

Terms of reference and conduct of the inquiry¹

Terms of reference

1. On 2 November 2009 the OFT sent the following reference to the CC:
 1. In exercise of its duty under section 33(1) of the Enterprise Act 2002 ('the Act') to make a reference to the Competition Commission ('the CC') in relation to an anticipated merger the Office of Fair Trading ('the OFT') 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 or under the control of Brightsolid Group Limited ('FMP/1911') will cease to be distinct from enterprises carried on by or under the control of Friends Reunited Holdings Limited ('Genes'); and
 - (ii) as a result, the condition specified in section 23(4) of the Act will prevail, or will prevail to a greater extent, with respect to the supply of online genealogy/family history data and related services ('online genealogy services') in the UK; and
 - (b) the creation of that situation may be expected to result in a substantial lessening of competition within any market or markets in the UK for goods or services, including the supply of online genealogy services in England and Wales by large 'full service' genealogy providers.
 2. Therefore, in exercise of its duty under section 33(1) of the Act, the OFT hereby refers to the CC, for investigation and report within a period ending on 16 April 2010, 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 UK for goods or services.
 3. In relation to the question whether a relevant merger situation will be created, the CC shall exclude from consideration one of the subsections (1) and (2) of section 23 of the Act if they find that the other is satisfied.

(signed) Amelia Fletcher
Senior Director, Mergers, Office of Fair Trading
2 November 2009

¹In this report we refer to Brightsolid Group Limited as 'Brightsolid' and Friends Reunited Holdings Limited as 'Friends'.

Conduct of the inquiry

2. Notices inviting interested parties to submit evidence to the CC were placed in the following publications: *Ancestors* and *Family Tree*. We also posted an invitation to express views to us on the CC website² together with an [administrative timetable](#) for the inquiry.
3. We sought evidence from competitors, suppliers, associations, government bodies and other interested parties. We held staff hearings with a number of parties. Evidence submitted, and non-confidential versions of summaries of hearings, have been published on the CC website.
4. Members of the Group, accompanied by staff, visited the operations of Brightsolid and Friends.
5. We received written evidence from Brightsolid and Friends and held hearings with them. A non-confidential version of the companies' [joint submission](#) has been placed on our website.
6. In the course of our inquiry we sent to Brightsolid and Friends a statement of issues, a number of working papers and our provisional findings.
7. We commissioned Harris Interactive to carry out a [survey](#) of FMP and Genes customers. Results of the survey are published on the CC website.
8. On 18 December the CC accepted [interim undertakings](#) from ITV and Brightsolid under section 80 of the Act, for the purpose of preventing pre-emptive action, to ensure that no action was taken which might prejudice the reference or impede the taking of any action by the CC under Part 3 of the Act which might be justified by the CC's decisions on the reference.
9. The text of this final report has been placed on the CC website.

²www.competition-commission.org.uk.

Company background and financial overview

Introduction

1. This appendix sets out the group structures along with summary histories of the parties to the proposed merger. It also looks at the financial performance of the genealogy businesses within the parties, in the context of their immediate reporting groups.

Summary

2. Brightsolid's genealogy revenue was forecast to [X]. Revenue was forecast to be driven by [X].
3. Royalties and depreciation [X].
4. [X] Brightsolid, however, forecast an operating profit [X].
5. Friends was a profitable group although profitability had declined in the three-year period to December 2008. The year to December 2008 saw a change in revenue model for Friends Reunited Limited which resulted in [X].
6. Genealogy revenue was forecast to [X].
7. Genealogy returns an EBITDA [X].
8. [X]

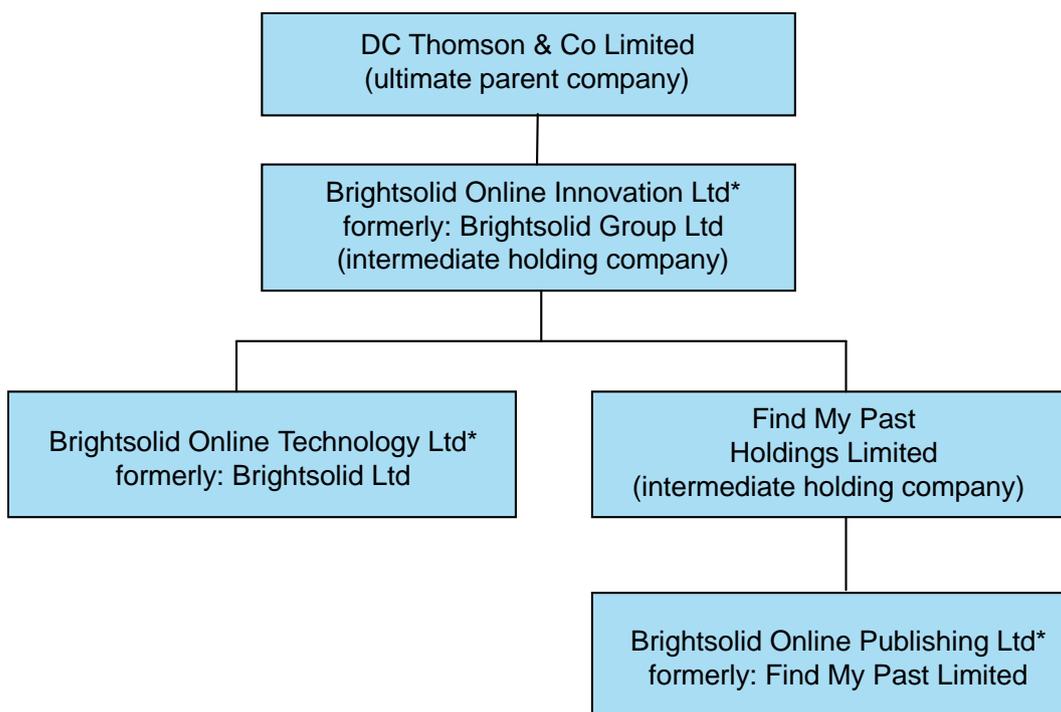
Brightsolid

Group structure

9. Brightsolid's group structure is set out in Figure 1. Since the reference, the group has renamed a number of its companies. The new names, along with the names as at the reference date, are included below. The new names have been used as the default within this appendix.

FIGURE 1

Brightsolid group structure (active companies only)



*Renamed November 2009.
Source: Companies House.

10. The Brightsolid group is being reorganized to split its ISP and online IT business services activities from its online family history services. Historically such activities have been undertaken by both Brightsolid Limited (Brightsolid) and Find My Past Limited (FMP). Following the reorganization, all family history activities will be undertaken by Brightsolid Online Publishing Ltd. As part of this process Brightsolid is in the process of novating or assigning the 1911 Census and Scotlandspeople contracts to Brightsolid Online Publishing.
11. The genealogy activities include:
 - (a) retail of family history data:
 - (i) access both on a PPV and subscription basis to online family history information through: findmypast.com (and .co.uk); ancestorsonboard.com;¹ 1911census.co.uk;² and scotlandspeople.gov.uk;³
 - (ii) the hosting of an online genealogy magazine *Discover My Past Scotland*; and
 - (iii) the provision of free software (www.familytreeexplorer.com⁴) allowing customers to create their family trees and store records online; and

¹Outbound passenger lists 1890–1960.

²Brightsolid digitized the 1911 Census data and operates the official 1911 Census website in association with TNA.

³Brightsolid manages the website which is a partnership between the GROS, the National Archives of Scotland and the Court of the Lord Lyon providing genealogical information derived from Scottish public authority records.

⁴Currently operating as a beta site. In practice, the family tree software is typically accessed by customers via a link on the FMP website.

- (b) the digitizing, transcribing and indexing of original records⁵ for its own use and for sale to third parties under wholesale licensing and 'white label' arrangements.

History

Brightsolid

12. Brightsolid was formed in 1995 as Scotland Online, originally operating as an ISP. In 2001 it was awarded the contract to manage the Scottish Government's official online records website, Scotlandspeople.gov.uk (launched September 2002). In 2007, the GROS exercised its option to extend this contract until August 2010. In 2009, the GROS ran a competitive award process for the next contract to manage the Scotlandspeople website. Brightsolid successfully tendered for the contract and was awarded the contract to run the service for a further three-year term from September 2010.
13. In April 2007, Brightsolid was awarded the contract to digitize the 1911 England and Wales census records in association with TNA. The site was launched in January 2009, albeit with only the first tranche of regional subsets available—the complete 1911 Census dataset only became available through the website in June 2009.
14. Scotland Online was renamed and rebranded as Brightsolid in June/July 2008. Brightsolid was subsequently renamed Brightsolid Online Technology Ltd in November 2009. As stated in paragraph 10, the genealogy business was in the process of being novated to Brightsolid Online Publishing.

FMP

15. FMP began trading in 2003 as 1837online.com. It initially provided access to civil registration records on a PPV basis. It subsequently expanded through agreements with original data holders [X] to offer full census data from 1841 to 1891 (1851 Census full data was completed in November 2009) as well as military and naval data and outbound passenger lists. A full chronology of data releases is at [Annex 1](#).
16. In December 2007, FMP was acquired jointly by DC Thomson and Co Ltd and Noble Grossart through Brightsolid Group Limited (now Brightsolid Online Innovation Ltd), with DC Thomson subsequently buying out Noble Grossart's 50 per cent share in 2009. FMP was renamed, in November 2009, Brightsolid Online Publishing Ltd.

Financial information

Overview

17. Table 1 shows the respective revenue, gross profit and contribution for genealogy and IT services businesses for the Brightsolid group. The data used in the analysis of the Brightsolid group has been constructed as follows:
 - (a) Revenue and costs for FMP have been included from January 2008.
 - (b) Gross profit is stated after direct costs (per management accounts) and contribution is stated after database and dataset amortization.

⁵Brightsolid outsources this activity.

(c) Marketing spend has been removed from this analysis and is looked at separately.

TABLE 1 **Brightsolid group genealogy and IT services revenue, gross profit and contribution**

£'000			
Years ended 31 March			
	2007	2008	2009
Revenue:			
Genealogy	[X]	[X]	[X]
IT Services	[X]	[X]	[X]
	[X]	[X]	[X]
Gross profit:			
Genealogy	[X]	[X]	[X]
IT Services	[X]	[X]	[X]
	[X]	[X]	[X]
Contribution:*			
Genealogy	[X]	[X]	[X]
IT Services	[X]	[X]	[X]
	[X]	[X]	[X]
<i>per cent</i>			
Genealogy share:			
Revenue	[X]	[X]	[X]
Gross profit	[X]	[X]	[X]
Contribution	[X]	[X]	[X]

Source: Management accounts.

*[X]
[X]

18. Genealogy revenue has increased from [X] as a result of the acquisition of FMP (2008) and the launch of the 1911 Census (2009). The level of contribution from genealogy has also increased significantly in 2009 from 2008.
19. The following sections look at genealogy performance in more detail.

Revenue and gross profit

20. Figure 2 shows revenue and gross profit for Brightsolid's genealogy businesses for the three years ended 31 March 2009 and the forecast for the three years ending 31 March 2012. It includes FMP from January 2008 (three months of results included in 2008) and 1911 Census from December 2008⁶ (four months of results in 2009).

FIGURE 2

Genealogy revenue and gross profit

[X]

Source: Management accounts.

21. The sections below look at the composition and trends in revenue and gross profit.

⁶1911census.co.uk website was launched in January 2009.

Revenue

22. Figure 3 shows the revenue profile for the Brightsolid group's three main genealogy business streams for the three years ended 31 March 2009 and the six months to September 2009.

FIGURE 3

Brightsolid Group's genealogy revenues, April 2006 to September 2009

[✂]

Source: Management accounts.

23. Scotlandspeople revenue has grown from [✂]. Revenue for the six months to September 2009 was £[✂]. Forecast revenue (see Figure 4) shows [✂].

FIGURE 4

Brightsolid group genealogy revenue split

[✂]

Source: Management accounts.

24. FMP revenue has grown [✂]. Revenue for the six months to date in 2010 was £[✂]. Forecast revenue for 2010 is [✂]. Figure 5 shows that this growth in revenue [✂].

FIGURE 5

FMP revenues, subscription and PPV

[✂]

Source: Management accounts.

25. 1911 Census revenue (see Figure 3) shows a significant peak on launch generating revenue of £[✂] in the four months of post-launch to March 2009. In the six months to September 2009 revenue is £[✂]. Forecast revenue for 2010 [✂].
26. The revenue figures show a relatively stable pattern for Scotlandspeople and FMP with slight peaks in the period following the 1911 Census launch (lag of one to two months). The 1911 Census follows a similar pattern with the peak on immediate launch followed by a flat revenue stream.

Gross profit

27. Figure 2 shows that [✂].

FIGURE 6

Royalties as a percentage of FMP and 1911 Census revenue

[✂]

Source: Management accounts.

Contribution

28. Figure 7 shows the effect on gross profit of the inclusion of depreciation on datasets and databases. It shows [REDACTED].

FIGURE 7

Genealogy revenue and contribution

[REDACTED]

Source: Management accounts.

29. Table 2 sets out the depreciation charge for each of the six years in total and as a percentage of both total revenue and revenue less Scotlandspeople which incurs no depreciation charges. Datasets are depreciated over the life of the asset.

TABLE 2 Depreciation

	£'000					
	2007*	2008*	2009*	2010†	2011†	2012†
Total revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Depreciation	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
1911 Census	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
FMP	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
% of revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Revenue (excl Scotlandspeople)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
% of revenue	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: Management accounts.

*Actual.

†Forecast.

Operating profit

30. It is not possible to calculate an operating profit for the entire genealogy businesses for the three-year period ended March 2009. FMP on a stand-alone basis recorded operating losses in both 2008 and 2009 of £0.23 million and £0.11 million respectively. The 2008 losses, however, are stated after charging dataset digitization costs of £0.51 million. In 2009, there was a change of depreciation policy which meant that these costs are now capitalized and amortized instead of being charged in the year they are incurred.
31. The forecasts for Brightsolid Online Publishing for the three years ending 2012 show [REDACTED].

TABLE 3 Forecast operating profit

	£'000		
	2010*	2011*	2012*
Contribution	[X]	[X]	[X]
Overheads:			
Staff cost	[X]	[X]	[X]
Marketing	[X]	[X]	[X]
Depreciation (non-dataset)	[X]	[X]	[X]
Other	[X]	[X]	[X]
Operating profit	[X]	[X]	[X]
Operating %	[X]	[X]	[X]

Source: Management accounts.

*Forecast.

32. In the three years ended March 2009, marketing spend (FMP and Brightsolid) was [X].⁷ This equates to [X] per cent of revenue in each year and reflects the increase in spending relating to the 1911 Census.

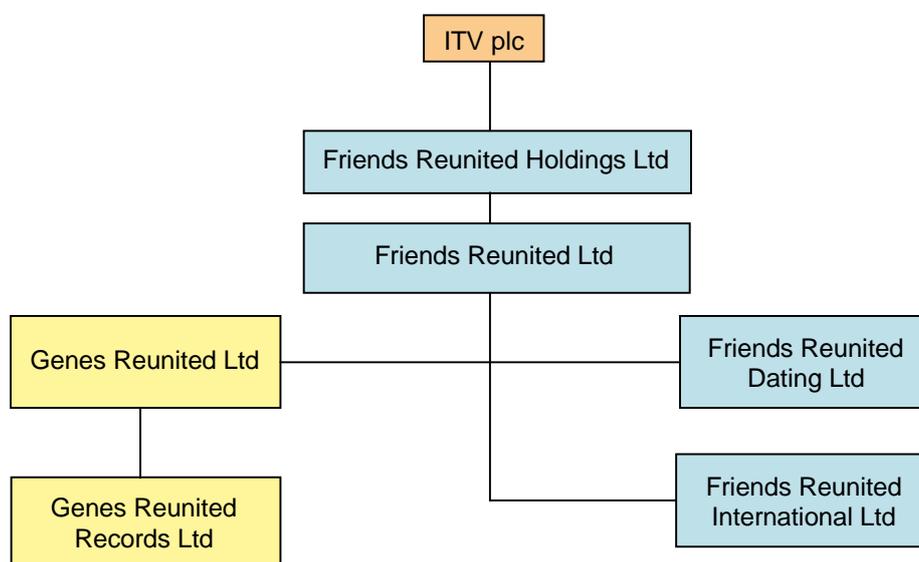
Friends Reunited Group

Group structure

33. Friends Reunited's group structure is set out in Figure 8.

FIGURE 8

Friends Reunited group structure (active companies only)



Note: All companies 100 per cent owned.
Source: Management accounts.

⁷Marketing spend for 2007 and 2008 is FMP only and is stated as total marketing spend for the full year irrespective of the date of acquisition by Brightsolid group.

34. The Friends Reunited group consists of five currently active subsidiaries⁸ operating a range of online businesses. These include:
- (a) Friends Reunited Limited provides a service which enables individuals to track down and contact old friends from school, university, workplaces and streets where they used to live. It has over 20 million registered members.
 - (b) Genes allows users to enter their family tree information into a database and then search, find and make contact with other users with matching individuals in their tree. As at 31 December 2008, the Genes family tree database contained the names of approximately 177 million ancestors.
 - (c) Genes Reunited Records Limited (GRR) owns and operates the official 1901 Census on behalf of TNA. It also provides access to other datasets in partnership with a third party supplier ([REDACTED]).
 - (d) Friends Dating Limited (Dating) is an online dating service.
 - (e) Friends Reunited International Limited provides online reunion services in Australia, New Zealand and South Africa.

History

35. Friends Reunited was founded in 1999, with the online social networking site launched in 2000, initially as a free service which in 2002 was changed to annual subscription. In 2003, Genes Reunited and Friends Dating Reunited were launched using the annual subscription model. In August 2005, the group acquired the website and dataset for the 1901 Census for £[REDACTED] million from Qinetiq. These were placed in the newly-formed GRR.
36. The Friends Reunited group was acquired in December 2005 by ITV for an initial £120 million,⁹ rising to £175 million with earnout (based on EBITDA performance). In April 2008, Friends Reunited changed its model from annual subscription to an advertising model with no user fees.
37. In March 2009, ITV announced its intention to sell the Friends Reunited group and appointed Credit Suisse as adviser. On 6 August 2009, a Sale and Purchase agreement was signed with DC Thompson & Co for the sale of the group for £25 million.

Financial information

Friends Reunited group profit and loss

38. Table 4 sets out the profit and loss account for the Friends Reunited group for the three years ended 31 December 2008. The table shows that: [REDACTED].^{10,11,12,13,14}

⁸Friends Reunited Jobs Limited is currently inactive. In addition, the group includes the following dormant companies: Friends Reunited Classifieds Limited, Friends Connections Limited and Friends Reunited.co.uk.

⁹£120 million comprised £75 million cash, £24 million ITV plc shares and £21 million loan notes.

¹⁰Information memorandum.

¹¹Contribution at a group level is stated after direct costs but before central costs.

¹²EBITDA is stated after charging central overheads to contribution.

¹³EBIT is stated after charging ITV contra and depreciation and amortization to EBITDA.

¹⁴Friends Reunited operates cross-advertising and marketing between itself and ITV. The stated figure represents the net amount of inter-company activity.

TABLE 4 Friends Reunited group profit and loss

	2006	2007	2008
<i>Revenue</i>			
Genes Reunited	[REDACTED]	[REDACTED]	[REDACTED]
GRR	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
Friends Reunited	[REDACTED]	[REDACTED]	[REDACTED]
Dating	[REDACTED]	[REDACTED]	[REDACTED]
Friends jobs	[REDACTED]	[REDACTED]	[REDACTED]
Advertising	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
Genes % of total revenue	[REDACTED]	[REDACTED]	[REDACTED]
Net contribution*	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
EBITDA†	[REDACTED]	[REDACTED]	[REDACTED]
EBIT‡	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]

Source: Management accounts.

*[REDACTED]
 †[REDACTED]
 ‡[REDACTED]

Genes revenue, EBITDA and EBIT

39. The following sections look at Genes' revenue, EBITDA and EBIT. For this analysis EBITDA is stated after charging direct costs (including royalties) as set out in the management accounts, but excluding advertising and marketing. EBIT is stated after depreciation/amortization costs for the 1901 Census (taken from the statutory accounts). Advertising and marketing costs have been excluded from both calculations and are looked at separately. Central costs are not accounted for in the analysis as these are not allocated on an individual company basis in the management accounts.
40. Figure 9 shows the actual revenue and EBITDA for Genes for the three years ended 31 December 2009, the actual results for the nine months to September 2009 and the forecast revenue and EBITDA for the three years ending December 2011.

FIGURE 9

Genes revenue and EBITDA

[REDACTED]

Source: Management accounts.

41. [REDACTED]

42. [REDACTED]

TABLE 5 Genes revenue profile

	Years ending 31 December					
	2006*	2007*	2008*	2009†	2010†	2011†
Subscription:						
Genes	[X]	[X]	[X]	[X]	[X]	[X]
Gold GR	[X]	[X]	[X]	[X]	[X]	[X]
Gold GRR	[X]	[X]	[X]	[X]	[X]	[X]
Platinum 1911	[X]	[X]	[X]	[X]	[X]	[X]
PPV:						
1901	[X]	[X]	[X]	[X]	[X]	[X]
GRR	[X]	[X]	[X]	[X]	[X]	[X]
Platinum	[X]	[X]	[X]	[X]	[X]	[X]
Other & deferred	[X]	[X]	[X]	[X]	[X]	[X]
Revenue split:						
Subscription	[X]	[X]	[X]	[X]	[X]	[X]
PPV	[X]	[X]	[X]	[X]	[X]	[X]

Source: Actuals—management accounts, Forecast—3 year business plan.

*Actual.

†Forecast.

Notes:

1. [X]

2. [X]

43. Genes told us that the reason for the change in revenue away from 1901 and towards GRR was that: the 1901 site was a relatively isolated site, whereas higher PPV record sales derived from the traffic that visited the larger, better-known Genes site; and in 2008 the Gold subscription was launched which was not available through the 1901 site.

44. [X]¹⁵

TABLE 6 Royalties

	2006*	2007*	2008*	2009†	2010†	2011†
Revenue	[X]	[X]	[X]	[X]	[X]	[X]
Royalties	[X]	[X]	[X]	[X]	[X]	[X]
Percentage of revenue	[X]	[X]	[X]	[X]	[X]	[X]

Source: Management accounts.

*Actual.

†Forecast.

45. [X]

FIGURE 10

Genes revenue and EBIT

[X]

Source: Management accounts.

¹⁵[X]

Marketing spend

46. Table 7 shows Genes' marketing spend as a comparison to the overall spend by Friends Reunited group and as a percentage of Genes' revenue. [REDACTED]

TABLE 7 Friends Reunited group marketing expense

	£'000			
	2006*	2007*	2008*	2009†
Marketing expense:				
Genes	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Friends	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Dating	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Genes expenditure as a percentage of:				
Marketing spend (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Genes revenue (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: Management accounts (marketing schedule).

*Actual
†Forecast.
[REDACTED]

47. [REDACTED]¹⁶

48. [REDACTED]

TABLE 8 Genes total advertising spend, 2007 and 2008

	£'000	
	2007	2008
Marketing spend	[REDACTED]	[REDACTED]
ITV:		
Promotion	[REDACTED]	[REDACTED]
Airtime	[REDACTED]	[REDACTED]
Sponsorship	[REDACTED]	[REDACTED]
PQR credit	[REDACTED]	[REDACTED]
Total marketing	[REDACTED]	[REDACTED]

Source: Friends Reunited management accounts.

