsewhere.

Conclusion on product and geographic markets

6.64 We provisionally conclude that the appropriate relevant markets within which we will assess the theory or harm of horizontal unilateral effects are:

- (a) RMS (excluding in-house supply);
- (b) OSDP (excluding in-house supply); and
- (c) RIMS to oil and gas customers that require specialist services in the Aberdeen area.

6.65 We provisionally conclude that local geographic markets for both RMS and OSDP (including RIMS to oil and gas customers that require specialist services in the Aberdeen area) can be measured by radii of 50 miles, wherever possible measured in terms of driving distance.

7. Assessment of the competitive effects of the merger

Introduction

7.1 We now assess the effects of the merger on competition in the supply of RMS, OSDP, and specialist RIMS services to oil and gas customers in the Aberdeen area. Our concern is whether the loss of rivalry caused by the merger would substantially lessen competition. As set out in paragraphs 6.36 to 6.49, we consider that these markets are local. Our concern is therefore to assess the identity and strength of remaining constraints in each local area in which the Parties compete with each other.

7.2 In the supply of RMS and OSDP, prices and other terms are individually negotiated. In this context, the impact of the merger will depend on the strength of the remaining 'outside options' (ie alternatives) available to customers, the different requirements of customers and how different suppliers compete and can serve different types of customers.

7.3 Customer views on the likely effects of the merger varied. Many of the customers that we contacted had not recently retendered for OSDP or RMS,

and some of these appeared to have a limited understanding of which competitor was likely to be an effective option for them.

7.4 Two customers who had retendered in 2015 said the following:

- 'There are many other suppliers both national and local.' ([REDACTED])
- 'Based on the [...] tender exercise we ran [REDACTED] months ago, a merger of these two companies would have had very little impact on the outcome.' ([REDACTED]).

7.5 On the other hand, a variety of other respondents raised concerns, mainly in the context of national coverage. Three customers that tendered in 2014/15 said the following:

- 'Currently, the market does not have many nationwide storage services providers. The merger will not help this.' ([REDACTED])
- 'These are two of the main providers. [REDACTED]' ([REDACTED])
- '[This is a] merger of the two dominant suppliers in the marketplace for a nationwide offering with the capacity to deal with large volumes.' ([REDACTED])

7.6 Some customers raised specific concerns that on the basis of providers' quality of service, along with size and profile, they have a limited choice of providers, including Iron Mountain and Recall. For example:

- 'Iron Mountain sit higher than [...] [REDACTED] [...] due to the superior standards, greater geographic footprint and hunger for [our] business.' ([REDACTED])

7.7 Our assessment of the competitive effects of the merger is structured as follows.

7.8 For RMS we:

- (a) review indicators of overall competition in RMS in the UK;
- (b) assess supplier characteristics that may be important to some customers and identify a set of competitors that we consider able to meet the needs of all types of customers;
- (c) assess the effects of the merger in local areas around Recall's sites using a simple fascia count of significant competitors and noting how the effects may differ for customers in each area that also require service in multiple regions of the UK. This highlights Aberdeen and Dundee as areas of potential concern;

- (d) consider what additional constraints may be provided in RMS in general by the prospect of entry and expansion;
- (e) review in more detail how the merger will affect competition in RMS in Aberdeen and Dundee and whether this effect may be mitigated by entry or expansion;
- (f) consider whether countervailing buyer power may counteract any SLC; and
- (g) assess how the merger will affect RMS customers with international requirements.

7.9 For OSDP we:

- (a) review the limited evidence available on overall competition in OSDP;
- (b) assess the constraint that may be provided by entry and expansion in OSDP, including by large RMS providers;
- (c) identify a set of providers that, where present, we think are likely to constrain the Parties and be able to meet the needs of all types of customers;
- (d) assess the effects of the merger in each of the local areas around Recall's OSDP sites, including more detail on those areas (including Aberdeen) where fascia counts of existing large OSDP suppliers are relatively low; and
- (e) describe the effects of the merger on OSDP customers with international requirements.

7.10 For RIMS for oil and gas customers that require specialist services in the Aberdeen area, we:

- (a) look at competition from suppliers in the market; and
- (b) consider the prospects for entry into the provision of these services from general RIMS suppliers in and just outside the local catchment area, and also completely new entry.

7.11 In what follows, we have weighed up a range of quantitative and qualitative evidence. Our assessment is based on information provided by the Parties, customers and competitors. We received questionnaire responses from 103 customers, of whom 93 purchase outsourced RMS services and 48 purchase outsourced OSDP. We received responses from 36 competitors, of whom 33

are RMS providers and 24 are OSDP providers. We have taken into account any limitations in individual pieces of evidence, including noting small numbers of respondents in some cases. Below we set out the evidence and reasoning which supports our provisional findings.

Indicators of overall competition in RMS across the UK

Switching

- 7.12 We found that switching rates in RMS are low. Iron Mountain told us that in 2015 just [redacted]% of its RMS accounts were terminated. In consequence, there are many holdings of legacy deposits which have been in place for a very long time.
- 7.13 While this may in part be because customers are happy with the service, they value the relationship with an established partner, and/or the costs of RMS storage are sufficiently low that customers may perceive very limited benefits in shopping around, we also identified two barriers that impeded customer switching: slow rates of transfer; and perm-out fees.
- 7.14 It is normal practice for the rate at which boxes can be transferred between suppliers to be restricted by contractual terms in the event of the customer switching. We were told [redacted] boxes per day, corresponding to one small lorry, would be typical. The Parties told us this was because such movements could be accommodated by their facilities using the existing workforce, and would not necessitate recruitment of extra labour, either to despatch boxes or to receive and rack incoming boxes. [redacted] Nonetheless, large customers with very large numbers of boxes deposited told us that switching would be likely to take months or years. During this period, the customer would find itself multi-sourcing and could perceive a risk of being unable to immediately trace files it required. Customers told us that the cost and practical difficulties of moving can deter switching.
- 7.15 Perm-out fees are defined in paragraph 2.9. The charges apply even if the customer wishes to remove its boxes (either because they have switched supplier or because they are taking work in-house) at the end of a contract, and are in addition to the ordinary fees for retrieving these boxes, any transportation fees, and any charges for materials required for the move (pallets and shrink wrapping).

- 7.16 Estimates of the level of perm-out fees range from around [redacted]%¹¹⁶ to [redacted]% or more of the cost of a year's storage. Recall told us that perm-out fees for RMS vary across customers depending on 'pre-existing conditions, market pressure, the size of the contract or the specific needs of the customer'. Recall also said that [redacted] contracts will generally have higher perm-out fees (of up to £[redacted] per box) than those renegotiated or signed [redacted], where perm-out fees may be £[redacted] to £[redacted] per box, or in some cases eliminated entirely for customers with strong buyer power.
- 7.17 When contemplating whether to switch, and to which supplier, customers may look to alternative providers to contribute to the cost of perm-out fees or provide a payment-holiday to offset against switching costs. This can influence how suppliers compete for customers and their ability to cover such costs in the short term can also affect rivalry (in the long term we would expect the new contract to recover these costs, and often this will be secured by new perm-out terms). Given perm-out fees are charged per box, larger customers with larger volumes of boxes will face higher overall switching costs than smaller customers. We were told by competitors that this affects the ability and willingness of providers to help cover the cost of these customers switching.
- 7.18 The Parties told us that most customers do 'soft terminations, where they place new records with a new supplier but keep legacy business with the old supplier. They said in this way customers avoided having to pay perm-out fees. However, while Recall was able to provide us with [redacted] examples [redacted], we found no examples of such soft-switching among customers we contacted. Instead, customers told us they were keen to consolidate, not increase, their suppliers, both for procurement efficiencies and to simplify tracking of their records. Customers told us that they generally wished to avoid multi-sourcing, and where this occurred, this was usually the result of legacy contracts (such as holdings from companies that had been acquired, or where historically different departments had been allowed to make their own arrangements independently).
- 7.19 The Parties also told us that customers may switch without any requirement on their new suppliers to subsidise the perm-out fees, or customers may negotiate initial fee-holidays. They also suggested some RMS providers may have access to additional financial resources, if part of a larger group, which could help them bear the cost of paying perm-out fees to attract business.

¹¹⁶ Iron Mountain submitted that these fees are generally [redacted] times the agreed handling and transportation charge.

- 7.20 The Parties submitted that perm-out fees are not harmful to competition, and could facilitate entry (eg by reducing risk and anchoring in customers for a new entrant), and they said that in any case customers were increasingly negotiating reduced or waived perm-out fees for new contracts (but we found perm-out fees are widespread among current contracts). The Parties also told us these fees provide certainty to the providers and so allow them to offer low ongoing storage fees to customers.
- 7.21 We consider that these perm-out fees are likely to increase switching costs to customers, and might distort the process of competition for switching where it does occur, particularly if competitors are expected to contribute to the costs of these perm-out fees. Perm-out fees for RMS are well established internationally and we did not find that the conduct of the Parties or any other supplier was unusual in the context of established industry practices. Nonetheless, we are concerned about the restrictions they might impose on competition. We are not aware of another industry where customers are charged to stop taking a service above and beyond the cost of withdrawal and transport. No compelling explanation was offered by the Parties to justify these fees in terms of costs incurred, other than that it helped protect them against the risk of carrying unused capacity. However, we are not aware of any refunds having been offered if resulting capacity has subsequently been filled.

Shares of supply

- 7.22 The Parties submitted that there is a large number of suppliers present in RMS – Iron Mountain told us that there are at least 170 RMS providers.¹¹⁷ Our inquiry has confirmed that a large number of providers offer RMS, including pickup, indexing, storage and retrieval.
- 7.23 Our estimates of shares of overall UK supply for RMS are set out in Table 5. There is some uncertainty over total market size and therefore exact shares of supply. This is because there is a large number of smaller suppliers whose exact revenues we have not been able to confirm. Based on the average of providers' estimates, the total value of outsourced RMS may be in the region of £500 million (we received total market size estimates from suppliers ranging from £350 million to £550 million). Given this uncertainty, we have taken the conservative approach of only including those providers (more than 30, including the Parties, listed in Table 5) for whom we have confirmed

¹¹⁷ [Recall initial submission](#), paragraph 46; [Iron Mountain initial submission](#), paragraph 1.18.

revenue in our analysis of the market. We are not aware of large suppliers who have been omitted. Total supply by this measure is £303 million.

Table 5: Shares of confirmed UK supply for RMS

<i>Competitor</i>	<i>£m</i> <i>UK revenues</i> <i>RMS</i>	<i>%</i> <i>Share of confirmed</i> <i>RMS revenue</i>
Iron Mountain	[X]	[30–40]
Recall	[X]	[5–10]
<i>Combined</i>	[X]	[40–50]
Box-it	[X]	[X]
Capita	[X]	[X]
Crown	[X]	[X]
DeepStore	[X]	[X]
EDM	[X]	[X]
PHS	[X]	[X]
Restore	[X]	[X]
The Hill Company	[X]	[X]
TNT	[X]	[X]
21 other respondents that provided revenue figures	27.4	9.1
All respondents that provided revenues	302.7	100.0

Source: CMA calculations based on data from suppliers.

Note: Iron Mountain data for FY14 adjusted for the recent purchase of BJ Browns; Recall data for FY15; competitor data from questionnaire responses (approximate 2015 data requested); revenue figures are inclusive of the provision of RMS to oil and gas customers that require specialist services in the Aberdeen area.

7.24 As noted above, the CMA has taken a conservative approach to calculating shares of supply by only included those providers whose revenue we know about. This means that the shares in Table 5 overstate the actual shares of the Parties (as well as their competitors). Nevertheless, these shares are indicative of the relative size of the various providers, and it is notable that Iron Mountain is well over twice the size of its nearest competitor. The merger brings together the largest provider of RMS in the UK (Iron Mountain), with the 6th largest provider of RMS. There are four alternative RMS suppliers with a share larger than Recall: [X]. Three other suppliers, [X], have a share of over 2%, while a further two have a share of over 1.5%. We note, however, that the geographic coverage of each of these competitors varies, and we take this into account later in our assessment.

