

# **Completed acquisition by Iron Mountain Incorporated of Recall Holdings Limited**

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Glossary

## Terms of reference and conduct of the inquiry

### Terms of reference

1. In exercise of its duty under section 33(1) of the Enterprise Act 2002 (the **Act**) the Competition and Markets Authority (**CMA**) believes that it is or may be the case that:
  - (a) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation, in that:
    - (i) enterprises carried on by Iron Mountain Incorporated will cease to be distinct from enterprises carried on by Recall Holdings Limited; and
    - (ii) the condition specified in section 23(2)(b) of the Act is satisfied with respect to the supply of records management services (**RMS**) in the UK; and
  - (b) the creation of that situation may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom for goods or services, including the:
    - (i) supply of RMS to national customers in the UK;
    - (ii) supply of physical offsite data protection services (OSDP) to national customers in the UK;
    - (iii) supply of records and information management services, including specialised services, to oil and gas customers in Aberdeen and Dundee.
2. Therefore, in exercise of its duty under section 33(1) of the Act, the CMA hereby makes a reference to its chair for the constitution of a group under Schedule 4 to the Enterprise and Regulatory Reform Act 2013 in order that the group may investigate and report, within a period ending on 29 June 2016, on the following questions in accordance with section 36(1) of the Act:
  - (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 within any market or markets in the United Kingdom for goods or services.

**Andrea Coscelli**  
**Executive Director – Markets and Mergers**  
**Competition and Markets Authority**  
**14 January 2016**

### **Conduct of the inquiry**

3. We published biographies of the members of the inquiry group conducting the inquiry on 1 February 2016, and the administrative timetable for the inquiry was also published on the CMA's webpages on 1 February 2016.
4. We invited a wide range of interested parties to comment on the anticipated acquisition. These included customers and competitors of Iron Mountain and Recall. Evidence was obtained from these third parties through hearings, staff meetings, telephone contact and through written requests. Summaries of hearings can be found on our webpages.
5. As the transaction was also being reviewed by the Australian Competition and Consumer Commission, the Canadian Competition Bureau and the United States Department of Justice, we were in contact with these agencies and we kept each other updated on progress throughout the course of the investigations.
6. We received written evidence from Iron Mountain and Recall, and a non-confidential version of their main submission is on our webpages. We also held a hearing with Recall on 24 March 2016 and Iron Mountain on 31 March 2016.
7. On 3 February 2016, we published an issues statement on our webpages, setting out the areas of concern on which the inquiry would focus.
8. On 4 February 2016, members of the inquiry group, accompanied by staff, visited Iron Mountain's site at Heywood, and on 18 February 2016, Recall's site at Hoddesdon. On 23 February 2016, one member of the inquiry group, accompanied by staff, visited the Aberdeen sites of Recall (C21) and Iron Mountain.
9. In the course of our inquiry, we sent Iron Mountain, Recall and other parties some working papers and extracts from those papers for comment.

10. On 4 May 2016, we published on our [website](#) the notice of provisional findings, a non-confidential version of the provisional findings report and a notice of possible remedies.
11. In response to our provisional findings and notice of possible remedies, we received a submission from Iron Mountain, a non-confidential version of which was published on our [webpages](#). In addition, response hearings were held with Iron Mountain on 18 May 2016 and Recall on 23 May 2016.
12. A non-confidential version of the final report was placed on CMA's [webpages](#) on 16 June 2016.
13. We would like to thank all those who have assisted us in our inquiry.

### **Consent for completion of the merger and interim measures**

14. On 26 January 2016 and 12 February 2016, Iron Mountain requested the CMA's consent under section 78(2) of the Enterprise Act 2002 to the acquisition by Iron Mountain of shares in Recall. Broadly, Iron Mountain was concerned that section 78(2) of the Act might operate to prevent the acquisition from proceeding at a global level.
15. On 26 February 2016, [the CMA wrote to Iron Mountain](#) indicating that it was prepared, in principle, to give its consent in due course to the acquisition subject to agreement on two sets of undertakings.
16. The CMA wished to ensure that no action was taken pending final determination of the Reference which might prejudice the Reference or impede the taking of action by the CMA under Part 3 of the Act which might be justified by the CMA's decisions on the Reference.
17. Pursuant to section 80(2) of the Act, for the purpose of preventing pre-emptive action, [the CMA accepted two sets of undertakings](#) from Iron Mountain and its subsidiaries on 21 March 2016 and 30 March 2016. Consent under section 78(2) was granted on 30 March 2016.
18. The first set of undertakings concerned the appointment of a monitoring trustee. The monitoring trustee was required to:
  - (a) report on the current state of any integration between Iron Mountain Inc. and Iron Mountain UK and Recall UK;
  - (b) monitor compliance by Iron Mountain Inc. and Iron Mountain UK with the second set of undertakings once accepted by the CMA; and
  - (c) support the CMA taking any remedial action which may be required.

19. The monitoring trustee continues to perform this function and reports to the CMA on a monthly basis.
20. The second set of undertakings included the remainder of the hold separate arrangements, which were designed to avoid any impairment of the ability of Recall to compete independently in any of the markets affected by the transaction while the CMA proceedings were ongoing.

## Market definition

### Introduction

1. This appendix sets out some supporting evidence in relation to market definition.

### Electronic alternatives to RMS and OSDP

2. The CMA asked RMS customers how likely they would be to switch from RMS to OSDP in response to a 5% increase in the price charged by all RMS providers. The relevant responses are summarised in Table 1.

**Table 1: Summary of customers' responses on the substitutability of physical RMS and physical OSDP**

	<i>Likelihood of switching from physical RMS to physical OSDP in response to a SSNIP</i>	
	<i>Number</i>	<i>%</i>
Likely	1	8
Possible	0	0
Unlikely	10	77
Uncertain	2	15

Source: Customer responses to CMA questionnaire.

Note: Percentages exclude two customers that stated they were already in the process of switching from physical RMS to electronic RMS but did not comment on the further step of storing the digitised information through physical OSDP.

3. In order to switch from RMS to OSDP a customer would first have to digitise its existing paper records and then back them up on physical tape. We asked customers about the first of these steps – how likely they would be to switch from physical RMS to electronic alternatives in response to a 5% increase in the price charged by all physical RMS providers. We did not ask customers about the subsequent step of archiving digital materials by using physical OSDP, but we note that electronic OSDP would also be an alternative for a customer that was in the process of changing its storage approach.
4. Sixteen customers stated that they were either already in the process of digitising their paper records or were undertaking a strategic review of whether to do so. The responses of the remaining customers that replied to this question are summarised in Table 2.

**Table 2: Summary of customers' responses on the substitutability of physical RMS and electronic alternatives**

*Likelihood of switching from physical to electronic RMS in response to a SSNIP*

	<i>Number</i>	<i>%</i>
Likely	6	10
Possible	6	10
Unlikely	41	69
Uncertain	6	10

Source: Customer responses to CMA questionnaire.

Note: Percentages exclude those customers that stated they were already in the process of switching to electronic alternatives.

5. We also asked competitors what proportion of customers they expected would switch to electronic alternatives in response to a 5% increase in the price of physical services charged by all providers. The responses to these questions are summarised in Table 3 and Table 4 for RMS and OSDP, respectively.

**Table 3: Summary of competitors' responses on the substitutability of physical and electronic RMS**

*Proportion of customers expected to switch from physical to electronic RMS in response to a SSNIP*

	<i>Number</i>	<i>%</i>
None	8	53
Few if any	2	13
10%	1	7
20%	2	13
Uncertain	2	13

Source: Competitor responses to CMA questionnaire.

**Table 4: Summary of competitors' responses on the substitutability of physical and electronic OSDP**

*Proportion of customers expected to switch from physical to electronic OSDP in response to a SSNIP*

	<i>Number</i>	<i>%</i>
None	8	57
Few if any	1	7
10%	1	7
20%	1	7
Uncertain	3	21

Source: Competitor responses to CMA questionnaire.

6. As set out in the main body of the report, we consider that this evidence suggests that the number of customers switching, in response to a SSNIP, from physical to electronic RMS or OSDP, is unlikely to be sufficient to defeat the price rise, ie render it unprofitable. As such we do not consider that RMS or OSDP lie in the same market as their electronic alternatives.





9. We asked customers how likely they would be to bring their RMS provision in-house in response to a 5% price increase. One customer stated that it was already in the process of bringing its provision in-house. The responses of the remaining customers that replied to this question are summarised in Table 7.

**Table 7: Summary of customers' responses on the substitutability of outsourced and in-house RMS provision**

	<i>Likelihood of bringing RMS provision in-house in response to a SSNIP</i>	
	<i>Number</i>	<i>%</i>
Likely	4	7
Possible	5	9
Unlikely	44	80
Uncertain	2	4

Source: Customer responses to CMA questionnaire.

Note: Percentages exclude those customers that stated they were already in the process of bringing their RMS provision in-house.

10. Similarly, we asked customers how likely they would be to bring their OSDP provision in-house in response to a 5% price increase. One customer stated that it was already in the process of bringing its provision in-house. The responses of the remaining customers that replied to this question are summarised in Table 8.

**Table 8: Summary of customers' responses on the substitutability of outsourced and in-house OSDP provision**

	<i>Likelihood of bringing OSDP provision in-house in response to a SSNIP</i>	
	<i>Number</i>	<i>%</i>
Likely	0	0
Possible	6	22
Unlikely	21	78
Uncertain	0	0

Source: Customer responses to CMA questionnaire.

Note: Percentages exclude those customers that stated they were already in the process of bringing their OSDP provision in-house.

11. Together this data suggests that while a [X] proportion of Iron Mountain's lost customers switch to in-house options, such a move is unlikely to be prompted by a SSNIP.

### **Retrieval times and geographic requirements**

12. The Parties submitted data on the distances over which retrieved documents were sent from each of their sites. This data showed the distance from the Parties' site of the customer that, when ranked by distance, accounted for the

80<sup>th</sup> percentile of retrievals activity from that site,<sup>1</sup> and is summarised in Table 9. The Parties submitted that there are some very large catchments, which have been skewed by the movement of materials to more distant sites as part of the Parties' internal management of stock. However, we note this does not indicate how customers chose their supplier. They also argued that other outliers are driven by a small number of large customers.

**Table 9: Range of Parties' catchment areas, miles**

		<i>mi</i>	
		<i>Iron Mountain</i>	<i>Recall</i>
RMS	Minimum	[X]	[X]
	Maximum	[X]	[X]
	Average	[X]	[X]
OSDP	Minimum	[X]	
	Maximum	[X]	
	Average	[X]	

Source: The Parties.

Note: Recall provided catchment areas for its business overall. The majority of its non-ancillary service revenues are from RMS ([X]%) so the CMA has reported in the table above its catchment areas for RMS.

13. We note that for the majority of Recall's sites and a significant number of Iron Mountain's sites, the distance defined by the 80<sup>th</sup> 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 [45-50] miles from the storage facility.<sup>2</sup>
  
14. In response to a question about the catchment area over which they compete strongly, some competitors provided us with information about how far from the customer they can be while meeting particular retrieval time requirements (see Table 10). Their responses varied, but for the shortest typical retrieval time offered, 50 miles was the further distance suggested. 50 miles was also mentioned by some providers in respect of longer delivery times.