¹⁶[REDACTED]

Brightsolid chronology

The key events in Brightsolid's development are as follows:

- In 2001, Scotland Online was successful in the Scottish Government's tender process to run the proposed official online records. On 18 September 2002, ScotlandsPeople.gov.uk was launched as the official Scottish Government website offering access to statutory records.
- In April 2003, Trace2 Limited, trading as 1837online.com, launched the website providing PPV access to Civil Registration records (ie BMD records).
- In February 2005, 1837online.com released the index and images for the 1861 Census.
- In December 2005, 1837online.com launched its first subscription package. Around the same time, [✂].
- In January 2006, Trace2 Limited acquired assets from Trusted Third Party Limited (then trading as The National Archivist), including the benefit of a licence agreement with TNA in respect of the censuses from 1841 to 1891 and certain other data sources.
- In March 2006, 1837online.com released its first counties from the 1891 Census.
- In June 2006, 1837online.com released its first military history data, licensed from Naval and Military Press.
- In August 2006, [✂].
- In September 2006, 1837online.com released its first counties from the 1841 Census, [✂].
- In October 2006, 1837online.com was rebranded as findmypast.com and Trace2 Limited changed its name to Find My Past Limited.
- In November 2006, findmypast.com released its first counties from the 1871 Census, [✂].
- In January 2007, FMP launched a new site, ancestorsonboard.com, in association with TNA. The site provides access to TNA's BT27 series, ie the Outbound Passenger Lists for 1890 to 1960, and was the first project where FMP has been responsible for scanning from original paper records (previous digitization projects having been conducted using microfilm copies).
- In April 2007, Scotland Online was awarded the contract to digitize the 1911 Census for England and Wales.
- In May 2007, FMP completed the purchase of the PedigreeSoft online family tree software, with the aim of integrating it into its site.
- In July 2007, findmypast.com released 1881 Census records using free transcriptions only.

- In November 2007, findmypast.com released its first datasets [✂].
- In December 2007, Scotland Online acquired FMP.
- In January 2008, FMP entered into an agreement to license its BMD and census data to [✂].
- In February 2008, FMP entered into a cross-licensing arrangement with [✂].
- In May 2008, findmypast.com released its first counties from the 1901 Census.
- In June/July 2008, Scotland Online was rebranded as Brightsolid.
- In August 2008, findmypast.com added its first parish records and other material from Federation of Family History Societies.
- In November 2008, findmypast.com released its first counties from the 1851 Census.
- In January 2009, Brightsolid launched the 1911census.co.uk website in association with TNA. The online census records were eventually completed with the release of the Welsh counties on 9 June 2009.
- In June 2009, [✂].
- In September 2009, Brightsolid was awarded a new contract to operate the ScotlandsPeople.gov.uk service as agent for the GROS.
- In October 2009, the 1911 Census was launched on findmypast.com, with PPV and subscription options.
- In November 2009, the final counties from the 1851 Census were released on findmypast.com, completing FMP's 1841 to 1911 Census collection.

Transaction

Summary

1. Friends was deemed to be non-core by ITV early in 2009. It announced its intention to sell it in March 2009. [REDACTED]
2. Brightsolid's valuation documentation shows that around [REDACTED] per cent of the value in Friends lies in Genes. In strategic terms it saw the acquisition of Genes as providing Brightsolid with the important social networking facility, which it currently did not have, and which would be expensive for it to create.
3. It envisaged revenue benefits arising as a result of the ability to [REDACTED] as well as providing greater flexibility in subscription models. Brightsolid's valuation of Genes did not include or rely on [REDACTED].
4. In relation to costs, Brightsolid envisaged that the main cost reduction would arise from [REDACTED], which would save it £[REDACTED].

Introduction

5. This appendix sets out ITV's rationale for the sale of Friends, the sale process and bids received. It also sets out Brightsolid's rationale for the acquisition and the valuation it placed on Friends underlying its final bid price.

Sale process

ITV—rationale for sale

6. ITV stated on 4 March 2009 as part of its announcement of ITV's results for the year ended 31 December 2008 that it intended to dispose of Friends. Its rationale for the disposal was the narrowing of its online business focus on to the delivery of web-based video-on-demand content. As a consequence, Friends was no longer a core asset and, given the background of 'challenging trading conditions for ITV', it was decided that the business should be sold.
7. In April 2009, the Friends Reunited Group was put up for sale with Credit Suisse acting as corporate finance adviser.

Bid process and offers

8. [REDACTED] is in Table 1.

TABLE 1 [REDACTED]

[REDACTED]

Source: [REDACTED].

[REDACTED]

Brightsolid's bid

9. The following section sets out the chronology, proposed business model, rationale and expected revenue and cost benefits of Brightsolid's accepted bid.

Chronology

10. Chronology of Brightsolid's bid (all 2009):
 - (a) 12 June—Brightsolid's first-round bid of £[~~8~~] million submitted. First-round bid based on Information Memorandum (IM) and limited interaction with management.
 - (b) 24 July—Brightsolid's second-round bid of £25 million submitted—exclusivity granted until noon on 5 August 2009.
 - (c) 5 August—sale and purchase agreement signed.

No changes in business model

11. Brightsolid stated that it intended to continue to operate the Genes (Genes Reunited and Genes Reunited Records) business separately from FMP and in accordance with its existing business model subject to: [~~8~~].

Strategic rationale for Brightsolid acquisition

Customer

12. In relation to the Genes part of the acquisition, Brightsolid saw the merger as an opportunity to:
 - (a) build its overall customer base; and
 - (b) expand into the social networking segment of the online family history sector where it did not currently have a presence.
13. Brightsolid stated that FMP lacked the resources easily to develop a customer offering in regard to social networking and collaborative tools. It said that these tools were currently playing, and were likely to continue to play, an increasingly significant role for consumers researching their family history online. As a result, FMP was vulnerable to competition from international social networking sites that might develop their offering, for instance to increase customers' ability to link user-generated content and original data. Acquiring Genes provided FMP with an enhanced ability to respond to this competitive threat.
14. In addition, Brightsolid told us that there was significantly more financial risk in trying to develop its own social networking capability compared with acquiring Genes along with its incumbent expertise in this area.

Revenue and cost benefits

15. Brightsolid believed that its core data products were of interest to Genes' existing data customers, but considered that FMP's specialist datasets were less likely to be of immediate interest to Genes' customers, who, it argued, were less strongly

engaged with family history as a leisure activity. [REDACTED] It said that this would have both customer benefits for Genes members and provide Brightsolid with a greater opportunity to recover its investment in [REDACTED] datasets.

16. In addition, Brightsolid said that this combination would enable it to have greater flexibility in respect of its subscription pricing, benefiting customers.

17. [REDACTED]¹

18. Other benefits which are expected to result from the acquisition of Friends, and in particular the increased and more diverse customer base following the acquisition, include:

(a) [REDACTED];

(b) improved marketing return on investment, enhancing its attractiveness to advertising and marketing companies; and

(c) improved purchasing power for advertising, marketing, email and bank transaction charge spend.

19. [REDACTED]

Brightsolid valuation

20. Brightsolid stated that the merger valuation was not predicated on any increase in prices post-merger and none was anticipated to take place as a result of the merger. The following section looks at Brightsolid's valuation model including pricing, revenue and cost benefits.

21. Table 2 shows Brightsolid's mid-case, base-case discounted cash flow (DCF) valuation used for its final bid of £25 million.² It shows that its accepted bid was between [REDACTED]. It also shows that Genes represented at least [REDACTED] per cent of the value to Brightsolid of the merger.

TABLE 2 Mid-case DCF valuation

DCF valuation (ten-year model)	£ million		
	Base case	Base case less 10%	Base case less 20%
Friends	[REDACTED]	[REDACTED]	[REDACTED]
Genes	[REDACTED]	[REDACTED]	[REDACTED]
Dating	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
Genes % of valuation	[REDACTED]	[REDACTED]	[REDACTED]

Source: [REDACTED].

22. In addition to the mid-case, Brightsolid produced a high case and a low case. It did this, in the case of Genes, by adjusting the standard subscription revenue. In the low case it was reduced by 25 per cent a year from 2009 and in the high case it was increased by 1 per cent a year from 2009. Both these revenue adjustments were

¹Brightsolid's ordinary commercial activities include the licensing of datasets to other online providers (ie at the wholesale level)

[REDACTED].

²[REDACTED]

done at the overall revenue level and not at the underlying subscription price or volume level.

23. In preparing its base case valuation, Brightsolid took the Genes IM figures as its base and adjusted them for:

(a) Revenue:

- (i) [REDACTED]; and
- (ii) 2012 and 2013 forecasts kept constant with 2011 (no inflation). The IM includes figures only up to 2011.

(b) Costs:

- (i) marketing costs reduced [REDACTED]; and
- (ii) annual pre-tax cost savings [REDACTED].

24. Brightsolid also sensitized the base case by reducing the revenue and direct costs by 10 and 20 per cent (Table 2). As with the high and low case scenarios, the revenue reductions were undertaken at the total revenue level for each area and did not specifically reflect either price or user volume reductions.

25. As stated above, Brightsolid's valuation was based on the IM revenue and costs. Table 3 sets out the VAT-exclusive revenue per subscriber figures used in the IM. These figures show that [REDACTED]. These price assumptions were not changed in Brightsolid's valuation model.

TABLE 3 IM revenue assumptions

Subscriber fees	2007	2008	2009*	2010†	2011
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: [REDACTED].

*VAT at 15 per cent.

†[REDACTED]

Cost savings (pre-tax)

26. Savings included within the valuation model relate to cost savings for [REDACTED] and technology with an offset for additional ISP costs (Group level). [REDACTED]

TABLE 4 [REDACTED]

[REDACTED]

Source: [REDACTED].

27. [REDACTED] is shown in Table 5.

TABLE 5 [✂]

[✂]

Source: [✂].

[✂]

28. [✂]

Effect of revenue and costs adjustments

29. The effect on revenue and EBITDA in Brightsolid's valuation compared with the IM of the revenue and cost savings is shown in Figure 1. [Annex 1](#) includes the detailed numbers used in Figure 1.

FIGURE 1

Brightsolid valuation revenue and EBITDA compared with IM

[✂]

Source: [✂].

Brightsolid valuation revenue and EBITDA figures compared with Information Memorandum

TABLE 1 Figure 1 detailed figures

[X]

Source: [X].

Industry background

Summary

1. The purpose of this appendix is to provide an overview of the UK online genealogy industry. The introductory section gives an explanation of UK online genealogy, including an industry timeline. Subsequent sections set out:
 - (a) Section 2: an overview of the current industry structure and supply chain with a focus on the role of ODHs and digitizers including:
 - a summary of the key UK ODHs and their digitization policies;
 - an explanation of the scanning and transcribing processes;
 - an explanation of the subcontracting relationship within the digitization process; and
 - the sub-licensing of datasets (including the recent 1911 Census).
 - (b) Section 3: a focus on the retail section of the supply chain, including an overview of the current key players and their service and product offerings.
 - (c) Section 4: an analysis of current market shares by unique user and by turnover.
 - (d) Section 5: information on user profile.
 - (e) Section 6: possible future online genealogy market trends.
2. This appendix shows that the UK online genealogy market has grown very rapidly in recent years, but growth is now slowing, in terms of user numbers. Now that a large proportion of BMD records and censuses up to 1911 have been digitized, there is a lack of availability of new UK core datasets which have not yet been digitized. The 1921 Census records will not be available until 2022 because of statutory restrictions on the release of the data (Census Act 1920).¹
3. Consequently, players are finding that they have to innovate both in the provision of new non-core datasets and also additional services such as family tree software and social networking, in order to maintain or increase market share. Both existing players and new entrants are currently seeking the business model that will be most successful commercially in this space.
4. Due to the pace of change in the market, it is not yet clear to what extent users are willing to pay for content and whether their preference is for subscription or PAYG models. However, the speed with which the range of offerings is developing in the UK indicates how quickly the market may change. In addition, the willingness of consumers to pay for content is likely to vary significantly by type of content, with certain categories (ie core data) potentially being more successful in supporting a subscription-based business model.

¹In addition, the 1931 Census was destroyed by fire and the 1941 Census was not carried out due to the outbreak of WWII.

Section 1: Introduction

Explanation of UK online genealogy

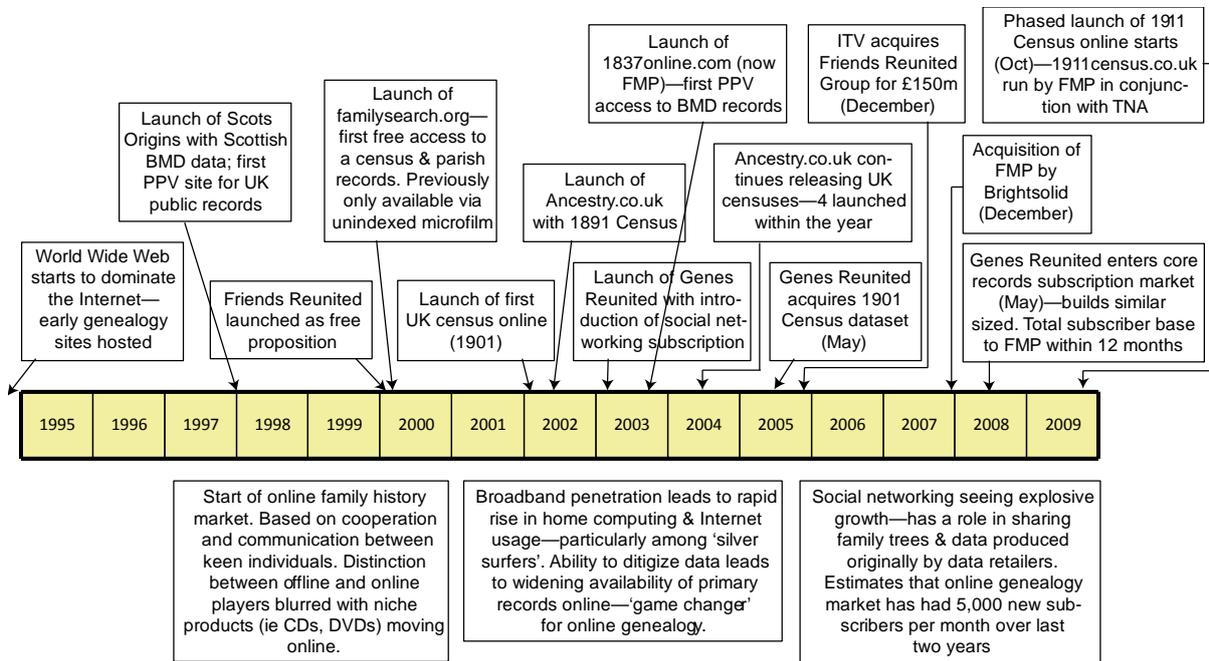
5. Online genealogy is the investigation of ancestry and family history online. The Internet has revolutionized the ease with which some research can be carried out: Key aspects of this are:
 - (a) increasing amounts of data being digitized and being available online; and
 - (b) the proliferation of Internet use which has increased the number of people with shared interests who have Internet access.
6. The Internet is now the publishing medium of choice for all large genealogical data projects, whether official, commercial or volunteer-run, and there is growing popularity for amateur genealogy in the UK—2 million people are estimated to access genealogy websites per month.²
7. This increase in popularity is partially as a result of the fact that genealogy websites now also provide additional services (to core data research) such as family tree software and social networking.
8. Figure 1 shows a detailed UK online genealogy market timeline focusing on the main trends of the market and key events in the development of Genes, FMP and Ancestry. Other key players are detailed in paragraphs 70 to 101 of this appendix. Key events include:
 - (a) December 1997—launch of ScotsOrigins with Scottish BMD data—the first PPV site for UK public records;
 - (b) early 2000—launch of familysearch.org—the first free access to a census and parish records in the UK;
 - (c) early 2002—launch of the first UK census online (1901) and launch of ancestry.co.uk (the UK website of Ancestry, a US firm and the market leader);
 - (d) late 2002—launch of Genes as GenesConnected and introduction of Genes' subscription for social networking;
 - (e) April 2003—launch of 1837online.com—now findmypast.com (FMP);
 - (f) 2005: Genes' acquisition of the 1901 Census dataset in August (from QinetiQ) and Friends Reunited Group is bought by ITV in December for £175 million (including earn-out);
 - (g) 2007: FMP acquired by Brightsolid in December;
 - (h) 2008: Genes enters the core records subscription market in May and builds a similar-sized subscriber base to FMP (including social networking only subscriptions) within 12 months; and

²Nielson.

- (i) 2009: FMP acquires exclusive access to the 1911 Census data in partnership with TNA.³

FIGURE 1

UK online genealogy timeline



Source: CC analysis.

Section 2: Industry structure and supply chain

9. Figure 2 shows the UK online genealogy supply chain, which has four main constituent parts:

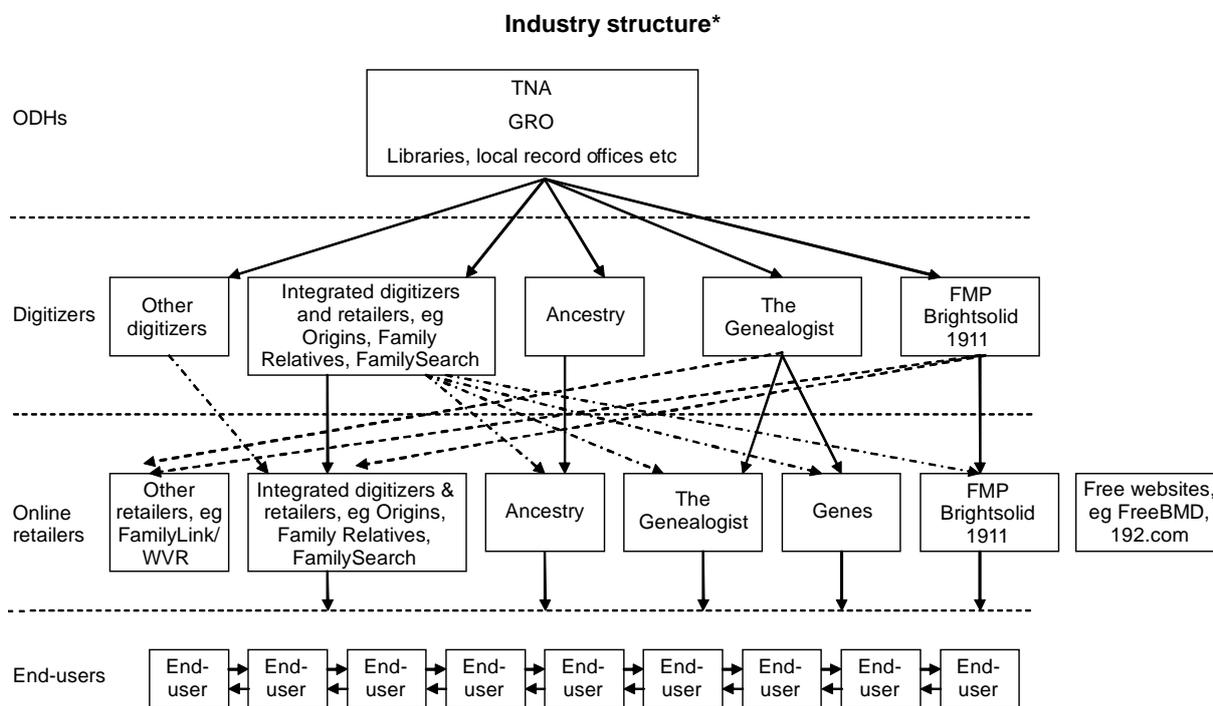
- (a) Official ODHs: many of which are public bodies which may not have the resources (or remit) to digitize and retail the data sources themselves; accordingly ODHs tend to offer access to their records via partnerships with private companies that are able to digitize the data, known as digitizers.
- (b) Digitizers: typically scan, index and transcribe the data source in return for a period of de-facto exclusivity whereby they are the sole retailers of the data (sometimes different companies will scan and transcribe the data). The digitizer may also retail this data online to end-users or it may partner with an online retailer or retailers.
- (c) Retailers: companies which market and sell data and/or related services to end-users. There are currently at least four main online retailers of genealogy services whose offering extends to cover BMD data and a substantially complete range of England and Wales census data in the UK: Ancestry, FMP/1911, Genes and The Genealogist.

³Scotland Online Limited/TNA Agreement—5 April 2007.

- (d) End-users: obtain information by either purchasing it, accessing publicly-available information, or by sharing information with other end-users.

FIGURE 2

UK online genealogy supply chain



*Core and specialist record providers—excludes social networking providers.

Source: OFT.

Original data holders

- Data owners are the holders of the original sources of data—examples in the UK include TNA, the GRO and the British Library. In Scotland, the large majority of the original data is held by the GROS, which makes this data available through ScotlandsPeople.gov.uk in partnership with Brightsolid.

The National Archives

- TNA holds a collection of archival materials from across the UK spanning the past 1,000 years. One of its stated goals involves 'bring[ing] history to life for everyone' by providing increasingly universal, realistically priced access to archival documents. In keeping with this goal, the ratio of online to on-site document delivery has grown quickly, doubling to almost 200 to 1 over the past year alone.⁴ TNA told us that its online strategy, and in particular its willingness to create partnerships with commercial entities, has therefore become increasingly important to its future.
- TNA told us that it had a responsibility under the Public Records Act to make its records as accessible as possible and that its objectives (in order of importance) were:

⁴The National Archives, UK: Digitization with Commercial Partnerships via the Licensed Internet Associates Programme: http://sca.jiscinvolve.org/files/2009/07/sca_bms_casestudy_natarchives.pdf.

- (a) to provide access to its records;
 - (b) to preserve its records (the 'Only Handle It Once' or OHIO theory); and
 - (c) to generate revenue, but this final point was not an overwhelming goal.
13. However, as it did not have the funds or expertise to self-digitize, it used the licensing model to contract others to do so on its behalf.
14. By 2011, TNA 'aims to provide digital copies of all of its most popular records online, through commercial partners and its own DocumentsOnline system'.⁵ By TNA's estimation, the 'most popular' records include about 100 million documents, and as of early 2009, it was 80 per cent of the way towards reaching this goal. TNA stated that it was pursuing a 'portfolio' approach to generating resources for digitizing content, which involved the following strategies:
- (a) developing commercial partnerships, referred to as the Licensed Internet Associates (LIA) programme, as well as granting secondary commercial licences and academic licences, all of which are on non-exclusive terms;
 - (b) raising grant funds;
 - (c) employing institutional funds for projects deemed important but for which good external sponsor candidates are lacking; and
 - (d) in the longer term, harnessing the work of visitors to TNA (taking advantage of 'user generated content').⁶
15. In accordance with the first strand of its strategy, TNA told us that its LIA programme aimed to digitize content more quickly. There are five of these commercial partnerships currently in existence (with Ancestry, FMP, Genes, GSJ and Eneclann,⁷ although it expected this number to increase). It told us that an LIA contract gave a company primacy, rather than exclusivity, which it termed 'de facto exclusivity' (ie based on having extremely high quality standards for transcriptions in terms of permitted error levels, number of fields transcribed etc).

The General Register Office

16. The record sets that fall within the GRO's remit are as follows:
- (a) marriage registrations from 1837;
 - (b) birth registrations from 1837;
 - (c) death registrations from 1837;
 - (d) stillbirth registrations from 1927;
 - (e) adoption registrations from 1927;

⁵The National Archives Digitization programme, 2005–2011, www.nationalarchives.gov.uk/documents/digitisation-programme2005-2011.pdf.

⁶http://sca.jiscinvolve.org/files/2009/07/sca_bms_casestudy_natarchives.pdf.

⁷Eneclann is an Irish heritage company offering genealogy, family history and house history research plus digitization, archives and records.