7.25 The Parties submitted that the CMA should not place undue weight on shares of supply, in part because of the lack of accurate data on the overall market sizes.¹¹⁸ Iron Mountain also submitted that it was one of the early pioneers in the industry, and that a good deal of its revenue is earned [X]. It argued that to the extent that shares are used as an indication of potential market power, continuing revenue streams from legacy business won long ago and ‘no longer up for competition’ are irrelevant.¹¹⁹

¹¹⁸ [Iron Mountain initial submission](#), paragraph 1.19.

¹¹⁹ [Iron Mountain initial submission](#), paragraph 1.19.

([REDACTED]%) than with others ([REDACTED]% use [REDACTED] and [REDACTED]).¹²³ The remainder multi-source their RIMS requirements across various other providers.

- 7.34 Recall did not have full data on multi-sourcing among its customers. However, its data indicates that for those customers that do multi-source, Iron Mountain is likely to be a strong competitor (see Appendix C, Table 3). Among a sample of Recall's [REDACTED] largest and smallest customers, [REDACTED] were believed to use more than one provider to meet their RMS requirements, of which [REDACTED]% were believed to multi-source with Iron Mountain.¹²⁴
- 7.35 Among customers that provided the CMA with information on their most recent occasion of tendering their business, considering a switch or carrying out a benchmarking exercise, and where one of the Parties was the winner, the other Party was more often the second-placed provider than any of the Parties' competitors. This was true in two of 18 Iron Mountain wins, and nine of 20 Recall wins, with other providers in second place much less often. [REDACTED] were the most frequently mentioned other providers.¹²⁵
- 7.36 However, many Iron Mountain and Recall customers had not recently tested the market, and this may have influenced the pattern of overall responses. We also note the multi-sourcing data does not distinguish whether this was used as a deliberate tactic or was a result of historical circumstance.

Internal documents

- 7.37 Some internal documents submitted by Iron Mountain suggest that it views Recall as a close competitor not only globally but also in the UK as a whole. In particular, they suggest the following:
- (a) In an internal document discussing the Parties' respective digital positions, an observation is also made regarding the Parties' relative offering in RMS: '[REDACTED]'.
 - (b) The same competitive analysis notes that [REDACTED], as is the case in the UK.
 - (c) We also note that Iron Mountain had in 2014 commissioned specific and detailed competitive research on Recall, although Iron Mountain told us that this was produced in preparation for the merger.

¹²³ See Appendix C, Table 1.

¹²⁴ See Appendix C, Table 2, for more details.

¹²⁵ See Appendix C, Table 4, for more details.

- 7.38 Recall's [REDACTED] suggests that [REDACTED]. However, the document also suggests that Recall [REDACTED].
- 7.39 [REDACTED] provided an internal document in which it considers the national coverage provided by Box-it, Crown, Iron Mountain, PHS, Recall, Restore, and Wincanton.¹²⁶ This document states that the following providers have national coverage: Box-it, Crown, Iron Mountain, PHS, Recall and Restore.¹²⁷

Conclusion on extent of competition between Iron Mountain and Recall

- 7.40 While some data is lacking, the above evidence suggests that Restore is a close competitor in the supply of RMS to Iron Mountain but Recall is also a reasonably strong competitor (in the top five and closer on some measures). There are also other suppliers that compete with Iron Mountain, including the providers that, along with the Parties, make up the 11 largest RMS providers in the UK: Box-it, Capita, Crown, DeepStore, EDM, The Hill Company, PHS, Restore, and TNT. Additionally, competition is also provided by other smaller suppliers. The analysis above is at a national level whereas for most customers, competition in local markets is relevant.

Evaluation of competition in local markets for RMS

Supplier characteristics and identification of a filter tool of effective competitors

- 7.41 As we have identified local markets for RMS, we need to assess the extent and nature of competition in local areas served by both Iron Mountain and Recall. We have focused on the competitors present within 50 miles of Recall facilities (we also looked at competition around Iron Mountain's sites, which overlapped with Recall facilities, but our analyses produced very similar results. For clarity we concentrate on presenting results for Recall's sites).
- 7.42 In order to simplify this process, rather than initially analyse all RMS suppliers in an area, we have instead adopted an approach of filtering areas ahead of undertaking a full assessment, on the basis of the presence or absence of identified competitors who we are satisfied are likely to be able to compete effectively with the Parties. The initial filter determines local areas where adequate competition is maintained post-merger by these suppliers. If the area does not pass this initial filter, we then examine local circumstances in more detail, including an assessment of all local suppliers. To be clear, we are not saying that other suppliers are inferior or cannot compete for business

¹²⁶ [REDACTED]

¹²⁷ The document notes that [REDACTED].

effectively, we are merely saying that they will have to be considered in the context of a detailed local assessment.

7.43 We note that customers' requirements for an RMS supplier, and the suppliers' abilities to meet these requirements vary. This section looks at the supplier characteristics that may be important for at least some customers, to help us identify whether suppliers are likely to meet the needs of the most demanding customers. Our full consideration is set out in Appendix D: Supplier characteristics.

7.44 The supplier characteristics that we consider that are likely to matter to at least some customers are:

- size and ability to take on large customers; and
- quality and reputation.

Size and ability to take on large customers

7.45 Our first concern is that small RMS providers may be unable to effectively compete for some large customers because:

- (a) they may have limited capacity and so will need to expand; and
- (b) if the supplier is required to cover some or all of a perm-out fee in order to encourage a prospective customer to switch to it, there is a question of whether it has the financial resources available to allow it to bear that cost.

7.46 In relation to size and ability to take on large customers, the following applies:

- (a) We have focused our assessment of providers on the largest 11 RMS providers (including the Parties) – these all have shares of around 1.5% or more and include all providers that were frequently mentioned by competitors in their responses to our questionnaires. We consider that being large may give a supplier more credibility in taking on large customers, and may facilitate easier access to funding to cover the costs of perm-out fees. There is unlikely to be a sharp size cut-off point at which providers are 'too small' to take on large customers, but it has not been necessary for our assessment (see paragraphs 7.40 and 7.53 to 7.56) to consider any additional providers in detail (other than in Aberdeen and Dundee).

- (b) We have heard that most of the largest 11 providers have moderate levels of spare capacity, and that in general they are able to expand to serve new customers (see paragraph 7.27).
- (c) We asked RIMS providers whether they pay perm-out fees to facilitate customer switching. We found many of the RMS providers are prepared to pay perm-out fees or to offset them against free storage, at least in some cases.
- (d) We asked the 11 largest RMS providers what large customers they supply. All reported that they serve at least some larger customers, be they financial customers, large legal firms, large accountancy firms or NHS Trusts.

7.47 Together, this evidence supports our provisional conclusion that at least the 11 largest RMS suppliers (that is ten post-merger) are capable of competing for and serving larger customers.

Quality and reputation

7.48 Our second concern is whether providers can provide sufficient quality of service to win the business of more demanding customers. We were told by many customers that aspects of service quality were very important, such as their customer service, processes and security. For example, several customers expressed concern over whether small local providers could offer a satisfactory degree of quality. The Parties disagreed, saying that in the main RMS are 'commodity' products that are very simple to provide, and so there is no significant segmentation of suppliers by quality.

7.49 We also considered whether customers may have a subjective view of the reputation of suppliers which will affect which ones are seen as viable competitors. This could apply if customers were very risk averse and wanted to ensure records were kept with suppliers who were highly regarded.

7.50 In relation to quality and reputation, we took the following steps:

- (a) We asked the largest 11 providers to tell us whether some or all of their sites met various requirements that had been used as selection criteria in recent customer tenders. Overall, the results do not show any readily apparent differentiation of these large and medium sized suppliers into a high quality and lower quality group.

(b) We asked both competitors and customers to rate a variety of RMS suppliers. Looking at the results for the 11 largest suppliers,¹²⁸ the differences in the assessments offered were not large. None emerged as markedly weaker than the Parties.

7.51 Although individual customers may vary in their views of individual competitors, and while the largest 11 RMS providers in the UK will vary in terms of reputation and quality, in the light of the evidence our provisional view is that all of the 11 will be able to compete effectively for most RMS customers.

7.52 Below we assess how the number of these particular suppliers varies across the areas of the UK in which the Parties overlap.

Local assessments and geographic coverage

7.53 We consider that at least the largest 11 UK RMS providers are likely, in any local area where they are present, to exert a sizable constraint on the Parties. This is based on:

(a) national indicators of competition; and

(b) information on these suppliers' characteristics.

7.54 Table 8 summarises the number of such competitors present pre- and post-merger and offering RMS (to non-oil and gas customers) in each area where the Parties overlap in the supply of RMS, based on 50-mile catchment areas around Recall's sites. It shows that in all areas other than Aberdeen and Dundee there will remain six or more providers that are each likely to meet the needs of most customers. Table 8 also lists all suppliers who have confirmed their involvement to us. There will also be additional local competitors who may be able to compete effectively to serve some or all customers.

¹²⁸ Set out in Table 2, Appendix D.

Table 8: Effects of the merger – RMS fascia counts around Recall’s RMS sites (based on the 11 largest providers)

<i>Recall site</i>	<i>Top 11 providers</i>	<i>All confirmed providers</i>
Scotland (Aberdeen)	3 to 2	5 to 4
Scotland (Dundee)	3 to 2	5 to 4
Scotland (Dundee)	3 to 2	5 to 4
North West (Heywood)	8 to 7	9 to 8
North West (Warrington)	8 to 7	10 to 9
West Midlands (Birmingham)	8 to 7	11 to 10
West Midlands (Rugby)	8 to 7	13 to 12
East Midlands (Northampton)	7 to 6	11 to 10
East of England (Hoddesdon)	8 to 7	15 to 14
London (Kidbrooke)	10 to 9	18 to 17
London (Stockwell)	10 to 9	19 to 18
London (Bloomsbury)	10 to 9	19 to 18

Source: CMA analysis of postcode data provided by the Parties and competitors.

7.55 These results indicate that in all local areas except Aberdeen and Dundee, there are a considerable number of competitors, including at least five rivals to the merged entity drawn from the largest 11 competitors, or at least seven confirmed RMS providers of all types.

7.56 Given these results, we focus our attention on Aberdeen and Dundee where the number of existing competitors is much lower.

RMS in Aberdeen and Dundee

7.57 As described above, in the areas in which the Parties overlap, Aberdeen and Dundee are the two geographies with fewest large RMS competitors.

7.58 Recall told us that it serves [X] customers from either its Aberdeen or Dundee sites that do not store core geological samples (ie non-oil and gas customers); Iron Mountain told us that it serves [X] such customers requiring retrieval or delivery to an Aberdeen or Dundee location. Three such Recall customers and nine Iron Mountain customers responded to our questionnaire. These were primarily customers that require service in Aberdeen or Dundee as well as in other parts of the UK.

7.59 Three of these customers raised concerns, one of which was worried about a reduction in the number of global suppliers, one that was worried about a reduction in the number of supplier with sites across the UK, and another that was concerned in general that there has been too much consolidation in the industry and that this would harm quality of service.

7.60 Below, we consider the competitive constraints that exist in general RMS in Aberdeen and Dundee. Services to oil and gas customers in the Aberdeen area are discussed in paragraphs 7.202 to 7.241.

Aberdeen

7.61 Table 9 shows information for non-oil and gas customers about the providers that the Parties told us are active within 50 miles of Recall's site in Aberdeen. We also consider any potential constraint posed by additional competitors outside this area up to 100 miles distant (ie Storage 4 U Records Storage (S4U) in Dundee). The nearest provider outside this area is Crown, around 130 miles away.