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<sup>1</sup> See paragraph 5.2.25 of the [Merger Assessment Guidelines](#) for general information on our use of catchment areas in market definition.

<sup>2</sup> [Recall initial submission](#), paragraph 22.

**Table 10: Number of competitors stating each catchment area – for particular retrieval times**

<i>Retrieval time</i>	<i>mi</i>	<i>RMS/OSDP</i>
	<i>Distance</i>	
2 hours	10	1
	20	1
	50	2
4 hours	5	1
	30	1
	100	1
Same day	25	1
	20	1
	50	1
Next day or longer	50	1
	100	1
	Nationwide	2

Source: Competitor responses to CMA questionnaire.

15. We also asked competitors about which geographic areas they believed they compete strongly in. Their responses are summarised in Table 11. We note that their answers are likely to reflect not only the ability to meet retrieval time requirements, but also the costs of doing so (eg in terms of collection/retrieval routes). Again, their responses varied but the large majority thought that they competed strongly within a catchment of 50 miles or more.

**Table 11: Number of competitors stating each catchment area within which they compete strongly or in which customers are typically based**

<i>Compete strongly overall / Typical customer distance</i>	<i>Overall/RMS</i>	<i>OSDP</i>
15 miles		1
20 miles		2
25 miles	2	
20-30 miles	1	
30 miles	2	1
40 miles	1	
50 miles	7	
50-100 miles	1	1
1 hour's drive	1	
100 miles	5	1
120 miles	1	

Source: Competitor responses to CMA questionnaire.

16. The Parties provided us with data on the number of postcode areas<sup>3</sup> customers require delivery and retrieval services to and how often this service was used in 2015. Table 12 presents the average use of each retrieval option, broken down by the total number of postcodes customers' require retrieval services to/from.
17. Table 13 shows the proportion of customers that used each retrieval type at least once in the past year.

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<sup>3</sup> A postcode area is the largest geographical unit used by Royal Mail for the purposes of directing mail and forms the initial characters of the alphanumeric UK postcode. There are currently 121 geographic postcode areas in use in the UK.

18. Together this data shows that while the large majority of retrievals are next-day non-urgent retrievals, [redacted] of customers use half day or more urgent retrievals at least sometimes. This supports the view that a relatively narrow catchment area of 50 miles is appropriate.

**Table 12: Summary of volume and speed of Iron Mountain RMS customer retrievals**

				%
	<i>Average number of annual retrievals per customer</i>	<i>Average proportion of next day retrievals</i>	<i>Average proportion of half day retrievals</i>	<i>Average proportion of urgent retrievals</i>
All customers	[redacted]	[redacted]	[redacted]	[redacted]
1 postcode area	[redacted]	[redacted]	[redacted]	[redacted]
2 postcode areas	[redacted]	[redacted]	[redacted]	[redacted]
3-5 postcode areas	[redacted]	[redacted]	[redacted]	[redacted]
6-10 postcode areas	[redacted]	[redacted]	[redacted]	[redacted]
11-20 postcode areas	[redacted]	[redacted]	[redacted]	[redacted]
20+ postcode areas	[redacted]	[redacted]	[redacted]	[redacted]

Source: CMA calculations using data submitted by Iron Mountain.

**Table 13: Customers which used each type of retrieval at least once in the past year**

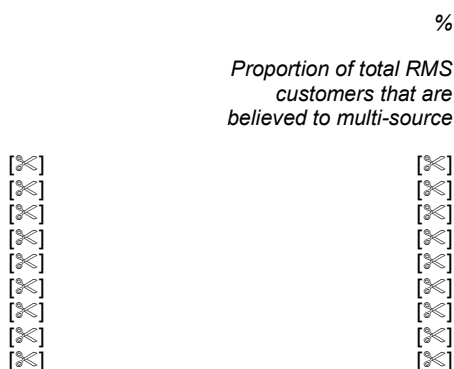
	<i>Iron Mountain</i>		<i>Recall</i>		%
	<i>Base: All customers</i>	<i>Base: customers with at least one retrieval in period</i>	<i>Base: All customers</i>	<i>Base: customers with at least one retrieval in period</i>	
Any retrieval	[50–60]	[90–100]	[70–80]	[90–100]	
Next day retrievals	[50–60]	[90–100]	[60–70]	[80–90]	
Half day retrievals	[10–20]	[20–30]	[10–20]	[10–20]	
Urgent retrievals	[10–20]	[20–30]	[30–40]	[40–50]	

Source: CMA calculations using data submitted by Iron Mountain and Recall.





**Table 3: Competitors with whom Recall RMS customers are believed to multi-source**



Source: CMA analysis of data submitted by the parties.

Notes:

1. Base = [X] multi-sourcers from a sample of the 50 largest and smallest Recall customers.
2. Percentages do not sum to 100 because of customers multi-sourcing with more than one provider.

6. We have analysed the result of RMS competitions for those 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 (Table 4).
7. Although the sample is small, the data shows that where one of the Parties was the winner, the other of the Parties was more often the second-placed provider than any of the Parties' competitors. This was true in [X] of [X] Iron Mountain wins, and [X] of [X] Recall wins, with other providers in second place much less often. Restore and Crown were the most frequently mentioned other providers.

**Table 4: Summary of customers' RMS tender data**

	<i>Iron Mountain</i>	<i>Recall</i>
Total	18	20
<i>of which following competitor was placed second:</i>		
Iron Mountain	N/A	[X]
Recall	[X]	N/A
Crown	[X]	[X]
Box-it	[X]	[X]
Restore/Wincanton	[X]	[X]
PHS	[X]	[X]
Oasis	[X]	[X]
TNT	[X]	[X]
DeepStore	[X]	[X]
Other	[X]	[X]
No other providers considered	[X]	[X]

Source: Customer responses to CMA questionnaire.

## OSDP

8. This section contains supporting evidence setting out indicators of competition for the provision of OSDP, based on data from the Parties and competitors, as well as customer responses to our enquiry.
9. Table 5 summarises our analysis of the data submitted by Iron Mountain on the destination of its terminated OSDP accounts over the period 2013-15 (excluding those accounts for which Iron Mountain recorded that the customer moved to a different solution or brought their OSDP requirements in-house). Both [X] are strongly represented in this data.

**Table 5: Summary of Iron Mountain lost OSDP account destinations**

<i>Competitor</i>	<i>No. of lost accounts</i>	<i>% of lost accounts</i>	<i>Value of lost accounts, £</i>	<i>% of lost revenue</i>
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]

Source: CMA calculations using data provided by Iron Mountain.

Notes:

1. Data refers to account terminations over the period 2013-2015 for which the customer destination was known.
2. Analysis excludes those accounts for which the customer bought their OSDP provision in house or moved to a different solution.
3. Base = [X] terminated accounts.

10. Table 6 below sets out the number of occasions on which Iron Mountain believes that it has competed against each provider, among the [X] OSDP tender exercises of more than £100,000 that Iron Mountain considered in the last three years. [X] is the competitor most frequently cited in the opportunities base (four times). [X], [X] and [X] were both cited once each.

**Table 6: Summary of Iron Mountain OSDP opportunities data**

<i>Competitor</i>	<i>Number of competitor mentions</i>
[X]	[X]
[X]	[X]
[X]	[X]
[X]	[X]
[X]	[X]
[X]	[X]
[X]	[X]
[X]	[X]
[X]	[X]
[X]	[X]

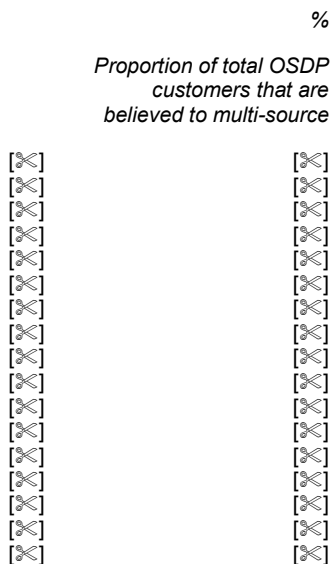
Source: Iron Mountain.

11. Iron Mountain also submitted data on the number of OSDP customers it believes to be multi-sourcing their OSDP provision (see



12. Table ). We consider that evidence of multi-sourcing with a provider suggests that customers believe them to be credible alternatives to the Iron Mountain. Of the [redacted] customers Iron Mountain believes to be multi-sourcing their OSDP provision, [redacted] (around [redacted]%), [redacted] ([redacted]%) and TNT ([redacted]%) [redacted] ([redacted]%).

**Table 7: Competitors with which Iron Mountain OSDP customers are believed to multi-source**

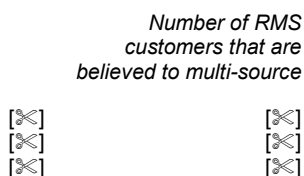


Source: CMA analysis of data submitted by parties.

Note: Percentages will not necessarily sum to 100 due to customers multi-sourcing with more than one provider.

13. Recall did not have full data on multi-sourcing among its customers. Among a sample of Recall's 50 largest and smallest customers (see Table 8) only [redacted] OSDP customers were believed to use more than one provider to meet their OSDP requirements, of which [redacted] did so with Iron Mountain.

**Table 8: Competitors which Recall OSDP customers are believed to multi-source with**



Source: CMA analysis of data submitted by Parties.

Notes:

1. Base = [redacted] multi-sourcers from a sample of the 50 largest and smallest Recall customers.

2. Percentages will not necessarily sum to 100 due to customers multi-sourcing with more than one provider.

14. We have analysed the result of OSDP competitions for those 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 (see Table ).
15. Information for tenders which either of the Parties won was only provided by eight OSDP customers (including only one in which Recall was the successful bidder). Of those seven tenders which Iron Mountain won, Recall was the

second placed participant in [redacted] of them. Crown and Restore were the second placed participant in [redacted].

**Table 9: Summary of customers' OSDP tender data**

	<i>Iron Mountain</i>	<i>Recall</i>
Total	7	1
<i>of which following competitor was placed second:</i>		
Iron Mountain	N/A	[redacted]
Recall	[redacted]	N/A
Crown	[redacted]	[redacted]
Restore/Wincanton	[redacted]	[redacted]
No other providers considered	[redacted]	[redacted]

Source: Customer responses to CMA questionnaire.

## Supplier characteristics

### Introduction

1. This appendix looks at the supplier characteristics that are most likely to be important to certain groups of customer when choosing a supplier. The purpose of this exercise is to identify a set of competitors who are likely to be considered as effective options by a wide variety of customers with varying requirements. This can then be used as an initial filter, to determine local areas where adequate competition is maintained post-merger by these suppliers. If not, then we would need to examine local circumstances in 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 effectively; we are merely saying that they will have to be considered in the context of a detailed local assessment.
2. In respect of RMS 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 note that other suppliers may also provide important constraints, but it has not been necessary for us to assess them in detail. For OSDP, we received fewer and less complete competitor responses, but have reported information on the largest 12 OSDP providers<sup>1</sup> where available – these providers all have shares of around 1% or more, in the context that Recall has a lower share in OSDP than in RMS.
3. Third party comments (see paragraph 10 below) suggest that supplier characteristics that are likely to be important 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

4. Our concern is that, particularly for RMS, small providers may be unable to effectively compete for some large customers because:

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<sup>1</sup> A slightly wider set than for RMS, because the 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> largest OSDP revenues among those reported to us were very similar.