- (f) civil partnership registrations from 2005; and
- (g) overseas registrations from 1761 (various registrations that have been made via the British High Commission or British Consulate including HM Forces Returns).
17. The GRO told us that since 2005 all civil partnership records had been made electronically and since July 2009, all birth and death records had been captured electronically. It was planned that marriage registrations would follow this route and be captured electronically by January 2011. Therefore, with the exception of overseas registrations, by the end of 2010 all new registrations would be made via this route. (Overseas registration returns were received annually.) Prior to these dates all records were recorded manually and copies sent to the GRO on a quarterly basis.
 18. The GRO told us that the project to digitize all the BMD records in England and Wales started in 2005 when Siemens IT Solutions was awarded a three-year contract to undertake the work as part of the Digitalisation of Vital Events (DoVE) Project. However, the project was closed prematurely in July 2008, at which point the digitization of approximately 130 million records (around half the total—namely the birth records from 1837 to 1934 and the death records from 1837 to 1957) had been completed at a total cost of approximately £8.5 million. It said that experience evidenced that the costs varied dependent on the type of record, the age of the record (the older records are more complex and handwritten) and the amount of data capture required.
 19. The DoVE contract with Siemens was not renewed and the options available to complete the digitization work were reviewed. That review was completed recently and the GRO is preparing for the procurement exercise to identify a supplier for the remainder of the work under the Digitization & Indexing (D&I) project.⁸
 20. The GRO said that when the D&I project was complete there would be online digitized indexes to the records which would be publicly available free of charge and would also be more accurate than those indexes currently available via online genealogy services (in that the indexes would be regularly refreshed to keep them up to date). These indexes would be similar to those now available on commercial genealogy websites but would link to the digitized record for the issue of a certificate. The GRO noted that current legislation in England and Wales provided for information in the records to be supplied only in a certified copy and did not allow for digitized records to be available online. The GRO told us that it would look at changing the law to allow online public access to some of the records which it considered would strike a balance between allowing historical research, protecting privacy and preventing fraud. It is probable that this would be subject to public consultation.

The General Register Office for Scotland⁹

21. The GROS is a government department, headed by the Registrar General for Scotland.¹⁰ Its functions include administration of civil registration of vital events—births, deaths, marriages, civil partnerships, divorces and adoptions, making arrangements for the taking of periodic censuses of Scotland's population and making available public records about individuals to customers (for example, genealogists).

⁸www.ips.gov.uk/cps/rde/xchg/ips_live/hs.xsl/1090.htm.

⁹www.gro-scotland.gov.uk and www.scotlandspeople.gov.uk.

¹⁰The GROS was established by an Act of Parliament in 1854 and is an Associated Department of the Scottish Government, being part of the devolved Scottish Administration set up by the Scotland Act 1998.

22. In 1998, public online access to some GROS indexes was made available through a service provider. The range of indexes available progressively expanded, and this service included a facility to order official extracts. Its development culminated with access to digitized images of the 1891 and 1901 censuses being available. In 2001 Brightsolid was contracted as the new service provider (then Scotland on Line Ltd), following a public procurement exercise. Since 2002, open access by the public to the records has been available at the scotlandspeople.gov.uk website on a PPV basis, representing a partnership between the GROS, National Archives of Scotland and the Lyon Office.
23. In the past, the GROS told us that although it had used external contractors to digitize its records, these contracts were for digitization only and none of the contractors was allowed to retain a copy of the images. Separate from the ScotlandsPeople website, the GROS told us that it, along with the Office of Public Sector Information, planned to provide for a non-exclusive licensing arrangement that would enable external bodies to digitize and to provide online public access to the historic Scottish census records (1841 to 1901) in return for payment of royalties. Currently, there were no licensing arrangements for the records.

The British Library

24. Another significant ODH in the UK is the British Library, which is currently exploring opportunities for digitization. It receives a copy of every publication produced in the UK and the Republic of Ireland. The collection includes 150 million items, in most known languages; 3 million new items are incorporated every year. The Library houses manuscripts, maps, newspapers, magazines, prints and drawings, music scores, and patents.
25. The Library recently identified the India Office Records and its UK electoral registers as suitable for digitization and invited third party genealogy platforms to submit proposals to enter into seven- to ten-year contracts with the Library to complete these projects. The partner company would fully fund the digitization and finance the creation, management and maintenance of online delivery. The Library would then receive a royalty on sales revenue and a digital copy.
26. The British Library is also currently coming to the end of a two-year project which involved digitizing more than 100,000 books from the 19th century and recently released its digitization policy for 2008–2011 which stated that its top priority digitization programme in support of the Library's corporate strategy 2008–2011 was the digitization of newspapers.¹¹
27. In terms of its sub-licensing policy, the British Library said that it:

must ensure diligence in relation to matters of UK copyright and to obtaining permissions of rights holders, wherever it is possible to do this and that ... this remains work in progress, whilst noting that it may be impossible to trace all the potential rights holders within such large masses of material. However, The British Library has a policy to show the process of due diligence.¹²

¹¹British Library digitisation strategy: www.bl.uk/aboutus/stratpolprog/digi/digitisation/digistrategy/.

¹²British Library Digitisation—access and copyright: <http://ifla.queenslibrary.org/IV/ifla74/papers/139-King-en.pdf>.

Other ODHs

28. There are a large number of other ODHs in the UK including county councils, parish churches and military records holders. Other ODHs that have recently announced projects for digitization of their records include Westminster City Council¹³ and Dorset County Council.¹⁴

Self digitization

29. Data owners are in theory able to digitize their data themselves. However, online digitization is time consuming (for example, censuses of England and Wales from 1841 to 1911 include details of over 200 million individuals which had to be individually transcribed) and can be expensive for large datasets, particularly for the 'first-mover' (eg the 1911 Census would cost a subsequent licensee approximately £[£] million for the purchase of a set of digital images from TNA alone, and entailed significant additional costs for FMP as first-mover to digitize them). Therefore in practice, digitizers are commonly used by the ODHs.
30. Genealogical data projects have historically been funded in a number of ways:
- (a) volunteer-run projects (for example, FreeBMD, which is an ongoing project to make access to UK BMD records free. The project is ongoing with 1837–1932 fully indexed to date);
 - (b) publicly-funded projects (ie through the National Lottery);
 - (c) commercially-funded projects—there are three main routes for data holders in relation to commercially-funded projects:
 - (i) set up an in-house data service;
 - (ii) partnership with a commercial firm for a combined data service (eg ScotlandsPeople.gov.uk is the website run by Brightsolid in partnership with the GROS and is the only official source of Scottish records); and
 - (iii) licensing of data to third parties.

Digitizers

Scanning and transcription services

31. The term 'digitization' refers to two related areas of digitization activities as follows:
- (a) scanning: the process by which original records, on paper or film, are scanned in order to create digital images, and which can vary by the degree of sophistication involved (eg if optical character recognition (OCR) technologies are applied); and
 - (b) indexing/transcription: the process whereby elements of the digitized records (such as names, dates, counties, etc) are copy-typed into a database and indexed in order for them to be searchable by the user.

¹³Westminster City Council, Contract for the Digitisation of Westminster's Archival Records, August 2009, appendix 6 to [parties' joint submission](#).

¹⁴Dorset County Council Tender & Project Brief, September 2009, appendix 6 to [parties' joint submission](#).

32. An ODH may supply on-site access to the original records themselves, or to master copies on microfilm or fiche. Some ODHs may have pre-digitized resources. The nature of the source material involved determines where and how it may be scanned (eg the equipment required, the outsourcing companies that can be used, etc).¹⁵ Transcription services are usually provided offshore, most commonly in Asia. Notwithstanding the above, there are many digitization projects that are conducted on a much smaller scale, and many that do not involve an ODH at all (eg where the original records are not protected by copyright and are freely available or available from several sources).
33. A potential provider of digitization services must generally be able to provide the scanning element of the services, as the ODH will typically require digital images of its original records. However, from the perspective of a provider of online family history services, it is not necessarily a requirement to have access to the original records at any point (as opposed to a scanned and transcribed copy). For example, FMP launched 1837online.com, its first website providing online access to family history data, in April 2003, but it was not until January 2007 that it released online content from a project in respect of which it had been responsible for scanning from original records.
34. The precise terms of any digitization arrangement will vary depending on the ODH and digitizer in question. Once an original data source has been digitized, a set of digital records is usually returned to the ODH in question. This will typically take the form of a set of digital images together with metadata.¹⁶ Typically, any index and transcription created by the digitizer will remain its property and will not be transferred back to the ODH.
35. There is generally a short gap between the time at which the data has first been digitized, indexed and transcribed and the time at which the digitized version is passed back to the ODH. This enables there to be a period of public exposure during which it is possible to assess the completeness and quality of the digital images and identify the need for any rescanning. It also provides the bidder with a period of first-mover advantage which provides the justification for the upfront costs that are incurred by the bidder.
36. Where the digital material provided by an ODH includes indexing and transcription, or where it has been digitized using OCR, the licensee will be able to make that material available in searchable form on its website without any further action being undertaken. If the material is provided only as digital images (without any indexing), the licensee would initially only be able to make such material available on its website for browsing. In order for it to make the data available in searchable form, it would be necessary for some indexing and/or transcription work to be undertaken.
37. Content digitization and indexing requires a significant investment of time, money and technology to scale. Historical records typically exist in physical formats such as paper and microfilm. Digitizing therefore requires identifying, securing rights to and then acquiring the physical materials in order to scan and create indexes from them. Records are often handwritten, making them difficult to scan and index accurately using automated OCR scanning technologies. Because of these difficulties, it is often

¹⁵Images may be transferred between digitization partners (ie between the party contracting with the ODH and their specialist subcontractor) either by file transfer protocol or by using portable hard drives delivered by couriers.

¹⁶Metadata describes other data. Metadata is information about a thing, apart from the thing itself. It provides information about a certain item's content. For example, a text document's metadata may contain information about its length, the author, when it was written, and a short summary of the document.

necessary to use special scanning techniques to obtain a clear image and to manually transcribe records to create a searchable index.

38. Digital search for family records can be challenging and complicated. Most search engines are not designed to deal with the specific challenges of searching digital records for family history purposes. Delivering optimal search results requires advanced search technology designed to deal with incomplete information, record errors and cultural, phonetic and other variances in names, dates and places. An effective family history search engine must be able to search both structured data, like census rolls and military records, and unstructured data, such as newspapers and other free-form text.

Digitization—technological developments

39. In terms of developments over the last five years, Brightsolid told us that there was now a wider range of qualified contractors for outsourced digitization projects than previously, which reflected the huge growth in digitization activities over that period. There were also more formal tender procedures for digitization projects as ODHs looked at the model pioneered by TNA, working with commercial partners to achieve their digitization objectives.
40. Brightsolid also told us that online transcription tools had greatly increased the viability, speed and quality of volunteer transcription projects (and therefore reduced the cost and time to market), which had led to more comprehensive offerings from online providers of free content and services, and that digital imaging equipment had dramatically fallen in cost and improved in quality, which had helped to reduce digitization costs generally.

Digitization—costs

41. Brightsolid told us that ‘as a rule of thumb, a Victorian census can now be digitized for between £500,000 and £1,000,000, depending on the provider’s individual requirements. Similarly, a typical time schedule could be anywhere between 8 months and 2 years’.
42. Brightsolid also told us that censuses, along with fully indexed BMDs, were at the top end of the scale for digitization projects and costs in respect of family history datasets, and that since FMP had been in business, it had seen a significant fall in the costs of digitization. It said that previously, Brightsolid/FMP had been quoted close to [REDACTED].
43. It also noted that at the other end of the spectrum, Brightsolid could commission an index such as bankrupts or a trade directory, taken from an out-of-copyright book either bought from a second-hand shop for less than £50 or borrowed from a library, and have the content fully indexed from around £500.
44. In terms of technological developments regarding digitization, Brightsolid told us that storage and server costs had dropped significantly over recent years and there had also been significant reductions in the cost of database and search technology ([REDACTED]¹⁷). With increased broadband take-up, there was no longer a need to convert images to DjVu (a highly-compressed format suitable for dial-up connections).

¹⁷[REDACTED].

Scanning costs had also been reduced. For example, the improvement in digital cameras meant that [REDACTED].

45. Brightsolid told us that its second and third digitization projects were undertaken with the same digitization contractor and were similar projects. The earlier of these projects involved [REDACTED] records and cost £[REDACTED]. The latter involved [REDACTED] records and cost £[REDACTED]. A 47 per cent increase in the number of records nonetheless cost 15 per cent less to digitize. It told us that the reasons for this included improved speed and accuracy of transcription for the second project, with transcribers working from higher-quality images and more automated quality control processes having been introduced as well as post-capture functional testing and data clean-up. There was also an increasing number of specialist contractors within the market with experience of projects of this nature, making the market more competitive.
46. Finally, in relation to technological developments affecting the digitization market, Brightsolid told us that it had developed two partnerships where it was able to benefit from free labour. FamilySearch, which undertook the scanning of numerous large datasets, had agreed [REDACTED]. Brightsolid had also agreed with the Federation of Family History Societies to [REDACTED].

Digitizers—1911 Census

47. The 1911 Census was launched online via an FMP/TNA partnership on 13 January 2009. TNA told us that it had 22 million hits in the first week of launch. The census was released two years early (ie it would normally be released after 100 years) and therefore certain information within the census had had to be redacted to comply with data protection legislation for a two-year period.
48. Brightsolid told us that 1911census.co.uk was delivered on a special agreement under which TNA received [REDACTED].
49. While FMP currently has the only existing digitised copy of the 1911 Census, having invested in its digitization and transcription (with costs estimated to be £[REDACTED] million for scanning, service delivery and transcription), it is likely that this will not be the case by the end of next year. [REDACTED] Ancestry told us that the '1911 Census' actually related to two datasets: the main dataset (RG14) which captured every man, woman and child, and the secondary dataset, known as 'RG78', which captured only the head of each household (roughly equivalent to a quarter of the population). [REDACTED]
50. TNA also told us that it had had the scanned images of the 1911 Census valued independently [REDACTED].
51. However, Ancestry told us that after dropping out of the original bid process for the 1911 Census (due to issues with the price, level of indexing and PPV requirements that TNA was requiring), its view was that the price it would be paying now to access the scanned images would be higher than it would have paid had it been the winner of the tender process in 2007, that it was 'above a fair market price' and 'a price for Ancestry and not the market'. Consequently it did not yet appear clear what would be the next step in terms of licensing the 1911 Census to retailers other than FMP.

Other current digitization projects

52. Google is also entering into the digital market and is currently scanning millions of books. Google Book Search is a service from Google that searches the full text of books that Google then scans, converts to text and stores in its digital database.

Amazon has also digitized hundreds of thousands of books and allows users to search the texts; Carnegie Mellon is hosting a project called the Universal Library, which so far has scanned nearly a million and a half books; the Open Content Alliance, a consortium that includes Microsoft, Yahoo and several major libraries, is also scanning thousands of books; and there are many smaller projects in various stages of development.

53. We note that TNA told us that due to the very 'long tail' of content in genealogy websites, in contrast to Google Books, the Google search model was not particularly appropriate for genealogical research as it used page ranking and therefore searches for individuals would not come up particularly highly in their search results (ie a surname search).

Section 3: Retail—retail section of supply chain

Acquisition of datasets by retailers

54. In order to be active in online retail of core and/or specialist records, it is necessary to have access to a dataset that can be made available online to consumers, ideally in searchable form. In addition to self-digitization, this can be achieved by obtaining a licence for: (a) access to the digital images in a form that is already searchable; (b) access to indexes and/or transcriptions that are already searchable; or (c) access to the digital images (or on film) in a form that is not already searchable, but which the licensee could make available in a searchable form online by arranging for some indexing/transcription.

Self-digitization

55. First, if a digital image were not available from an ODH (if the data had not yet been digitized, for example), a retailer could arrange to digitize and/or transcribe the data itself. The parties told us that obtaining the datasets from an ODH was typically straightforward and TNA told us that it considered that its use of royalty rather than up-front fee-based models and mix of delivery media offered help to encourage smaller companies to license and maintain the range of size of company licensing material from it.
56. Secondly, if a digital image were available from an ODH, the firm could provide its own indexing and transcription services. Indexing and transcription itself is typically carried out by a specialist subcontractor. There are, however, instances where this is not the case:
 - (a) The ODH could use volunteers, either by initiating its own voluntary transcription project, or making its original records available to a volunteer-staffed project initiated by a third party, such as a charitable organization or a family history society. Examples include the Cheshire Register Office¹⁸ and the Scottish Archives Network project. The Scottish Archives Network project was undertaken in cooperation with FamilySearch and involved scanning over 6 million images and making them available to users for free.

¹⁸The Cheshire Register Office set a model that a number of other County Register Offices subsequently followed, by making its local BMDs available online for free through UKBMD.com working with Cheshire Family History Society to provide transcription.

(b) GSJ undertakes a significant amount of scanning for its CD and DVD business, initially using volunteers for the first level indexing. These digital images are then used to provide material for its websites.

(c) The parties told us that Ancestry might also do its own transcription.¹⁹

Licensing and sublicensing of data by retailers

57. As a third possible route, an entrant could negotiate a licence to the data in question directly from the ODH, rather than engage in any digitization itself. ODHs can vary in their approach to licensing data. An example is the approach of TNA, which told us that it endeavoured to ‘attract and enable new businesses to bid for content, or to licence on a non-exclusive basis’.
58. Alternatively, a dataset could be acquired through sublicensing the data itself from a previous transcriber. This could be the original digitizer or a subsequent firm which has carried out its own transcription. For example, FMP is active in sublicensing its data to third party online retailers [REDACTED]. FMP also licenses data from other sources (which are often other online retailers), for example: [REDACTED]. Brightsolid told us that ‘there are no cases in which third parties have sought access to a particular dataset and Brightsolid has not granted any licence’ although there had been occasions where it had not reached an agreement with a particular retailer.
59. A new entrant could subsequently add its own transcription services; for instance, it may want to create different or better functionality than that carried out by the original transcriber.
60. There are several different upstream sources of a particular digitized and transcribed/indexed UK dataset in existence which a downstream retailer of family history services could acquire or license. For example:
- (a) BMDs are available from FMP, GSJ, FreeBMD and Family Relatives among others, as well as non-Internet companies, [REDACTED];²⁰
 - (b) 19th century censuses are available from FMP, GSJ, FamilySearch, Origins/[REDACTED] and (at the county level) various family history societies; and
 - (c) other records, for instance Soldiers Died in Great War, are available from Naval and Military Press, TNA and Family Relatives.
61. Almost all data continues to be owned by ODHs. Retailers generally have terminable rights to sell the data for private use. After the period of exclusivity, ODHs will usually make the information sources as widely available as possible (eg digital images of the 1911 Census became available to online providers from TNA less than a year after they first became accessible to consumers online).
62. Brightsolid told us that the process it followed for obtaining a licence for a dataset from a third party was generally as follows:
- (a) A sample of the data (and images, if applicable) was evaluated and reviewed for quality and compatibility with its existing search functionality—some amendment or standardization of the data may be performed at this point by Brightsolid.

¹⁹[REDACTED]
²⁰[REDACTED]

- (b) If the dataset met Brightsolid's requirements, it would issue a standard form licence agreement, which may then be subject to further negotiation.
- (c) The dataset may then be transferred as a CSV file, Excel or Access database, either emailed, on CDs or DVDs or portable hard disc, depending on the volume involved.
- (d) The dataset was uploaded on to Brightsolid's servers; any new development or amendments to the navigation were planned and Brightsolid wrote help and advice copy, briefed its helpdesk staff about the new project and wrote and executed a marketing plan.

Retail—current key players and service offerings

*Overview of existing retail business models and product offerings*²¹

- 63. Sites providing data will offer 'core records' (Census 1841–1901, BMD 1837–2005) and possibly a range of other data sources. Of other records offered, general (pre-1837) parish records have been the most popular to date.
- 64. Sites providing social networking are structured around allowing a user to create and share their family tree. More sophisticated services offer the ability to search others' trees and to collaborate with other users via forums and message boards.
- 65. In payment terms, most commercial sites operate using PAYG credits, a subscription, or both. A few non-commercial sites (primarily FamilySearch and FreeBMD) are completely free to use.
- 66. Some of the services primarily based on building family trees have a basic offering which is free but then charge a fee for more complex services, larger amounts of online storage or for contacting other members.

Core data

- 67. Broadly, data may be divided into 'core' and 'non-core'. Core data refers to census and BMD records which in the UK are fully digitized and available for the period from 1841 to 1911 for census and 1837 to 2005 for BMD records. The 1911 Census records have recently been digitized and made available through 1911census.co.uk, which is owned and operated by FMP.
- 68. The datasets which the parties told us were considered 'core' for the UK online genealogy market were the eight census datasets for England and Wales (1841 to 1911) and BMD data for England and Wales from 1837 to 2005. Genes does not offer the 1881 Census (as it has only very recently become available from [redacted]²²) and FMP is the only current provider of the 1911 Census, [redacted].
- 69. There is debate about the degree of product homogeneity between datasets, and even core datasets may vary by quality, searchability²³ and functionality. The qualitative aspects of the same dataset can vary from provider to provider, for example in terms of the resolution and legibility of images, the accuracy of transcription and the

²¹See [Annex 1](#) for detailed service offerings summary table.

²²The parties told us that they understood that [redacted].

²³Recent innovations in this area include initial wildcards, ability to search by the name of a second person in a household and cross-database searches.

number of data fields that have been transcribed and are capable of being searched, the complexity of the search facilities available, and the speed at which search results become available. Different customers attach different values to each of these aspects, which are present throughout the quality spectrum.

Providers of core data in the UK market

70. Annexes 1 and 2 produced by the parties summarize the offerings and the datasets of some of the main providers of family history records offering both paid-for and free core data.

Ancestry

71. The largest company in the online family history market is Ancestry. Ancestry.com is the world's largest for-profit genealogy company which offers access to over 8 billion records within 28,000 historical collections. Ancestry was privately held, but recently completed an IPO in the USA which raised approximately \$100 million.
72. Ancestry provides every database that is currently provided both by FMP and by Genes (though this would not necessarily be the case after the merger if the 1911 Census were to be available on Genes), and also offers the largest collections of datasets together with family tree and social networking tools. Ancestry has a global customer base and has a high level of marketing activity, with recent national television and press campaigns in the UK. Ancestry also targets more expert users through specialist magazines and family history exhibitions in the UK.
73. Ancestry.co.uk is a website targeted at UK residents and is owned and operated by a US company: Ancestry.com Operations Inc (Ancestry). Ancestry in turn is owned by Ancestry.com Inc, a US public company which is quoted on NASDAQ. All the customers of Ancestry.co.uk contract with Ancestry and all revenues in respect of subscriptions to Ancestry.co.uk flow to it and not a UK entity.
74. Ancestry told us that it 'considers its main competitors to be Genes and FindMyPast'. In terms of product offering, it offered three subscription packages: 'Essentials' (£83.40 a year or £10.95 a month), 'Premium' (£107.40 a year or £12.95 a month) and 'Worldwide' (£155.40 a year or £18.95 a month) and a PPV option (12 record views for 14 days at £6.95). Ancestry was the first online genealogy company to introduce subscription payment options to the market in 2002. Prior to this date only PPV options were available.
75. In June 2009, Ancestry launched its 'Member Connect' service, which is an extension to its existing social networking capability that allows users to get in touch to discuss research and shared interests. Members can also make their family trees publicly available to share with other users.

Genealogical Supplies (Jersey) Ltd/The Genealogist

76. GSJ operates under a number of domain names, including www.thegenealogist.co.uk; www.bmdindex.co.uk; www.rootsuk.com; www.bmdregisters.co.uk; www.rootsmagic.co.uk and www.genfair.co.uk.
77. GSJ hosts genealogy data as well as tree-building software, and told us that it considered FMP to be its main competitor. It has an almost complete set of census records and BMDs on its website, although its range excludes the 1911 Census. GSJ is currently the only company to have digitized TNA's non-conformist BMDs.

78. [✂]
79. GSJ also has a website called FHS Online, designed to allow family history societies to publish their datasets. It currently has almost 50 county census indexes for individual years and requires free registration before the user can search the indexes.