Table 9: Providers in the Aberdeen area

<i>Provider</i>	<i>Distance from Recall to nearest site, miles</i>	<i>Sites within 50 miles</i>	<i>RMS capacity within 50 miles, M³</i>
Recall		1	[REDACTED]
Iron Mountain	0	4	[REDACTED]
Box-it	36	1	[REDACTED]
CGG*	16	1	[REDACTED]
United Supplies	1	1	[REDACTED]
Shore Porters*	1	1	[REDACTED]
KRC International	38	1	[REDACTED]
S4U	65	0	[REDACTED]

Source: The Parties, Competitor responses to CMA questionnaires

*These providers were not included in the fascia count analysis set out in the earlier section, for reasons explained below.

†With room for significant expansion.

‡Oil and gas customers only.

§'Around 10 archive containers' alongside a removals business.

7.62 The Box-it site opened in late 2014, and at present it has [REDACTED] in the Aberdeen area, although it considers that it has room and ability to expand.

7.63 CGG is a specialist provider to the oil and gas industry, and we have been told that it is a credible provider of RMS (alongside or without core storage) to customers in that industry. However, CGG does not serve non-oil and gas customers, and has no plans to do so, since its RIMS offer to oil and gas customers is itself a supplementary service to a range of other geoscience services.

7.64 United Supplies is an RMS provider with one facility in Aberdeen, close to those of the Parties. United Supplies has [REDACTED]. United Supplies said it [REDACTED], and although United Supplies offers pick-up and retrieval of boxes, it does not offer indexing,¹²⁹ a service which Iron Mountain told the CMA is part of a 'full-service' RMS offer.

¹²⁹ United Supplies.

- 7.65 Shore Porters is also located close to the Parties. However, although its website includes some text relating to storage of paper archives,¹³⁰ Shore Porters told us that its focus is on removals [X].
- 7.66 Similarly, KRC International (38 miles from the Parties' central Aberdeen sites) advertises its RMS offer on its website.¹³¹ KRC International has not confirmed the scale of its RMS offering to us and its website provides no indication of this. Therefore, while we have included KRC International in our fascia count, it appears to be a small provider.
- 7.67 We have considered what constraint may be provided by S4U, which is based 65 miles away from the Parties (outside the local catchment for Aberdeen). This provider [X]. S4U considers itself as a strong competitor for customers local to its site including those (such as the NHS) requiring urgent retrieval, and that it competes strongly for public sector contracts alongside Recall and Iron Mountain. However, S4U told the CMA, as did many other respondents to our enquiry, that in RMS it competes strongly in a catchment area of only 50 miles, which does not include the Aberdeen area.
- 7.68 Finally, we assessed the possibility of the Parties being constrained, in the supply of general RMS in Aberdeen, by expansion of existing providers, or new entry or expansion from other parts of the UK.
- 7.69 We note that Box-it is a recent entrant positioned between Aberdeen and Dundee. The relevant Box-it franchisee saw opportunities to expand because it believed the Aberdeen market was dominated by Iron Mountain. We consider that it is likely to provide a plausible alternative for many customers.
- 7.70 We did not find any providers present elsewhere in the UK that have intentions to expand into Aberdeen. For example, Crown told us that it previously had a facility close to Aberdeen but had exited the market because it was not cost effective for it to remain. Crown told us that the Aberdeen area is not a market that it has been targeting over the last few years.
- 7.71 We also note that Aberdeen is geographically distant from other major centres of population and has high property costs. This means that high fixed property costs, and transport time and costs reduces its attractiveness as an 'overflow' location that could initially accommodate boxes from other sites for a multiple-site operator.

¹³⁰ 'Shore Porters offers archive document storage... renting out individual, shelved archive rooms in Aberdeen. Offices with little storage space for essential archive documents find this an ideal and cost-effective solution'. See [Shore Porters](#) website.

¹³¹ 'Our simple and secure document storage service offers you a reliable cost effective solution for storing paperwork offsite'. See [KRC International](#) website.

7.72 Moreover, much of the Aberdeen economy is based, directly or indirectly, on the oil and gas industry. At the moment, because of the low prices for oil and gas, demand is likely to be low, even for non-specialist oil and gas customers, making entry less attractive.

7.73 In light of the above, we provisionally conclude that in the Aberdeen area the Parties face limited constraints and the merger is likely to result in a substantial lessening of competition in respect of general (non-oil and gas) RMS services, due to a reduction in the number of significant competitors from three (the Parties and Box-it) to two. We note there are two other smaller competitors (United Supplies and KRC International) also in the area.

Dundee

7.74 In the Dundee area, as in the Aberdeen area, there are currently only three RMS providers among the largest 11 in the UK: Iron Mountain, Recall and Box-it.

7.75 Table 10 shows information about the providers that the Parties told us are active within 50 miles, and also within 100 miles, of Recall's sites in Dundee. Their locations are shown in Figure 3.

Table 10: Providers in and beyond the Dundee area

<i>Provider</i>	<i>Distance from Recall to nearest site (mi)</i>	<i>Sites within 50 miles</i>	<i>RMS capacity within 50 miles, M³</i>
Recall		2	[X]
Iron Mountain	46	1	[X]
Box-it	35	1	[X]
S4U	4	1	[X]
KRC International	38	1	[X]
Capture All	56	0	[X]
Crown	62	0	[X]
Restore	63	0	[X]
The Hill Company	64	0	[X]
United Supplies	66	0	[X]
Shore Porters	67	0	[X]
PHS	87	0	[X]

Source: Competitor responses to CMA questionnaires.

7.76 Box-it and Iron Mountain are the only larger RMS providers within 50 miles of Recall's Dundee sites, and the Parties have a very large share of capacity in the area. Iron Mountain's site, in Inverkeithing, is 46 miles from Recall's.

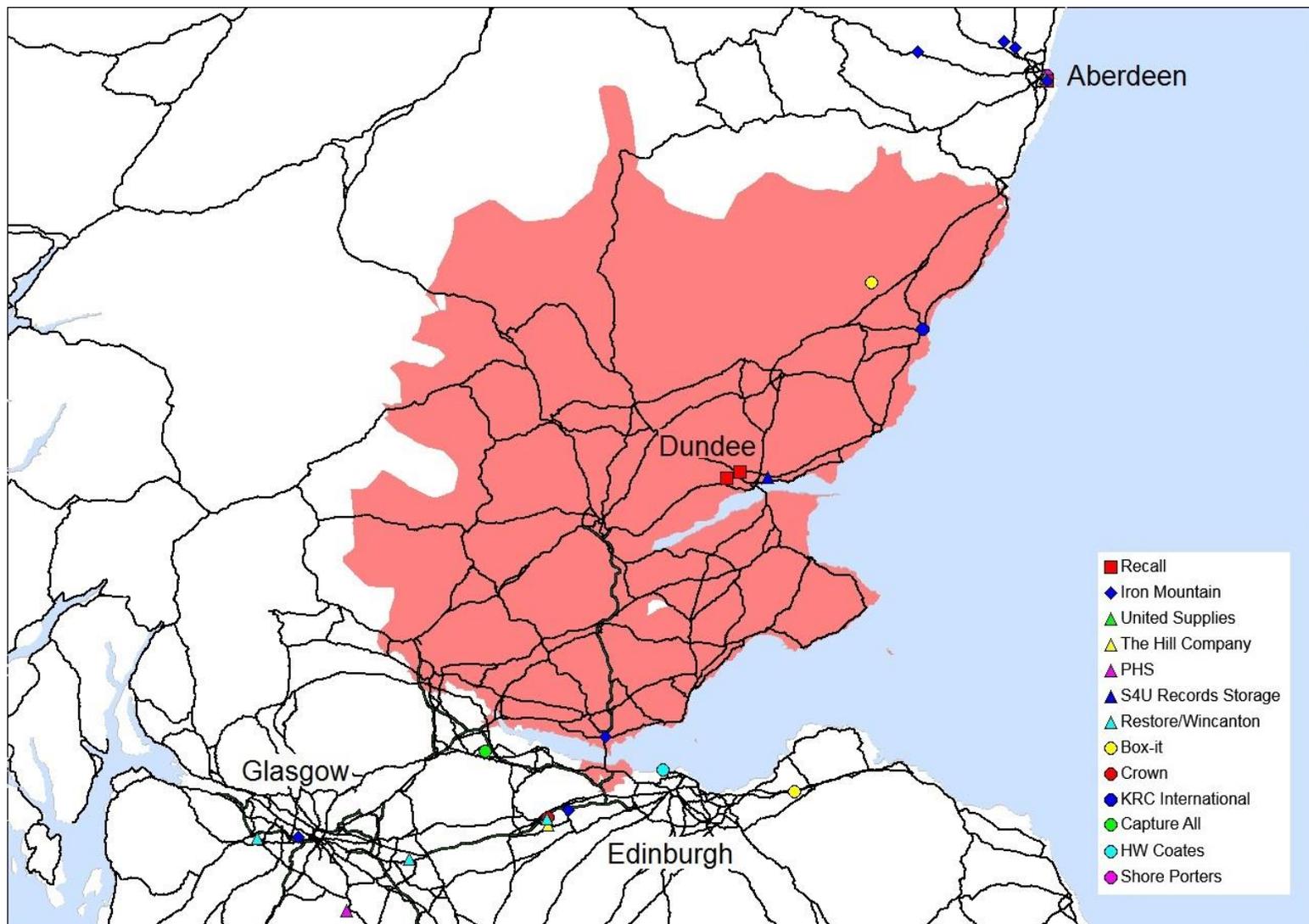
7.77 S4U is nearby to the Recall site. As set out in paragraph 7.67, S4U considers itself as a strong competitor for customers local to its site alongside Recall and Iron Mountain, although it has won no customers from either in the past year.

7.78 KRC International, a small RMS provider, is also based within the catchment area.

- 7.79 Just outside of the 50 mile catchment area lies Capture All, a small RMS and digitisation provider. However, Capture All told the CMA that ‘in our 14 years of business we have encountered Iron Mountain on only a couple of occasions; we have never come across Recall.’ This suggests that any constraint provided by Capture All is minor. We have also discounted any constraint from Shore Porters in Aberdeen.
- 7.80 Crown, Restore, and The Hill Company have sites close to Edinburgh, 60 to 70 miles away from Recall’s Dundee sites and relatively close to Iron Mountain’s Inverkeithing site. PHS has a site around 90 miles from Dundee, near Glasgow. We have considered the extent to which:
- (a) Iron Mountain uses its Inverkeithing site and Recall its Dundee site to currently compete for the same types of customers; and
 - (b) Iron Mountain (and Recall) is likely to be constrained by providers in the Edinburgh area.
- 7.81 Recall told us that it believes that [REDACTED].
- 7.82 Iron Mountain analysed the delivery postcodes of customers that retrieved RMS boxes from its Inverkeithing warehouse during 2015.¹³² From this is estimated that approximately [REDACTED]% of relevant customers required retrievals to a site located within 50 miles of Dundee. This suggests that Iron Mountain at this site is competing to a considerable degree for customers who could also be served by Recall in Dundee. As pricing and terms are individually negotiated, it is unlikely that Iron Mountain’s negotiations with some of these customers will be substantially constrained by the competitors it faces based in Edinburgh or further south if these are too distant from those customers.

¹³² Iron Mountain submitted that to the best of its knowledge, analysis based on customers who required retrievals can be considered representative of the typical location of customers whose volumes are stored in Iron Mountain’s Inverkeithing warehouse.

Figure 3: Providers within 100 miles of Recall's Dundee sites



Source: CMA analysis of postcodes provided by the Parties and competitors.
Note: The area marked in red shows the 50 mile catchment area around Recall's Dundee sites.

- 7.83 We also received no evidence that providers are currently planning to expand into the Dundee area.
- 7.84 On the basis of the information available, it appears that customers in the Dundee area would face a reduction as a result of the merger in the number of significant suppliers from four (the Parties, Box-it and S4U) to three. There is also one smaller competitor (KRC International) in the area. We provisionally conclude that the merger is likely to result in a substantial lessening of competition in respect of general (non-oil and gas) RMS services in the Dundee area.