- (a) they may have limited capacity and so will need to expand to meet a large contract; and
- (b) if the supplier is required to offer 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.
5. While alternative suppliers are unlikely to have the spare capacity to serve large customers, we understand that it was normal practice to recruit customers before leasing new buildings or expanding racked capacity in existing buildings – see Appendix F. This is facilitated by the slow rate at which records are typically transferred between suppliers (see Appendix F, paragraph 26). We note that none of the larger RIMS providers described customer size as a barrier to us.
6. We asked RMS providers whether they had paid perm-out fees to facilitate customer switching in the last year. Our findings in relation to the largest 11 providers are set out in Table 1 below. This indicates that many of the RMS providers are prepared to pay perm-out fees or to offset them against free storage, at least in some cases. We have not heard that perm-out fees are a significant barrier to switching in OSDP.

**Table 1: Indicators of providers’ ability to meet demanding requirements – Size and ability to overcome switching costs**

	<i>Perm-out fees</i>	<i>Example large customers</i>			
		<i>Law</i>	<i>Financial/ insurance</i>	<i>Accountancy</i>	<i>NHS</i>
Iron Mountain	[X]	[X]	[X]	[X]	[X]
Recall	[X]	[X]	[X]	[X]	[X]
Box-it	[X]	No	No	Yes	Yes
Capita	[X]	Yes	Yes	No	Yes
Crown	[X]	[X]	[X]	[X]	[X]
DeepStore	[X]	[X]	[X]	[X]	[X]
EDM	[X]	No	Yes – [X]	Yes – [X]	Yes – [X]
The Hill Company	[X]	Yes	Yes	No	No
PHS	[X]	[X]	[X]	[X]	[X]
Restore	[X]	Yes	Yes	Yes	Yes
TNT	[X]	[X]	[X]	[X]	[X]

Source: CMA calculations based on data from suppliers.

7. We also asked providers what large customers they supplied. We received a variety of answers but all the largest 11 RMS suppliers reported that they served at least some larger customers, be they financial and insurance, customers, large legal firms, large accountancy firms or NHS Trusts. This suggested that providers of this size are capable of competing for and serving

larger customers. These large RMS providers also include six of the largest 12 OSDP providers (including the Parties). We received only limited responses from other large OSDP providers but note that Data Protect indicated that it could serve customers of any type; Saracen indicated that its customers include those that require service at up to 25 customer sites; and Abbot Datastore described itself as a very close competitor of the parties.

8. Given the evidence that the largest 11 RMS providers are capable of supplying large customers, that they can pay perm-out fees in some cases, and given the acceptance by all providers that capacity was not a substantial constraint as expansion is reasonably easy, we have concluded that at least these providers can be considered as effective RMS competitors for a wide range of customers. 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 and many smaller suppliers may be able to compete effectively for a variety of customers. However, it has not been necessary for our assessment to consider any additional RMS providers in detail (other than in Aberdeen and Dundee).
9. Although we have less information in relation to OSDP, we note that six of the largest 12 OSDP providers are also among the largest RMS providers and are known to serve a range of large customers. As set out above, we have some limited evidence about other large OSDP providers which suggests that they too can serve large customers. In light also of the smaller scale of OSDP storage relative to RMS, we conclude that the largest OSDP providers are likely to be able to compete for large customers.

### **Quality and reputation**

10. We were told by many customers that aspects of service quality were very important, such as their processes and security. 24% of customers rated non-price factors (including security, tracking systems, relationships and reputation) as an essential factor in their choice of provider, compared to 18% for price factors. This indicates that suppliers could be differentiated, to a certain degree, by the quality of service they are able to provide. This is reflected in comments by some of the customers that we contacted:
  - One customer said that 'Our due diligence process in selecting the provider for this service focused on a number of factors, including turnaround times, perceived quality, security/controls, BSI compliance, flexibility, electronic file transfer capability and price.' ([REDACTED])

- A customer rated Restore as a moderately strong competitor, based on the quality of its facilities, and Recall as strong, saying that it had ‘good processes, strong reporting and Account Management and competitive pricing and security’ ([REDACTED])
  - Another stated: ‘Recall was selected. The main contributing factors in selection were: Strength of the retrieval and the audit process; Flexibility to adapt to meet our requirements; Quality of the storage facility offered; Cost.’ ([REDACTED])
11. Several customers expressed concern over whether small local providers could offer a satisfactory degree of quality. For example:
- ‘Local providers do not have adequate service offerings.’ ([REDACTED])
  - ‘Local providers [are] “too small” and do not have required level of security or standards required by supply chain, are at risk of takeover and don’t understand needs of [REDACTED].’ ([REDACTED])
  - ‘Local providers do not tend to have the level of facilities, technology and operational processes that our current provider has.’ ([REDACTED])
12. 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. Furthermore, Recall submitted that the service it provides is essentially the same for all customers<sup>2</sup> regardless of their size, and that it believes the same is true for all of its competitors.<sup>3</sup> The Parties submitted that, more generally, the quality of service provided does not vary, particularly across leading RMS providers,<sup>4</sup> and that many operators offer very similar services and security levels, sufficient to meet all customers’ needs.
13. The Parties acknowledged that there can be differences in the security levels (physical security and fire protection) provided and in the service levels which are offered. However, they said where additional security/service measures are implemented, this is often in response to customer demand, and that such service improvements can be very easily implemented by almost all RIMS suppliers. They told us that while many customers might express an interest

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<sup>2</sup> With the exception of [REDACTED].

<sup>3</sup> Recall submitted that all RIMs providers ‘store documents in non-specialised facilities [...] that are common to most industrial parks. They store documents in each facility on racks using non-specialised equipment such as pallets and forklifts. They index and track the documents using basic computer systems. They use standard trucks or vans and semi-skilled labour to collect the documents from customers and deliver them back to the customers.’ [Recall initial submission](#), paragraphs 37 & 38.

<sup>4</sup> [Iron Mountain submission](#), paragraph 1.27.

in such standards, in practice most customers' decisions on which supplier to use were driven largely by pricing considerations (alongside retrieval times).

14. No large or medium-sized provider we contacted considered that it had lost a contract on quality issues.
15. A provider's ability to take on customers with more demanding quality requirements will depend in part on whether it is able to meet objective measures of quality, but also on customers' perception of this quality. This perception of quality may reflect more nuanced factors such as the quality of the sales team or relationship management. We have therefore assessed providers' ability to meet quality requirements by looking at both objective measures and the qualitative comment and assessments of customers and competitors.

### ***Objective measures of quality***

16. We looked at the 11 largest RMS providers, and assessed whether some or all of their sites met various criteria that had been used as standard requirements in a variety of customer tenders based on each supplier's response to our requests. These included, for example, different types of tracking systems used, compliance with ISO standards, aspects of physical security and fire control, screening and training of staff, etc. The results are shown in Table 2 below. For clarity, boxes in Table 2 are shaded: green where the supplier can fully meet these requirements; amber where it can partly meet them (eg at only some of its sites); and red where it cannot meet the requirements. As noted earlier, the largest RMS providers include six of the largest 12 OSDP providers. The table also includes Data Protect, a large OSDP provider. We have not been able to collate equivalent data on the remaining large OSDP providers.

**Table 2: Indicators of provider’s ability to meet quality requirements**

	<i>Iron Mountain</i>	<i>Recall</i>	<i>Restore</i>	<i>EDM</i>	<i>TNT</i>	<i>Capita</i>	<i>PHS</i>	<i>Box-it</i>	<i>The Hill Company</i>	<i>DeepStore</i>	<i>Crown</i>	<i>Data Protect</i>
<b>Tracking</b>												
RFID	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Able to provide a bar code solution for tape and carton movement which allows for chain of custody tracking	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Able to provide paperless interaction software for customer for storage of electronic and physical media (self-service inventory management)	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
<b>Standards etc</b>												
Organisation ISO 14001 compliant	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Organisation ISO 9001 certified	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Organisation ISO 27001 certified§								[X]		[X]	[X]	
Organisation adheres to a Code of Ethics/Code of Conduct internally	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Organisation adheres to a Code of Ethics/Code of Conduct externally	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Maintain an up-to-date records retention policy	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Experience in dealing with actual and test disaster recover (OSDP)	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Able to meet the insurance requirements of the most demanding clients (eg banks)	[X]*	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]



	<i>Iron Mountain</i>	<i>Recall</i>	<i>Restore</i>	<i>EDM</i>	<i>TNT</i>	<i>Capita</i>	<i>PHS</i>	<i>Box-it</i>	<i>The Hill Company</i>	<i>DeepStore</i>	<i>Crown</i>	<i>Data Protect</i>
<b>Access control</b>												
Perimeter fencing	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Biometric access control	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Electronic readers – Access cards / Proximity tags	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Man traps (ie double doors that can't both be open at once)	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Multiple levels of authorisation used to control who can interact with customer critical records and at what level for both day-to-day interaction and actual emergency situations	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Truck loading area has a secured, double door entry system	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Intruder Alarm System	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
<b>CCTV</b>												
Remote Video Response (RVR) CCTV	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Direct voice link to site from control room	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
External PTZ (Pan, Tilt and Zoom) cameras	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Images monitored 24/7 off site	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
90 / 180 day image archiving	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Pure white lighting	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

	<i>Iron Mountain</i>	<i>Recall</i>	<i>Restore</i>	<i>EDM</i>	<i>TNT</i>	<i>Capita</i>	<i>PHS</i>	<i>Box-it</i>	<i>The Hill Company</i>	<i>DeepStore</i>	<i>Crown</i>	<i>Data Protect</i>
Infrared lighting	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
<b>Vehicle security</b>												
Automatic locking and alarming features for all cargo doors	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Driver notifications (eg high intensity siren, light in the cabin, door open/unauthorized entry, anti-starting switch)	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Heavy duty steel construction	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Vehicles equipped with GPS tracking devices	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Each vehicle owned by the provider	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Automatic anti-tow (tilt system) protection	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
<b>Fire</b>												
Dedicated fire reporting panel	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Dedicated water reservoirs	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Thermographic scans	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Dedicated fire pumps	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Thousands of sprinkler heads	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Heat detectors	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

	<i>Iron Mountain</i>	<i>Recall</i>	<i>Restore</i>	<i>EDM</i>	<i>TNT</i>	<i>Capita</i>	<i>PHS</i>	<i>Box-it</i>	<i>The Hill Company</i>	<i>DeepStore</i>	<i>Crown</i>	<i>Data Protect</i>
Smoke detectors	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Frost protection	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Entire 100% fire suppression coverage (includes any neighbours)	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Vaults meet NFPA fire rating of 4 hours	[X]	[X]	[X]	[X]	[X]	[X]‡	[X]	[X]	[X]	[X]	[X]	[X]
Each vault has a dedicated alarm, a non-water based fire suppression system and HVAC unit	[X]	[X]	[X]	[X]	[X]	[X]‡	[X]	[X]	[X]	[X]	[X]	[X]
VESDA	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
<b>Team</b>												
Pre-employment screening and background checks (initial)	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Ongoing screening and background checks (bi-annually)	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Safety and Security Induction	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Ongoing Safety and Security training	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Fire response and first aid training	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Employee drug testing performed on an un-scheduled basis	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

Source: Suppliers' responses to RFIs.