FamilySearch (www.familysearch.org)

80. FamilySearch is one of the most significant providers of free online genealogy content and is sponsored by the Church of Jesus Christ of Latter-day Saints (LDS) through its website, FamilySearch.org. This not-for-profit organization has actively gathered, preserved and shared genealogical records worldwide for over 100 years. In its recent IPO document, Ancestry noted that:

FamilySearch has more than 2.3 million rolls of microfilm and 180,000 sets of microfiche ... [it] has digitized a large quantity of these records and has published them online at FamilySearch.org, where it makes them available to the public for free. [It] has stated its intention to undertake a massive digitization project to bring most of its collection online over the next few years.²⁴

81. The largest collection of free online UK census data is the 1881 Census Index. This was created by volunteers in a project run by the Federation of Family History Societies and the Genealogical Society of Utah and was put online free of charge by FamilySearch in February 2003. The material for 1881 available on commercial sites is generally taken from this index and access is therefore usually offered free of charge (although sites do charge for access to images of the original records, which this index does not link to).

FamilyLink/World Vital Records (www.FamilyLink.com/www.worldvitalrecords.com)

82. This is a company developed by former Ancestry founder Paul Allen, with a number of ex-Ancestry staff and an initial business model based on online retailing of third-party licensed data. FamilyLink's flagship application 'We're Related' was launched in 2007 and today has more than 50 million users, making it a top five Facebook application. More than 20 million users use the product on a monthly basis. The company was rebranded FamilyLink when it started offering online family tree-builder functionality and a research hint engine. FamilyLink.com provides a platform for family members to create family generated content, preserve interactions, add historical content and communicate across a number of mediums.
83. In addition to social networking, the company also operates in the 'core' data segment, including UK data. In addition to FamilyLink, its operations include:
- (a) *WorldVitalRecords*. FamilyLink runs its official records operation under the brand name of World Vital Records (WVR). Launched in January 2007, WVR has created partnerships with data owners to offer over 1 billion records globally.
 - (b) *Worldhistory.com*. This site enables users to build family trees and create map views. In addition, the website provides historical information such as timelines to create context around each user's family history.

²⁴Ancestry IPO 424B4 form—<http://files.shareholder.com/downloads/ABEA-3SYR2V/781254903x0xS950123-09-58478/1469433/filing.pdf>, p14.

(c) *Genealogywise.com*. In July 2009, FamilyLink launched this membership-only site offering social networking services focused on family history.

Origins Network (www.origins.net)

84. As indicated on the timeline in Figure 1, Origins was a pioneer in the UK online genealogy market. Origins offers online material primarily through licensing partnerships. It told us that its approach was to have exclusive, long-term agreements with content owners and to maximize its ability to develop online datasets by working in partnership with multiple other parties (including leading archives and genealogical societies in the UK and the Republic of Ireland) to share revenue and costs.
85. In addition, Origins told us that it shared rights to two censuses (1841 and 1871) [§]. Origins licensed these two censuses to [§], among others.
86. Origins is an online digitizer and retailer, but does not offer tree-building or matching services. Origins material includes the largest set of pre-1837 marriage registers available online; indexes and abstracts of wills; court, poor law and apprentice records; and its unique selling point is the richness of its data—‘putting flesh on the skeletons of your ancestors’.

192.com

87. This website provides ‘core’ BMD and census data, as well as electoral rolls, directory enquiries and other historical records.²⁵ Its primary market has historically been in contemporary people and business search with a focus on living relatives. It also offers innovative mapping products.

FreeBMD (www.freebmd.org.uk)

88. FreeBMD is a registered charity with about 200 million civil registration BMD index entries from 1837, transcribed by volunteers. The free access website is among the top 10 genealogy sites visited by UK users. It is an ongoing project with more records being added daily and with monthly updates to the website.

FreeCEN (www.freecen.org.uk)

89. FreeCEN is a volunteer project sponsored by FreeBMD. It aims to provide a free online searchable database of the 19th century UK census returns for England, Wales and Scotland. The main focus was initially on the 1891 Census but work has also been undertaken on earlier censuses. It now has fully indexed censuses from 1841 to 1891 including Scotland with coverage of the Victorian censuses growing. It is also an ongoing project.

FreeREG (www.freereg.org.uk)

90. FreeREG is a volunteer project sponsored by FreeBMD. It aims to provide a free online searchable database of the parish registers for England and Wales.

²⁵192.com does license some census and BMD data [§], but could acquire this data from other sources.

Treequest Limited (www.familyrelatives.com)

91. Treequest operates the Familyrelatives.com website. It is a private company involved in providing family history data online including digitization, online retailing, family tree software and social networking features. It entered the market in 2004 and launched a full online service in 2005. Treequest started its operations with significant investments in full-name indexed BMDs and has focused on developing datasets as well as interactive features including genealogical social networking.
92. Familyrelatives.com currently has over 150 datasets available, providing indexed GRO BMDs from 1837 to 2005, and offers 700 million records at a comparatively low price—currently £30 for an annual subscription. Added extras include overseas BMDs 1761 to 2005, First World War National Roll, World War I and World War II death records, other military records and lists, parish records for England and Wales, school and university records, trade directories and medical registers and other overseas records.

Genealogy archives (www.archives.com)

93. Genealogy Archives operates the GenealogyArchives.com website which was launched in July 2009, having evolved as an offshoot from People Search Media (www.peoplesearchmedia.com), a people-searching business (similar to 192.com). GenealogyArchives annual membership costs \$3.33 per month, focusing on core data with some specialist records also available. GenealogyArchives has collated a database of over 1 billion searchable records and historical documents. [✂]

Other records offered

94. Other records offered by online genealogy websites include parish records, military records, apprentice records, passenger lists, landowner records, emigration records and other more specialist records such as crew lists, clergy lists and medical registers.
95. There are a large number of online providers offering access to these 'specialist' records. In addition to Ancestry, FMP, 192.com, FamilyRelatives and the Genealogist, these include Origins Network, Eneclann, the Commonwealth War Graves Commission, World Vital Records, Deceased Online and Casus Belli among others.

Family tree software

96. Gedcom is a standard data format which can be used by customers of all family history websites to transfer their data between online and offline family tree programmes. Developed by LDS, this software is designed to make the data from the tree fully importable and exportable both online between sites and offline (for example, on a home computer). The format does not allow the transfer of photos and other add-ons as part of the Gedcom file, hence there is arguably some 'stickiness' associated with family tree creation on a particular website. However, it is possible for a user to save these add-ons to their computer and transfer them to another family tree, hence this 'stickiness' may be limited in practice.
97. Software packages and online tools are available from a number of websites, including:

- (a) Familytreeexplorer.com,²⁶ which is hosted by FMP and allows customers to create their family trees and store records online;
- (b) Familytreemaker.com,²⁷ which is owned by Ancestry; Ancestry also provides an online family tree tool on its websites;
- (c) Family Tree Builder,²⁸ which is a free genealogy software package available from MyHeritage; and
- (d) Geni,²⁹ which is a free and subscription website which provides online family tree software along with social networking features.

Social networking

- 98. Some sites provide social networking features so that the user can interact with other users via message boards and forums. Family tree matching services are also provided by some sites. These enable the user to compare the family trees they have created with those of other users and add matching ancestors to their own family tree. This has the potential to significantly cut down on own research time required by utilizing the research that others have already carried out.
- 99. In the social networking segment, several new firms have entered the market in recent years, in addition to Genes and Ancestry (which is present in all three segments). Most of these companies allow users to build their family tree online and share it with other users. Due to the widespread usage of the Gedcom data format, users can export their family trees to other websites and sample or experiment with different services. Among the most prominent companies in this segment are FamilyLink (see paragraphs 82 and 83 above) and MyHeritage.

MyHeritage (www.myheritage.com)

- 100. MyHeritage is an Israel-based provider which has built significant volumes of UK traffic and has enhanced its presence by buying Kindo.com, a UK start-up. It provides online family tree-builder software as well as social networking and family history utilities and is a top 10 family history website by visitor traffic. One of its key features is a 'metasearch' function known as 'Megadex',³⁰ which searches multiple sources of data at one time and can be a significant time saver for online genealogists. The function searches both free and pay sites and also supports 'Soundex', the technology that enables the results of a name search for an ancestor to include names that 'sound like' the name entered (phonetic matching), which is useful tool for genealogists in tracking ancestors—for example, when the spelling of their family surname may have changed over time.

Summary—product offerings

- 101. Figure 3 summarizes some of the main providers in the online family history market and shows the sectors of the market in which they are involved.

²⁶www.familytreeexplorer.com/.

²⁷www.familytreemaker.com/.

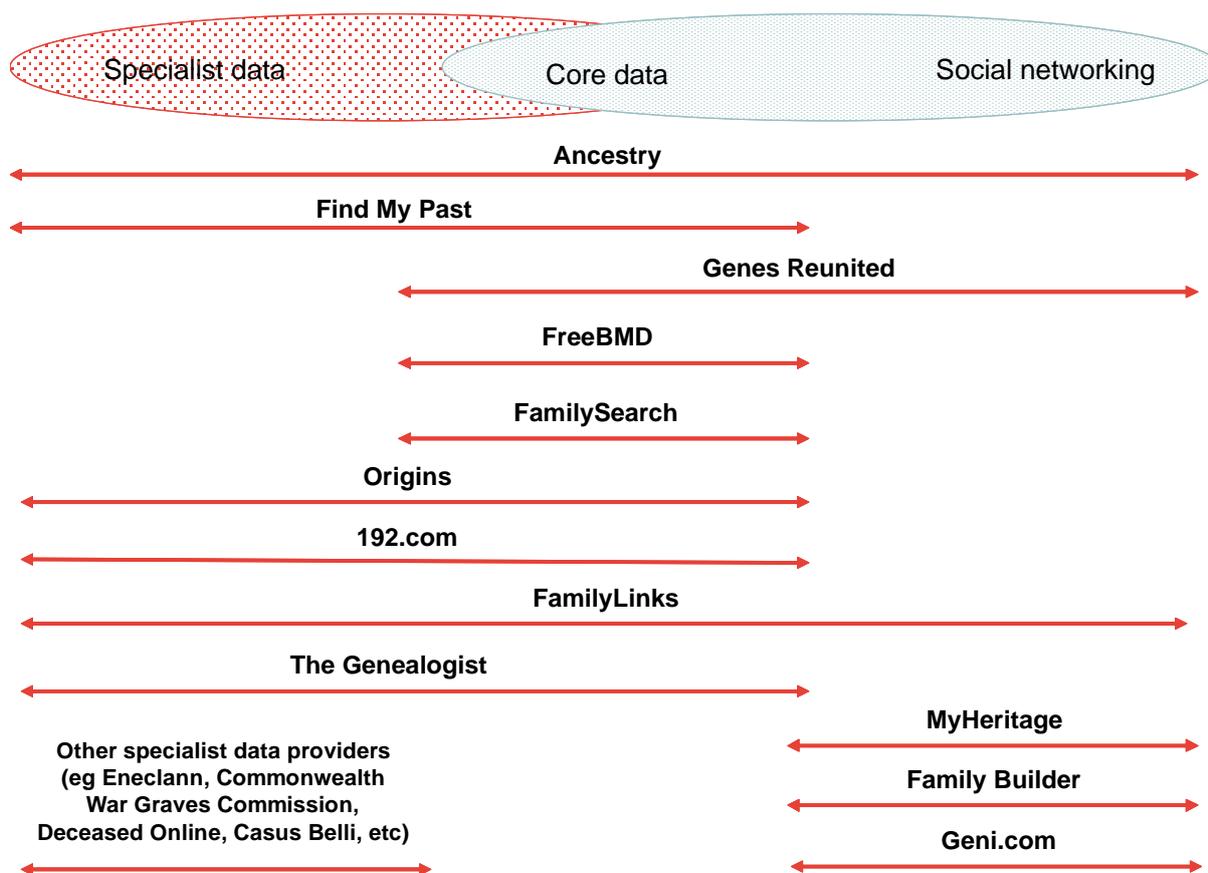
²⁸www.myheritage.com/family-tree-builder.

²⁹www.geni.com/.

³⁰www.myheritage.com/FP/Company/megadex.php.

FIGURE 3

Main providers of online family history



Source: Friends Reunited.

Section 4: Current market share by unique user and turnover

Market share by unique users

102. Appendix E illustrates various measures of market share that we have calculated but indicates that there is a lack of a unique and reliable measure. Whilst these measures present a relatively consistent picture that Ancestry is the market leader, we note that these figures should be treated with caution when making inferences about levels of market power, due to the wide differences between various estimates.
103. The parties told us that it was difficult to get a firm hold on current market shares as companies were based in various jurisdictions and worked across different markets, brands and companies; no published data existed apart from online statistics, such as page views and audience share, which did not give any insight into how well companies were able to monetize their traffic (as the prevalence of volunteer or charity-run free sites suggests), and who was wholesaling or making corporate sales as well as online retail. They told us that free and non-commercial sources were

found at five out of the top ten sites (including Genuki,³¹ FreeBMD, BMDindex, FamilySearch and Rootsweb).

104. The parties also noted that newcomers to market were growing quickly, especially on the social networking side—see the rapid rise of FamilyBuilder and FamilyLink (one of the top eight Facebook applications in the UK). The latter has overtaken FMP, despite being US based and not supported by marketing in UK. The very high peak reached by 1911census.co.uk in January 2009 appears to be subsiding. Other sites were also lifted by the media attention around the launch.

Market growth

105. Whilst noting the points above on the significant limitations on market share data, [REDACTED].
106. [REDACTED]
107. The due diligence report produced for Brightsolid on the Friends acquisition noted that the potential for not achieving new subscriber forecasts and increased churn were a 'key risk' for the business, as the 'lack of new datasets may impact renewals'. However, it also noted that the analysis carried out for it by the consultants Enders Analysis 'indicates a growing market which provides comfort as to the achievability of the forecasts'.
108. Given the nascent nature of the market and the lack of concrete data as outlined above, we believe it is difficult to gain comfort from these forecasts and that caution should be exercised in making inferences from them.

Section 5: User profiling

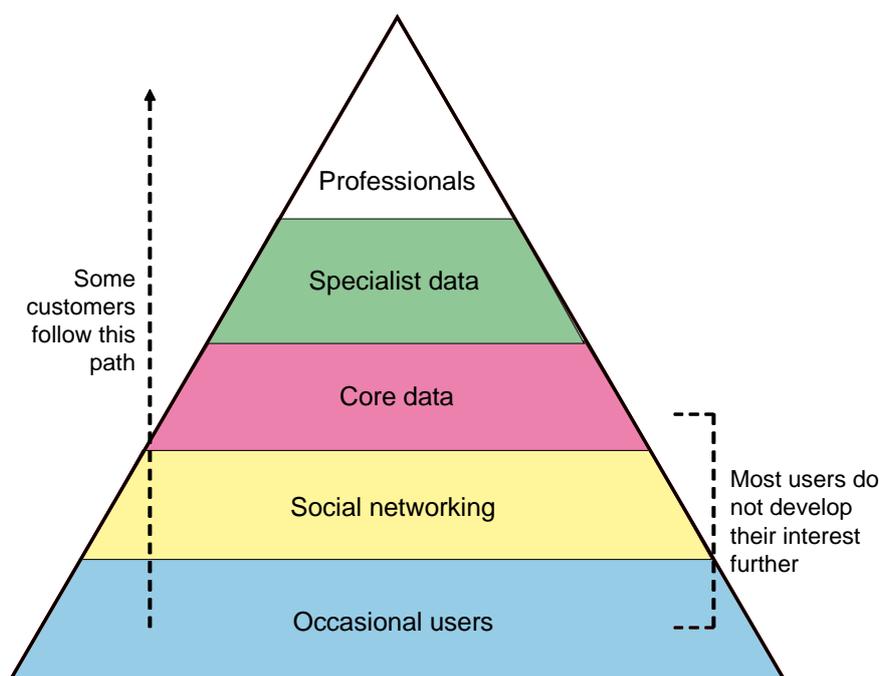
Current and forecast usage

109. For the majority of consumers, their interest in family history can be characterized as a hobby. Customers have various levels of engagement, as represented in Figure 4.

³¹Genuki is a charitable trust running a large distributed set of web pages (www.genuki.org.uk) concerning genealogy in the UK and the Republic of Ireland.

FIGURE 4

Level of customer engagement



Source: Brightsolid/Friends Reunited.

110. Occasional users may develop a basic family tree.³² Those with a greater level of engagement may network with others to share data and link family trees. Further on are customers who start to use free or paid-for 'core' data such as the census or BMDs, which provides basic information on their ancestors. Some customers will wish to use specialized datasets to provide richness to the portraits of their ancestors.
111. Those with the greatest level of engagement are professional users such as individual research agents, commercial entities, government departments, libraries and academic institutions. These might include professional heir-tracing companies, local authority housing departments using civil registration indexes to verify ages and identities, the GRO, and local historians undertaking population studies in a particular locale.
112. For many customers, family history is a marginal leisure activity which is competing for time and attention with many other leisure activities. This can be shown by the fact that online family history sales appear to respond to seasonal and weather patterns. Lower volumes are typically seen in the summer when the weather is better and there are more alternative options for the use of leisure time.
113. Lower volumes are also seen before Christmas, as customers tend to be otherwise occupied, but higher volumes are seen on Boxing Day and in the following days. This

³²A number of websites provide straightforward and accessible family tree-building software that is suitable for beginners, including Geni.com, MyHeritage.com and Genes.

is shown in Figure 5, which shows the daily PPV³³ sales volumes of Genes' customers throughout December.³⁴

FIGURE 5

PPV sales volumes in December 2008

[✂]

Source: [✂].

114. One of the main features of the customer base for online family history services appears to be that it tends to be more heavily weighted towards older people than the population as a whole. One customer survey conducted by FMP indicated that over [✂] per cent of its customers were aged 55 and above, and over [✂] per cent were aged 65 and above. Similarly, Genes told us that almost [✂] per cent of its customers were over 55.
115. For FMP customers, FMP believed that [✂]. It told us that FMP customers were [✂]. Family circumstances could also motivate investigation into family history, such as where families were ruptured, people were adoptees, or if they did not know the identity of their father. Life events, such as new babies and the loss of loved ones, often seemed to act as a trigger, motivating the start of search behaviour.

Section 6: Possible market trends

Evolving business models

Digitization

116. In terms of digitization, Brightsolid told us that potential new models for (or alternatives to) digitization included activities such as [✂].³⁵

Retail

117. In the last two years, the market has witnessed several new entrants, most notably applications based on the Facebook platform. Facebook opened its platform to developers in May 2007³⁶ and at present, there are around 58,000 applications running on the Facebook social network.³⁷ Developers of applications must cover the cost of hosting applications on their own web servers, although they are not charged by Facebook itself to run an application on its network.³⁸ In the family history sector, there are two clear leaders: FamilyBuilder and FamilyLink. Both applications allow users to build basic family trees on either the open web or just the Facebook network and share them with other users, and have experienced fast growth since launch:

- (a) FamilyLink application: 'We're Related' was launched on Facebook in October 2007 and has become the largest and fastest-growing social network for families. The application has more than 50 million users, and is currently the eighth most

³³PPV refers to the purchase of credits which can be spent on a website to acquire specific historical records.

³⁴The picture for FMP is similar.

³⁵[✂]

³⁶www.techcrunch.com/2007/05/24/facebook-launches-facebook-platform-they-are-the-anti-myspace/.

³⁷Adonomics (an open analytics platform for Facebook) <http://adonomics.com/>.

³⁸The Facebook economy article: http://money.cnn.com/2007/08/22/technology/facebook_economy.biz2/index.htm.

popular application on Facebook with 771,873 daily users.³⁹ The application allows individuals to find relatives on Facebook, connect with friends and family members, build family trees, and share news and photos.

(b) Familybuilder 'Family Tree' application: Familybuilder is quickly becoming one of the most-used family history services online and is ranked among the top 10 online family history services in the world,⁴⁰ with over 6 million users and over 30 million family tree profiles as part of its Family Tree applications. Familybuilder is currently the 21st most popular application on Facebook with 138,863 daily users.⁴¹

118. In addition to Facebook-based applications, it is possible that Facebook could enter the market on its own behalf, as it has the potential ability to license data and outsource digitization. It could also leverage its social networking functionality, IT infrastructure and existing staff to do so. However, Facebook has not yet indicated that it intends to enter this market.
119. The parties told us that the market had been dynamic in terms of both marketing and product innovation and that Ancestry had led the way in both areas, with significant new investments in products such as improved family tree tools, family homepages and social networking functionalities. Ancestry had also launched a DNA service and an online book creator tool to enable people to create a personalized book of their family history.
120. In theory, opportunities to enter the sector exist for any company with access to a large audience, [X]. Companies from adjacent industries [X] have also shown increasing interest in the sector and therefore the competitive landscape has the potential to alter significantly over the course of the next five to ten years.

Technological developments

121. New technologies may also be expected to have a significant effect on the current competitive environment. The emergence of products such as Twitter and the iPhone over the last couple of years demonstrate how rapid the pace of technological development can be and new products may have a specific impact on the market for online family history services.
122. Brightsolid told us that it also expected that the ability of online providers to buy in technology platforms on an applications service provision (ASP) model would facilitate the emergence of new social and affinity networks. It said that the ASP model allowed providers to effectively license-in particular applications for a monthly fee, rather than requiring them to invest in having them built for an up-front fee, and that if this was combined with the availability of data from multiple sources, it expected a number of new competitors to emerge from this model.

³⁹Adonomics: <http://adonomics.com/>, 7 December 2009.

⁴⁰ComScore.

⁴¹Adonomics: <http://adonomics.com/>, 7 December 2009.

Online genealogy service offerings

URL	Price per year (UK full sub or pro-rata equivalent)	Core BMDs (1837 onwards)	Census 1841–1901	Parish records	Other records	Search family trees	Basic tree builder	Social features (forums etc)	Also digitizer?	USP
Ancestry.co.uk	£83.40	Y	Y	Y	Y	Y	Y	Y	Y	Comprehensive records & features: one-stop shop
Findmypast.com	£89.50	Y	Y	Y	Y	N	Y	N	Y	Accurate & comprehensive records, only site to offer subscription (in addition to PAYG access) to 1911 Census
1911census.co.uk	PAYG only	N	1911 only	N	N	N	N	N	Y	The official 1911 Census website (owned by Brightsolid)
Scotlandspeople.gov.uk	PAYG only	Y	Y	Y	Y	N	N	N	N	Only official source of Scottish records (operated by Brightsolid as an agent for GROS)
Genesreunited.co.uk	£69.90	Y	Y	N	Limited	Y	Y	Y	N	Search trees, basic records: beginners choice
1901censusonline.com	PAYG only	Y	Y	N	N	N	N	N	N	The official 1901 census website (provides the same core data sets as Genes Reunited)
Thegenealogist.co.uk	£68.95	Y	Y	Y	Y	Y	N	N	Y	Value for money access to core records & some rare records
Origins.net	£47.50	N	Limited	Y	Y	N	N	N	Y	Access to rare records & photos
Familyrelatives.com	£30.00	Y	N	N	Y	Y	N	Limited	Y	Fully indexed BMDs, international searches, social networking, other rare records, low prices
Nationalarchives.gov.uk	PAYG only	N	N	N	Y	N	N	N	N	Official, rare government archives
Rootsuk.com	PAYG only	Y	Y	N	N	N	N	N	?	Simply access to core records (BMDs, census)
Familysearch.org	Free	N	1881 only	Y	Y	N	N	N	N	Free, rare records
Freebmd.org.uk	Free	Incomplete—ongoing project	N	N	N	N	N	N	Y	Free, fully indexed BMDs, 1837–1922
Freecen.org.uk	Free	N	Limited	N	N	N	N	N	?	Free census records
Lostcousins.com	Free basics > £10 (to contact other members)	N	N	N	Y	Y	Y	Y	N	Social networking to find lost relatives (USA, UK & Canada)
FamilyLink.com	Free	N	N	N	N	Y	Y	Y	?	Social networking—'We're related' applications is in Facebook top 8 in UK
Myheritage.com	Free basics > £95.40 (for more complex services)	N	N	N	N	Y	Y	Y	?	Online tool & social networking to build a family tree

Source: Brightsolid.