Multi-site coverage

- 7.85 We note that some customers may have a preference for a provider with a widespread network. Some RMS customers will have multiple sites from which they require delivery and retrieval services. Where these sites are located across a wide geographic range, customers can service their requirements either by using multiple providers across areas or by using a single provider with sufficiently broad geographic coverage.
- 7.86 While many customers currently multi-source, many respondents to our enquiries told us that they multi-source for legacy reasons and would prefer not to do so. Very few told us that they did so in order to achieve geographic coverage.¹³³ Competitors largely confirmed that customers are unlikely to do so. We have therefore assessed the effect of the merger on competition for multi-site customers that have a preference to single-source their RMS requirements across all sites.
- 7.87 Currently, Iron Mountain has broad geographic coverage across England including sites in London, Bristol, the South East, the East of England, the West Midlands, the North West, the North East and Yorkshire and the Humber. Crown, Box-it, Restore and PHS are able to offer a similar breadth of geographic coverage, with over 73% of Iron Mountain's sites being located within 50 miles of one of each of these four rivals' sites.¹³⁴ On this basis, such providers have similar or better geographic coverage than Recall (72% of Iron Mountain's sites being located within 50 miles of one of Recall's sites).
- 7.88 Considering Recall's 12 RMS sites, with the exception of the C21 Aberdeen and Dundee sites, there are at least six other providers, among the 11 largest, present within 50 miles of each site. Of these, Restore and Crown are all

¹³³ Of the 26 multi-sourcing customers that require services to more than one site and provided their reasons for multi-sourcing, only two said that they did so in order to obtain the required geographic coverage.

¹³⁴ See Appendix E. Additionally, around half of Iron Mountain's sites are located within 50 miles of TNT sites.

present in all of the nine local areas within 50 miles of Recall's sites outside of Aberdeen and Dundee. PHS and Box-it are additionally present in eight of the areas. These providers all have a more extensive geographic RMS network than Recall and are likely to be able to provide similar services to customers who currently choose Recall, at least in England.¹³⁵ In the Aberdeen and Dundee areas, the only other large multi-site supplier present is Box-it.

Entry and expansion in RMS in areas other than Aberdeen and Dundee

7.89 We now consider whether new entry into the provision of RMS, or expansion by existing RMS suppliers, following the merger, would be expected to effectively restore competition and so prevent any potential SLC. The CMA's Merger Assessment Guidelines state:¹³⁶

In assessing whether entry or expansion might prevent an SLC, the [CMA] will consider whether such entry or expansion would be: (a) timely; (b) likely; and (c) sufficient.

7.90 The Parties told us that entry and expansion in RMS would satisfy all these conditions.

7.91 Iron Mountain said that the provision of RIMS requires very basic warehouse space, standard computer systems with barcode readers, shelves and forklifts, and trucks or vans.¹³⁷ It said that all of these assets can be acquired very quickly, at very low cost. It believed that operations can be commenced in a basic facility outside London in roughly six months, with an investment of around £350,000. It said that once a RIMS provider has raw warehouse space, it can add shelving in a few months and at very little cost, after the supplier has won a procurement and contracted to provide the services that will cover the cost of the additional shelves. It said such management of racking installation makes it extremely easy for RIMS providers to minimize what are already low capital investments, which need be made only when new business is assured.

7.92 Iron Mountain said substantial business opportunities exist for new and expanding suppliers, particularly since roughly two-thirds of all records management in the UK is still performed in-house.¹³⁸ Recall said that entry by new competitors and expansion by existing competitors is likely to occur very

¹³⁵ For detail on which suppliers are present in each area, see Appendix E.

¹³⁶ CMA [Merger Assessment Guidelines](#), paragraph 5.8.3.

¹³⁷ [Iron Mountain initial submission](#), paragraphs 1.34–1.35.

¹³⁸ [Iron Mountain initial submission](#), paragraph 1.36.

frequently.¹³⁹ It said that competitors can (and frequently do) expand into the provision of RIMS from adjacent services.¹⁴⁰

- 7.93 Recall told us that perm-out fees do not limit the customer's switching possibility nor the entry or expansion of rivals.¹⁴¹ Recall told us that some customers are ready to pay perm-out fees to switch vendors, in particular when they are not satisfied with the services provided. It also said competitors to the incumbent supplier increasingly incentivise customers to move existing archives by paying their perm-out fees, although this increases costs to these competitors. It said some customers are increasingly exercising their buying power to eliminate perm-out fees from their RMS contracts. However, we saw only occasional examples of this, and perm-out fees remain a common feature of the industry.
- 7.94 However, some competitors disagreed that entry and expansion was likely to occur. Crown told us it was seeing fewer and fewer competitors and not seeing new companies coming into the business. It said developing new sites or new entry is difficult because the critical rate of capacity utilisation is high.¹⁴² Crown said that a major new customer would have to be won to justify a new site.
- 7.95 [X] said that RMS takes a huge amount of investment. [X] told us that it is very expensive to expand for a small or medium-sized business. [X] told us that storage rates combined with excessive incumbent supplier perm-out fees are making it increasingly difficult to make large investments in new facilities. [X] said for small private companies to expand and to compete in this market it is prohibitively expensive, and virtually impossible to finance.
- 7.96 Appendix F sets out evidence and an assessment of barriers to entry and expansion in the supply of RMS.
- 7.97 Some suppliers, [X], told us that for them expansion was reasonably easy. In addition to this there were numerous examples of competitors who had recently expanded or had plans to expand. [X] had all recently expanded or had plans to expand (see Appendix F).
- 7.98 We found from our investigations and competitor views, that in relation to physical infrastructure the Parties' accounts of the resources required and costs of entry in paragraph 7.91 were generally supported. We consider that

¹³⁹ [Recall initial submission](#), paragraph 60.

¹⁴⁰ [Recall initial submission](#), paragraph 53.

¹⁴¹ [Recall initial submission](#), paragraph 50.

¹⁴² Similarly, Recall told us the industry is characterised by high fixed costs, and it explained that their underlying margin is heavily impacted by the level of capacity that is being utilised.

the assets, infrastructure and technical expertise required to provide a full RIMS service are readily available, eg warehouse and racking, computer and barcode tracking systems, vans etc. Nor is staff availability likely to be a significant problem.

- 7.99 Estimates from third parties of the time to develop a new site varied from six months and two and a half years depending on the size of project and whether it requires building on a greenfield site.¹⁴³ One supplier, [REDACTED], gave estimates for a new facility ranging from £150,000 to £500,000. However, another, [REDACTED], told us that its total costs from recent investments ranged from £2–£4.75 million.
- 7.100 However, we did find a likely barrier arising from barriers to switching and the need to recruit substantial numbers of customers in order to cover the fixed costs of a facility, notably the costs of a lease on a warehouse, and potentially other costs such as IT/barcoding systems, staff recruitment (eg management and sales staff) and so on. Some costs are likely to be variable, for example warehouse staff, leasing vans, and fitting the warehouse out with racking. However, a significant proportion of costs are fixed and we heard the key to profitable operation of a facility is to ensure high levels of capacity utilisation.¹⁴⁴
- 7.101 Levels of customer switching in RMS are low. This is in part because of perm-out fees (see paragraph 7.21), which deter the customer from switching, or may necessitate competitors offering to pay or offset some or all of these fees. This makes gaining customers from competitors very difficult even where lower charges are being offered; it imposes an up-front cost or defers revenue and so reduces the attractiveness of entry even if an entrant has the financial resources to contribute to perm-out fees in the short term. Additionally, switching is deterred by the length of time taken to complete this process.¹⁴⁵
- 7.102 The Parties told us that new entrants could additionally compete either for new customers moving away from in-house provision, or for customers that undertake ‘soft-termination’.¹⁴⁶ However, less than [REDACTED] of Recall’s and Iron Mountain’s growth is from new customers,¹⁴⁷ suggesting new customers are not entering the market in large numbers and providing a ready means of supporting entry, and evidence from customers shows they do very little

¹⁴³ See Appendix F, paragraphs 13 to 25.

¹⁴⁴ [REDACTED] the Parties have a total capacity utilisation level of [REDACTED]. See paragraph 7.27.

¹⁴⁵ See paragraphs 7.12 to 7.20.

¹⁴⁶ For example, [Iron Mountain initial submission](#), footnote 36; [Recall initial submission](#), paragraph 57.

¹⁴⁷ See Appendix F, paragraph 29.

deliberate switching through soft-termination as they generally wish to avoid multi-sourcing.¹⁴⁸

- 7.103 Given these factors the attractiveness of entry will be diminished. Moreover a new entrant will not benefit from an established reputation (see paragraphs 7.48 to 7.49), nor can they serve customers who require service in a variety of regions and so require multi-site provision (see paragraphs 7.85 to 7.88).
- 7.104 We also note that prices for storage have been declining,¹⁴⁹ making entry less attractive, and meaning a new entrant will achieve lower average prices than competitors with legacy business.
- 7.105 Expansion into a new location by an existing RMS supplier could be somewhat easier than completely new entry, as the supplier could already benefit from a reputation for quality, and may be better placed to compete for customers with multi-site requirements. Moreover, multi-site suppliers can optimise box allocation between sites where levels of box recall are expected to be low. This means free space to serve new customers may be created in existing facilities by transferring rarely touched holdings to the new site.
- 7.106 The Parties provided three examples of recent new entry:¹⁵⁰ The [X]. We were told by suppliers of some additional examples of entry, including [X], and [X].
- 7.107 However, much of the expansion we see is undertaken through acquisition of existing small providers. Therefore, this does not increase the number of competitors, and suggests that acquiring an existing customer base is seen as a much lower risk method of entry than building a new facility from scratch.

Conclusion on entry and expansion in RMS in areas outside Aberdeen and Dundee

- 7.108 We provisionally conclude that while entry and expansion are possible, there are barriers to entry arising from the limited opportunities to attract customers to switch and the costs involved in helping those customers overcome switching costs, particularly perm-out fees. We also note there are currently declining charges for storage, reducing the attractiveness of the industry. While we have seen examples of investments in new facilities by established providers, this is usually based on securing a major customer in advance, and so it is very uncertain that the threat of entry and expansion will be a generally

¹⁴⁸ See paragraph 6.46.

¹⁴⁹ See Appendix F, paragraphs 32–34..

¹⁵⁰ [Iron Mountain initial submission](#), paragraph 1.37.

applicable constraint. This explains why expansion is usually through acquisition of existing suppliers, in order to secure an existing customer base.¹⁵¹ However, entry through acquisition does not itself increase the number of competitors. It may change their competitive tactics and resources but this depends on specific circumstances, and so could increase their competitive strength or improve their capability in competing for a broader range of customers such as multi-site customers.

7.109 The most likely form of entry, and expansion will be expansion into a new location by an existing RMS supplier, due to having an established reputation and customers, and it will be adding to its geographic coverage. However, it would still need to overcome the barriers to switching.

Overall conclusions on RMS

7.110 On the basis of evidence on UK-wide indicators of competition and of provider characteristics, we consider that following the merger, in all areas of the UK except Aberdeen and Dundee there will exist sufficient RMS providers that can meet the needs of all customer types, including large customers with demanding requirements in respect of quality, reputation and geographic coverage, and customers with subsets of those demands. Within 50 miles of nine of Recall's sites, there are at least five providers within the largest 11 competitors to the Parties. In all cases this includes Crown and Restore plus other providers with moderate or strong geographic coverage that would be able to meet the needs of customers with multiple UK sites. We also consider that some additional constraint is provided by smaller competitors that are in aggregate strongly represented in Iron Mountain's customer losses data,¹⁵² in some cases were also highlighted and rated moderately by their competitors,¹⁵³ and in a small number of cases have firm intentions to expand.¹⁵⁴ Including all confirmed providers, there are seven or more in each of the nine areas.

7.111 We therefore provisionally conclude that no SLC is likely to arise in respect of RMS in areas outside of Aberdeen and Dundee.

7.112 However, in respect of Aberdeen and Dundee we find that the Parties face limited constraints in respect of RMS supply.