\*If customers require special insurance, they bear cost.

†Not as such but multi-layered site entry, eg fence and door.

‡Capita does not supply OSDP, for which these aspects are relevant.

§This question was asked of only a subset of providers.

17. The results indicate that the largest RMS suppliers each differ to a degree in respect of the criteria that they meet. Iron Mountain and Recall do not themselves overlap in all these criteria and these vary between their sites. Some suppliers currently meet a similar set of criteria as Iron Mountain and/or Recall. Other suppliers cover the majority of the criteria that Iron Mountain and Recall can meet. Importantly, it is not clear that any one customer requires all of the quality measures examined. For example, some criteria may refer to different means of achieving the same objective and some of the criteria will be unimportant to some customers. Therefore, the fact that a supplier does not provide a specific service that Iron Mountain or Recall does is not an indication that it is unable to constrain the Parties.
18. Overall, the results do not show any readily apparent differentiation of these suppliers into a high quality and lower quality group.
19. While it is possible that customers may perceive differences in the quality of service offered by different RMS suppliers, and this may particularly apply to smaller suppliers, or they may have their own specific requirements, we have not found that differentiation on quality is likely to be a significant factor in restricting competition between at least the large and medium sized RMS suppliers.

### ***Subjective measures of quality***

20. 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.
21. We asked both competitors and customers to rate a variety of RMS suppliers, as well as to self-assess their performance against ability to serve national, large local and small local customers and those who required urgent service. We acknowledge that these results must be treated with caution, for example, some customers appeared to be rating suppliers they did not currently use and where they may not have recently tested the market. We note some suppliers appeared to be more self-critical than others in undertaking their self-assessment.
22. Nonetheless, looking at the results for the 11 largest RMS suppliers, set out in Table 3 below, the differences in the assessments offered were not large. None emerged as markedly weaker than the Parties. For providers that are large

OSDP providers but not large RMS providers, we received much more limited information.

**Table 3: Rankings of providers by competitors and themselves**

	Mentions by competitors	Average scores from competitors				Scores it gave itself			
		National	Urgent	Big local	Small local	National	Urgent	Big local	Small local
Iron Mountain†	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Recall†	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Abbot Datastore*	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Box-it	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Capita	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Crown†	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Dajon*	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Data Protect*	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
DeepStore	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Dh Media Solutions	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
EDM	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
PHS†	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Restore†	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Saracen*	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
The Hill Company	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
The Stock Room*	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
TNT†	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis of competitor and customer responses.

\*These providers are among the largest 12 OSDP providers but not the largest 11 RMS providers.

†These providers are among the largest 11 RMS providers and the largest 12 OSDP providers.

**Table 4: Rankings and mentions of providers by customers**

	Number of ratings by customers RMS	Average scores by customers RMS	Number of ratings by customers OSDP	Average scores by customers OSDP	Mentions in customers' RMS bidding data	Mentions in customers' OSDP bidding data
Iron Mountain†	[X]	[X]	[X]	[X]	[X]	[X]
Recall†	[X]	[X]	[X]	[X]	[X]	[X]
Abbot Datastore*	[X]	[X]	[X]	[X]	[X]	[X]
Box-it	[X]	[X]	[X]	[X]	[X]	[X]
Capita	[X]	[X]	[X]	[X]	[X]	[X]
Crown†	[X]	[X]	[X]	[X]	[X]	[X]
Dajon*	[X]	[X]	[X]	[X]	[X]	[X]
Data Protect*	[X]	[X]	[X]	[X]	[X]	[X]
DeepStore	[X]	[X]	[X]	[X]	[X]	[X]
Dh Media Solutions	[X]	[X]	[X]	[X]	[X]	[X]
EDM	[X]	[X]	[X]	[X]	[X]	[X]
PHS†	[X]	[X]	[X]	[X]	[X]	[X]
Restore†	[X]	[X]	[X]	[X]	[X]	[X]
Saracen*	[X]	[X]	[X]	[X]	[X]	[X]
The Hill Company	[X]	[X]	[X]	[X]	[X]	[X]
The Stock Room*	[X]	[X]	[X]	[X]	[X]	[X]
TNT†	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis of competitor and customer responses.

\*These providers are among the largest 12 OSDP providers but not the largest 11 RMS providers

†These providers are among the largest 11 RMS providers and the largest 12 OSDP providers.

23. Customers we spoke to mentioned Iron Mountain and Recall more than other suppliers and gave them higher average scores. However, these results also need to be interpreted with care. Iron Mountain and Recall are overrepresented

in the number of mentions and ratings, since the survey was sent primarily to customers of the main Parties.

24. Similarly, the results indicate that the competitors we spoke to mentioned Iron Mountain and Recall more than other suppliers. This may be expected given the subject of our investigation was stated when we spoke to competitors. Other suppliers that were often mentioned by competitors included Restore/Wincanton, Crown and PHS.

25. We asked competitors to explain the reasons for the ratings given:

- (a) Iron Mountain was described as a ‘strong national player’ with high specification sites but potentially expensive and inflexible (especially for small customers).<sup>5</sup>
- (b) Recall was also described as a ‘strong national player’, with good coverage, buildings, and tracking system, but standard pricing.<sup>6</sup> One competitor noted that there is a slight inconsistency in quality across Recall sites’.<sup>7</sup>
- (c) Restore [redacted].<sup>8,9</sup> [redacted]<sup>10,11,12</sup>
- (d) As with Restore, Crown was described by [redacted].<sup>13,14,15</sup>
- (e) Box-it described itself as stronger than its larger rivals, for small orders from SMEs. A rival described Box-it [redacted].<sup>16</sup> [redacted]<sup>17</sup>
- (f) PHS was described by [redacted].<sup>18,19</sup>

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<sup>5</sup> [redacted]

<sup>6</sup> [redacted]

<sup>7</sup> [redacted] Two competitors [redacted] also noted that Recall has nationwide coverage, while [redacted] described it as being ‘mainly Midlands/Southern based’.

<sup>8</sup> [redacted]

<sup>9</sup> [redacted]

<sup>10</sup> [redacted]

<sup>11</sup> [redacted]

<sup>12</sup> [redacted]

<sup>13</sup> [redacted]

<sup>14</sup> [redacted]

<sup>15</sup> [redacted]

<sup>16</sup> [redacted]

<sup>17</sup> [redacted]

<sup>18</sup> [redacted]

<sup>19</sup> [redacted]

(g) TNT was described by itself as being competitive on price, offering an excellent service, and having sites of a consistently high level of process, security, and fire detections/suppression, with its only limitation being geographic coverage in some areas for urgent delivery. [REDACTED]<sup>20</sup> although we note TNT's relatively large revenues. [REDACTED]<sup>21</sup>

26. It is clear from the quotes in (a) to (g) above that the ratings given were not based solely on perceptions of quality but also on geographic coverage, and price.
27. In summary, the rankings and comments from competitors indicate that Iron Mountain and Recall are viewed as being strong suppliers of RMS. [REDACTED], [REDACTED] and [REDACTED] are ranked higher by competitors than Recall, and there are a number of suppliers that competitors give a similar average score to Recall.
28. Therefore we have concluded that depending on the specific customer, there are several providers who have a similar reputation to the Parties.
29. 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 view is that all of the 11 will be able to compete effectively for most RMS customers. In respect of large OSDP providers that are not large RMS suppliers, we were able to gather only very limited information on supplier reputation.

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<sup>20</sup> [REDACTED]  
<sup>21</sup> [REDACTED]

## Local and network analysis

1. This appendix describes the extent and location of the largest RMS and OSDP providers' site networks.

### Extent of network

2. To compare the overall extent of each provider's network, Table 1 shows for the largest RMS and OSDP providers how many sites they have in total, and the number of Iron Mountain sites that lie within 50 miles of at least one of the provider's sites. This suggests that Restore, Crown, PHS and Box-it have more extensive networks than Recall, and that many other providers are within 50 miles of a sizeable proportion of Iron Mountain's sites.

**Table 1: Overall site network**

	<i>Number of sites</i>	<i>Number of Iron Mountain sites in 50 miles</i>
Iron Mountain†	46	
Recall†	12	33
<i>Combined</i>	58	
Abbot Datastore*	1	16
Box-it	14	37
Capita	5	7
Crown†	18	41
Dajon*	1	15
Data Protect*	2	16
DeepStore	2	19
Dh Media Solutions*	2	15
EDM	2	9
The Hill Company	4	22
PHS†	8	34
Restore†	32	36
Saracen*	2	14
The Stock Room*	1	15
TNT†	5	22

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

\*These providers are among largest 12 non-specialist OSDP providers but not the largest 11 RMS providers.

†These providers are among the largest 11 RMS providers and largest 12 non-specialist OSDP providers.

3. A similar picture holds for sites at which RMS is offered. Again Restore, PHS, Crown and Box-it are close to as many or more Iron Mountain sites than Recall is, with other providers also close to a substantial proportion of Iron Mountain sites.



**Table 2: RMS site networks**

	<i>Number of sites</i>	<i>Number of Iron Mountain sites in 50 miles</i>
Iron Mountain†	37	
Recall†	12	25
<i>Combined</i>	49	
Restore†	30	28
TNT†	5	16
Capita	5	6
Crown†	18	32
PHS†	8	25
EDM	2	8
DeepStore	2	15
The Hill Company	4	18
Box-it	14	31
Abbot Datastore*	1	10
Dh Media Solutions*	1	8
Saracen*	2	8

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

\*These providers are among largest 12 non-specialist OSDP providers but not the largest 11 RMS providers.

†These providers are among the largest 11 RMS providers and largest 12 non-specialist OSDP providers.

- For OSDP, some providers (including Iron Mountain and Recall) offer the service from fewer sites. While [X] is close to more Iron Mountain OSDP sites than Recall is, [X], [X] and others have OSDP facilities close to fewer Iron Mountain OSDP sites. [X] and some other OSDP suppliers have many RMS sites which do not offer OSDP. In paragraphs 7.174 to 7.204 we consider the constraint that may be provided by the threat of RMS providers expanding their OSDP provision.
- Table 3 compares providers against Iron Mountain, the UK provider with the largest network.

**Table 3: OSDP site networks**

	<i>Number of sites</i>	<i>Number of Iron Mountain sites in 50 miles</i>
Iron Mountain	16	
Recall†	5	11
<i>Combined</i>	21	
Restore†	6	10
TNT†	3	5
Crown†	5	9
PHS†	8	14
EDM	2	2
DeepStore	2	5
The Hill Company	4	7
Box-it	8	8
Abbot Datastore*	1	6
Data Protect*	2	6
Dh Media Solutions*	1	7
The Stock Room*	1	5
Dajon*	1	6
Saracen*	2	6

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

\*These providers are among largest 12 OSDP providers but not the largest 11 non-specialist RMS providers.

†These providers are among the largest 11 RMS providers and largest 12 non-specialist OSDP providers.