Illustrative example of datasets offered by a selection of providers

TABLE 1 UK historical records—illustrative example of datasets offered by a selection of providers

	<i>Genes/ 1901</i>	<i>Ancestry</i>	<i>FMP/ 1911</i>	<i>Origins</i>	<i>GSJ</i>	<i>Family Link</i>	<i>Other*</i>
Census records							
England & Wales 1841	x	x	x	x	x	x	x
England & Wales 1851	x	x	x		x	p	x
England & Wales 1861	x	x	x	x	x	x	x
England & Wales 1871	x	x	x	x	x	x	x
England & Wales 1881		x	x		x	x	x
England & Wales 1891	x	x	x	p	x	x	x
England & Wales 1901	x	x	x		x	p	x
England & Wales 1911			x				
Scotland 1841		x					x
Scotland 1851		x					x
Scotland 1861		x					x
Scotland 1871		x					x
Scotland 1881		x					x
Scotland 1891		x					x
Scotland 1901		x					x
Other		x		x			
BMD records							
England & Wales BMD 1837–1983	x	x	x		x	x	x
England & Wales BMD 1984–2005	x	x	x		x	x	x
British overseas BMD 1761–2002			x				
England/London parish records		x	x	x	x	x	x
Scotland old parish BMD registers pre-1855				x			x
Other		x	x	x	x	x	x
Military records							
WW1 deaths†	x		x		x		x
WW2 deaths†	x		x		x		x
Army & Navy lists					x		
WW1 British Army Pensions		x					
WWII News Reel		x					
Army/Royal Navy casualties		x					
Indian Army records		x					
Royal Irish Constabulary		x					
ANZAC Memorial, 1914–1918		x					
Canadian Soldiers in WWI		x					
US Marine Corps Rolls		x					
Korean War Casualties		x					
Vietnam War Awards & Decorations		x					
Babergh Hundred Military Survey of 1522		x					
British Army WWI Service Records		x					
British Naval Biographical Dictionary, 1849		x					
Charterhouse Register 1872–1910		x					
Sea Officers of the Royal Navy, 1660–1815		x					
Great British Army War Ltd, January 1893		x					
Scottish Solders in Colonial America, Part I–III		x					
The French and Indian War from Scottish Sources		x					
British Army Prisoner of War 1939–45		x					
British Commonwealth War Graves registers		x					
Ireland Casualties of World War One		x	p				x
Solders Died in the Great War 1914–18		x	x				x
National Roll of the Great War 1914–18		x	x				x
Royal Navy Division 1914–1919		x	x				x
Army Roll of Honour 1939–45		x	x				x
Other army lists roll calls 1656–1888			x				
Armed forces births 1761–1994			x				
Armed forces marriages 1818–1994			x				
Armed forces deaths 1796–1994			x				
Militia Attestations Index 1860–1915				x			
De Ruvigny's Roll of Honour 1914–1924		x	x				x
Medal rolls/gallantry awards		x	x				
Other		x	x	x	x		x

	<i>Genes/ 1901</i>	<i>Ancestry</i>	<i>FMP/ 1911</i>	<i>Origins</i>	<i>GSJ</i>	<i>Family Link</i>	<i>Other*</i>
Niche records							
Wills & Testaments/Court, Land and Probate		x	x	x	x		x
Passenger lists/migration		x	x	x	x	x	x
Apprentices/teachers/clergy/occupations			x	x			x
Medical registers/directories/electoral roll		x	x		x	x	x
Knights of England					x		x
Other		x	x	x	x	x	x

Source: Main parties' joint submission.

*Includes ScotlandsPeople, 192.com, FreeCen, FreeBMD, FamilyRelatives, military-genealogy.co.uk, Naval and Military Press, Casus Belli.

†These records are only a very small subset of the GRO Overseas BMDs that are available from FMP. FMP offers much more detailed datasets relating to WW1 and WW2 casualties and service records: in particular, Solders Died in the Great War 1914–1919, National Roll of the Great War 1914–1918, De Ruvigny's Roll 1914–1918, Royal Navy Division 1914–1919, and Army Roll of Honour 1939–45.

Note: p = online version pending.

Market share by 2009 turnover—based on parties' estimates

[X]

Source: Brightsolid and Friends.

Note on various measures of market shares

Summary

1. This appendix provides a summary of the various measures of market shares we have calculated.¹ Market shares are relevant to our assessment of pre-merger competition in the supply of online genealogy services, which in turn forms part of our assessment of the unilateral effects of the merger. We also provide a summary of the main parties' customer profile, in terms of type of use they make of the site. This information provides useful background to the parties' customers, and also suggests how much weight we should place on each measure of market share.
2. Generally market shares can provide some indication of market power as in some specific circumstances the price cost margin that a firm can charge is proportional to its share of units sold. For this reason, market shares based on volume can be used to inform views on firms' market power. However, frequently actual market circumstances are such that this relationship is less clear-cut. Factors such as product differentiation, differences between customer groups, network externalities across markets etc can decrease the reliability of market shares as an indicator of market power. For this reason, we present a varied set of measures with the aim of providing some information on the relative strength of various companies operating in the market.
3. Overall, the market share figures vary considerably depending on what measure is used—there is a lack of a unique and reliable measure. We begin by presenting share of total UK revenue. Brightsolid and Friends both told us that they did not have reliable data on the total number of subscribers over time, but rather kept data on new subscribers. However, both parties and Ancestry provided some data on number of current subscribers, which are presented below. We note that these market share measures include information about the merging parties and Ancestry only, and therefore will overstate the market share of all three retailers to the extent that there are other providers with significant revenues or numbers of subscribers. However, these measures do provide information on the relative position of FMP, Genes and Ancestry.co.uk.
4. We have also calculated shares of various other measures of volume: image downloads of TNA data, new subscription purchases (volume and value), PPV purchases and new registrations. These latter three measures also include information only from the merging parties and Ancestry, and so can best be used as an indication of the relative performance of these three retailers on various performance measures.
5. These measures of market share do not include any of the free genealogy data sites, which the parties argued were an important constraint in the market. Furthermore, various genealogy social networking sites will not be picked up in the measures of market share referred to above. We therefore also present figures on shares of site traffic (from Hitwise data), which include site traffic on all online genealogy sites, including social-networking-only sites and free sites.
6. Some general points emerge, which are consistent with wider evidence. Overall, the shares show that Ancestry has by far the highest share of TNA image downloads

¹Market shares based on turnover figures quoted by the OFT are: Ancestry [§] per cent, Genes [§] per cent, FMP [§] per cent and others [§] per cent.

(more than [X] per cent), the highest share of UK revenue ([X] per cent), the highest number of total subscribers ([X] per cent) and the highest share of new subscriptions (around [X] per cent). This presents a relatively consistent picture that Ancestry is the market leader. Ancestry's higher number of total subscribers will contribute to its lead in TNA image downloads. However, Ancestry has a much higher share of TNA image downloads than it does total subscribers—it is not possible to determine precisely why Ancestry's market share figures differ so significantly according to these measures. However, the figures do suggest that Ancestry users are more 'heavy' downloaders of data than are users of Genes, for example.

7. The difference between the market share figures is consistent with differentiation between the retailers' product offerings and with only a limited combined share of core data, which is the only area where the parties currently overlap. Genes has a higher share of new and existing subscriptions when we include social-networking-only subscriptions than when we exclude these social-networking-only subscriptions, which highlights their greater focus on social networking. Ancestry has a small share of PPV purchases, especially when compared with its share of new and existing subscriptions and TNA downloads, which is consistent with its lack of focus on PPV.
8. However, these figures should be treated with caution when making inferences about levels of market power, due to the wide differences between various estimates. It is difficult to place more weight on one measure of market share than another in this market. The figures on total subscribers do not include information on the value of subscriptions, which might skew the shares. The TNA figures might be seen as a reliable measure of the core-data aspect of the offering. However, these cannot be used for an approximation of overall customer base, as such an approximation would not take into account the heaviness of customers' data usage across different retailers or other aspects of the product offering. PPV purchases are a subset of these TNA figures, but are subject to different retailers' strategies in promoting subscriptions over PPV (and vice versa). New subscriptions provide some information on the relative strength of different retailers on records as opposed to social networking, but do not provide information on the total number of subscribers.

Customer profile

9. Table 1 shows the proportion of FMP and Genes² users falling into each category (subscription, PPV and free-only users). As noted in the table, the FMP figures include the 1911 Census online website, which is likely to increase the proportion of users that are PPV customers. The figures show that out of Genes' paying customers, most purchase only social networking.

²We did not obtain this information from Ancestry.

TABLE 1 **Customer base profile**

	<i>per cent</i>	
	<i>Genes</i>	<i>FMP</i>
Free-only users	[X]	[X]
Subscription users	[X]	[X]
of which Gold only	[X]	[X]
of which Standard only	[X]	[X]
PPV users	[X]	[X]
Combination paying users	[X]	[X]

Source: Data provided by Genes and FMP.

Notes:

1. The Genes numbers are based on transactions between January and September 2009.
2. FMP as of 8 December 2009.
3. The FMP users include 1911census.co.uk users. This is likely to affect the proportions. In particular, it is likely that this increases the proportion of users that are PPV users, since the 1911 Census is only available as PPV on that website as required by TNA, and only became available as a subscription in October 2009. Customers whose existing subscription had not yet expired are likely to continue using PPV to access 1911 until their subscription is up for renewal.

10. Tables 2 and 3 show the proportion of customer revenue (non-corporate customers and not including advertising revenue) accounted for by the different subscription and PPV product offerings of the parties.

TABLE 2 **Revenue profile—FMP**

	<i>Share of 2009 revenue from (non- corporate) customers %</i>
Subscriptions	[X]
PPV	[X]

Source: Data provided by FMP.

Note: This revenue profile excludes revenues from the 1911 site. This site offers only PPV records and including revenues from this site would significantly increase the proportion of revenues accounted for by PPV.

TABLE 3 **Revenue profile—Genes (excluding 1901)**

	<i>Share of 2008 customer revenue %</i>
Standard subscription	[X]
Gold subscription	[X]
PPV	[X]

Source: Data provided by Genes.

Note: We exclude 1901 revenue from this table. The 1901 site offers only PPV and therefore if we included this site the proportion of revenues accounted for by PPV products would increase.

Market share estimates

UK revenue

11. We have information on UK revenue for the parties and for Ancestry and present shares of the total UK revenue for these three providers in Table 4. We do not have this information for other third party retailers or for free sites, but Table 4 provides information on the relative size of the main parties and Ancestry in terms of turnover. Ancestry has the largest share ([X] per cent) compared with a [X] per cent combined share for the merging parties.

TABLE 4 Share of total revenue

	<i>per cent</i>
	<i>% share of total 2008 revenue</i>
Ancestry	[REDACTED]
Brightsolid	[REDACTED]
Genes	[REDACTED]

Source: Data provided by FMP and Genes.

Notes:

1. Ancestry estimated revenue from UK customers.
2. Genes and 1901 combined.
3. All genealogy Brightsolid revenue.

Total subscribers

12. We have some information on the total number of subscribers at Genes, FMP and Ancestry, which are presented in Table 5. Again, this total is a sum of total subscribers to FMP, Genes and Ancestry, since we do not have data on other third party retailers. Therefore although it does not provide an indication of other retailers, it does provide information on the relative size of customer base of what we understand to be the three largest retailers. We note that it does not provide any information on the use of free sites.
13. Genes' social-networking-only subscription is a unique product in the market, therefore we present figures excluding this social-networking-only subscription in the first column of this table. The shares including the social-networking-only subscription are presented in the second column.

TABLE 5 Share of total subscribers

	<i>per cent</i>	
	<i>% share of no of subscribers, excluding social-networking-only subscriptions</i>	<i>% share of no of subscribers, including social-networking- only subscriptions</i>
Ancestry	[REDACTED]	[REDACTED]
FMP	[REDACTED]	[REDACTED]
Genes	[REDACTED]	[REDACTED]

Source: Data provided by Ancestry, FMP and Genes.

14. Table 5 shows that Ancestry has the highest share of total subscribers ([REDACTED] per cent). FMP and Genes have much smaller shares ([REDACTED] per cent and [REDACTED] per cent respectively). When we include social networking, Genes has the highest share ([REDACTED] per cent), but, as noted above, this includes a subscription package unique to Genes. We note that even excluding Genes' social-networking-only subscription, the parties' and Ancestry's products are still not exactly comparable—Genes' and Ancestry's subscriptions include social networking and FMP's and Ancestry's subscriptions include non-core data.
15. The parties were unable to provide us with complete data on the value of total subscribers. However, we note that the above figures in all likelihood overestimate Genes' shares. Genes' Gold subscription is priced significantly lower than either FMP

or Ancestry's offerings,³ and Genes' Standard subscription, which as noted is a unique product offering, is priced at only £9.95 for six months. These price differentials on both the Gold and Standard subscription imply that Genes' share of value of total subscribers will be lower than the shares of volume presented above, and this overestimate is likely to be more significant when we include the social-networking-only subscription.

TNA image downloads

16. Table 6 shows the share of image downloads of TNA data in 2009. TNA told us that this was the most reliable measure of volume and therefore of market share, according to each retailer's performance in retailing TNA records. FMP told us that these figures did not fully represent its customers' activities since it takes no account of views of transcriptions only, as opposed to image downloads. However, since this is the case of all the parties represented below, we argue that this data gives a reliable picture of the relative use of TNA data by customers of each of the retailers represented below.

TABLE 6 Share of TNA image downloads, 2009

	% share
Ancestry	[30]
FMP	[20]
Genes	[15]
Origins	[10]
The Genealogist	[10]
Others	[15]

Source: Data provided by TNA.

17. According to Table 6, Ancestry has a [30] per cent market share.⁴ However, we note that the figures in this table take no account of other aspects of the retailers' offerings such as non-TNA records and social networking functionality. We do not have the data to measure shares of these other aspects, which would give us an indication of relative performance in retailing these other aspects of the competitive offering. It is perhaps a reasonable assumption that shares of TNA image downloads are a reasonable proxy for shares of image downloads of other core datasets (eg BMDs), and so these market share figures might be used as an indicator of the retailers' relative performance in retailing all core data, where the merging parties overlap. However, it may be less likely that this TNA data captures share of non-core data or share of social networking users, in which case these market share figures are likely to be less reflective of relative performance in retailing non-core data or social networking services.

New subscriptions

18. Table 7 shows the share of the number of new subscriptions in 2009 (up until October). As with total subscribers, this total is a sum of new subscribers to FMP, Genes and Ancestry, since we do not have data on other third party retailers. It can be used therefore to provide information on the relative performance in winning new

³FMP's Explorer subscription is priced at £54.95 for six months or £89.95 for 12 months. Ancestry's Essentials subscription is priced at £83.40 for 12 months and Ancestry's Premium subscription is priced at £107.95 for 12 months.

⁴As a check on these figures, we also look at the share of TNA downloads of an individual dataset (the 1901 Census). Ancestry has a similarly high share of downloads of this dataset ([30] per cent).

subscribers of these three retailers, but will be likely to overstate all of these retailers' exact shares.

19. Again, we look at the total market both including and excluding these social-networking-only subscriptions.

TABLE 7 **Share of new subscriptions, 2009**

	<i>% share of no of new subscriptions, excluding social-networking-only subscriptions</i>	<i>% share of no of new subscriptions, including social-networking-only subscriptions</i>
Ancestry	[X]	[X]
FMP	[X]	[X]
Genes	[X]	[X]

Source: Data provided by Brightsolid, Friends and Ancestry.

20. Table 7 shows that Ancestry again has the highest share, whether we include or exclude social-networking-only subscriptions. However, Ancestry's market share is much lower than that suggested by the TNA data. FMP has a higher share of new subscriptions than does Genes when we exclude social-networking-only subscriptions, which as noted above are a subscription package unique to Genes. This rank ordering is reversed when these social-networking-only subscriptions are included, reflecting Genes' focus on social networking.
21. As noted in relation to total subscribers, we do not have reliable data to present the share of the value of new subscriptions.⁵ As with total subscribers, the figures in Table 7 are therefore likely to overstate Genes' share of new subscriptions as its subscription prices are lower than those charged by FMP and Ancestry.
22. The introduction of the 1911 Census data as part of FMP's subscription is too recent to be picked up in market share figures—it is possible that this has increased FMP's share of new subscribers.

PPV purchases

23. Table 8 shows the share of PPV purchases. The 1911 Census data became available in January 2009, and so we present shares for 2008 and for 2009 to compare the position before and after this development. The 1911 Census⁶ data was available only on PPV until October 2009. The total PPV purchases presented in Table 8 are a sum of Genes, FMP, 1911census.co.uk and Ancestry PPV purchases, as again we did not receive this data from other retailers. We note that these shares will be affected by the strategy of different retailers to use different price structures. For example, Ancestry does not focus on PPV purchases, and instead offers monthly (as well as yearly) subscriptions.

⁵This is because Genes did not provide the information on value on the same basis as FMP and Ancestry.

⁶The 1911 Census was available to invitation-only customers in December 2008, which accounts for the small share of PPV purchases for 1911 in 2008. However, this does not affect the overall picture of 2008 as pre-1911 launch.

TABLE 8 Share of PPV purchases

	<i>% share of the number of new PPV purchases 2008 (pre-1911 Census)</i>	<i>% share of the number of new PPV purchases 2009 (post-1911 Census)</i>
Ancestry	[X]	[X]
FMP	[X]	[X]
Genes	[X]	[X]
1911census.co.uk	[X]	[X]

Source: Data provided by Brightsolid, Friends and Ancestry.

24. Table 8 shows that, unlike the other measures of market share presented, Ancestry has the smallest share of PPV purchases. This is consistent with Ancestry’s focus on subscriptions rather than PPV, as noted above, and which Ancestry itself confirmed.
25. Prior to the introduction of the 1911 Census data, Genes had by far the highest share of PPV purchases ([X] per cent). As of September 2009, 1911census.co.uk had the highest share of PPV downloads ([X] per cent), with a corresponding decline in the shares of Genes and (to a lesser extent) of FMP and Ancestry. However, we note two caveats:
- (a) The introduction of the 1911 Census data is associated with a large increase in the overall volume of PPV purchases. Hence 1911census.co.uk’s large market share (and decline in Genes’ and FMP’s market share) appears to be somewhat driven by new PPV customers for the 1911 Census data, rather than switching of PPV volume across the retailers.
- (b) In October 2009, the 1911 Census data became available as part of FMP’s subscription, where previously it was only available as a PPV option. This is too recent an event to analyse properly, but it is possible that the availability of this data in a subscription will reduce the volume of 1911 PPV purchases, and so the share of PPV purchases of 1911censusonline may decline.

Registrations

26. Table 9 shows shares of new free registrations to Genes, FMP, 1911census.co.uk and Ancestry. Again, we look at shares pre- and post-launch of the 1911 Census data, as well as shares in the month of the launch. We look at these monthly figures, rather than the yearly figures used above, since the monthly figures capture the large spike around the launch of the 1911 data, which then subsequently declined.

TABLE 9 Share of new registrations

	<i>% share of new registrations pre-1911 launch (November 2008)</i>	<i>% share of new registrations in month of 1911 launch (January 2009)</i>	<i>Current % share of new registrations (September 2009)</i>
Ancestry	[X]	[X]	[X]
FMP	[X]	[X]	[X]
Genes	[X]	[X]	[X]
1911census.co.uk	[X]	[X]	[X]

Source: Data provided by Brightsolid, Friends and Ancestry.

27. Prior to the launch, Ancestry had the highest share of new free registrations, and more recently this appears to have been overtaken by Genes. However, we argue that this measure of market share is perhaps the least informative, as it does not

involve any payment—many of the free registered users may only visit the site once and may never go on to purchase other products or services.

Site traffic—Hitwise data

28. As noted above, the measures of market shares presented so far do not take into account free sites offering data (such as FamilySearch) and also do not fully capture genealogy social-networking-only sites, as these sites do not run a subscription/PPV business model. We therefore use Hitwise data on site traffic to get a broader sense of the online genealogy market.⁷
29. We note that these Hitwise figures, as with all other figures of market share presented in this appendix, present only one aspect of retailers' strength. In this case, the figures provide information on how successful various retailers are in attracting traffic to their sites but do not provide any information about further or more in-depth usage of any of the sites.
30. Figure 1 presents monthly shares of site traffic since November 2006 for the five largest providers, grouping together websites under common ownership. [Annex 1](#) provides details of which websites come under common ownership. According to this figure, Ancestry currently has more than a [X] per cent share of site traffic, still significantly higher than site traffic on the parties' websites combined ([X] per cent). Until the launch of the 1911 Census data (January 2009), FamilySearch websites (which are free of charge) consistently had slightly more site traffic than Brightsolid websites.

FIGURE 1

Shares of page impressions—websites grouped under common ownership

[X]

Source: Genes.

31. Figure 2 shows the share of total site traffic across social networking sites only. Similarly to Figure 1 above, Genes and Ancestry have the highest share of social networking sites' traffic, and there is a long tail of smaller sites. However, several of the smaller sites are under joint ownership with Ancestry (see [Annex 1](#)) and so if we grouped these sites together Ancestry's share would be even higher. FMP has no social networking services and so does not appear in Figure 2.

FIGURE 2

Shares of page impressions—genealogy social networking sites only

[X]

Source: Genes.

⁷The Hitwise figures do not include FamilyLink as providers using the Facebook platform are not covered by Hitwise.

Website common ownership

Genes + 1901 Census	www.genesreunited.co.uk www.1901censusonline.com	Ancestry	www.ancestry.co.uk www.ancestry.com www.rootsweb.com www.genealogy.org boards.ancestry.com www.genforum.com archiver.rootsweb.ancestry.com www.myfamily.com familytreemaker.genealogy.com genealogy.about.com www.genealogy.com resources.rootsweb.ancestry.com
GSJ sites	www.thegenealogist.co.uk www.ukcensusonline.com www.bmdindex.co.uk www.rootsuk.com		
FamilySearch sites	www.familysearch.org Search.labs.familysearch.org		
Find My Past	www.findmypast.com www.scotlandspeople.gov.uk www.1911census.co.uk www.familyhistoryonline.net	My Heritage	www.myheritage.com

Unilateral effects

Summary and introduction

1. In this appendix we analyse:
 - (a) the effect of the merger on price competition, now and in the future; and
 - (b) the effect of the merger on investment.
2. Section 1 discusses the potential for the merger to create incentives to increase prices unilaterally. This includes an analysis of whether the merging parties impose some constraint on each other in setting prices, and how strong this constraint is likely to be. As part of this analysis, we present evidence on the extent of differentiation between the parties and other constraints on the merged company's prices, principally from Ancestry but also from free core data sites.
3. Furthermore, we present evidence on whether the merger could have pro-competitive effects on prices. The pro-competitive effects we analyse stem from the elimination of a double mark-up, the complementary nature of at least part of the parties' offer and the potential for the merger to increase price competition with Ancestry.
4. In Section 2 we first assess whether current or planned investment decisions would be likely to lead to increased price competition between the parties in the counterfactual. In other words, we assess whether current or planned investment by either Genes or FMP will lead to the parties becoming closer in product space and hence closer competitors on prices.
5. We then turn to the effect of the merger on investment decisions. We consider whether the merger will increase the scope of investment and innovation as a result of reducing the risk associated with upfront investment costs. We also consider whether, as a result of the merged firm offering a product more comparable to that of Ancestry, it might be likely to impose a greater constraint on Ancestry in competition to innovate and improve product quality.