7.113 We provisionally conclude that in the Aberdeen area the merger is likely to result in a substantial lessening of competition in respect of general (non-oil

¹⁵¹ [REDACTED]

¹⁵² See Appendix C, Tables 1 & 2.

¹⁵³ See Appendix D, Table 3.

¹⁵⁴ See Appendix F.

and gas) RMS services, due to a reduction in the number of significant competitors from three (the Parties and Box-it) to two. The Dundee area would face a reduction as a result of the merger in the number of significant suppliers from four (the Parties, Box-it and S4U) to three, and so we provisionally conclude that the merger may be expected to result in a substantial lessening of competition in respect of general (non-oil and gas) RMS services in the Dundee area.

- 7.114 Because of the reduction in competitive options available to customers, as a consequence of the merger, suppliers will face less risk of losing customers to competitors. Therefore we expect that individually negotiated prices for storage fees and service fees will increase. Similarly, suppliers may in consequence reduce the level and quality of service offered and/or investment and innovation will be deterred.

Countervailing buyer power

- 7.115 We considered whether countervailing buyer power could offset any loss of competition.

- 7.116 We were offered no evidence of countervailing buyer power other than reference to a customer's normal ability to exercise choice between alternative suppliers or to withdraw itself from the market (for example by taking its storage requirements in-house). As noted in our consideration of market definition, while customers might consider using different records keeping methods and technologies (such as digitising records and storing electronically), the costs of such changes are very significant and decisions on appropriate methods are unlikely to be driven by small changes in relative costs. None of the customers we spoke to said that they would be able and willing to bring their storage requirements for RMS back in-house. The reasons for this were lack of space or internal capability. Customers did not indicate that they perceived any other kind of countervailing buyer power; their negotiating positions were restricted to the normal choice of suppliers, affected by the ease with which they could switch, and the volume of storage they were negotiating for.

RMS for customers with international requirements

- 7.117 In the following section we consider the effect of the merger on competition for customers with international RMS requirements. Some customers told us that they sought to purchase RMS services in multiple countries through a single contract, or through an enabling framework agreement with national pricing and terms subsequently negotiated, allowing the national operator to potentially source from other local providers. We were told such contracts

may be important to international customers as they believe they can negotiate better terms because of their international scale, or because it greatly simplifies procurement and management of the relationships.

- 7.118 Our concern is therefore whether a reduction in the number of competitors able to serve customers in multiple countries could reduce competition for customers who require or prefer international contracts. However, we note the CMA's consideration of an SLC extends to any market or markets in the United Kingdom for goods or services (see paragraph 1.2(b)) and that the international merger is proceeding, meaning the number of international suppliers will reduce.
- 7.119 The Parties currently have [REDACTED] UK customers that have international contracts or global framework agreements (ie agreements establishing the terms under which other agreements will be entered into) in place for the supply of external RIMS. Such customers represent around £[REDACTED] of UK RIMS revenues, of which approximately [REDACTED]% is accounted for by RMS.
- 7.120 The Parties also have customers that hold separate and independent contracts with Recall or Iron Mountain in the UK and their respective entities in other countries. Of a sample of [REDACTED] Recall UK RIMS customers, approximately [REDACTED]% have independent contracts with Recall entities outside of the UK. This includes large international companies such as [REDACTED].
- 7.121 Iron Mountain's international operations are outlined in paragraph 3.3, and Recall's in paragraph 3.14.
- 7.122 We note that a comparison of the international coverage of each of the three providers suggests that while considerable overlaps in geography exist, none of the providers is able to offer complete global coverage (and indeed one of the stated rationales for the merger of the Parties is to achieve broader international coverage).¹⁵⁵
- 7.123 We were told that Crown is the only other RMS provider present in the UK with significant international coverage.¹⁵⁶
- 7.124 The number of RMS providers with the ability to offer RMS to customers across multiple national geographies (including the UK) will therefore be reduced from three to two post-merger. We have therefore considered whether the transaction might give rise to a lessening of competition for UK

¹⁵⁵ For example Iron Mountain does not have a strong presence in East and South East Asia; only Crown has a presence in Africa.

¹⁵⁶ [REDACTED]

customers with international RMS requirements. This might arise if global competition determines the terms offered, because:

- (a) customers with international RMS requirements use global competition (between Crown, Recall and Iron Mountain) as a means to improve their UK bargaining power and achieve better terms than would be offered on the basis of UK-only competition (by Crown, Recall, Iron Mountain or other UK providers); or
- (b) customers with international RMS requirements only consider those providers with a global presence (for example because they wish to achieve procurement cost savings) such that the wider set of competitors in the UK (including those without international coverage) does not exert a competitive constraint (ie there is global competition instead of UK competition).

7.125 We therefore consider, in the sections that follow, the impact of the merger on global customers' bargaining power in the UK and the existence of any additional costs (or foregone benefits) to customers from carrying out UK-specific procurement and contracting.

The effect of global competition on the terms offered

7.126 We have examined the extent to which competition between RMS providers with global coverage would provide a customer with global requirements with better price or service quality terms in the UK relative to those which would be achieved as a result of competition between solely UK-based providers.

7.127 This could be the case if the potential global volumes obtainable from a customer with international requirements could incentivise the Parties to offer lower price terms to it in the UK than would be commercially feasible for the customers' UK RMS requirements only.

7.128 One UK customer with international RMS requirements told us that it had previously used a global framework agreement with one of the Parties as an outside option to negotiate quality improvements [REDACTED].¹⁵⁷

7.129 Similarly, another customer told us that it had used its global volumes to secure a global agreement which offered improved commercial terms and the opportunity for continued, incremental service improvement.¹⁵⁸

¹⁵⁷ [REDACTED]

¹⁵⁸ [REDACTED]

- 7.130 Both of the Parties told us that the prices for a given customer in each country are determined by local costs and competitive environments and that the global value of the customer did not influence pricing for each country. Iron Mountain told us that it was not aware of any instance in which UK prices have been influenced by a customer's global storage volumes, and that the number of countries included under a framework agreement were irrelevant to the price terms offered for the provision of RIMS in the UK. The Parties also told us that there were no economies of scale or scope in the provision of international RIMS which could be passed on to customers with global RMS requirements.
- 7.131 The Parties also submitted simple comparisons of unit storage prices which show [REDACTED]. However, no other factors¹⁵⁹ except storage volumes were controlled for in the comparisons, limiting the weight we are able to place on such analysis.
- 7.132 We examined the nature of the global contracts or framework agreements held by the Parties.
- 7.133 Recall provided a copy of one [REDACTED] contract, which only specifies [REDACTED] terms of service. Recall has told us that [REDACTED] terms are determined on a [REDACTED]. It also supplied us with a copy of a [REDACTED] framework agreement it has with [REDACTED] that has RMS requirements in the UK but [REDACTED] not currently supplied by Recall. We note that this document does specify [REDACTED].
- 7.134 Iron Mountain told us that some of its international contracts cover service standards only, while some include a provisional schedule of prices for each country covered under the agreement. Such provisional prices would still be subject to negotiation as and when each national level service agreement was finalised.
- 7.135 This evidence suggests that global customers are not benefiting substantially (relative to national contracting) in the UK terms they receive as a result of the scale of their international volumes or international bargaining.
- 7.136 We therefore considered whether for international customers the set of credible options is limited only to global providers or if national providers are also credible for those customers. While an international customer may prefer to limit its options to global providers, if the *threat* of separate contracting in the UK with UK-only (as well as global providers) is credible, the customer is

¹⁵⁹ Such as type of storage (ie open-file versus box), level of perm-out fees, length of contract, age of contract etc.

likely to retain strong bargaining power even with a reduction in the number of global providers present in the UK.

7.137 We note that some customers have expressed a preference to have a global service provider for their RMS requirements,¹⁶⁰ for example due to contracting costs. This could reduce the credibility of their outside options from national suppliers. The extent to which this occurs will depend on the strength of the customer's preference (driven by the size of, for example, the contracting efficiency), and how well known this preference is to the parties.

7.138 In relation to the possible efficiencies from global contracting, we note the following:

(a) Recall has told us that the primary benefit of global contracts to customers is a single point of contact between the customer and Recall. Customers may therefore derive some efficiencies in the internal management of their RIMS contracts.

(b) [REDACTED]¹⁶¹ [REDACTED]

7.139 The size of such efficiencies is not clear. However, Iron Mountain has told us that all of its UK customers with global agreements also separately contract with suppliers in at least one of the countries covered by the agreements. [REDACTED]

7.140 This evidence of widespread use of global multi-sourcing might indicate that, pre-merger, any efficiencies derived from single-sourcing are already outweighed by the improved price and quality terms that can be achieved from national procurement.

7.141 In relation to the credibility of the threat of international customers using national providers, we note that we have seen multiple examples of customers with multi-national RMS requirements using UK-only suppliers such as Restore, PHS, TNT, and Box-it.¹⁶² This suggests that customers are willing to forego the benefits of using a single global provider and that UK-only providers are therefore a credible constraint on the UK terms offered by providers that can offer a global service.

7.142 We therefore consider that the extent of bargaining power that a global customer has in respect of its UK RMS requirements (and thus the effect of the merger on this customer) will depend largely on the credibility of its other

¹⁶⁰ [REDACTED]

¹⁶¹ [REDACTED]

¹⁶² [REDACTED]

options in the UK (regardless of whether UK RMS requirements are tendered under a global contract).

Conclusions

- 7.143 We have not found any strong evidence to suggest that the existence of providers with global coverage gives customers with international RMS requirements increased bargaining power with respect to their purchase of UK RMS (above and beyond that which would be obtained by competition between all UK RMS providers). Some customers held significant concerns and we recognise the ability to globally single-source RMS provision may provide such customers with internal procurement and management efficiencies. However, there are many examples of customers choosing to forego these in order to contract with a UK-only provider of RMS.
- 7.144 Moreover, we note that the merger is proceeding internationally and so a reduction in international options is unavoidable (see paragraph 4.3).
- 7.145 We therefore consider that the effect of the merger on competition for the UK provision of RMS to customers with international requirements will be determined by the effect of the merger on competition for the provision of UK RMS in general.

OSDP

- 7.146 We now consider the competitive effects of the merger in relation to the provision of OSDP.
- 7.147 Recall offers OSDP services from five of its facilities: Aberdeen, Birmingham, Hoddesdon, Bloomsbury (Ike) and Heywood. All these sites overlap with Iron Mountain facilities within 50 miles.
- 7.148 Recall and Iron Mountain told us that they offer OSDP [REDACTED].¹⁶³ Recall submitted that as and when it needs to install new OSDP vaults at any facility to meet demand, it can easily do so.

OSDP Indicators of overall competition and supplier characteristics

- 7.149 As noted at paragraph 2.17, there were substantial differences in estimates of the value of OSDP provision in the UK. The Parties submitted that at least [REDACTED] suppliers offer OSDP in the UK. Iron Mountain also told us that there are

¹⁶³ For example, Recall said '[REDACTED]'.

ITC companies, particularly those that offer business process outsourcing, that compete for OSDP provision.¹⁶⁴

7.150 Iron Mountain suggested the true number of OSDP suppliers could be even higher than those it had identified, as some providers may operate on a small scale or offer low-technology solutions for OSDP storage. It told us of the example of File Express Ltd, a Chichester-based company, which it had acquired on the understanding that it was an RMS-only supplier, but following completion of the acquisition Iron Mountain was surprised to learn that File Express offered OSDP provision through the use of low-cost fire-proof safes.

7.151 The Parties also stressed that they perceived that electronic OSDP/in-house provision placed a significant competitive constraint placed on them.

7.152 22 of the suppliers that we identified confirmed their revenue to us. These included all those that we were told were significant suppliers, which are listed in Table 11. Their combined revenues were £48 million a year, and our share estimates are based on this; we acknowledge that this will have missed some suppliers. Some of the largest RMS providers offer OSDP services from some of their sites but were not able to separate out OSDP revenue to enable us to estimate their market share. This includes DeepStore and Box-it. In consequence, this calculation will underestimate the true size of total supply of OSDP.