## Location of networks

6. Our local assessments are focused on geographies in which Iron Mountain and Recall currently compete for customers. We therefore describe below the competitors present in the 50 miles around each Recall site where the Parties overlap in the provision of RMS or OSDP.
7. Table 4 shows the RMS providers with RMS facilities in each Recall area, of those among the largest 11 overall. It shows that outside of Aberdeen and Dundee there are at least six large providers aside from the Parties in each local area. [X] and [X] are in all [X] of the local areas outside Aberdeen and Dundee, [X] and [X] are in [X], [X] is in [X], and [X] and [X] are in [X]. Aberdeen and Dundee are considered in the main body of the report.
8. Table 5 shows the OSDP providers with OSDP facilities in each area where Recall has an OSDP site, of those among the largest non-specialist 12 suppliers overall.<sup>1</sup> It shows that outside of Aberdeen (which is considered in paragraphs 7.188 to 7.192), in each local area except Heywood there are at least four other large OSDP providers with OSDP facilities in the area, plus additional large OSDP providers with RMS facilities in which they could potentially put OSDP vaults, as well as OSDP facilities belonging to other providers. The latter includes some large RMS providers with nearby OSDP facilities that were not able to provide us with their OSDP revenues and so have not been counted among the largest OSDP providers.
9. In Heywood, among the largest OSDP providers, [X] are present. However, Box-it and [X] ([X]), and The Hill Company (a large RMS provider [X]) also have OSDP facilities in the area. EDM, another large RMS provider, has OSDP facilities 55 miles away.
10. We also conducted equivalent analysis centred on Iron Mountain sites. Table 6 shows information for the three areas in the North-West (Leeds, Oldham and Warrington) where this produced differing results from the analysis centred on Recall. In each of these areas, 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 five to four in Leeds, an eight to seven in Oldham and seven to six in Warrington.

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<sup>1</sup> An additional provider is included for RMS as the 11<sup>th</sup> and 12<sup>th</sup> providers have very similar revenues. See section 7 of the main report for more discussion of which providers we consider likely to exert constraints on the Parties.

**Table 4: Providers with RMS facilities with 50 miles of Recall RMS facilities**

	<i>Scotland (Aberdeen)</i>	<i>Scotland (Dundee)</i>	<i>Scotland (Dundee)</i>	<i>North West (Heywood)</i>	<i>North West (Warrington)</i>	<i>West Midlands (Birmingham)</i>
	[X]	[X]	[X]	[X]	[X]	[X]
Iron Mountain	[X]	[X]	[X]	[X]	[X]	[X]
Restore/Wincanton	[X]	[X]	[X]	[X]	[X]	[X]
Capita	[X]	[X]	[X]	[X]	[X]	[X]
TNT	[X]	[X]	[X]	[X]	[X]	[X]
Crown	[X]	[X]	[X]	[X]	[X]	[X]
PHS	[X]	[X]	[X]	[X]	[X]	[X]
EDM	[X]	[X]	[X]	[X]	[X]	[X]
DeepStore	[X]	[X]	[X]	[X]	[X]	[X]
The Hill Company	[X]	[X]	[X]	[X]	[X]	[X]
Box-it	[X]	[X]	[X]	[X]	[X]	[X]
Fascia count (above providers)	3 to 2	3 to 2	3 to 2	8 to 7	8 to 7	8 to 7
Fascia count (all confirmed providers)	5 to 4	5 to 4	5 to 4	9 to 8	10 to 9	11 to 10
	<i>West Midlands (Rugby)</i>	<i>East Midlands (Northampton)</i>	<i>East of England (Hoddesdon)</i>	<i>London (Kidbrooke)</i>	<i>London (Stockwell)</i>	<i>London (Bloomsbury)</i>
	[X]	[X]	[X]	[X]	[X]	[X]
Iron Mountain	[X]	[X]	[X]	[X]	[X]	[X]
Restore/Wincanton	[X]	[X]	[X]	[X]	[X]	[X]
Capita	[X]	[X]	[X]	[X]	[X]	[X]
TNT	[X]	[X]	[X]	[X]	[X]	[X]
Crown	[X]	[X]	[X]	[X]	[X]	[X]
PHS	[X]	[X]	[X]	[X]	[X]	[X]
EDM	[X]	[X]	[X]	[X]	[X]	[X]
DeepStore	[X]	[X]	[X]	[X]	[X]	[X]
The Hill Company	[X]	[X]	[X]	[X]	[X]	[X]
Box-it	[X]	[X]	[X]	[X]	[X]	[X]
Fascia count (above providers)	8 to 7	7 to 6	8 to 7	10 to 9	10 to 9	10 to 9
Fascia count (all confirmed providers)	13 to 12	11 to 10	15 to 14	18 to 17	19 to 18	19 to 18

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

**Table 5: Providers with OSDP facilities within 50 miles of Recall OSDP facilities**

	<i>Scotland (Aberdeen)</i>	<i>North West (Heywood)</i>	<i>West Midlands (Birmingham)</i>	<i>East of England (Hoddesdon)</i>	<i>London (Bloomsbury)</i>
	[X]	[X]	[X]	[X]	[X]
Iron Mountain	[X]	[X]	[X]	[X]	[X]
Restore	[X]	[X]	[X]	[X]	[X]
Crown	[X]	[X]	[X]	[X]	[X]
Abbot Datastore	[X]	[X]	[X]	[X]	[X]
Dh Media Solutions	[X]	[X]	[X]	[X]	[X]
TNT	[X]	[X]	[X]	[X]	[X]
Data Protect	[X]	[X]	[X]	[X]	[X]
The Stock Room	[X]	[X]	[X]	[X]	[X]
PHS	[X]	[X]	[X]	[X]	[X]
Dajon	[X]	[X]	[X]	[X]	[X]
Saracen	[X]	[X]	[X]	[X]	[X]
Fascia count (above providers OSDP sites)	2 to 1	4 to 3	6 to 5	11 to 10	12 to 11
Fascia count (above providers OSDP and RMS sites)	2 to 1	5 to 4	6 to 5	11 to 10	12 to 11
Fascia count (all confirmed providers OSDP sites)	3 to 2	7 to 6	7 to 6	16 to 15	18 to 17

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

**Table 6: Providers with OSDP facilities within 50 miles of Iron Mountain OSDP facilities**

	<i>North West (Leeds)</i>	<i>North West (Oldham)</i>	<i>North West (Warrington)</i>
	[X]	[X]	[X]
Recall	[X]	[X]	[X]
Restore/Wincanton	[X]	[X]	[X]
Crown	[X]	[X]	[X]
Abbot Datastore	[X]	[X]	[X]
Dh Media Solutions	[X]	[X]	[X]
TNT	[X]	[X]	[X]
Data Protect	[X]	[X]	[X]
The Stock Room	[X]	[X]	[X]
PHS	[X]	[X]	[X]
Dajon	[X]	[X]	[X]
Saracen	[X]	[X]	[X]
Fascia count (above providers OSDP sites)	3 to 2	4 to 3	4 to 3
Fascia count (above providers OSDP and large RMS providers)	8 to 7	8 to 8	9 to 8
Fascia count (all confirmed providers OSDP sites)	4 to 3	8 to 7	7 to 6

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

Note: This table only includes analysis of the three areas around Iron Mountain OSDP sites that did not produce similar results to looking at OSDP facilities within 50 miles of Recall OSDP facilities.

## Entry and expansion

### Introduction

1. This appendix sets out some supporting evidence in relation to entry and expansion in RIMS.
2. We first consider evidence on past entry and expansion in RIMS and future intentions as provided by competitors to the Parties.

### Competitor entry, expansion and acquisitions

3. Below we briefly describe some of the recent expansion and expansion plans reported to us by competitors:
  - (a) [X] has recently developed a new site in [X] from which they provide services to both RMS and P-OSDP customers. However, [X] said that ‘as we enter a more dynamic age of digitisation we perceive that our need to significantly expand our warehousing capability will be limited. [X] are committed to [X] and expansion is more likely to come in areas close to [X] as we ‘spread out’ from expensive city centre operations’.
  - (b) Restore has purchased a number of competitors in recent years the largest of these being Wincanton Records Management, which prior to its acquisition by Restore told us that it recently expanded in [X].
  - (c) [X] said it is planning to extend one of its [X] sites and [X]. Its plan may also consider a new site to provide capacity. [X] said that its approach is always to operate the most efficient solution and expansion at these existing sites will support this approach. Investment in new sites typically follows customer demand and new business wins.
  - (d) [X], which operates a [X], has recently opened up a facility [X].
  - (e) [X] is in the process of expanding an existing [X]. [X] described the current market as attractive and is actively looking for another site in a different geographic area, [X].
  - (f) [X] told us that it had not opened any new facilities in the last five years; however, it is actively pursuing a new facility to accommodate new contract wins. The new facility will be [X].

(g) [REDACTED] said its most recent expansions were in [REDACTED] and [REDACTED] in [REDACTED] and [REDACTED]. [REDACTED] is looking to expand again in the next couple of years. Space is required in [REDACTED] first, and then later [REDACTED] would ideally open up sites in [REDACTED] and [REDACTED].

(h) [REDACTED] has expanded in the last three to four years through acquiring [REDACTED]. It is also seeking opportunities to expand in the [REDACTED] through acquiring established companies. [REDACTED] told us that [REDACTED] had bought out much of the competition.

4. Recall told us that competitors can and do expand into the RIMS market from adjacent service markets. Recall argued that a competitor entering from an adjacent market will have the customer relationships, reputation and income stream to support the launch of new services. It said:

RIMS are now provided in the UK by companies that expanded into the field from removals and logistics businesses (eg Crown), facilities management companies (eg PHS), business process providers (eg Capita), freight and moving companies (eg TNT), general storage companies (eg Lok'nStore/Saracen) and, on an increasing basis, technology and software companies (eg HP, IBM, Ricoh, and Xerox).<sup>1</sup>

5. Iron Mountain told us that the RIMS market has become more competitive over time, partly attributable to entry and expansion by rivals. Iron Mountain gave us examples of geographic expansion from rivals The Hill Company, Box-it and EDM. Iron Mountain outlined examples of expansion through acquisition from Restore, Oasis, HW Coates and Stor-A-File. Iron Mountain outlined examples of entry into RIMS from adjacent markets from competitors Crown, Capita, HW Coates, PHS, Saracen, TNT and Kelly's Storage. Iron Mountain also told us that Recall's [REDACTED] and [REDACTED] were effectively [REDACTED] respectively.