Section 1: The potential loss of competition from reduced price competition

6. We begin by briefly setting out the product offerings of the parties, and the extent of product overlap. FMP currently offers three types of subscription packages:
 - (a) Explorer subscription: access to all of FMP's records excluding the 1911 Census data. £54.95 for six months or £89.95 for 12 months.
 - (b) 1911 Census only subscription: access to only the 1911 Census data. £39.95 for six months or £59.95 for 12 months.
 - (c) Full subscription: Explorer plus 1911 Census data. £94.90 for six months or £149.90 for 12 months.
7. Genes offers two sorts of subscription:

- (a) Standard subscription: access to all social networking and family tree-building services on the site. No access to records. £9.95 for six months.
- (b) Gold subscription: access to core records¹ as well as all social networking and family tree-building services. £34.95 for six months.
8. Both parties also offer PPV credits for access to their records.
9. As outlined in Appendix D, the parties overlap in the supply of core records. Genes' Gold subscription offers access to BMD and census records, as do the subscription packages offered by FMP. Similarly, both parties' PPV credits allow access to this core data (although FMP also offers access to non-core records through its PPV access).
10. We note, however, that the majority of Genes' paying customers ([REDACTED] per cent) purchase only the Standard subscription, which does not overlap with any of FMP's products.
11. The overlap of the parties' core data offering suggests that there is the potential for customers to switch between the parties in response to relative price changes. This in turn implies that the parties could impose at least some constraint on each other in setting prices.
12. Our customer survey shows that some customers are likely to switch in response to price changes. In response to a 5 per cent price change, [REDACTED] per cent of Genes' subscribers and [REDACTED] per cent of FMP's subscribers claimed that they would switch to another website. We note that relatively fewer of Genes' customers might switch because many of Genes' subscribers purchase the Standard subscription, a product that is unique in the market. [REDACTED] per cent of Genes' PPV customers and [REDACTED] per cent of FMP's PPV customers claimed that they would switch websites in response to a 5 per cent price rise. This survey evidence does not provide information on where customers would switch in response to price changes, and hence these figures cannot provide evidence on the relative constraint imposed on the parties by each other and by third party retailers. However, it does suggest that there is potential at least for price competition in the market.
13. Similarly, we conducted some analysis of the changes in FMP's new subscription volumes over time, in response to changes in FMP's prices and promotions. We observe some changes in FMP's new subscriptions volume in response to price changes, which suggests that there is potential for price competition. However, we were again not able to use this evidence to look at customers' reactions to relative price changes. For example, due to noise and volatility in measures of volume we were not able to pick out the effect on FMP's volume from a change in Genes' prices, and hence were not able to infer anything about switching between the websites.
14. [REDACTED]^{2,3}
15. Similarly Brightsolid documents also refer to customers switching and competition between the parties:

¹We use the term 'core records' to refer to census records and BMD indexes, in line with the way the parties have defined these terms.

²[REDACTED]

³[REDACTED]

- (a) A Brightsolid internal briefing said that the Genes Gold subscription had been successful in preventing migration of casual genealogists to either Ancestry or FMP, which provides some evidence of substitutability between the Gold subscription and those offered by FMP.⁴
- (b) A Brightsolid note states that the purchase of Genes would consolidate the position and prevent a competitor from entering the ‘battle for market share and data’.⁵
- (c) FMP’s review of pricing for the 1911 Census tracked Genes PPV prices.
16. However, the review of pricing referred to in (c) above does not track Genes’ subscription prices.
17. There is also some evidence that both parties monitor each other’s activity. Genes told us that it benchmarked Gold subscription and PPV prices against a number of competitors, including FMP. FMP told us that it took out a subscription with Genes (along with many other competitors) which it used to monitor prices. However, both parties told us that the market was characterized by numerous targeted customer discounts and special offers, and neither party was able to observe these prices.
18. Our customer survey shows that out of those of FMP’s users who said they would switch at the end of their current subscription or PPV credits package, Genes is the [redacted] most likely website to which they would switch [redacted]. Of Genes’ customers who said they would switch at the end of their current subscription/PPV package, FMP is the [redacted] most likely website to which they would switch (behind [redacted]).
19. However, there is considerable differentiation between the parties’ product offerings, which is likely to limit the extent of price competition between the merging parties. The greater the differentiation between the parties’ products, the less likely it is that customers will switch between the two sites in response to relative price changes, which implies that the parties impose a relatively weak constraint on each other’s prices.
20. While Genes focuses on the provision of social networking and core data, FMP focuses on core and specialist data, with no social networking features. As noted in paragraph 9 above, the only overlap is on core data. However, there is also significant differentiation between the parties’ offerings even on these overlapping products. For example, Genes’ Gold subscription includes only core data whereas FMP’s subscription includes many non-core record sets. Appendix D sets out the overlap of core and non-core records. FMP offers all core records, while Genes offers all core records aside from the 1881 and 1911 Censuses. FMP also offers at least 18 non-core record sets that are not available on Genes.⁶ The Gold subscription also includes access to all of Genes’ social networking tools, which FMP does not offer. FMP also told us that its core data offering was of a higher quality than that offered by Genes, which further increased differentiation.
21. Our customer survey provides further evidence on customer views of the differentiation between the parties’ products:
- (a) Although the main reason for using both Genes and FMP was to search for a particular ancestor ([redacted] per cent of FMP’s users and [redacted] per cent of Genes’

⁴Analysis of complementarity between sites.

⁵Analysis re possible FMP growth.

⁶Main parties’ joint submission.

users), [redacted] per cent of FMP users cited searching a particular set or set of records as the main reason they chose to use FMP, whereas only [redacted] per cent of Genes users cited this as a main reason for using Genes.

(b) A major reason for using Genes was searching other users' trees and interacting/communicating with other users ([redacted] and [redacted] per cent of Genes users respectively cited these as main reasons for using Genes). FMP does not offer these services.

(c) We also asked customers about their satisfaction with FMP and Genes. Customers were far more satisfied with FMP than Genes on [redacted]. On the other hand, customers were far more satisfied with Genes on [redacted].⁷

(d) As part of the customer survey, we also conducted qualitative interviews with 20 users of FMP and/or Genes. We note that these interviews are based on a very small sample size and provide qualitative opinions only. Nevertheless, these qualitative interviews also pointed towards the two sites fulfilling different functions—Genes is largely used for social networking and FMP is used for better record sets.

22. As outlined in paragraphs 6 and 7, there is also a large difference in prices between the subscription packages offered by each main party.
23. In addition, there are significant constraints from other retailers on the main parties' prices that will remain post-merger, which we outline below. We note that TNA, as an ODH, is able to specify the terms on which its datasets are retailed. For example, TNA specifies that PPV access must be offered and is also able to refuse certain PPV price increases. However, TNA's ability to constrain subscription packages is more limited. Furthermore, the evidence suggests that other, smaller original data owners are less able to constrain prices and terms of access in this way.

Constraint from Ancestry

24. We note in paragraphs 12 and 13 that although there is evidence that some marginal customers switch in response to price change and hence that there is at least the potential for price competition in this market, we cannot infer from this in itself the constraint imposed on the parties by each other and by third parties. However, in this subsection, we present evidence that suggests that a significant constraint on prices is likely to come from Ancestry.
25. Ancestry is closer to both parties in terms of product offering. Ancestry's subscription offers a similar breadth and quality of data to that offered by FMP. In addition, Ancestry's subscription packages, like the Gold subscription offered by Genes, also include social networking services.
26. Ancestry's prices for its two UK subscription packages are also closer to the parties than the parties' prices are to each other:
 - (a) Ancestry's Essentials subscription includes core data, some non-core data and social networking and is priced at £83.40 for 12 months (equivalent to £41.70 for six months), a similar price point to Genes' Gold subscription (£34.95). However,

⁷[redacted]

it is not possible to purchase Ancestry's package for six months,⁸ which might limit the extent of comparability between Genes' product and that supplied by Ancestry, for example for entry level users.

(b) Ancestry's Premium subscription includes core data, all non-core data and social networking and is priced at £107.40 for 12 months (equivalent to £53.70 for six months), a similar price point to FMP's Explorer subscription (£54.95). Again it is not possible to purchase Ancestry's package for six months only, which might limit the extent to which these products are comparable.

27. The parties also argued that Ancestry was a closer constraint on each of them than the parties were on each other due to Ancestry's greater overlap with the parties in terms of product offering. Furthermore, FMP's pricing review before the online launch of the 1911 Census data, referred to in paragraphs 15 and 16, cited Ancestry as the only relevant competitor for subscription pricing. Ancestry was also cited as a relevant competitor for PPV prices along with three other retailers (Genes, Origins and The Genealogist).
28. Our customer survey shows that customers of each party to the merger are considerably more likely to switch to Ancestry than they are to the other party. The website to which both Genes' and FMP's users are most likely to switch is Ancestry.
29. Our customer survey also suggests that Ancestry is more similar to each of the parties in terms of factors that motivate customers to use each of the sites than they are to each other. Ancestry's users were motivated by searching a particular record set [X], as well as being motivated to some extent by the ability to search other users' trees and interact with other users [X].
30. The market share figures show that on most measures Ancestry has a considerably higher share than FMP and Genes combined. Ancestry's lead is particularly pronounced for share of TNA image downloads, but is also strong in terms of UK revenue and total subscribers and new subscriptions when we exclude Genes' Standard subscription, a product unique to Genes.⁹
31. TNA also told us that the merger might challenge Ancestry's dominant position by creating a stronger competitor. Ancestry told us that the merger could create a stronger competitor to it.

Constraints from other free and paid-for sites

32. The parties argued that free sites were an important constraint on their prices. The parties told us, and as also evidenced in Appendix D, that much of the core data on which they overlapped was available free of charge from websites such as FreeBMD, FreeCen and FamilySearch and that customers were happy to use free content rather than paid-for content. They said that this constrained how much they were able to charge for their core data services. Genes also told us that free sites for social networking were the key reason why it provided a large portion of its site for free such as tree building, searching other users' trees and replying to (though not sending) messages to other users.

⁸Ancestry's subscriptions are available on a monthly basis but this is at a higher price than when purchased as a yearly package.

⁹See Appendix E. However, we note that the market shares presented in that appendix are all partial and flawed, and should therefore be viewed with caution when making inferences about levels of market power.

33. Our customer survey also suggests that some customers are willing to switch to free sites at the end of their current contract or PPV package. Genes ranked lower among FMP’s users’ potential substitutes than the free sites FreeBMD and FamilySearch— of those of FMP’s users who said that they would switch websites at the end of their current subscription or PPV package, [X] per cent said they would be likely to switch to Genes compared with [X] and [X] per cent who said they would switch to FreeBMD and FamilySearch respectively. Of those of Genes’ users who said they would switch websites at the end of their current subscription or PPV package, the proportion willing to use FreeBMD ([X] per cent) and FamilySearch ([X] per cent) was lower than the proportion that would be likely to switch to FMP ([X] per cent), but still significant.
34. The Hitwise data on site traffic, presented in Appendix E, also shows that FamilySearch has a share of site traffic ([X] per cent) similar to that of FMP ([X] per cent).
35. There is a range of other paid-for sites that offer core data, including Origins and The Genealogist. FMP tracked both of these competitors’ prices in its PPV (though not subscription) price review for the 1911 Census data. However, according to the CC’s customer survey, customers appear to be less likely to switch to these paid-for sites, and so it is unclear how much of a constraint these other retailers really impose.

Pro-competitive effects on prices

36. We now turn to the potential for pro-competitive effects on prices to arise as a result of the merger.

Elimination of double mark-up

37. [X]¹⁰
38. [X]
39. [X]
40. [X]
41. [X]
42. [X]
43. [X]
44. [X]
45. [X]
46. [X]
47. [X]
48. [X]

¹⁰[X]

49. [REDACTED]

Complementarity

50. As outlined in paragraph 9, the parties overlap only in the supply of core data, but this accounts for only a small proportion of Genes' customer base. Instead, Genes focuses on social networking. In addition to the free social networking and tree-building tools offered by Genes, the majority of Genes' paying customers (payments between January and September 2009) pay for additional social networking functionality. The majority of Genes' revenue is also accounted for by Standard subscriptions. The detail of Genes' customer and revenue profile is set out in Appendix E.
51. FMP focuses on the supply of genealogy records and data. This includes core data (which is also said to be of a higher quality than the core data offered by Genes), but also many other specialist records, which are not offered by Genes. Indeed, FMP offers at least 18 other specialist record sets that are not available on Genes.
52. Two goods are said to be complements if a reduction in the price for one of the goods, as well as increasing demand for that good, also increases the demand for the other.¹¹ The parties told us that Genes' social networking services were complementary to the more extensive data offered by FMP, at least for a significant proportion of customers. Genes told us that there were some users who worked across multiple sites, and who found Genes to be complementary to, rather than substitutable for, FMP.
53. Our customer survey shows that a significant proportion of customers of both FMP and Genes multi-source from the two websites—that is, a significant proportion of Genes' paying customers also pay to use FMP and vice versa. This suggests a degree of complementarity across the two websites, as customers use both websites as part of their family history research. This multi-sourcing is summarized in Tables 1 and 2.

TABLE 1 Multi-sourcing by Genes paying customers

	% that purchase:	
	FMP subscriptions	FMP PPV credits
Genes Standard subscribers	[REDACTED]	[REDACTED]
Genes Gold subscribers	[REDACTED]	[REDACTED]
Genes PPV users	[REDACTED]	[REDACTED]

Source: CC customer survey.

Note: There could be overlap between Genes' Standard subscribers and Genes' PPV customers, and hence the columns cannot be summed to get an overall multi-sourcing figure.

¹¹See Begg et al *Economics*. Provided both goods are normal—that is, an decrease in the price of a good causes an increase in the demand for the good.

TABLE 2 Multi-sourcing by FMP paying customers

	% that purchase:		
	Genes Standard subscriptions	Genes Gold subscriptions	Genes PPV credits
FMP subscribers	[X]	[X]	[X]
FMP PPV users	[X]	[X]	[X]

Source: CC customer survey.

-
54. [X] per cent of Genes' Standard subscribers, with access to social networking only, also purchase an FMP subscription, which gives access to core and specialist data. Similarly, [X] per cent of FMP's subscribers purchase a Genes Standard subscription. [X] of FMP's subscribers also purchase Genes' Gold subscription. This suggests that there is a complementarity between Genes' social networking (Standard subscription) and FMP's more extensive records offering [X] customers who use these services together.
55. There is also multi-sourcing between both parties' PPV offerings, consistent with some complementarity between the core record sets offered by Genes and the more specialist data offered by FMP.
56. Less intuitively perhaps, a [X] proportion of Genes Gold subscribers ([X] per cent) also purchase an FMP subscription. This is less intuitive since these customers pay more for a Genes subscription including core records access when these core records are already included in the FMP subscription. Nevertheless, this multi-sourcing behaviour is not inconsistent with complementarity between Genes' social networking and FMP's more extensive record sets, since customers are still finding it beneficial to purchase products from both Genes and FMP.
57. As outlined in paragraph 21, our customer survey also provides evidence on the reasons customers chose either FMP or Genes. For both sets of customers, the most important reason for using either site was to search for a particular ancestor ([X] per cent of FMP's customers and [X] per cent of Genes' customers). However, while FMP's customers also highlighted searching a particular record set as an important reason for choosing FMP ([X] per cent—compared with [X] per cent of Genes customers), Genes' customers highlighted creating a family tree ([X] per cent—compared with [X] per cent of FMP users), sharing/searching other users' family trees ([X] per cent—compared with [X] per cent of FMP users) and interacting with other users ([X] per cent—compared with [X] per cent of FMP users). This, combined with the evidence on multi-sourcing, is consistent with a significant proportion of customers using the parties as complementary tools—Genes for social networking and FMP for record sets—to perform a single function of searching for particular ancestors.
58. Various quotes from the qualitative interviews conducted as part of the customer survey support this reading of the quantitative survey results. For example:
- (a) 'They [FMP and Genes] are complementary to each other, as are other sites ... you could be going across several sites to find information.'
 - (b) 'Genes is more of a data sharing site. You put on a family tree and share it. It's a social networking site—FMP does not do that.'
 - (c) 'I find myself bouncing from one to the other [FMP and Genes].'

59. Complementarity between the parties' product offerings creates an incentive for the merged company, supplying both social networking and official records, to charge lower prices compared with the pre-merger prices set by separate suppliers. As the price for social networking falls, we expect that the demand for social networking will also increase, as some users who did not purchase social networking at a higher price are induced to do so as its relative price falls. The effect of a price change for social networking on the demand for official records, on the other hand, depends on whether social networking and official records are complementary or substitutable products.
60. The survey evidence suggests that for a proportion of Genes and FMP users, social networking and official records are complementary products used to research family history. For those customers for which the products are complementary, a fall in the price for social networking will lead to an increase in their demand for official records as well as for social networking. This is because as these customers use more social networking, they find that official records also become more useful—for example, social networking might create matches with other users' family trees that can then be checked and verified in historical records. In this way, a decrease in the price of social networking not only increases demand for social networking but also increases demand for access to official records.
61. These complementary products are provided by different suppliers prior to the merger—Genes supplies social networking while FMP supplies a complete core and non-core data offering. As a result, when considering setting a lower price for social networking, Genes takes into account only the effect this has on demand for its own products (social networking and core data) and ignores the effect it has on demand for FMP's complementary extensive data offering.
62. Post-merger, by contrast, the complementary products would be supplied by a single supplier that takes into account the positive effect on the demand for official records caused by a decrease in the price for social networking (or vice versa). This creates an incentive for the merged firm, supplying both social networking and official records, to charge lower prices compared with the pre-merger prices set by separate suppliers.¹²
63. We note that Brightsolid does not have clear plans for the integration of Genes and FMP post-merger. However, this should not affect the incentive to lower prices post-merger as this incentive results simply from the merged company taking into account the positive effect on demand from complementary products.
64. A similar incentive to lower prices could be achieved in the counterfactual were each of the parties separately to develop a full product offering—ie were Genes to develop a full core and non-core data offering and were FMP to develop social networking functionality. However, the evidence suggests that this would not occur in the absence of the merger, at least not in a relevant time frame. The parties' investment plans in the counterfactual are discussed further in Section 2.
65. Therefore, the evidence suggests that the social networking offered by Genes and the extensive records provided by FMP are complementary for a significant proportion of both Genes' and FMP's customers. This in turn implies that the merger could result in an incentive for the merged entity to lower prices for these services compared with the counterfactual. We note that we cannot quantify the likely size of

¹²See, for example, *Competition Policy: Theory and Practice*, Massimo Motta, p537.

this effect on prices or total customer savings, unlike the double mark-up estimates of customer savings in the form of lower prices.

Increased competition with Ancestry

66. As outlined in paragraphs 25 and 26, pre-merger Ancestry offers all of social networking and core and non-core records. Appendix E also shows that Ancestry has a substantially higher market share than either FMP or Genes (on all measures but PPV purchases).
67. We argue in paragraphs 25 to 31 that, given Ancestry's market leading position and comprehensive product offering, Ancestry exerts a significant constraint on the parties. However, the constraint imposed by the parties on Ancestry in the counterfactual is limited by each of the party's incomplete product offering—Genes' lack of non-core records and FMP's lack of social networking mean that neither site offers a product that is comparable to that offered by Ancestry. In other words, Ancestry's product offering is of a superior quality to that offered by either of the parties in the counterfactual, which suggests that while the constraint imposed by Ancestry on the parties is significant, the constraint from the parties on Ancestry may be limited. This is consistent with Ancestry's substantially higher share of almost all measures of the market, outlined in Appendix E.
68. The merged entity, however, could offer a similarly comprehensive product as that offered by Ancestry. We note in paragraph 63 that Brightsolid does not have clear plans for the integration of Genes and FMP post-merger. However, Brightsolid stated that it intended to [X], although we have seen no specific plans of how or when this will be achieved. Brightsolid's evidence on its post-merger plans is set out in more detail in Section 2. This implies that it is likely that the FMP website will offer a more comprehensive genealogy service than exists pre-merger, combining existing core and non-core data with at least some of Genes' social networking functionality.
69. The creation of a site with a product offering of a quality and comprehensiveness comparable to that of Ancestry would be likely to increase the constraint imposed on Ancestry by the merged company, compared with that imposed by the each of the parties separately. Assuming that the merger is unlikely to give rise to an increased likelihood of coordinated effects, this is then likely to create incentives for Ancestry to lower prices and increase overall rivalry in the market.
70. Brightsolid told us that the combination of the parties' product offering would create an overall offering more similar to that of Ancestry, which was likely to increase the competition with Ancestry compared with the counterfactual.
71. Ancestry told us that, in its view, the merger could create a stronger competitor than existed without the merger, one reason being the combined subscriber base of each party. TNA also told us that the merger might challenge Ancestry's dominant position by creating a stronger competitor.
72. We note that the incentive for the merged company to lower prices as a result of the complementary nature of its products, as well as the potential for the elimination of double mark-up, would further increase the competitive constraint it would be able to impose on Ancestry.
73. It is again possible that this pro-competitive aspect of the merger could be achieved in the absence of the merger were the parties separately to develop a complete product offering comparable to that of Ancestry. However, as set out in more detail in Section 2, the evidence does not suggest that such a counterfactual is likely.

74. Therefore, the evidence suggests that the merger might have another pro-competitive effect in that the merged company will be able to impose an increased competitive constraint on Ancestry by it providing a more complete, and hence better quality, product offering, comparable to that currently provided by Ancestry.

Section 2: The potential loss of competition in investment plans

75. We now consider the effects of the merger on investment in product development, including whether the merger would eliminate current or planned investment decisions that might be expected to lead to more intense price competition in the future.

Counterfactual investment plans

76. As discussed in paragraphs 19 to 22, there is currently significant differentiation between the parties' product offerings, which limits the extent of price competition between them. In this section, we consider whether, in the counterfactual, current or planned investments might lead to a reduction in the level of differentiation between the parties, which in turn might lead to an increase in price competition in the future.
77. [REDACTED]
78. Brightsolid told us that while some smaller social networking capabilities might be developed for an outlay of around £10,000, developing a full social networking offering would be likely to cost a seven-figure amount. It argued that it did not have any more precise estimates of these costs, which can be seen as further evidence of its lack of plans to develop such technology in the absence of the merger.
79. Brightsolid told us that as well as continuing to invest in developing new datasets, its investment priorities for the FMP site in the counterfactual would be: [REDACTED].
80. These investment priorities therefore largely relate to [REDACTED]. This is confirmed by lack of specific project plans (in the internal documents) by FMP [REDACTED]. Therefore, it does not appear that absent the merger FMP would be likely to develop its product offering so that it includes social networking technology similar to that of Genes (or of Ancestry).
81. [REDACTED]
82. [REDACTED]
83. [REDACTED]
84. [REDACTED]
85. Therefore it does not appear that in the counterfactual either FMP or Genes is likely to invest in product developments that will render the parties less differentiated. As a result, we do not think that current or planned investment decisions, in the absence of the merger, are such as to lead to increased price competition in the counterfactual.

Post-merger investment plans

86. In this section we consider the effect of the merger on investment and product innovations in online genealogy services.