Table 11: Shares of confirmed UK supply of OSDP

	%	£m
	<i>UK shares of supply</i>	<i>UK revenue</i>
Iron Mountain	[60–70]	[∞]
Recall	[0–5]	[∞]
<i>Combined</i>	[60–70]	[∞]
Abbot Datastore	[∞]	[∞]
Crown	[∞]	[∞]
Dajon	[∞]	[∞]
Data Protect	[∞]	[∞]
Dh Media Solutions	[∞]	[∞]
PHS	[∞]	[∞]
Restore	[∞]	[∞]
Saracen	[∞]	[∞]
The Stock Room	[∞]	[∞]
TNT	[∞]	[∞]
Other providers that provided revenue figures	6.3	3.05
Total for all respondents that provided revenues	100	48.4

Source: CMA calculations based on data from suppliers.

Note: Revenue figures are inclusive of the provision of OSDP to oil and gas customers that require specialist services in the Aberdeen area.

¹⁶⁴ It said these include: Atos, BT Engage, Commvault, CSC, Dimension Data, Getronics, HCL, IBM, Kefron, Quiss, Specialist Computer Centres, Steria, Sungard, and Tata.

- 7.153 As shown in Table 11, Iron Mountain has a very high share of supply ([60–70]%), around six times that of the next largest competitor. Recall is the third largest provider ([X]%) behind [X] ([X]%). Nine other non-specialist OSDP providers have revenues in the range approximately 1% to 3.4%.¹⁶⁵
- 7.154 We looked at data on competitors Iron Mountain had lost customers to, data from Iron Mountain on competitors it had been aware of when bidding for large contracts, and suppliers that customers used when multi-sourcing. These figures are set out in Appendix C, Tables 5, 6 and 7. This data is very limited, and as such we have considered it alongside other pieces of evidence, rather than focusing on it in isolation.
- 7.155 Both [X] and [X] are strongly represented in this data. Of the largest providers [X] are also present, as are [X], large RMS providers with small OSDP revenues [X], and other [X]. This data suggests that [X] and [X] may be the closest competitors to Iron Mountain. Specifically, looking at the [X] large customers that [X], [X] had been lost to [X], and [X] to [X], while [X] were reported to have gone [X] and [X] had moved to an [X]. One of the customers lost to [X].
- 7.156 In respect of supplier characteristics, we were able to collect only limited data. However, we note that among the large RMS suppliers (including Crown, Restore, TNT and PHS who also reported among the largest OSDP revenues), objective quality measures (which are also relevant for OSDP) did not vary widely.¹⁶⁶
- 7.157 We considered the nature of Recall and Iron Mountain’s presence in OSDP and whether their strength may differ from that suggested by their revenues.
- 7.158 [X]¹⁶⁷ [X]
- 7.159 [X]¹⁶⁸ [X]
- 7.160 Iron Mountain told us ‘Iron Mountain was one of the early pioneers in the RIMS industry, and was therefore well positioned to attract physical OSDP records. To a large extent, therefore, its revenues may reflect legacy business as a result of its historical presence in the industry.’ Looking at Iron

¹⁶⁵ In addition CGG, a provider of RIMS services specifically to customers in the oil and gas industry, also has OSDP revenues [X].

¹⁶⁶ See Appendix D. Table 3 of Appendix D also shows rankings by customers for OSDP. We note that the scores for Iron Mountain and Recall are only slightly higher than for Crown and Restore, but these scores are based on limited responses.

¹⁶⁷ [X]

¹⁶⁸ For example, [X].

Mountain's customer lists, we find that legacy customers account for part of its share. [X] % of its revenue comes from [X] % of customers with a relationship of more than 15 years.¹⁶⁹ While over [X] % of revenue came from large customers with a revenue of £160,000 a year or more, the same applied to Recall.

- 7.161 Responses to our customer questionnaires did not yield any clear consensus on concerns about the effects of the merger on OSDP provision. Eleven respondents were concerned, seven were unconcerned and 34 did not express a view. Those who were concerned spoke of the reduction in the number of large providers, but in contrast those who were unconcerned felt that there were several alternatives available.
- 7.162 Overall, there appeared to be limited engagement from many customers. The reasons for this are speculative, but may be because storage costs for OSDP tapes are seen as small in the context of overall IT strategies, or that customers are likely to be risk-averse for disaster recovery purposes and so are happy to stick with what they know as reliable solutions, or that purchasing decisions are made through IT departments rather than general procurement departments.
- 7.163 Nonetheless, we note that there is evidence that Recall is a close competitor to Iron Mountain (along with [X]). Further, given Iron Mountain's large market share, any increase in concentration, even if of small absolute increment, is of particular concern because it removes a higher proportion of the outside options that customers face. We therefore explore the possibility of an SLC in more detail within the local markets we have identified.

Local assessments, entry and expansion, and geographic coverage

- 7.164 We now consider competition in local areas around the five sites where Recall operates OSDP. We begin by looking at the number of alternative known providers of OSDP services within a 50 mile catchment area around each of the Recall sites, through a count of number of fascia (ie we do not count multiple sites under the same ownership). We also looked at competition around those Iron Mountain sites that overlapped with Recall facilities. In all but three instances our analysis produced very similar results. These three instances are examined below but in all other cases, for clarity, we concentrate on presenting results for Recall's sites.

¹⁶⁹ This compares to RMS where approximately [X] % of Iron Mountain customers are older than 15 years. Such customers account for less than [X] % of revenue.

7.165 As with RMS, we have applied an initial filter to provide some certainty over the quality of service provision, so that all customer segments are likely to consider these suppliers as acceptable competitors. As a simplification, we consider the 12 non-specialist OSDP suppliers who each have a share of the supply of OSDP of greater than 1% according to the results in Table 11¹⁷⁰. While a 1% threshold is not based in precise analysis, it was chosen to represent significant suppliers whose presence in the market is likely to be not too dissimilar from Recall's, so that they are likely to be seen as effective competitors by customers, even if they are concerned about the size and reputation of potential suppliers. To be clear, this does not mean that other suppliers are necessarily inferior or would be unable to compete effectively. The purpose of the initial filter is to demonstrate that if there are many of these providers within the filter in a local area, than there is little likelihood of an SLC arising and so in those cases further detailed local analysis is unnecessary. We also report the number of confirmed OSDP providers in the same catchment. It is likely that there will be some other providers who have not confirmed their presence to us. Our results are shown in Table 12.

Table 12: OSDP suppliers within 50 miles of Recall facilities, effects of the merger by fascia count

<i>Recall site</i>	<i>Top 12 providers*</i>	<i>All confirmed providers</i>
Aberdeen	2 to 1	3 to 2
Birmingham	6 to 5	7 to 6
Bloomsbury	12 to 11	18 to 17
Heywood	4 to 3	7 to 6
Hoddesdon	11 to 10	16 to 15

Source: CMA analysis.
*Only their OSDP sites.

7.166 It can be seen immediately that there are a large number of alternative OSDP suppliers in the catchment areas for Bloomsbury (London) and Hoddesdon (north of London).

7.167 Aberdeen is of particular concern, where Iron Mountain and Recall were the only large OSDP suppliers to the general market, and the only other known OSDP supplier is Box-it. In paragraphs 7.188 to 7.200, we consider in more detail the local market for OSDP around Aberdeen.

7.168 In Birmingham and Heywood, there are six to five or four to three reductions from the merger in the number of large OSDP suppliers, but a seven to six effect if all confirmed OSDP suppliers are included.

¹⁷⁰ We note that CGG, a provider of RIMS services specifically to customers in the oil and gas industry, also has OSDP revenues in excess of [redacted]%.

- 7.169 We also looked at competition around those Iron Mountain sites that overlapped with Recall facilities. Three areas produced different results from the analysis around the overlapping Recall sites: [REDACTED]. In [REDACTED] there is a three to two reduction from the merger in the number of large OSDP suppliers. In [REDACTED] and [REDACTED] there are four to three reductions from the merger in the number of large OSDP suppliers. If all confirmed OSDP suppliers are included, there is a four to three in [REDACTED], an eight to seven in [REDACTED] and seven to six in [REDACTED].
- 7.170 In some cases, the other OSDP providers present include large RMS providers that are not among the largest OSDP providers. We therefore consider the opportunities for expansion by these suppliers, or new entry, in paragraphs 7.171 to 7.180.

Entry and expansion

- 7.171 We now consider whether entry and expansion in the supply of OSDP would be timely, likely, and sufficient to offset any lessening of competition from the merger.
- 7.172 The Parties told us that entry into OSDP was relatively easy, particularly for an existing RMS supplier adding OSDP as an additional service. Iron Mountain said:

the costs of OSDP entry/expansion are limited, as it essentially involves the installation of an OSDP zone/vault (which can be installed in three to six months), and use of the same assets as RMS (eg leased trucks and vans, semi-skilled labour force). Further, RMS suppliers can store tapes in existing rooms used for the storage of irreplaceable records (such as wills and deeds), which are sometimes air conditioned and use gas-based fire suppression [...] similar to RMS, suppliers can bid on OSDP contracts without having the prior capacity to store the records, and then add the requisite capacity when needed. Further, a supplier can begin OSDP supply with a small fireproof cabinet (available at the cost of a few hundred pounds), before upgrading modular vault, which can then be extended as and when new business is won [...] An OSDP vault (capable of holding approximately 26,000 tapes) can be installed for as little as £73,500 (including all related temperature controls, racking, gas fire suppression, security and air conditioning).

- 7.173 The Parties presented estimates of the cost of installing a new OSDP vault in an existing facility. They told us these could be purchased off the shelf, and could be ordered or extended simply through purchasing additional modules.

These provide secure units with advanced fire protection including gas suppression systems. Their estimates of costs are set out in Appendix F. Some other parties told us that for more basic service provision, the prerequisites for an OSDP operation are likely to exist for any RMS provider and a basic fireproof storage facility could be purchased for a few thousand pounds.

- 7.174 As set out in Appendix F, paragraph 37, we considered the cost of a new vault using Iron Mountain's estimates. Combined with data on the Parties' average customer pricing and volumes, the analysis suggested that the cost of a small, full-specification vault could typically be covered over a three year period (ignoring other costs) with fewer than 20 customers.
- 7.175 We also saw an example of a small scale entry into OSDP by an RMS provider (Box-it Aberdeen). With just the two customers it has quickly won, it could pay off the cost of a modular vault (based on the Parties' numbers, it had in practice not adopted a full specification vault) in two years from storage fees.
- 7.176 We heard from the Parties and other suppliers that a presence in RMS may help to win OSDP customers. This is only partially supported by the experience of the Parties. For both of them, stand-alone OSDP customers [redacted]. [redacted], but [redacted]. [redacted]
- 7.177 However, several RMS providers have indicated that in general they make investments in response to customer wins/demands, though existing expansion plans relate mainly to RMS. Box-it in Scotland has built new vaults specifically in response to RMS customers asking for OSDP.
- 7.178 We consider that there are reasons to believe that existing RMS providers are well placed to respond to opportunities in OSDP as has already been observed by building new facilities at existing sites. This is because it can be done quickly (estimates of two to six months), and it only requires a small diversion of existing space and otherwise largely relies on the use of existing staff and equipment. Further, the cost of a new vault can be varied according to the desired capacity and the precise specification of security and facilities required. Many but not all suppliers believed the OSDP market was still growing. We were told storage rates were higher than for RMS and there were greater revenues from retrievals, and the facilities could be used for different types of media storage. Picking up sufficient customers, especially from existing RMS customers was seen as a lower risk than new entry into

RMS, partly because of the general absence of perm-out fees.¹⁷¹ On the other hand, [REDACTED], and some had doubts about the long term prospects for OSDP demand as customers moved to alternative IT arrangements such as cloud storage or use other systems. However, overall we conclude that the RMS suppliers are likely to be well placed to enter into the provision of OSDP (if they are willing to do so and have the necessary scale and capabilities) and that therefore their presence in a local area provides the next strongest constraint on incumbent suppliers after the existence of an existing competitor in the area. The strength of that constraint will depend on the particular circumstances including the location, size, quality and reputation of that potential entrant.