### **Costs, time and expertise required to enter/expand in the UK**

6. This section describes the assets and other components required to provide RIMS.

#### ***The Parties' views***

7. Iron Mountain told us that the provision of RIMS requires very basic warehouse space 'of the kind that can readily be leased in virtually any

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<sup>1</sup> [Recall initial submission](#), paragraph 53.

industrial park or local business neighbourhood', standard computer systems with barcode readers, shelves, forklifts, and trucks or vans.<sup>2</sup> Recall told us that RIMS services are provided in non-specialised warehouses and other facilities that are widely available for purchase or lease.<sup>3</sup>

8. Iron Mountain told us that the assets can be acquired very quickly, at very low cost.<sup>4</sup> Accordingly, Iron Mountain believes that operations can be commenced in a basic facility outside London in roughly six months, with an investment of around £350,000.
9. Iron Mountain said that once a RIMS provider has raw warehouse space, it can add shelving in a few months and at very little cost. Iron Mountain said that after a competitor has won a procurement and is contracted to provide services this will cover the cost of the additional shelves.<sup>5</sup> Iron Mountain said few costs would be sunk as racking, vehicles etc. can easily be resold for alternative uses.
10. Similarly, Recall said that RIMS services are provided in non-specialised warehouses and other facilities that are widely available for purchase or lease. Equipping a facility at a viable scale outside Greater London, where competition is exceptionally intense, requires a minimum capital of approximately £350,000.
11. Recall also told us that trucks and vans for transportation are readily available, on short-term lease, and third-party delivery services are readily available as is the requisite semi-skilled labour force.<sup>6</sup>
12. A small number of staff would be required to run a facility. We have received no evidence to suggest that highly specialised or technically skilled staff are required to run a RIMS facility. We also note the cost of entry and expansion varies significantly depending on where a facility is being established. The largest individual annual cost to a RIMS provider is that of rent, and these vary significantly throughout the UK.

### **Competitor views**

13. [REDACTED] told us developing new sites/entry is difficult because the critical rate of capacity utilisation is high. [REDACTED] said that a major new customer would have to be won to justify a new site.

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<sup>2</sup> Iron Mountain initial submission.

<sup>3</sup> Recall initial submission.

<sup>4</sup> Iron Mountain initial submission.

<sup>5</sup> Iron Mountain initial submission.

<sup>6</sup> Recall initial submission.

14. [X] told us that acquiring an additional building would take approximately six months, with a further three months to install racking. The estimated cost of increasing capacity is £2.50 per new box slot. [X] said that finding new building space is not an issue, which could even be a mine or an aircraft hangar.
15. [X] told us that an additional site for 0.5 million RMS boxes would take 18 months if constructing from Greenfield site. If expanding existing facilities this would be nearer six months. [X] said the cost of an additional site would require a multimillion pound investment.
16. [X] told us that it had recently expanded in [X]. In its experience, it takes about one year to source a building, with six months to make the building operational, the cost of which is approximately £10 per square foot.
17. [X] said that if you have planning permission and a site, it would take six months from start to finish to get it operationally ready.
18. [X] said that RMS takes a huge amount of investment. [X] has just opened up its [X] building, and the costs have been:
  - (a) rent rates and insurance – £250,000 yearly;
  - (b) racking – £500,000 (one-off); and
  - (c) staff – £150,000 yearly.
19. [X] told us that it is very expensive to expand for a small or medium sized business. [X] tends to try to fill up its sites and plan a move a year or two before becoming full.
20. [X] told us that it expands annually with new buildings, to serve growing markets. [X] said its costs are the negotiated lease, staffing and capital expenditure for racks and other supporting infrastructure. [X] said that all of these vary by size and location, and it can open a new centre for less than £150,000 or as much as £500,000.
21. [X] said it has concluded that it is extremely difficult to justify expansion for RMS alone. It told us that for many years, the UK RMS market has been driven by cost-cutting between the major players, resulting in them (Iron Mountain, Recall, etc) erecting ever-larger mega-stores on low cost land around the country. [X] told us that for the likes of Iron Mountain, this is a relatively easy task; but for small private companies to expand and to compete in this market it is prohibitively expensive, and virtually impossible to finance.



22. [X] told us that as [X], it has at its disposal [X] from which it benefits from having cash reserves and banking facilities that allow it to expand its business without cost restrictions.
23. [X] said that this is just a matter of finding a shed and racking it.
24. [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.
25. [X] has opened new facilities in the last five years in [X] for approximately £[X], and one in [X] for approximately £[X]. In both cases the cost includes a full fit-out, and the time to open the facilities took around [X].

### **Switching as a barrier to entry and expansion**

26. A number of competitors raised some concerns suggesting that some features of the market hindered switching. Low levels of switching might make expansion less likely, unless a significant contract can be won. The key concerns raised were in relation to perm-out fees and the speed of removal:
  - (a) [X] told us that any unsatisfied customers after the potential merger will find it extremely difficult to switch, unless a new supplier can absorb exit fees.
  - (b) [X] told us that [X] creating a huge barrier to customer switching through perm-out fees, which can be 200 to 300% of normal activity charges, as well as long removal times as you can only remove 250 boxes a day. [X] said that many customers will not switch because of this.
  - (c) [X] told us that there is a trend for the largest suppliers to place high exit charges and very slow removal rates. This makes a move for competitive gain, costly and slow.
  - (d) [X] said that permanent withdrawal charges are so high they end up giving any clients taken on board a number of months' free storage to try and help them recover some of these costs, but it never covers the monies involved for permanent box withdrawals. [X] told us that most clients will not pay these fees as their budgets do not cover one-off bulky exit costs.
  - (e) [X] said that perm-out fees create 'inertia' in the market and make it difficult for a competitor of their size to win larger contracts.
  - (f) [X] told us that perm-out fees create a huge barrier.

27. Some suppliers pay perm-out fees or offer alternative incentives such as free rental periods to attract new customers. Responses from some smaller suppliers suggested that they struggle to afford these perm-out fees.

### **Market growth and pricing**

28. The attractiveness of entry and expansion will depend on suppliers' expectations of future market growth and pricing.
29. Iron Mountain's holdings growth (number of boxes) over the last three years has been [X]% on average. [X] of this growth in inventory comes from 'new' sales, with [X] coming from additional deposits from current customers. Iron Mountain said that OSDP growth is [X] than RMS.<sup>7</sup>
30. Recall's growth in holdings in the last two years has been [X] to [X]%. [X], the majority of Recall's growth in volumes comes from additional deposits from current customers.
31. We asked other RIMS providers for their expectations of growth for RMS and OSDP. Respondents indicated an expectation of continuing slow growth in RMS. However, third parties had varying views of prospects for OSDP; some expected slow growth, some expected the market to be flat, and some expected decline.
32. Recall and Iron Mountain have both told us that prices in the market have been falling in recent years. Recall said that its prices per cubic foot have fallen from £[X] per ft<sup>3</sup> in 2014 to £[X] per ft<sup>3</sup> by 2016, a [X]% fall in little over a year.
33. Iron Mountain provided average customer prices split by age of account. This data shows that the average price per unit is lower for newer accounts than older ones. The £ per unit storage fee for a new customer (<1 year) is £[X] against £[X] for customers who have accounts greater than ten years old. This indicates that prices have fallen.
34. Other suppliers ([X], [X], [X] and [X]) confirmed prices had fallen.

### **Differences in relation to OSDP**

35. There are some differences between RMS and OSDP which will impact on the likelihood and ease of entry and expansion occurring.

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<sup>7</sup> [Iron Mountain initial submission.](#)

36. The key differences that we note are the following:
- (a) There are additional entry costs in OSDP due to the need to construct secure, fireproof storage within a warehouse. These can be special vaults with gas fire suppression systems but alternatives of a lower specification are sometimes used. We note that sometimes clients will request similar systems are used for valuable paper records, but this appears to be rare. However, third parties agreed that RMS staff and systems (eg barcode tracking systems) could be easily applied to handle OSDP.
  - (b) Perm-out fees are not common in the OSDP market, which makes it easier for an entrant to compete for customers.
  - (c) The OSDP market is smaller in overall revenue terms than the RMS market.
  - (d) From reviewing the data provided by the Parties, it appears less common for companies to have significant volumes of tapes. Although the number can be large, particularly when tapes are used as record archives rather than just for backup, significant amounts of data can be held on relatively few tapes and new technologies mean the capacity of a single tape has increased.
  - (e) OSDP can more easily be entered into at a smaller scale than RMS as small vaults can be built.
  - (f) Whilst the Parties and some suppliers saw the OSDP market growing some suppliers thought that the OSDP market was static or declining as customers switched to alternative technologies.

*Expanding from RMS into OSDP*

37. The Parties gave us cost estimates for building a new vault within an existing RMS warehouse. Iron Mountain said dedicated vault rooms with air-conditioning and gas-based fire suppression systems can be built inside an RMS warehouse at a cost of roughly £100,000 to 120,000.<sup>8</sup> It told us that 'off-the shelf' modular vaults can be purchased in varying sizes and then can be expanded at a later date if necessary. It said one modular vault could be obtained at a cost of £73,500 (including installation) with a capacity of 26,000 tapes, a double vault with a capacity of 46,000 tapes at £146,250, a triple with capacity of 75,000 tapes at £238,900, and so on.

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<sup>8</sup> [Iron Mountain initial submission](#).

38. Recall told us a new vault would likely cost in the region of £[REDACTED] to £[REDACTED].<sup>9</sup> [REDACTED]<sup>10</sup> We note that some suppliers use OSDP vaults of a lower specification, eg they might not have a gas fire suppression system.
39. [REDACTED] added its first vault to its RMS facility in [REDACTED]. The vault was opened up to accommodate the OSDP holdings of a newly won RMS customer. The vault has temperature and humidity control and can store just under 10,000 tapes. A more recently won customer means that the vault will be at near capacity soon and the site owner believes a new vault or the expansion of the existing vault will be required. The range of fees paid by the two customers [REDACTED].
40. While storage fees vary significantly between customers, if we assume a £[REDACTED] a year storage fee per tape (which is slightly lower than the average charges from [REDACTED] and [REDACTED]), if the vault were 50% full and making no allowance for retrieval revenues or operating costs, the cost of a full specification vault could potentially be covered by these revenues in under a year and a half.
41. Put another way, based on median customer revenue for the Parties, covering the cost of a single modular vault through storage fees alone over a three year period would approximately require between 11 and 20 of these customers. This suggests investment costs for OSDP vaults in an existing RMS facility are unlikely to be prohibitive.
42. We were told such facilities could be installed relatively quickly. [REDACTED] told us it could add a new storage facility in an existing facility for approximately 150,000 tapes in a time frame of around six months. [REDACTED] said that it could build a new tape library of 150,000 units within two months.
43. This implies that the costs of entry into OSDP for an existing RMS supplier or expansion by an RMS supplier that currently supplies a small amount of OSDP is unlikely to be prohibitive.
44. However, these cost estimates make no allowance for new entry requiring a completely new facility, where additional rental/lease and construction costs will be higher. Additionally, the supplier would need a dedicated van fleet to undertake the collection and delivery of tapes.

### **Services to the oil and gas sector**

45. This section describes how entry and expansion for the provision of RIMS to oil and gas customers might differ from entry and expansion elsewhere.

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<sup>9</sup> Recall initial submission.

<sup>10</sup> Recall initial submission.