87. Both parties told us that the merger would increase the scope for investment and product innovation. Brightsolid told us that the merger substantially reduced the risk associated with product development and investment. Specifically, Brightsolid told us that in considering potential digitization and transcription projects, the size of a retailer's distribution network was important, as the greater the number of customers to which a digitizer had access, the lower the risk associated with the upfront costs of digitization and transcription investment. Brightsolid said that the merger would substantially increase its distribution network, thereby lowering the risk associated in digitization projects, and increase its incentive to invest in such projects.
88. Furthermore, Brightsolid said that the increased customer base would make FMP/ Genes [REDACTED].
89. We considered whether FMP could achieve a similar distribution network in the absence of the merger, and similarly reduce the risk associated with digitization of large datasets, through partnering with another retailer prior to investing in digitization. However, such an arrangement would be likely to involve more uncertainty than a merger, and hence not lead to as large a reduction in the risk associated with digitization projects. First, it is uncertain that a contract as efficient as the merger could be specified. There is likely to be significant asymmetric information on the part of both contracting parties. A retailer without experience in digitization is likely to lack information on the true costs involved. It would also be difficult for the digitizing partner to observe, for example, the marketing effort exerted by the retail partner in selling the digitized datasets to its customers. Some contractual forms may also involve a double mark-up (see paragraphs 37 to 49).
90. Secondly, it is uncertain whether there exist retailers with which to partner on such a basis. As outlined in paragraph 83, Genes told us that it would [REDACTED]. Other potential retailers with which FMP might potentially partner (principally Ancestry, but also The Genealogist and Origins) are likely to also be competitors in the digitization market and therefore unwilling to partner with FMP in order to increase FMP's ability to invest in digitization. Retailers other than Genes that are not active in digitization are small.
91. Finally, Brightsolid told us that by [REDACTED], it would be able to innovate further in social networking technology, [REDACTED]. As noted above, developing a social networking capability is not likely to be a priority in the absence of the merger due in large part to [REDACTED].
92. We judge that the logic behind the parties' arguments in relation to their post-merger investment plans is convincing and hence that this evidence suggests, first, that Genes will be better able to invest in product development compared with the counterfactual, where its position as a non-core asset [REDACTED] is likely to hinder product development. Secondly, the evidence suggests that the merged company will have an increased incentive to invest due to the reduction in the risk surrounding investment, which stems from lessening the risk of Brightsolid's investment in social networking and lessening the risk associated with the upfront costs of digitization.
93. Furthermore, we set out in Section 1 that we expect the merged company and Ancestry will be closer in product space, due to the merged company being able to offer a more comprehensive product offering along the lines of that already offered by Ancestry.
94. In such a setting, and absent any coordinated effects, we would expect increased competition to innovate between the merged company and Ancestry. Currently, Ancestry's wider product offering can be seen as a better-quality offering than that of

either of the parties to the merger, which limits the extent to which the parties separately impose a constraint on Ancestry to develop its product offering and further improve quality. There is, however, potential for the merged company's broader product offering to stimulate Ancestry's investment plans, encouraging faster innovation in improving product quality (including offering more record sets).

95. TNA told us that it expected competition between the merged company and Ancestry to digitize new datasets to intensify as a result of the merger. As noted above, Ancestry also told us it expected that the merged company could be a much stronger competitor.

Double mark-up

Summary

1. This annex considers possible efficiency gains in the Brightsolid/Friends merger as a result of elimination of a double mark-up in prices. A double mark-up exists when an upstream supplier adds a margin to costs to set its wholesale price; and then the downstream retailer adds its own, second mark-up on the wholesale price to set the retail price.
2. The main conclusion is that, given the current (and likely future) type of contract that Genes uses to obtain data, the extent of double mark-up in PPV pricing is minimal with or without a merger.

The main point

3. Genes told us that its current contract for the supply of data records is a pure revenue share arrangement. [X] Genes also said that it expected in the counterfactual to continue with this sort of contract, [X].
4. An initial assumption is that there is no variable cost to Genes when a customer accesses a record; it is likely that the majority of Genes' costs are fixed and are not volume-sensitive. Considering just PPV access, this currently accounts for around [X] per cent of Genes' revenue. Genes must give a share of the retail price charged for each view to its supplier. Since this happens for every view, Genes therefore gives a share of its total revenue to the supplier. Genes' profit is its share of revenues minus the fixed cost of operation. Genes sets the PPV retail price to maximize its profit. Since costs are fixed, this amounts to choosing the PPV price to maximize its share of revenues. The price that does this is independent of the share that Genes gives to its supplier: whatever share of the 'pie' that Genes must give up, it wants to maximize the size of the pie in order to maximize the share that it keeps.
5. Paragraphs 7 to 9 show more formally what happens when Genes' costs are volume sensitive. In this case, the PPV retail price increases when Genes has to pay a greater share to its data supplier. But the effect will be small when Genes' costs are largely (even if not entirely) fixed.
6. So, if Genes' costs are largely fixed (a reasonable assumption), then the double mark-up in PPV pricing is minimal. In the extreme case where costs are entirely fixed, there is just one mark-up, applied at the retail level. The merger will have little effect on the retail PPV price. Hence the elimination of a double mark-up in PPC pricing is unlikely to be a relevant factor in assessing potential efficiencies from a merger.

More detailed analysis of PPV

7. In order to assess the generality of the point, here is the basic algebra. Let the PPV retail price set by Genes be $p \geq 0$. Let the demand for viewing records be $q(p)$, which is decreasing in p . When Genes sets a retail price of p , it receives a share of $0 \leq s \leq 1$ of the revenue from a record view; its supplier receives $(1-s)$. Hence Genes' revenue per view is sp ; with $q(p)$ view, its total revenues are $spq(p)$. Let Genes' total

costs be $c(q(p))$; they are weakly increasing in q and weakly convex. Hence Genes' profit maximization problem is:

$$\max_p \pi(p) \equiv spq(p) - c(q(p)) \quad (1)$$

The first-order condition for maximization is $\pi'(p) = 0$, ie:

$$s(q(p) + pq'(p)) = c'(q(p))q'(p) \quad (2)$$

which is the standard equality between marginal revenue and marginal cost. This can be totally differentiated:

$$(q(p) + pq'(p))ds + s\pi''(p)dp = 0 \quad (3)$$

So that:

$$\frac{dp}{ds} = -\frac{q(p) + pq'(p)}{\pi''(p)} \quad (4)$$

Note that $\pi''(p) \leq 0$ (from the second-order condition).

8. When costs are strictly increasing $c'(\cdot)$ and demand strictly decreasing $q'(\cdot) < 0$, then the first-order condition (2) implies that $q(p) + pq'(p) < 0$, and hence $dp/ds \leq 0$: the PPV retail price decreases with Genes' revenue share. Alternatively, the PPV price increases when Genes pays out a greater share to its data supplier.
9. When costs are entirely fixed $c'(\cdot) = 0$ and hence $q(p) + pq'(p) = 0$. In this case, $dp/ds = 0$, ie the PPV price does not depend on the revenue share s . When costs are mostly, if not entirely, fixed, then dp/ds is small: the PPV price is largely insensitive to the revenue share s .

Entry

1. This appendix sets out the history of entry into the UK genealogy market since 1990, the arguments made in relation to barriers to entry and expansion, and potential entrants.

Summary

2. The history of entry into the UK online genealogy market since 1990 shows that entry has occurred from fee-based (subscription/PPV) as well as free-to-view entities, ODHs (eg DocumentsOnline) and third party data licensors. From 1990 to 2002, a number of free and paid-for websites were launched which tended to be small scale. The main UK fee-based genealogy providers all entered the market in 2002/03, which also saw the start of mass digitization. The period since this has been characterized by expansion of datasets by these entities, the launch of further specialist websites and the growth of genealogy-based social networking websites.
3. Entry can occur at either a dataset provision or a social networking level. In regard to dataset provision, the parties put forward a variety of entry models for a potential entrant to use depending on the physical nature of the data. The extent to which those datasets then need to be digitized/transcribed/indexed and whether they are core BMD/census records or are more niche/newly-released records affects to an extent the available access to the data and the cost of entry using it.
4. Brightsolid and Friends told us that records were easily accessible with the availability of free content, the increasing commoditization of core data through licensing arrangements and the incentive for ODHs to have the widest possible outlets for their proprietary data. They mentioned specifically in this regard that the largest data source in the UK, TNA, did not have exclusive contracts.
5. Third parties commented that there was a wide variety of ODHs from which to obtain records, although because of the nature of the records it was rare for there to be more than one source. All parties obtained, to some extent, datasets from digitizers under licence. In fact, [X] obtains all its datasets using this method.
6. Some third parties were concerned that some data may not be made available following the merger and that in fact this occurred to an extent in pre-merger conditions. Brightsolid and Friends, however, told us that neither of them had ever refused to provide datasets for anything other than purely commercial reasons. In addition, the existence of a number of agreements between retailers relating to cross-licensing, the fact that [X] obtains its core datasets from [X], and [X] statement that it intended to grow partly by increasing the amount of data it licensed to other entities and from collaborative projects with them suggests that there are sufficient suppliers of core datasets in the market for an entrant.
7. The issue for an entrant, however, is the scope of datasets it would be able to access. Evidence from [X] and our customer survey shows that the volume of datasets is a key determining factor for a customer in deciding which site to use. Although an entrant may be able to access relatively easily core BMD and census data, it may not be able to access newer datasets such as the 1911 Census. This data access issue, however, is more likely to be one of cost rather than purely one of access.

8. It is also not clear to what extent an entrant would need access to all data records used by the major market players to enter the market and be a competitive constraint on the merged entity, although the lack of a complete dataset may reduce an entrant's overall competitiveness.
9. Indications are that an entrant would need the majority of the core datasets to have the opportunity to compete effectively. Annex 2 to Appendix D, provided by the parties, shows that not all the main providers provide all the 'core' datasets. For example, Genes does not provide the 1881 Census data, Origins does not provide 1851, 1881, 1901 Census data and England and Wales BMD. There may be implications for an entrant not providing all datasets in regard to its ability to compete effectively against all current providers, but that annex would appear to show that not all datasets are required immediately on entry.
10. It has been put to us that [REDACTED], this could reduce the potential for a new entrant to enter via sublicensing of data, which we argue is a low-cost entry route for retailing genealogy data.
11. However, we note that the costs in digitizing and transcribing the datasets currently offered by [REDACTED] are sunk, and access to these datasets could be offered at essentially zero marginal cost. This implies that [REDACTED] would not affect [REDACTED] ability to sublicense its existing datasets to other retailers. Furthermore, we note that [REDACTED], its datasets would be open to an entrant to purchase since they are proprietary.
12. In addition, there are other data providers such as [REDACTED] which may be willing to provide licensed data. The continuing availability of [REDACTED] current records might suggest that [REDACTED] would not reduce the possibility of entry via sublicensing of data. This would not hold, however, if [REDACTED], such as the 1911 Census, is important for entry via sublicensing in the future.
13. Parties told us that the major costs of entry were the costs of the data from the ODH, licensing, digitization and transcribing. Third parties told us that there was no such thing as an 'off-the-shelf' data package with a list price. Costs for data records were independently negotiated and were dependent on the form the data was in, the number of records and whether the records had been released previously. TNA, for example, told us that it operated four schemes for its original data, and although the number of digitizers it would consider for the larger datasets was low, this did not mean that the data once digitized would not be available to an entrant on commercial terms. We note that the cost of the 1911 Census licence was significantly higher than any previous data record release and as such should not be taken as a basis for past or future dataset costs.
14. Digitization and transcribing costs can be significant. These costs are dependent on the nature of the records, the number of records, the accuracy required for transcribing and the number of fields etc. Figures do vary between parties, which is to be expected given the number of variables. Brightsolid has in the last three years spent £[REDACTED] on developing its databases. The parties, though, argued that costs were reducing as a consequence of technological improvements and that digitization etc would be outsourced to a growing number of players, also reducing costs.
15. It is clear from the numbers provided by the parties that an entrant would need to invest significant upfront costs if it wished to develop its own datasets from ODHs. [REDACTED] The fact that most parties obtain datasets under sublicences rather than through digitization/transcribing their own datasets indicates that this is the lower-cost/higher-return model and so is more likely to be adopted by a potential entrant. [REDACTED]

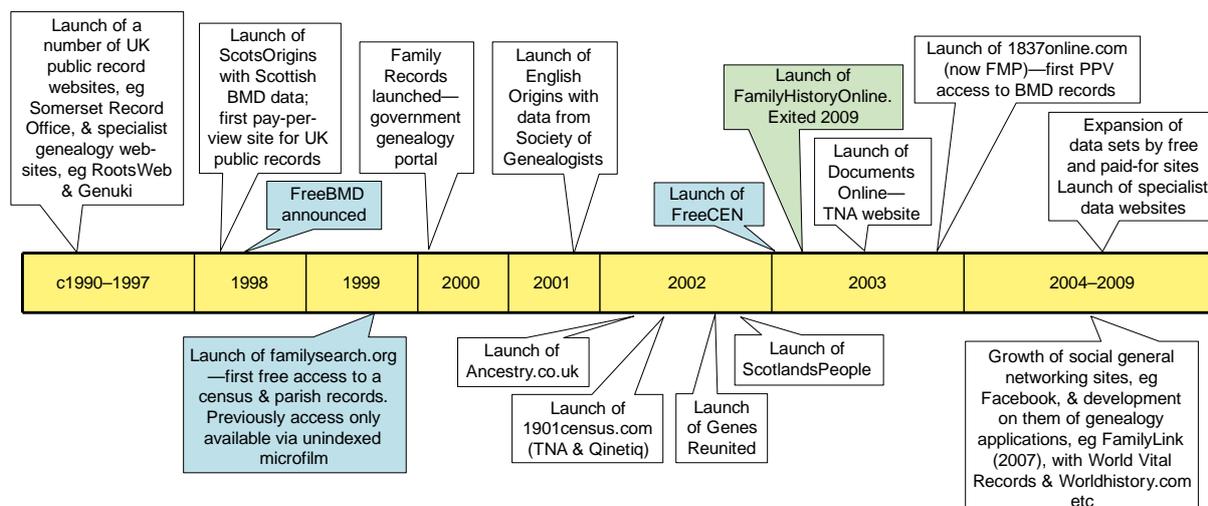
16. However, Genes noted [redacted]. Third parties [redacted] suggested that licensing was often used as a way to leverage the licensor's position as a retailer. If licensing of their data to other retailers allows licensors to increase their own strength as a retailer of online genealogy data, this would suggest that sublicensing of data may not allow a new entrant to compete successfully with the large existing retailers.
17. Advertising and marketing costs have been highlighted by a number of parties as being a key factor in the market affecting competition and entry, both to retailing of records and social networking. Figures from the main retailers show that advertising costs are around [redacted] per cent of revenues. Brightsolid and Friends suggested that a new entrant would be able to have significantly lower costs using online advertising methodologies were the expense to be linked to revenue (cost per click basis).
18. However, [redacted]. The current market participants spend a significant proportion of their revenue on advertising, suggesting that, despite the parties' arguments, a new entrant, if it wished to compete effectively against them, would also need to spend similar [absolute] levels in the short term which would be a significantly higher percentage of its revenue.
19. The last significant entry into large-scale dataset provision occurred around 2003 with the launch of the current main players. In addition, the market is characterized by a lack of expansion by the smaller genealogy entities over recent years. This could indicate the existence of barriers to these small players expanding their market shares.
20. Recent significant entry has actually occurred not in data record retailing but in social networking. Entrants in this market have tended to use existing social networking networks as the building block for entry. Genes, for example, was built on the Friends user base and FamilyLink used Facebook.
21. A social-network-based genealogist seeking to expand into data would still encounter licensing costs and advertising and marketing costs, which in the case of the latter could be significant, but it would do so from having a large customer base which could provide it with sufficient funding.
22. Arguably unlike entry of new data retailers, there has been recent entry of a social networking provider on a very large scale (FamilyLink), which might provide some evidence that entry is not too difficult.

History of entry

23. Figure 1 shows an overview of entry into the UK online genealogy market since 1990.

FIGURE 1

Summary history of entry into UK online genealogy market showing significant entrants



Source: Brightsolid, Genuki.

24. This period would appear to split into four phases:

- (a) *1990 to 1997.* This period was characterized by the launch of a number of small specialist websites with discreet datasets or information for specialist genealogists. The main exception to this was the launch in 1996 of Ancestry.com in the USA.
- (b) *1998 to 2001.* This period saw the start of large-scale record digitization and the launch of the first PPV UK site, ScotsOrigins. It also saw the launch of a number of free sites offering a variety of datasets aimed at non-specialist genealogists such as FreeBMD and familysearch.org (sponsored by LDS).
- (c) *2002 to 2003.* This period saw the launch of the main UK paid-for genealogy sites, including Ancestry.co.uk, Genes and FMP (launched as 1837online). In addition, FreeCEN was launched and TNA's own part-commercial website.
- (d) *2004 to 2009.* This period has seen a growth in the established online providers as well as:
 - (i) the launch of a number of specialist websites such as military-genealogy.com (military specialist) and Times Online (newspaper archive);
 - (ii) the growth and new entry of social networking websites. A number of social/cooperative websites already existed, eg RootsWeb (genealogy co-operative acquired by Ancestry) launched in 1996 and Genes launched in 2002. However, this period saw the growth of social networking sites, in particular World Vital Records/FamilyLink operating on Facebook, Footnote and Geni.com;¹ and
 - (iii) the emergence of genealogy search engines such as MyHeritage.

¹Genealogy linked to social networking sites tended not to be UK specific.

Barriers to entry and expansion

Parties' submissions

25. The parties submitted that the pace of developments in the market, including entry, dataset developments and product innovation, demonstrated that barriers to entry were low.
26. The parties said that online businesses by their nature were generally straightforward to enter, and recent history showed many examples of entry. In addition, the parties said that opportunities to enter the sector in any of the social networking, core and specialist areas existed for any company with access to a large audience, companies from adjacent industries and family-focused social networking start-ups.
27. The parties told us that access to records was not a barrier to entry or expansion in the core and specialist record areas, as records were easily licensed. They stated that existing record databases retailers of core and specialist records had grown their online offerings. They also said that this pace of change, in terms of expansion and entry, showed that the current state of the market was in no way fixed. The parties believed that the market might become even more competitive in the future as: the availability of free content was increasing; 'core' data was becoming increasingly commoditized; and several providers were able to offer access to the same sets of data.

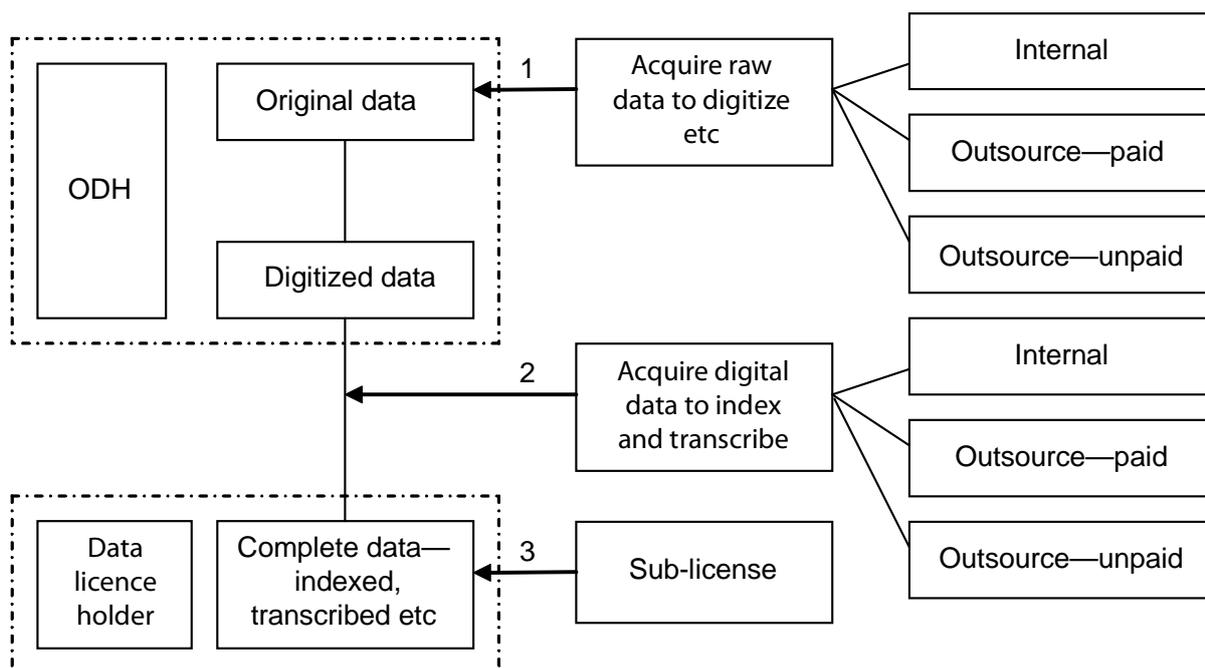
Entry models

Data record provision

28. The parties submitted that there were three principal entry models for an entity wishing to provide data records depending on the physical nature of the data. These entry models worked equally well for new entrants into the genealogy market and those currently providing social networking genealogy services moving into record provision. The three entry models were:
 - (a) *Digital image not available from ODH.* The entrant could obtain the original document from the ODH and either digitize the image and transcribe/index the data it contains itself, outsource to a specialist to digitize etc, or use volunteers to undertake at least part of the work.
 - (b) *Digital image available from ODH.* The entrant would only need to index and transcribe the image data either internally or by outsourcing to a specialist provider. The entrant would not have to engage in any digitization of the images itself and could simply negotiate a licence to the digitized images in question from the ODH.
 - (c) *Fully digitized images and transcribed data.* The entrant could sublicense the digitized images and transcribed data from the original digitizer or a subsequent firm which had carried out its own transcription. A new entrant could add its own transcription services if it so wished.
29. These entry modes are summarized in Figure 2.

FIGURE 2

Entry models



Source: CC from main party submission.

Social networking

30. The parties did not put forward any specific models for entry into social networking genealogy although they stated that:
- (a) There were social networking software packages available that an entrant could use, although these would need to be adapted to genealogy requirements.²
 - (b) There were a number of existing social networking sites such as Facebook which an entrant could use to enter the market. Brightsolid, however, stated that Facebook had recently closed down the viral marketing technology which had allowed new applications expedient growth, which meant that it was now harder for an entrant to use Facebook as an entry mode in the same manner as FamilyLink.
 - (c) In addition, there had been a number of start-ups that had entered the social networking area in the last five years, which had developed in-house, rather than harnessed existing, social network platforms including MyHeritage.com and Geni.com.
31. Social networking is discussed separately in paragraphs 97 to 103.

²Genes stated that a recent survey by technology news site, Techcrunch, listed 29 companies in the business of providing white label social networking platforms that enable their customers to build their own social networks, often from scratch, and to tailor those networks to a range of purposes.

Factors affecting entry and expansion in data provision

32. The following section examines factors which could affect the ease of entry into data provision. These include:
- (a) access to data;
 - (b) direct costs;
 - (c) marketing and brand awareness; and
 - (d) other factors.

Access to data

ODH

- *The parties*

33. The parties submitted that obtaining datasets from an ODH, either in original or digitized format, was typically straightforward. They said that this physical data was readily available, eg all census data from 1841 to 1911 was available from TNA in the form of digital images and/or microfilm copies.
34. The parties believed that it was in the principal UK data owner's, TNA's, interest, and therefore by implication in other ODHs' interests, to grant licences for proprietary data to obtain not only additional revenue, but also to distribute data as widely as possible. The parties said that as TNA did not generally license data on an exclusive basis, it was not restricted in its ability to grant such licences, thus distributing datasets widely.

- *Third parties*

35. Origins told us that it obtained its datasets from a variety of sources, including ODHs such as TNA, as well as digitizers/retail entities such as Eneclann Ltd and [X]. It also created its own datasets. GSJ told us that its data sources included archives, libraries, family history societies and other individuals or companies, although the main sources were TNA and the GRO. Ancestry told us that the majority of its records were informally identified and acquired in direct discussion and negotiation with ODHs. Origins, though, told us that as far as it was concerned, there was rarely, if ever, a choice of suppliers for each dataset of interest.
36. TNA told us that 90 per cent of its mass digitization was accomplished through licence agreements with third parties. TNA ran four schemes which covered all the costs of scanning and transcription and in return for a royalty on commercial revenue generated, retailers ran their businesses off the intellectual property generated in the name-level indexes. These were:
- (a) competitive dialogue for full census releases (one every ten years);
 - (b) by competition for co-branded LIAs major genealogical collections (about three a year);
 - (c) standard non-exclusive licences; and

(d) academic publishers for institutional sales.