7.179 An alternative possibility is for existing OSDP providers to expand their operations. Barriers to such expansion are small, assuming they could simply add capacity to their existing facilities. This could for example be achieved through the addition of an extra modular vault either within an existing building, or attached outside, for example if there was some adjacent space in a car park.

7.180 We did not receive indications that de novo entry into OSDP was likely. This appeared to be because entry involved higher costs if a new warehouse was required to house the OSDP facility, and if staff and IT/barcode systems and distribution networks were required specifically for OSDP. Securing customers would also be more challenging if there were no opportunities for cross-selling to existing RMS customers.

Consideration by catchment area

7.181 We consider that In Bloomsbury, Hoddesdon and Birmingham there are sufficient local competitors that the merger is unlikely significantly to reduce rivalry and competition in the local markets. While Recall may be a close competitor to Iron Mountain, there are other suppliers of a significant size and who would be expected to compete effectively. We also note the potential for entry, particularly from existing RMS suppliers in the area.

7.182 In Heywood, while the merger leads to a four to three reduction in large OSDP providers, OSDP is also offered in the area by Box-it and Deepstore (large RMS providers that could not provide us with their OSDP revenues) and The Hill Company (a large RMS provider that is not among the largest OSDP

¹⁷¹ We note that Iron Mountain's switching rates, measured by the rate of termination of accounts, were [REDACTED] for OSDP as for RMS.

providers). Also present in the area with RMS but not OSDP sites is Restore (a large OSDP providers).

- 7.183 Likewise, when looking at competition around those Iron Mountain sites that overlapped with Recall facilities, [REDACTED], [REDACTED] and [REDACTED] also had fewer actual OSDP competitors but there are several potential suppliers of OSDP in each catchment area. In Leeds, there are three large RMS competitors to the Parties which already provide OSDP at other locations.¹⁷² In [REDACTED] and [REDACTED] five of the largest RMS competitors provide OSDP within the catchment.¹⁷³ Additionally, there is a large OSDP provider (Restore) that has an RMS site within each of the catchments. Such a competitor is well placed to expand into OSDP.
- 7.184 As noted earlier, some customers may have a preference for a provider with a widespread network. The extent of providers' OSDP networks is set out in Appendix E. Iron Mountain provides OSDP from 16 of its 46 sites and Recall does so from five of its 12 sites. They both told us that the catchments of their OSDP sites overlap with their RMS sites, and that they have OSDP in fewer places because less storage is volume is needed for OSDP than RMS.
- 7.185 Several providers offer OSDP from multiple UK sites, including Restore, Crown, PHS, and Box-it, all of which do so from the same of more sites than Recall.
- 7.186 In the five local areas where Recall offers OSDP, Crown and PHS offer OSDP within 50 miles of all except Aberdeen. Restore provides OSDP within 50 miles of three sites, and has an RMS facility close to the fourth (in which it could potentially place an OSDP vault). TNT is also close to three of the Recall sites.
- 7.187 We did not receive any concerns about OSDP expressed by customers relating to specific local areas, although it is unclear whether this is due to a lack of engagement, awareness of alternative providers or because customers feel that they may in any case move away from utilising OSDP in the future.

¹⁷² [REDACTED], Box-it and Crown.

¹⁷³ In [REDACTED], the large RMS competitors are Crown, PHS, Deepstore, The Hill Company and Box-It. In [REDACTED], the large RMS competitors are Crown, PHS, Deepstore, The Hill Company and Box-It.

OSDP in Aberdeen

- 7.188 As described above, we found that Aberdeen is the area with fewest large OSDP competitors, among those UK areas in which the Parties overlap in having local sites at which they have OSDP storage.
- 7.189 For non-oil and gas customers in Aberdeen, Iron Mountain and Recall are the only two providers present that are among the largest 12 OSDP providers in the UK.¹⁷⁴ Box-it was not able to provide the CMA with its UK-wide revenues from OSDP, which it said are [REDACTED] (it offers OSDP from eight sites). Only two providers apart from the Parties offer OSDP within 100 miles – Box-it and S4U (see Table 13).
- 7.190 We note that the Box-it site near Aberdeen currently has two OSDP customers [REDACTED]. Box-it also considers it likely that it will expand its presence in OSDP at the site as it wins more RMS customers that also wish to store OSDP holdings.
- 7.191 S4U has a small amount of OSDP capacity, and is located more than 50 miles away from Recall and Iron Mountain’s Aberdeen sites. S4U also told the CMA that it considered that it competes most strongly in OSDP only 20 miles from its own site.
- 7.192 As discussed in respect of RMS, we found no other evidence of likely or intended entry or expansion in OSDP in Aberdeen. However, we note that there are two other small RMS suppliers in the Aberdeen area. KRC International in Montrose, and United Supplies in Aberdeen are RMS providers with the potential to expand into OSDP. Neither told us whether it would be well placed to supply OSDP or whether it had considered doing so, and so it is not clear whether they could effectively compete for any or all OSDP customers. Therefore we have not attributed much weight to the competitive constraint from the threat of possible entry by either of these providers would be expected to exert.

Table 13: OSDP Providers in Aberdeen

	<i>Distance from Recall</i>	<i>OSDP sites within 50 miles</i>	<i>OSDP capacity</i>
Recall	0	1	[REDACTED]
Iron Mountain	8	1	[REDACTED]
Box-it	36	1	[REDACTED]
S4U Records Storage	65	0	[REDACTED]

Source: The Parties; competitor responses to CMA questionnaires.

¹⁷⁴ Excluding CGG, which provides OSDP services specifically to oil and gas customers.

OSDP in Dundee

- 7.193 Iron Mountain offers OSDP from its Inverkeithing site, which is 46 miles from Dundee. Within a 50 mile catchment area around Dundee, only Box-it and S4U also offer OSDP. Recall does not have OSDP facilities in Dundee. However, it does have an existing RMS facility.
- 7.194 As set out earlier in our general discussion of OSDP in the UK, we consider that it is easier for an RMS provider to introduce OSDP facilities to an existing site (ie for Recall to offer OSDP in Dundee), than for any other provider to enter the area on a de novo basis and offer OSDP. We therefore considered the potential competition that could be provided from Recall in Dundee if it chose to enter the supply of OSDP there, for example because of an increase in market prices for OSDP. While we have no evidence from Recall that it had been considering entry into OSDP services from its Dundee base, we expect that Recall would have acted as a constraint on Iron Mountain in relation to its negotiations with customers that could be served from Dundee, as it is a likely potential entrant into OSDP in the area. This constraint will be most significant in the north of Iron Mountain's (Inverkeithing) catchment where Edinburgh and other competitors would likely be too distant.
- 7.195 We also note that KRC International is a potential entrant into OSDP in the Dundee area. For the reasons noted in paragraph 7.192 we have not attributed much weight to the competitive constraint the threat of possible entry by it would be expected to exert. Therefore, we consider that the effect of the merger would be to remove the most likely route of entry as a constraint facing the three competitors currently in the Dundee area.
- 7.196 We did not find similar circumstances applied to Recall's other sites where it does not currently offer OSDP. There are a large number of confirmed alternative OSDP suppliers in the catchment areas around Recall's sites at Kidbrooke, Stockwell, and Rugby and Warrington. The next closest area of concern was Northampton, where there is only other confirmed large competitor to Iron Mountain. However, apart from Recall, there are also five other large RMS providers who might equally be able enter the supply of OSDP.

OSDP for customers with international requirements

- 7.197 The provision of OSDP in the UK to customers with international RMS requirements contracts accounts for around £[redacted] million of the Parties' combined UK OSDP revenue (see Appendix D, Table 1). The Parties also have customers with separate and independent OSDP contracts with Recall/Iron Mountain in the UK and their respective entities in other countries.

7.198 Customers have not drawn any distinction in their concerns about the potential impact of the merger on the provision of RMS versus OSDP. The evidence on the existence and extent of global bargaining power and single-sourcing efficiencies, similarly does not differ by type of RIMS service. As for our assessment for UK RMS customers with global requirements (see paragraphs 7.117 to 7.145), we consider that the effect of the merger on competition for the UK provision of OSDP to customers with international requirements will be determined by the effect of the merger on competition for the provision of UK OSDP in general.

Findings

7.199 Because of the presence of sufficient alternative providers, supplemented by the ease and likelihood of entry into the provision of OSDP by existing RMS providers (or expansion of existing OSDP operations), we provisionally conclude that an SLC would not be expected to arise in any of the local markets around Recall's existing facilities except Aberdeen.

7.200 However, in the Aberdeen area, we provisionally conclude that the merger may be expected to lead to an SLC in the provision of OSDP to the general market, due to the reduction in the number of suppliers from three to two.¹⁷⁵ For the reasons set out in paragraph 7.192 we have not attributed much weight to the competitive constraint the threat of possible entry into OSDP by other small RMS suppliers in the area would be expected to exert.

7.201 Additionally, while Recall does not currently supply OSDP in the Dundee area, it is the only one of only two RMS suppliers in the area who would be well placed to expand into OSDP as a potential entrant against Iron Mountain, Box-it and S4U. For the reasons set out in paragraph 7.195, we have not attributed much weight to the competitive constraint the threat of possible entry from KRC International would be expected to exert. The effect of the merger is therefore to remove the constraint of potential entry from Recall, and we provisionally conclude that an SLC may be expected to arise in the supply of OSDP in the Dundee area due to the loss of this potential competition.

¹⁷⁵ The consequences of this reduction in competition are expected to be the same as set out in paragraph 7.114.

RIMS for oil and gas customers that require specialist services in the Aberdeen area

7.202 In the following section we consider the effect of the merger on competition for the provision of RIMS to oil and gas customers in Aberdeen that require specialist services (notably the storage of core geological samples).

7.203 There are approximately [redacted]¹⁷⁶ customers operating in the oil and gas industry which use outsourced storage of core geological samples in the Aberdeen area (see Appendix E, Table 1).¹⁷⁷ These customers represent approximately £[redacted] in annual RIMS revenue. Of this approximately [redacted]% relates to the storage and viewing of core geological samples, the remaining [redacted]% is accounted for by general RMS and OSDP.

7.204 Aside from the Parties, only one other provider in the Aberdeen area, CGG, currently provides RIMS that includes the storage of core geological samples.¹⁷⁸ Table 14 sets out the shares of supply of the three suppliers. The combined share of the merging Parties is high at approximately [redacted]% of customers, [redacted]% of annual revenue and approximately [redacted]% of storage capacity.

Table 14: Share estimates for the supply of RIMS (including the storage of core samples) to oil and gas customers in the Aberdeen area.

	%		
<i>Supplier</i>	<i>Share of customers</i>	<i>Share of revenue</i>	<i>Share of capacity</i>
Iron Mountain	[redacted]	[redacted]	[redacted]
Recall	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
Total	100	100	100

Source: CMA calculations using data provided by the Parties and CGG. Recall revenues refer to FY15.

7.205 The transaction is therefore a three to two merger in the relevant market, and the Parties have a high combined share of supply with a sizable increase in market concentration as a result of the merger.

7.206 In the sections that follow, we therefore first consider the extent to which the Parties are close competitors. We then consider the likelihood and strength of competitive constraints imposed from outside the market, including providers

¹⁷⁶ Due to customers multi-sourcing their requirements across suppliers, this figure will not necessarily reflect the number of unique customers with core sample storage requirements.

¹⁷⁷ We note that there is a wider group of customers operating in the oil and gas sector in the Aberdeen area that require the storage of paper records and magnetic tapes.