46. Recall and Iron Mountain told us 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 industries.<sup>11</sup> We agree that the services, assets and infrastructure used to provide specialist services to oil and gas customers are not appreciably different from the facilities used to service general RMS customers, apart from the provision of dedicated space for viewing core samples. Recall told us that viewing facilities/space could be provided to customers at all its sites, but such use by general RMS customers appears to be very low, and no customer told us it was a factor it considered when choosing a general RMS supplier.
47. [REDACTED] opened up a new [REDACTED] facility in [REDACTED] Scotland. [REDACTED]. [REDACTED] said that perm out fees were a significant stumbling block to acquiring new customers. However, the owner indicated a desire to provide these services and confirmed that it had the requisite facilities and planned to tender for Oil and Gas customers with core samples in the coming year.
48. United Supplies told us it thought the needs of oil and gas companies were very largely the same as any other sector, and it was simply the storage and management of boxes of data. It said if customers wanted it to provide something, it would endeavour to provide that service, although it had never been approached by a customer for the supply of the storage of core samples.
49. We spoke to Weatherford Laboratories, which stores core samples in the south of England. It told us it had previously considered expansion into Aberdeen as it has facilities there already. [REDACTED]
50. S4U is a records information management provider in Dundee. It does not currently store oil and gas customers' core samples, but told us that it had the space to provide storage and viewing facilities. [REDACTED]
51. We spoke to [REDACTED], which used to run a RIMS facility in [REDACTED],<sup>12</sup> [REDACTED]. [REDACTED] told us that it exited this facility because it was not cost-effective to run.<sup>13</sup> In relation to the attractiveness of opening up a facility in the Aberdeen/Dundee area, [REDACTED] said that the market in Scotland is quite small, and that if it was to invest in that area, it would have to put some concrete in the ground or take over a building and then hope to fill it. In the current market, it would be very difficult.

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<sup>11</sup> [Recall and Iron Mountain initial submissions.](#)

<sup>12</sup> [REDACTED]

<sup>13</sup> [REDACTED]

52. We also spoke to customers in Aberdeen and Dundee to get their views on the merger. In terms of switching, three customers told us that the cost of switching was the key prohibitive factor in moving suppliers:
- (a) 'A big factor in staying with the same provider is continuity of operation and the costs and upheaval of permanent withdrawal to go with an alternate provider'.<sup>14</sup>
  - (b) [REDACTED]<sup>15</sup>
  - (c) 'Permanent withdrawal costs are the single largest impediment to moving vendors. [REDACTED] [has] pulled back from a potential vendor change in the last six months for this reason'.<sup>16</sup>
53. Some other customers believed that a new provider would likely cover the cost of switching.
54. While the above concerns relate to cost and are therefore not unique to oil and gas customers, one customer told us that there was a physical restraint on switching. [REDACTED] told us that it was 'unable to move fragile samples away from [REDACTED]'.<sup>17</sup>
55. Recall won a contract with [REDACTED]. Recall purchased C21, a company already servicing oil and gas customers in Aberdeen and Dundee.
56. It said it ultimately decided to acquire C21 because the company was available for purchase [REDACTED].
57. As Recall's assessment of the potential options for entry into Aberdeen/Dundee shows, [REDACTED].

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14 [REDACTED]  
15 [REDACTED]  
16 [REDACTED]  
17 [REDACTED]

## RIMS for oil and gas customers in Aberdeen with specialist requirements

### Supplementary tables

- Table 1 presents the number of RIMS customers in Aberdeen that require outsourced specialist services (core sample storage), as well as the revenue associated with such customers.

**Table 1: Estimates of total outsourced RIMS for oil and gas customers that require storage of core geological samples in Aberdeen/Dundee area**

Estimate provided by	Number of customers	2015 RIMS revenue (£)	of which relates to storage and viewing of core geological samples	
			Revenue (£)	Percentage (%)
Iron Mountain	[X]	[X]	[X]	[X]
Recall	[X]	[X]	[X]	[X]
CGG	[X]	[X]	[X]	[X]
Total	[X]	[X]	[X]	[X]
Total (adjusted for known multi-sourcing)	[X]	[X]	[X]	[X]

Source: CMA calculations using data provided by the Parties and CGG. Recall revenues refer to FY2015.

- 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. The responses are summarised in Table 2.

**Table 2: Customers' ratings of suppliers of RIMS to oil and gas customers**

	Weak		Moderate		Strong	
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
CGG	[X]	[X]	[X]	[X]	[X]	[X]
Iron Mountain	[X]	[X]	[X]	[X]	[X]	[X]
Recall	[X]	[X]	[X]	[X]	[X]	[X]

Source: CMA analysis of responses to oil and gas customer questionnaire.

Note: Ratings based on a sample of 19 customers (10 Iron Mountain, 3 Recall, 1 CGG and 5 multi-sourcers).

- Table 3 provides a summary of the tender data provided by Iron Mountain oil and gas customers with specialist RIMS in the Aberdeen area (equivalent data was not provided by Recall customers).

**Table 3: Summary of Iron Mountain customer tender data**

	<i>Number</i>	<i>Percent (%)</i>
Total tenders	[REDACTED]	[REDACTED]
<i>of which following suppliers were considered</i>		
Iron Mountain	[REDACTED]	[REDACTED]
Recall	[REDACTED]	[REDACTED]
CGG	[REDACTED]	[REDACTED]
<i>of which following suppliers were chosen</i>		
Iron Mountain	[REDACTED]	[REDACTED]
Recall	[REDACTED]	[REDACTED]
CGG	[REDACTED]	[REDACTED]

Source: CMA analysis of responses to oil and gas customer questionnaire.

4. Table 4 summarises the data provided by oil and gas customers with specialist requirements on whether they multi-source and with which provider.

**Table 4: Summary of multi-sourcing of specialist RIMS requirements**

	<i>Iron Mountain customers</i>		<i>Recall customers</i>	
	<i>Number</i>	<i>Percent (%)</i>	<i>Number</i>	<i>Percent (%)</i>
Single sourcing customers	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Multi-sourcing customers	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<i>of which with</i>				
Recall	[REDACTED]	[REDACTED]	N/A	N/A
Iron Mountain	N/A	N/A	[REDACTED]	[REDACTED]
CGG	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis of responses to oil and gas customer questionnaire.



## **Customer views**

### **Introduction**

1. We received mixed views from both customers and competitors on the effect of the merger on competition. Many customers had not recently tested the market, and some of these appeared to have a limited understanding of which competitor was likely to be an effective option for them. Among those who had recently tested the market, opinions varied.
2. This appendix summarises the views of customers.

### **Concerned customer views (excluding oil and gas customers)**

3. Of the 112 customers that responded to our inquiry, 19 raised concerns of some sort about the merger. Table 1 below summarises the views of those customers.

**Table 1: Views of concerned customers**

<i>Customer</i>	<i>Concern (as raised in response to questionnaire)</i>	<i>Date of last considering/switching providers</i>	<i>RMS or OSDP, National/Local,* contract value</i>	<i>Providers considered and ranking</i>
[REDACTED]	We would have concerns that security across the enlarged business may not continue to be consistent with the current standards. We would need to carry out further due diligence to ensure that existing processes and security standards with regards the handling and storage of our data are maintained. Such an exercise is time consuming and has an irrecoverable cost to our business. We would also be concerned that any reduction in competition in this area may lead to a decrease in our negotiating power on pricing in future.	2016	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Crown 1 Interica 2 Recall 3 Restore 4 Kestrel 5
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	The costs of switching provider are high in relative terms. These are two of the main providers. While we have a contract in place for the short term, the options for exercising countervailing bargaining strategies post-merger will be limited.	2014	[REDACTED]	[REDACTED]
[REDACTED]	From a personal perspective it would appear that there is a merger of the 2 dominant suppliers in the marketplace from a nationwide offering with the capacity to deal with large volumes. It would therefore seem logical that this merger would result in a significant reduction in the amount of competition in this market place. Personally I would expect an uplift in pricing owing to the lack of completion and the lack of alternative suppliers	2014	[REDACTED]	RMS: Iron Mountain Recall
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	RMS: Iron Mountain (only provider on framework)
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	RMS: Recall Iron Mountain Restore
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Astellas Pharma Limited	This acquisition is unwelcome. It may result in overall lower records storage standards, poorer customer service and higher prices.	2011	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

<i>Customer</i>	<i>Concern (as raised in response to questionnaire)</i>	<i>Date of last considering/switching providers</i>	<i>RMS or OSDP, National/Local,* contract value</i>	<i>Providers considered and ranking</i>
[X]	Requires that suppliers can offer both the management of hard copy and electronic format. 2008 tender experience was that few can offer a credible solution that provides this.	2008	[X]	[X]
[X]	[X]	[X]	[X]	
[X]	Merger would reduce market choice significantly.	2005	[X]	
[X]	Concerned merger will result in less competition and higher prices. Prices may go up and service quality down. Have concerns regarding this merger.	2010	[X]	
[X]	[X]	[X]	[X]	[X]
[X]	[X]		[X]	

Source: CMA summary based on data from customers.

\*The CMA has classified as national those customers that have told us they require service in multiple local areas

## **Views of unconcerned customers who have recently market tested options**

4. Most customers that responded to our questionnaire did not raise concerns about the merger, although very few gave reasons for this. Table 2 below provides a summary of the views of only customers who have recently market tested their options but did not raise concerns about the merger. We concentrate on those customers who have recently been to market to ensure they are likely to be well informed.
5. Taken together, the summaries reflect the mixed views that we received from third parties about the effect of the merger across both RMS and OSDP.



## The CMA's approach to remedies

1. If the CMA expects an SLC to result from a completed merger it is required under section 35 of the Act to answer the following questions:
  - (a) Should the CMA itself take action for the purpose of remedying, mitigating or preventing the SLC or any adverse effects resulting or expected to result from the SLC?
  - (b) Should the CMA recommend the taking of action by others for the purpose of remedying, mitigating or preventing the SLC or adverse effects resulting or expected to result from the SLC?
  - (c) In either case, if action should be taken, what action should be taken and what is to be remedied, mitigated or prevented?

2. The CMA's guidelines state:<sup>1</sup>

The Act requires that the [CMA], when considering these remedial actions, shall 'in particular, have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the substantial lessening of competition and any adverse effects resulting from it'. To fulfil this requirement, the [CMA] will seek remedies that are effective in addressing the SLC and its resulting adverse effects and will then select the least costly and intrusive remedy that it considers to be effective. The [CMA] will seek to ensure, [as outlined in paragraph 1.12], that no remedy is disproportionate in relation to the SLC and its adverse effects. The [CMA] may also have regard, in accordance with the Act, to any relevant customer benefits arising from the merger.

3. Remedies are conventionally classified as either structural or behavioural. Structural remedies, such as divestiture or prohibition, are generally one-off measures that seek to restore or maintain the competitive structure of the market; they address the reduction in rivalry that results from the merger at source.<sup>2</sup> Behavioural remedies such as price caps, supply commitments and service level undertakings, are generally measures that aim to control the

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<sup>1</sup> [Merger Remedies \(CC8\)](#), paragraph 1.7

<sup>2</sup> [Merger Remedies \(CC8\)](#), paragraphs 2.5–2.6.

adverse effects expected from a merger rather than addressing the source of the SLC; they may require on-going monitoring.<sup>3</sup>

4. The CMA's guidelines set out four aspects to be considered in assessing the effectiveness of a remedy:<sup>4</sup>
  - (a) **Impact on the SLC and resulting adverse effects** – where possible, the CMA will seek to restore competitive rivalry, through remedies that re-establish the structure of the market expected in the absence of the merger.
  - (b) **Appropriate duration and timing** – the CMA prefers a remedy that quickly addresses competitive concerns, with the effect of the remedy sustained for the likely duration of the SLC.
  - (c) **Practicality** – a practical remedy should be capable of effective implementation, monitoring and enforcement.
  - (d) **Acceptable risk profile** – the CMA will seek remedies that have a high degree of certainty.
5. The CMA's Merger Remedies guidance explains that in merger inquiries, the CMA will generally prefer structural remedies, such as divestiture or prohibition, rather than behavioural remedies because:<sup>5</sup>
  - (a) structural remedies are likely to deal with an SLC and its resulting adverse effects directly and comprehensively at source in restoring rivalry;
  - (b) behavioural remedies may not be effective and may create significant costly distortions in market outcomes; and
  - (c) structural remedies do not normally require monitoring and enforcement once implemented.
6. Behavioural remedies are generally subject to higher risks than structural remedies and are therefore less likely to be effective and/or proportionate solutions to an SLC in a merger inquiry.
7. There are two broad categories of behavioural remedies: those that enable competition (for example by providing access to products or facilities of the merged entity), and those that control the adverse effects expected from the

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<sup>3</sup> [Merger Remedies \(CC8\)](#), paragraph 2.11.