37. TNA believed that its approach balanced its need to provide data to the public at low cost with its need to digitalize data. It stated that although LIAs gave primacy in the market, all other contractors could then license the images either from TNA or from the LIA partner.
38. GSJ suggested to us that TNA preferred to work with large organizations to allow it to have a greater chance of achieving a reasonable return. GSJ told us that the biggest, more lucrative sets of data had now gone and there were only the more obscure sets of data left which it was difficult to grow public interest in. GSJ believed that TNA looked at the number of subscribers a party had as this was a prime determinate of the revenue it could extract from the digitizer. In addition, it stated that a retailer needed a significant user base to guarantee its own return on any investment.
39. TNA told us that it positively encouraged smaller companies to enter the market. It told us that managing the whole process required [REDACTED].

Sublicence

- *The parties*

40. The parties argued that it was common for there to be several different sources of a particular digitized and transcribed/indexed dataset in existence which a retailer of family history services could acquire or license. These included:
 - (a) BMDs, which were available from FMP, GSJ, FreeBMD.com, Family Relatives, and possibly Ancestry as well as non-Internet companies such as [REDACTED];
 - (b) 19th century censuses, which were available from FMP, GSJ, FamilySearch, Origins/[REDACTED] and possibly Ancestry, and (at the county level) various family history societies; and
 - (c) other records, for instance Soldiers Died in the Great War was available from Naval & Military Press, TNA and Family Relatives, and largely overlapped with the free and more extensive material on the Commonwealth War Graves Commission site.
41. The parties stated that FMP was active in sublicensing its data to third party online retailers ([REDACTED]). FMP also licensed data from other sources (which were often other online retailers) including: [REDACTED]. In addition, Brightsolid stated that it was currently in negotiations with various third parties to license [REDACTED].

42. [REDACTED]³

- *Third parties*

43. Origins said that it obtained some of its datasets under licence from digitizers/retail entities such as Eneclann Ltd and [REDACTED] and that it licensed/sublicensed datasets to [REDACTED] among others. It stated that part of its own business growth was seen as coming from licensing more of its data to other entities and from collaborative projects with them. Origins also told us that for its Irish Origins service it worked in partnership with Eneclann Ltd and that it, along with [REDACTED], had an agreement with LDS to license

³[REDACTED]

census indexes to LDS for free access on familysearch.org which then linked to [REDACTED] for paid access.

44. Ancestry stated in the case of TNA's digitization projects that although a single digitization provider was selected in order to minimize handling of the records, the resultant digital images were available for wider licensing.

45. Ancestry, in its IPO document, stated that:

If owners of content have sold or licensed the rights to digitise content, even on a non-exclusive basis, they often elect not to sell or licence it for digitisation purposes to any other person.⁴ Therefore, if one of [Ancestry's] competitors acquires rights to digitise a set of content, even on a non-exclusive basis, we [would] be unable to acquire rights to digitise that content collection.

However, it also stated that 'a number of governmental bodies and other organisations are interested in making historical content available for free'.

46. Naval & Military Press thought that licensing would not happen since it would water down the retailers' own brands.

47. GSJ told us that licensing worked well where the interests of the two parties were aligned and there was no direct competition for customers, [REDACTED]. Where they did not align, there would be an unwillingness to license data as it effectively would be a dilution of the owner's market. Instead, retailers that possessed record sets would often offer 'affiliate programmes' whereby third parties were offered a link to the data on their website in return for a fee for every subscription achieved through that link. GSJ said that this usually involved losing customers to the retailer that owned the data.

48. Genes told us that it had never refused a request to license data. It told us that although it currently did not license any data, it did [REDACTED]. Brightsolid also told us that it had never refused access to its database on non-commercial grounds.

49. [REDACTED]⁵

- *Survey*

50. The results of our customer survey (although possibly to some extent reflecting the FMP and Genes customer base surveyed) showed that [REDACTED] per cent of users said that the main reason for considering a family history site to use was the volume of records available. This was the most popular reason for considering a site.

- *Proprietary datasets*

51. Table 1 shows proprietary core datasets where known. We note that both FMP and Genes have proprietary datasets which are licensed to third parties. However, we have excluded them from the following analysis on the basis that, if an entrant is able to source the required datasets from parties outside the proposed merged entity,

⁴Ancestry told us that this was because it would involve granting access, allocating resources and also having repeated handling of the original records.

⁵[REDACTED]

then the merger will not have a detrimental effect on its ability to enter even if the merged entity subsequently stops licensing its datasets.

TABLE 1 Core dataset owners and licensees

		<i>Ancestry</i>	<i>Origins</i>	<i>GSJ</i>	<i>Other*</i>
<i>Census</i> E&W	1841	x	x	x	x
	1851	x		x	x
	1861	x		x	x
	1871	x	x	x	x
	1881	x		x	x
	1891	x		x	x
	1901	x		x	x
	1911				
Scotland	1841–1901	x†			x
<i>BMD</i> E&W	1837–1983	x		x	x
	1984–2005	x		x	x

Source: Main and third parties.

*Includes: ScotlandsPeople, FamilySearch, 192.com, FreeCen, FreeBMD, FamilyRelatives etc.

†Index only.

52. In relation to the potential suppliers:

- (a) Ancestry has a full set of core data, excluding 1911, as proprietary data or as a licensee. Brightsolid told us that Ancestry did not have a history of licensing its data to third parties. However, Ancestry told us [redacted].⁶
- (b) Origins owns images for the 1841 and 1871 Censuses. It licenses other census data from [redacted] on a mutual basis, ie it provides 1841 and 1871 data to [redacted] in exchange for 1861 and 1891 data.
- (c) GSJ has [redacted].
- (d) The other category covers a number of other providers of core and non-core datasets.

Direct costs of entry

Factors affecting cost of data acquisition and digitization

- *The parties*

53. The parties submitted that digitizing, indexing and transcribing of data were services which were generally bought in with a number of specialists available and were not skills that an online family history provider would have to possess. Brightsolid stated that, for example, it did not carry out any scanning or transcription services itself.
54. Brightsolid told us that there was now a wider range of qualified contractors for outsourced digitization projects than five years ago, reflecting the growth in digitization projects. In addition, there had also been a growth in tenders for such projects.
55. Brightsolid said that costs could be reduced through innovations such as capital cost-sharing arrangements. It stated that [redacted] it had, for example, developed a supplier

⁶Friends Reunited board papers May 2008.

relationship [REDACTED]. This model reduced risk and upfront investment for those wishing to digitize datasets.

56. In addition to outsourcing to commercial entities, the parties submitted that a number of retailers such as FamilySearch, Enneclan and GSJ used in-house resources or volunteers for transcribing and indexing in some cases.
57. Brightsolid told us that it had, for example, two partnerships where it was able to benefit from free labour. FamilySearch had agreed to [REDACTED]. With the Federation of Family History Societies, Brightsolid had agreed to [REDACTED].
58. Brightsolid said that online transcription tools had greatly increased the viability, speed and quality of volunteer projects (and therefore reduced cost), which had led to more comprehensive offerings from online providers of free content and services, in addition to technology costs falling.
59. Brightsolid told us that it was generally possible to negotiate licences on a percentage royalty basis rather than an upfront fee, and so this route to entry involved only very low upfront entry costs. The parties noted that TNA adopted this approach and TNA considered that it had removed barriers to entry and that its use of royalty rather than fee-based models together with a mix of delivery media maintained the range of size of companies that licensed material from it.⁷ The parties also said that whilst TNA's prices varied depending on the form in which the data was made available and the level of demand for the census in question, anyone was able to acquire the data.
60. [REDACTED]
61. [REDACTED]⁸
62. Brightsolid stated that the variables affecting the cost of digitization etc of a dataset included:
 - (a) the number of records involved—later censuses involved larger populations;
 - (b) the accuracy level required;
 - (c) the number of fields to be indexed and/or transcribed;⁹
 - (d) the form of the original dataset, ie handwritten or typed—handwritten originals being more difficult to transcribe with accuracy;
 - (e) whether the documents in question could be indexed using OCR or would require manual transcription;
 - (f) whether the required scanning was from original paper records, microfilm, fiche or book copies;
 - (g) the condition of the original records—ie whether any conservation, unbinding or special handling requirements were necessary and whether the records were suitable for sheet feeding; and

⁷The parties refer to [TNA's representation](#) to the CC in respect of this inquiry, Section 2 in particular.

⁸[REDACTED]

⁹Accuracy and number of fields to be transcribed may be included within the terms of certain licences from ODHs, eg LIAs with TNA.

(h) whether the scanning must be carried out onsite at the ODH's premises or could be taken to another location or sent offshore.

- *Third parties*

63. Ancestry stated that the key costs to consider in terms of databases were acquisition fees, imaging costs and indexing costs. The main determining factor in the scale of these costs was the medium on which the records were available, with imaging from original records being considerably more expensive than digitizing from microfilm. The second main determining factor was the record count as this directly impacted the indexing costs. These costs also varied by format structure and legibility (ie typed structured records would be easier and therefore cheaper to index than freeform manuscript material). Indexing more fields also increased costs.
64. Origins listed the costs associated with digitization of original records as including: purchase of microfilm copies of source material; purchase of digitized images of source material; scanning of microfilm; scanning of paper documents; preparation of paper documents for scanning; data capture from source document or images of the source document; preparation of data capture specifications; and quality checking.
65. Origins stated that the factors which could affect digitization costs in a major way included size and state of the source documents; bound books might require unbinding and rebinding. It said that data capture cost significantly more from manuscript than from typescript material, and from unstructured than from structured text. In addition, it was not actually the type of dataset which affected cost, but what had to be done to the source material, and (secondarily) the source of that material.

Estimates of costs of data acquisition and digitization

66. A number of parties put forward estimates of the cost of digitization. These estimates are set out below. We were told by all parties that the costs of digitization etc were not uniform across different datasets, for all the reasons set out in the previous section, and that it was therefore very difficult to approximate the cost for a new digitized dataset.

- *The parties*

67. Brightsolid estimated that for a census of 38 million people¹⁰ it would cost approximately £[redacted], with scanning costs of £[redacted] per image and transcription costs of £[redacted] per record. This estimate would increase if documents could not be autofed, scanning cost rising to [redacted] per image. It estimated that a Victorian census could be digitized for £0.5–£1.0 million and take 8–24 months. It noted that there would be existing digitized versions available for licence.
68. Brightsolid said that it was quoted £[redacted] for a [redacted] dataset in 2004, with the costs for the same project having fallen to just over £[redacted] in 2007. Brightsolid argued that technology costs, storage and server and search technology costs had dropped 'significantly' in recent years and so the overall costs of digitization were reducing. It stated that two projects undertaken for it by RR Donnelly (second and third projects¹¹) showed a sizeable reduction in costs. The earlier project consisted of [redacted]

¹⁰Estimate based on census population of 38 million, transcription accuracy 99.5 per cent, 18 months to complete, handwritten originals, scanning from originals—does not include scanner costs and any cost paid to ODH for servers rental etc.

¹¹RR Donnelly completed three major projects with Brightsolid in the period 2005/06 to 2007/08: 1861 Census, 1891 Census and BT27 Passenger List.

records and cost £[redacted], and the later [redacted] records cost £[redacted], equating to a 15 per cent decrease in costs for a 47 per cent increase in the number of records.

69. Table 2 shows Brightsolid’s dataset development expenditure for the three years ended 31 March 2009 split by dataset.

TABLE 2 Brightsolid development expenditure for the three years ended 31 March 2009

			Database				£'000
[redacted]							
[redacted]							

Source: Brightsolid.

70. Genes currently is supplied with the majority of its datasets by [redacted].

- *Third parties*

71. Ancestry submitted that microfilming was no longer carried out by archives, with the result that ODHs now levied acquisition fees on digital images in place of microfilm copying fees. It said that this seemed to have led to a sharp rise in the overall costs involved for a vendor to offer material online. By way of example: [redacted].
72. Origins told us that there was no fixed price for a dataset apart from where a specific number of digitized images or reels of microfilm were purchased (eg from TNA) at a fixed price per image or film reel. Access to data is achieved through individual bespoke negotiations. Digital images again have no fixed cost and the price could be 60p per image or 2p per image. A set could be 1 million images or 27 million (1911 Census).
73. Origins said that, given the uncertainty surrounding the costs of digitizing a dataset, the financial barriers to entry to this market were not well defined. However, in principle, the amount of content available meant that parties with varying financial resources could enter the market, but to compete with the bigger players they would require deeper pockets.
74. GSJ estimated that if it was entering the market today with BMDs and 1841 to 1901 Census data it would cost it about £4 million.
75. The GROS stated that its third party digitization costs for its online datasets was around £4.6 million comprising:
- (a) digitization of BMDs back to 1855, census records from 1841 to 1901 banns and marriages and births and baptisms from the old parish registers and putting online—£3.5 million;
 - (b) indexing of old parish register deaths and burials—£80,000;
 - (c) digitizing wills—£1 million; and
 - (d) digitization and indexing of coats of arms—£20,000.
76. In addition, the GROS was currently digitizing the Catholic register of births with an estimated cost of £100,000.

77. Naval & Military Press told the OFT that the costs of building a site and accumulating data including digitizing [redacted].
78. Ancestry told us that the majority of digitization opportunities did not involve bidding for rights. Formal tenders such as for the 1911 Census project were rare, although it stated that this route had also been followed by the City of London among others. It said that the costs involved in a formal tender process, both in terms of time and resources, were considerable.
- *1911 Census*
79. The parties argued that in the context of *de novo* entry, it would be misleading to consider access to the 1911 Census data as pertinent to the assessment of barriers and risk as it had only recently been digitized and would soon be licensed to several other retailers.¹² They said that having access to it was neither a condition of entry nor of survival for any of the other entities seeking to serve the market for online family history services. They said that Brightsolid (as Scotland Online) won the licensing agreement for the 1911 Census project without any previous digitization experience.
80. [redacted]
81. TNA told us that web launches of the scale of the 1911 Census were rare (22 million hits in a week following launch) and as such, the pool of potential bidders for this digitization was limited.
- *DoVE project*
82. The DoVE project aimed to digitize all BMD records for England and Wales. The GRO told us that the project to digitize all the BMD records in England and Wales started in 2005 but stopped in 2008. The contract had since been reviewed and the GRO was preparing for the procurement exercise to appoint a supplier to complete the digitization of BMD records. Once the exercise was complete (no date) there would be online digitized indexes to the records which would be freely available to the public. The original DoVE project covering 130 million records cost £8.6 million, equating to approximately 7p per record.

Marketing and brand awareness

The parties

83. The parties did not consider marketing expenditure to be a barrier to entry. They said that in particular online paid-search marketing did not require significant upfront investment and was normally paid for on a per-click basis/cost per acquisition. [redacted]
84. Brightsolid said that online marketing could therefore effectively be treated as a cost of sale. As such, there were no upfront costs, with the entrant able to pay for advertising only when it received revenue from end-users buying products. It estimated that, typically, a new entrant to market would expect to pay between 25 and 50 per cent of the cost of a sale to advertising partners on a cost per acquisition basis.

¹²We have noted elsewhere other concerns we received that this is unlikely to occur given the terms required by TNA for supplying other retailers.

85. In addition, Brightsolid argued that online marketing could be supplemented by search engines and paid search advertising, which was typically bought on a cost per click basis but could easily be adjusted to ensure that campaigns consistently delivered a positive return on investment. Accordingly, cost per click expenditure could also be treated as a cost of sale.
86. Brightsolid believed that an entrant could also use other forms of online marketing such as blogging or social networks, which were low cost, and also its own site traffic, likely to be captured in the form of registrations, allowing it to use email marketing to send timely offers and promotions to users registered on the site. It said that this was an extremely cost-effective method of marketing as costs were extremely low, probably no more than £5,000 in the first year, and return on investment could be in the thousands of per cent.
87. The parties argued that whilst Genes was widely recognized, this was not the same as having a strong brand. [REDACTED]¹³
88. [REDACTED]¹⁴
89. [REDACTED]

Third parties

90. TNA believed that there was a ‘brand reputation’ challenge for entering the market. GSJ and Origins both referred in their submissions to the OFT to the importance of brand awareness. Origins told the OFT that it would be difficult for a new entrant to create a major presence because of the level of marketing required. Familyrelatives.com stated that the sheer volume of marketing that Ancestry/FMP/ Genes had done in the past made it expensive and difficult to compete as it had made the cost of customer acquisition high.

Expenditure

91. The costs of marketing and advertising expenditure for the main and third parties who provided information are shown on a yearly averages basis in Table 3.

TABLE 3 Marketing and advertising costs

	Ancestry*	FMP†	Family Search	Genes	Genes Reunited Records	GSJ	Origins
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Average Percentage of revenue (%)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: Market questionnaire responses.

*[REDACTED]
†[REDACTED]

¹³[REDACTED]
¹⁴[REDACTED]

Other factors

92. In addition to content digitization, Ancestry listed potential barriers to entry as search technology and network scale.
93. Ancestry stated that digital search for family records was challenging and complicated. Most search engines were not designed to deal with the specific challenges of searching digital records for family history purposes. Delivering optimal search results required advanced search technology designed to deal with incomplete information, record errors and cultural, phonetic and other variances in names, dates and places. An effective family history search engine must be able to search both structured data, like census rolls and military records, as well as unstructured data, such as newspapers and other freeform text.
94. Ancestry said that network scale was needed for collaboration and community. Websites without a critical mass of users generally lacked the scale to create the network effect that led to a rewarding user experience. Network and community scale allowed users to connect with one another, collaborate and leverage the community's collective research efforts. GSJ said that network scale was required in order to compete for digitalization projects (see paragraph 38).
95. The parties argued that network effects were relevant only to social networking. As FMP was not present in social networking, network effects were therefore irrelevant. Moreover, many companies which had a network, such as Facebook, and recent entrants to online family history could and did use the Facebook platform. They said that the Facebook platform or similar social networking tools could easily be leveraged to develop further family history applications. The lack of an existing social network was not therefore a barrier to entry.

Expansion of dataset providers

96. The parties said that existing online providers could expand through acquiring access to further datasets in the same manner as new entrants, such that there were no meaningful barriers to expansion. The parties stated that existing record database retailers such as Ancestry, Brightsolid and GSJ had all grown their online offerings. They said that Ancestry had completed its army records and added several other military records and had published improved BMD transcriptions; Brightsolid had completed its collection of census data for the period 1841 to 1901 for England and Wales and had released the 1911 Census; and GSJ had released BMD records for non-conformists.

Social networking

97. There would appear to be two principal factors affecting successful social networking entry: how easy/costly it is to develop the software, and how easy/costly it is to acquire users.

Software

98. [REDACTED]
99. Acquiring IT hardware similar to that used by Genes for its operations would require approximately £[REDACTED]. Genes argued that this investment could be incremental rather than upfront, as new hardware and storage capacity would be added as the operations expanded. A new entrant today could also use a scalable cloud computing

solution (such as Amazon EC2 and S3), thereby avoiding upfront hardware and hosting costs.

100. Overall, Genes estimated that to start up an operation like its own would require an upfront investment of up to £[REDACTED]. Entry on a smaller scale could be substantially less expensive.
101. Brightsolid told us that there were off-the-shelf social networking packages but that they were not tailored to the requirements of online genealogy, and that developing social networking capabilities from start-up for itself would be a very high-risk strategy and could incur significant software development costs.

User acquisition

102. [REDACTED]

Evidence of entry

103. In the past five years there have been a number of large-scale social networking entrants in the worldwide rather than specifically UK genealogy market. These include FamilyBuilder and FamilyLink, both of which are based around Facebook, and MyHeritage.

Barriers to exit

104. The parties said that the risks of unsuccessful entry into the provision of online family history services were low and there were no meaningful barriers to exit. Licensees were not typically 'locked-in' to licence agreements, which could be negotiated such that they were terminable by the licensee, subject to a specified period of notice. They could also be structured so that the licensee was able to terminate if it was not generating the revenues that it expected to under that agreement.¹⁵
105. Third parties have not argued that exit is difficult or costly.

Potential entrants

The parties

106. The parties argued that opportunities to enter the sector existed for any company with access to a large audience, such as [REDACTED], or a venture fund to either purchase a smaller player or to 'white label' a site from an existing player (as the Telegraph did from FMP). They stated that companies from adjacent industries ([REDACTED]) showed increasing interest in the sector. In addition, they argued that more family-focused social networking start-ups might well enter the market following the success of Facebook-based applications.

Third parties

107. GSJ told us that it was possible for an entity involved in 'tree building' to move to data retailing if it had significant resources and was not competing with the kind of Facebook/Google-type area or magazine advertising and had an established base.

¹⁵[REDACTED]

However, even for free tree-building sites it believed it would be difficult to build a significant user base along with the added difficulty in persuading customers to change from a free-to-use to a paid-for service.

108. TNA told us that [REDACTED].
109. TNA stated that there were potential UK entrants among US and European competitors, including Footnote (USA) and Eneclann (Ireland).
110. TNA believed that the Google search model did not work on the 'long tail' of data and that it would be 'quite a leap for Google to go down the subscription route from an advertising model' as the Google model was advertising funded.
111. Ancestry stated, in the context of the counterfactual, that non-UK companies such as [REDACTED] could be a potential acquirer of Genes as a route to entering the UK market.

Glossary

Act	Enterprise Act 2002.
Ancestry	Ancestry.co.uk, a website owned by Ancestry.com Operations Inc and ultimately by Ancestry.com Inc.
BMD records	Birth, marriage and death records.
Brightsolid	Brightsolid Group Limited.
CAGR	Compound annual growth rate.
Census	An official count of all people and households in the UK, usually carried out every ten years.
Complementarity	Two goods are said to be complements if a reduction in the price for one of the goods, as well as increasing demand for that good, also increases the demand for the other.
Core data	Census and BMD records that have been fully digitized, ie Census records for 1841 to 1911 and BMD records for 1837 to 2005.
Digitizer	A company which scans, indexes and transcribes original data.
Double mark-up	A double mark up exists when an upstream supplier adds a margin to costs to set its wholesale price; and then the downstream retailer adds its own, second mark-up on the wholesale price to set the retail price.
EBIT	Earnings before interest and tax.
EBITDA	Earnings before interest, tax, depreciation and amortization.
End-users	Individuals who obtain information by either purchasing it, accessing publicly available information or sharing information with other end-users.
FMP	Find My Past Limited, the online genealogy business of Brightsolid .
Friends	Friends Reunited Holdings Limited.
Gedcom	A standard data format that can be used to transfer data between online and offline family tree programmes.
Genealogy	The study of families and the tracing of their lineages and history.
Genes	Genes Reunited Ltd, the online genealogy business of Friends .
GRO	General Register Office.
GROS	General Register Office for Scotland.

GSJ	Genealogy Supplies (Jersey) Ltd.
ISP	Internet service provider.
LDS	Church of Jesus Christ of Latter-day Saints.
LIA	Licensed Internet Associate. A partnership between TNA and a commercial publisher for the digitization, marketing and sale of records online.
ODH	Original data holders, for example TNA , GRO , the British Library and many other public and private bodies.
OFT	Office of Fair Trading.
Online genealogy	The investigation of ancestry and family history via the Internet.
PAYG	Pay as you go.
PPV	Pay per view.
Retailers	Companies which market and sell data and/or related services to end-users .
SLC	Substantial lessening of competition.
SSNIP	Small but significant and non-transitory increase in price.
The Genealogist	thegenealogist.co.uk, one of the websites operated by GSJ .
TNA	The National Archives.