¹⁷⁸ Iron Mountain has suggested that a number of other providers (ALS Petrophysics, Weatherford Laboratories, and Flexi-store) also provide RIMS (including core sample storage facilities) in the Aberdeen area. We have contacted each of these providers to verify that they do not currently offer this service in the Aberdeen area.

that do not offer core storage, providers outside of the Aberdeen area, and the potential for customers to bring their RIMS provision in-house.

Assessment of competition within the market

7.207 CGG told us that it considers Iron Mountain to be a closer competitor to it than Recall, mainly because of the close geographic proximity between CGG and Iron Mountain. CGG said that the majority of customers that approach it to benchmark prices are existing customers of Iron Mountain. It also noted that both it and Iron Mountain were able to offer customers additional services.

7.208 We asked customers to rate each of the three providers on the strength of their provision of specialist RIMS services to oil and gas customers. A similar proportion of customers ranked CGG ([redacted]%) and Iron Mountain ([redacted]%) as strong providers of RIMS services, whereas a considerably higher proportion ranked Recall as a strong provider ([redacted]%).¹⁷⁹

7.209 We have also considered evidence on the competitive constraint posed by Recall on Iron Mountain using tender data reported by Iron Mountain's current and past customers.¹⁸⁰ Both Recall and CGG were considered as alternative providers to Iron Mountain in [redacted] of the [redacted] tenders reported, and CGG and Recall were [redacted] chosen as the preferred supplier. No other suppliers were considered, apart from Recall, Iron Mountain and CGG.

7.210 We have also considered as an indicator of closeness of competition, the extent to which the Parties' customers multi-source their specialist RIMS requirements across more than one provider.¹⁸¹ Of the customers that were able to provide information, around half multi-source their storage of core samples. Of those Iron Mountain customers that multi-source, around [redacted] do so with CGG and [redacted] do so with Recall.

7.211 Of those Recall customers that multi-source in the sample, [redacted] do so with Iron Mountain. While this may appear to suggest that Iron Mountain may provide more of a competitive constraint on Recall than vice versa, the sample of Recall customers for which multi-sourcing data is available is very modest. Further, around half of the customers who multi-source told us that this was for legacy reasons (typically the purchase of an asset for which samples were stored with an alternative provider). The suppliers with which they multi-source may therefore not necessarily reflect an active choice on the

¹⁷⁹ See Appendix E, Table 2.

¹⁸⁰ See Appendix E, Table 3.

¹⁸¹ See Appendix E, Table 4.

part of a customer and as such may not be indicative of the closeness of competition between a given set of providers.

7.212 We have not seen any other evidence from the Parties or third parties that there is any differentiation between the three suppliers in the nature or quality of the services provided to oil and gas customers. This indicates Recall and Iron Mountain are close competitors, along with CGG.

Assessment of competitive constraints from outside the market

7.213 We now address the extent to which providers from outside the market might constrain the behaviour of the Parties post-merger. In particular we are aware of two providers within the Aberdeen area and one provider within 70 miles of the Aberdeen area that currently provides RIMS services to non-specialist customers.¹⁸²

7.214 The distance of these providers from Iron Mountain's closest Aberdeen facility is set out in Table 15.

Table 15: Proximity of general RIMS providers to nearest Iron Mountain Aberdeen facility

<i>Supplier</i>	<i>Distance from Iron Mountain facility</i>	<i>mi</i>
United Supplies	<1	
Box-it	36	
S4U	65	

Source: CMA analysis of data provided by the Parties.

7.215 We are also aware of providers of specialist RIMS to oil and gas customers located in England¹⁸³ and have considered the potential for them (as well as general RIMS providers in England) to expand into the provision of such services in the Aberdeen area.

7.216 In assessing the potential competitive constraint imposed by entry, we have taken into account whether such providers have both the ability and incentive to expand into the storage of core geological samples for oil and gas customers in the Aberdeen area.

¹⁸² We also note the existence of two companies, Shore Porters and KRC International, located in Aberdeen and Dundee (respectively). For the reasons set out in paragraphs 7.65 and 7.66, [REDACTED], we have not given them much weight.

¹⁸³ Such as ALS Petrophysics and Weatherford Laboratories.

Entry by general RIMS providers in the Aberdeen area

- 7.217 As noted in our market definition (see paragraphs 6.52 to 6.55), the storage facilities that Iron Mountain and Recall use for oil and gas materials are the same as (or very similar to) those for other customers, and the oil and gas-specific facilities (large rooms with strong tables, and in the case of Iron Mountain a small amount of simple equipment) appear inexpensive and quick to develop. As such, a RIMS supplier such as United Supplies or Box-it that is already based in Aberdeen should have the ability at relatively low cost to provide the services needed by specialist oil and gas customers.
- 7.218 However, United Supplies [REDACTED].
- 7.219 Box-it does not currently have any oil and gas customers who store core samples [REDACTED]. Nevertheless, it has identified this as a target area and expects to be tendering for five to six customers next year. Box-it told us that it already has rooms available for the examination of core samples and that these could be modified depending on customer requirements if it is successful in attracting such customers.
- 7.220 We considered the extent to which customers would be willing to consider non-specialist providers for their core storage requirements.
- 7.221 CGG told us that the reputation and experience of handling geological samples was a key requirement for its specialist customers. In particular, it emphasised the importance of customer confidence, given the value of the core samples.¹⁸⁴ Furthermore, it said that it has no experience of its own customers threatening to switch to non-specialist RIMS providers.
- 7.222 A provider of specialist RMS services to oil and gas customers in the South East of England¹⁸⁵ [REDACTED].
- 7.223 We tested the extent to which oil and gas customers would be willing to consider suppliers with no previous experience in the handling and storage of core geological samples. Of the 15 customers that responded to our questions none had previously considered switching to any of the general RIMS providers in the Aberdeen and Dundee areas. All except one cited a lack of expertise and/or experience in handling geological samples as a reason for not doing so.

¹⁸⁴ CGG told us that core samples must be indexed and laid out in the correct order, and that if this order is not preserved, the value of the sample is lost.

¹⁸⁵ [REDACTED]

- 7.224 We have also considered the extent to which the provider of general RIMS services in the wider Dundee area (S4U) currently exerts a competitive constraint on the Parties or would begin to do so post-merger.
- 7.225 S4U told us that while it had considered offering core sample storage and had the facilities to do so (including viewing facilities) it considered most companies would want an Aberdeen-based supplier.
- 7.226 CGG told us that it considers itself to be on the outer limit of geographical proximity to Aberdeen at which a provider can compete for the storage of core samples; it is based approximately 15 miles from Aberdeen City centre. This is due to the requirement for customers' geological staff to visit the site to view core samples. It also told us that it considers that a Dundee location would restrict the strength with which a competitor could compete for the storage of core samples.
- 7.227 While we are aware that Recall currently stores core [REDACTED] at its Dundee facility [REDACTED], some oil and gas customers also cited the distance from Aberdeen as a reason for not having considered alternative general RIMS suppliers. [REDACTED]
- 7.228 Consistent with these statements, some oil and gas customers told us that the distance from their sites in Aberdeen was important for when their geological staff need to view core samples.¹⁸⁶ Sending staff this additional distance is likely to entail extra time and travel costs, especially as core examinations can take days or weeks. One customer told us that it required its core samples to be stored within a two mile radius from its site.¹⁸⁷ Another said it would require its core samples be held within 20 miles of its site.¹⁸⁸ For such customers, a Dundee-based supplier would not appear to be able to meet such geographic requirements.

Entry from RIMS providers based outside North East Scotland

- 7.229 We have also considered the extent to which existing providers of either general or specialist RIMS services from outside North East Scotland would have the ability and incentive to enter Aberdeen and expand into the storage of core samples.
- 7.230 Recall cited itself as an example of an existing supplier of RIMS based in England entering into the provision of services to oil and gas customers in Aberdeen. Recall told us that it had purchased C21 because it had won a [REDACTED]

¹⁸⁶ [REDACTED]

¹⁸⁷ [REDACTED]

¹⁸⁸ [REDACTED]

contract for [REDACTED], building on existing business in [REDACTED] and [REDACTED] and that [REDACTED] of the contract was in Scotland, requiring it to expand its geographic footprint into Scotland.

- 7.231 We note that this particular case is an example of the prospect of winning a large customer contract leading to the acquisition of an existing provider of RIMS services to oil and gas customers in Aberdeen, as distinct from the creation of an additional competitor. [REDACTED] Furthermore, [REDACTED].
- 7.232 Providers without existing storage facilities in Aberdeen are likely to have reduced incentives to expand into this area because of the current low oil and gas prices and its effect on the associated profitability of oil and gas customers in Aberdeen. One customer told us that it had consequently negotiated a decrease in prices from its RIMS provider.¹⁸⁹ [REDACTED] CGG also noted the relatively high cost of real estate and land rental in the Aberdeen area.
- 7.233 Consistent with this, [REDACTED]. We also heard from another [REDACTED].
- 7.234 RIMS providers from outside the immediate area that do not currently provide core sample storage would face the existing challenge that oil and gas customers are unwilling to consider providers without previous expertise in this area (see paragraph 6.61).¹⁹⁰
- 7.235 We therefore consider that, relative to alternative expansion options, oil and gas customers as a group are unlikely to be a commercially attractive segment, such that existing RIMS providers (either specialist or non-specialist) in England would be unlikely to expand into Aberdeen to serve them.

Other constraining factors

- 7.236 Finally, we have considered the extent to which customers' ability to bring their core sample storage in-house is likely to act as a constraint on the Parties, both now and post-merger.
- 7.237 In general, customers told us that bringing their core storage in-house was not feasible due to a lack of space, and that they would be unlikely to do so in

¹⁸⁹ [REDACTED]

¹⁹⁰ Furthermore, CGG told us that while it considers that large national providers such as TNT, Crown or PHS would be able to provide physical facilities required for core sample storage, the importance of reputation in winning tenders is likely to limit the ability with which they can compete for contracts.

response to a 5% increase in prices.¹⁹¹ [X] told us that a customer had never threatened to bring their core sample storage in-house as part of their price negotiations. As such, the evidence does not suggest that self-supply is currently constraining the Parties or would do so in the event of a price increase post-merger.

7.238 We have not seen any evidence of any other sources of competitive constraint or countervailing buyer power.

Findings on RIMS to oil and gas customers with specialist requirements in Aberdeen

7.239 There are currently only three providers of RIMS to oil and gas customers with specialist (core storage) requirements in Aberdeen. There is no strong evidence of differentiation (actual or perceived) in the services offered by these providers nor in the relative closeness with which the providers compete.

7.240 We have considered the extent to which entry (or the threat of entry) might constrain the behaviour of the Parties post-merger. Box-it appears to be well placed to enter the market, but it is not clear that any other existing RIMS providers (including specialist providers to oil and gas customers elsewhere in the UK) would have the incentive to do so. Additionally, for existing general RIMS providers, customers are generally unwilling to consider using non-specialists.

7.241 Customers were generally unable to bring their core storage requirements in-house, to the extent that it is unlikely to act as a credible outside option. Given the absence of evidence of any other countervailing sources of buyer power, we therefore provisionally conclude that the merger is likely to give rise to a substantial lessening of competition for the provision of RIMS for oil and gas customers that require specialist services in the Aberdeen area.¹⁹²

8. Provisional conclusions on the SLC test

8.1 We have provisionally concluded that the proposed merger may be expected to result in a substantial lessening of competition in the following markets:

(a) The supply of RMS in each of the Aberdeen and Dundee areas.

¹⁹¹ Of the 12 that responded to this question, seven customers cited a lack of space or internal capability as a reason they would be unlikely to bring their storage in-house, and a further two said they would be unlikely to bring their storage in-house (without specifying the reasons). Two customers indicated that they already met some of their storage requirements in-house.

¹⁹² The consequences of this reduction in competition are expected to be the same as set out in paragraph 7.114.

- (b) The supply of OSDP in the Aberdeen area.
- (c) The supply of OSDP in the Dundee area from the loss of potential competition from the potential entry of Recall into OSDP provision.
- (d) The supply of RIMS services to the oil and gas sector for customers in the Aberdeen area.