<sup>4</sup> [Merger Remedies \(CC8\)](#), paragraph 1.8.

<sup>5</sup> [Merger Remedies \(CC8\)](#), paragraph 2.14.

merger<sup>6</sup> (for example price or quality regulation). Among behavioural remedies, the CMA prefers remedies that enable competition as these are more likely to lead to ongoing competition.

8. Where the CMA is considering a divestiture remedy, it would need to be satisfied that the prospective purchaser is independent of the Parties, has the necessary capability to compete, is committed to competing in the relevant market(s) and that divestiture to the purchaser will not create further competition concerns. These criteria are set out in more detail below:<sup>7</sup>

- (a) **Independence** – The purchaser should have no significant connection to the merger parties that may compromise the purchaser’s incentives to compete with the merged entity, for example, an equity interest, shared directors, reciprocal trading relationships or continuing financial assistance.
- (b) **Capability** – The purchaser must have access to appropriate financial resources, expertise and assets to enable the divested business to be an effective competitor in the market. This access should be sufficient to enable the divestiture package to continue to develop as an effective competitor. For example, a highly leveraged acquisition of the divestiture package that left little scope for competitive levels of capital expenditure or product development is unlikely to satisfy this criterion.
- (c) **Commitment to relevant market** – The CMA will wish to satisfy itself that the purchaser has an appropriate business plan and objectives for competing in the relevant market(s).
- (d) **Absence of competitive or regulatory concerns** – Divestiture to the purchaser should not create a realistic prospect of further competition or regulatory concerns.<sup>8</sup>

9. Where there is doubt as to the viability or attractiveness to purchasers of a proposed divestiture process, we would consider whether to require an up-front buyer for the possible divestiture package. Our guidance on this issue states that:

Where the CMA is in doubt as to the viability or attractiveness to purchasers of a proposed divestiture package (ie composition risk) or believes there may be only a limited pool of suitable

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<sup>6</sup> [Merger Remedies \(CC8\)](#), paragraph 2.17.

<sup>7</sup> [Merger Remedies \(CC8\)](#), paragraph 3.15.

<sup>8</sup> In considering whether a divestiture is likely to give rise to competition concerns, we will apply the same framework to competition assessment as we have used in our analysis of competitive effects in the investigation.



purchasers (ie purchaser risk), it may require the merger parties to obtain a suitable purchaser that is contractually committed (for example through exchange of contracts subject to limited conditions) to the transaction before permitting a proposed merger to proceed or a completed merger to progress with integration. Where the CMA considers that the competitive capability of the divestiture package may deteriorate pending the divestiture (ie asset risk) or completion of the divestiture may be prolonged, it may also require that the up-front buyer completes the acquisition before the merger may proceed or, in the case of a completed merger, before the merger parties may progress with integration.<sup>9</sup>

10. Having considered the effectiveness of remedy options, the CMA will then consider the costs (including costs to the parties, third parties, the CMA and other monitoring agencies) of those remedies that it expects would be effective in addressing the SLC and resulting adverse effects.<sup>10</sup> In order to be reasonable and proportionate, the CMA will seek to select the least costly remedy or package of remedies that it considers will be effective.<sup>11</sup>

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<sup>9</sup> [Merger Remedies \(CC8\)](#), paragraph 3.19.

<sup>10</sup> [Merger Remedies \(CC8\)](#), paragraph 1.10: For completed mergers, as in this case, the CMA will not normally take account of costs or losses that will be incurred by the merger parties as a result of a divestiture remedy

<sup>11</sup> [Merger Remedies \(CC8\)](#), paragraph 1.9.

## Glossary

<b>The Act</b>	Enterprise Act 2002.
<b>Ancillary services</b>	Additional services that may be provided by <b>RIMS</b> suppliers to <b>RMS</b> and <b>OSDP</b> customers, such as photocopying, document scanning, sale of storage materials and document management consulting services.
<b>Abbot Datastore</b>	Abbot Datastore Limited.
<b>AMS</b>	Archive Management Systems Limited.
<b>Anglian Archives</b>	Anglian Archives Limited.
<b>Attric</b>	Attric Limited.
<b>Barclays</b>	Barclays Bank plc.
<b>Box-it</b>	Box-it Data Management Limited.
<b>C21</b>	C21 Data Services Limited.
<b>Capita</b>	Capita Document and Information Services, a division of Capita Business Services Limited.
<b>Capture All</b>	Capture All Limited
<b>CGG</b>	CGG Data Management (UK) Limited.
<b>Chatham Archive</b>	The Chatham Archive & Document Storage Company Limited.
<b>Clark's Archive Services</b>	Clark's Archive Services (Midlands) Limited.
<b>Cloud services</b>	A cloud service is any resource that is provided over the Internet.
<b>Cores</b>	Core samples, which are samples of rock from drilling wells, typically stored in boxes that are longer and heavier than standard storage boxes.
<b>Crown</b>	Crown Records Management Limited.
<b>Dajon</b>	Dajon Data Management Limited.

<b>Data Protect</b>	Data Protect (UK) Limited.
<b>DeepStore</b>	DeepStore Limited.
<b>Dh Media Solutions</b>	Dh Media Solutions Limited.
<b>DRS</b>	DRS Data Services Limited.
<b>EDM</b>	EDM Records Management Limited.
<b>Electronic OSDP</b>	Off Site Data Protection services using electronic rather than physical media, ie the collection and storage of electronic data, through the electronic transfer of digital files via networked or cloud-based services (electronic <b>OSDP</b> ).
<b>File Centre</b>	File Centre Document & Data Storage Limited.
<b>First Scottish</b>	First Scottish Document Management Limited.
<b>Flexistore</b>	Flexistore Limited.
<b>Gas fire suppression systems</b>	Fire control system used in <b>vaults</b> , utilising inert gas which starves a fire of oxygen. Used as an alternative to water sprinklers, where stored assets are valuable or would be particularly vulnerable to water damage.
<b>The Hill Company</b>	The Hill Company Limited.
<b>HSBC</b>	HSBC Bank plc.
<b>HW Coates</b>	HW Coates Limited.
<b>Imagestor</b>	Imagestor Limited.
<b>Iron Mountain</b>	Iron Mountain refers to Iron Mountain Incorporated, the US parent of Iron Mountain UK. Iron Mountain's UK trading operations are carried out by two entities, <b>Iron Mountain (UK) Limited</b> and <b>Iron Mountain (UK) Services Limited</b> .
<b>Iron Mountain (UK) Limited</b>	Iron Mountain (UK) Limited is an Iron Mountain UK trading entity.
<b>Iron Mountain (UK) Services Limited</b>	Iron Mountain (UK) Services Limited is an Iron Mountain UK trading entity.
<b>Kelly's Storage</b>	Kelly's Storage Limited.

<b>Kestrel IDM</b>	Kestrel IDM Limited.
<b>KRC International</b>	KRC International Limited.
<b>Local market/local catchment</b>	The geographic area over which companies significantly compete for business, based on the distance for which a customer would be likely to consider suppliers given their requirements for rapid retrievals.
<b>MJF</b>	MJF Group Limited.
<b>Oasis</b>	Oasis Records Management Limited.
<b>OSDP</b>	Off Site Data Protection services. This is the collection and storage of electronic data, through the physical transfer of magnetic tapes (tapes, hard drives and optical disks) (physical OSDP).
<b>Perm-out fees</b>	Fees levied if a customer permanently removes its stored boxes (to self-store or transfer to a competitor), whether in or out of contract, charged in addition to normal retrieval and transport fees.
<b>Phoenix</b>	Phoenix Data Management Limited.
<b>PHS</b>	PHS Records Management Limited.
<b>Preferred Media Limited</b>	Preferred Media Limited.
<b>Quicksilver</b>	D.Collard Limited.
<b>Racked capacity</b>	Total volume of installed racks.
<b>RBB Economics</b>	Economic consultants engaged by <b>Iron Mountain</b> .
<b>Recall</b>	Recall's UK operations as carried out by Recall Limited (UK) and its subsidiaries.
<b>Recall GQ Limited (UK)</b>	Recall GQ Limited, a <b>Recall Limited</b> Subsidiary.
<b>Recall Limited (UK)</b>	A subsidiary of Recall Holdings Limited, the ultimate Australian listed parent of <b>Recall Limited</b> .
<b>Restore</b>	Restore plc.

<b>Restore/Wincanton</b>	Refers to the merged <b>Restore</b> and <b>Wincanton</b> operation. <b>Restore</b> acquired <b>Wincanton</b> towards the end of 2015.
<b>RIMS</b>	Records and Information Management Services.
<b>RMS</b>	Records Management Services. This is the collection/transportation, storage, archiving and retrieval of paper documents and other physical records (eg microfilm/microfiche).
<b>Saracen</b>	Saracen Limited, a Lok'nStore Group Plc company.
<b>SDS</b>	SDS Limited.
<b>Secure Data Management</b>	Secure Data Management Limited.
<b>Shore Porters</b>	The Shore Porters Society.
<b>Specialist RIMS services to oil and gas customers</b>	Oil and gas customers may require specific services that customers from other sectors will not require, in particular storage of <b>core samples</b> . Other requirements may include storage of seismic tape, large technical drawings and maps etc, as well as standard boxes of paper records and <b>OSDP</b> tapes.
<b>SSNIP</b>	Small but significant non-transitory increase in relative price. A tool used for market definition, to explore whether customers would readily substitute between products (or geographical areas) in response to a small change in relative prices (typically 5%), indicating whether they are in the same market.
<b>The Stock Room</b>	Thestockroom Limited.
<b>Stor-A-File</b>	Stor-A-File Limited.
<b>S4U</b>	Storage 4 U Limited.
<b>Storage management company</b>	Storage Management (Data Services) Limited.
<b>TNT</b>	TNT Business Solutions are a division of TNT Express (UK) Ltd.

**United Supplies**

United Supplies Limited.

**Vault**

A sealed room (for security, fire control and environmental control purposes) used to store **OSDP** tapes and sometimes valuable paper records.

**Wincanton**

Wincanton Records Management was a trading subdivision of Wincanton plc providing document management, scanning and shredding services. Wincanton Records Management was purchased by **Restore Plc** in December 2015.