Appendices and glossary

Terms of reference and conduct of the inquiry

Terms of reference

1. On 8 December the CMA referred the completed acquisition by Xchanging of certain companies of Agencyport for an in-depth (phase 2) merger investigation:

    1. In exercise of its duty under section 22(1) of the Enterprise Act 2002 (**'the Act'**) the Competition and Markets Authority (**'CMA'**) believes that it is or may be the case that –

    (a) a relevant merger situation has been created in that:

    (i) two or more enterprises namely, Xchanging plc, acting through its wholly owned subsidiaries Xchanging Holdings Limited and Xchanging, Inc. have ceased to be distinct from enterprises previously carried on by, or under the control of, Agencyport Software Group; and

    (ii) the condition specified in section 23(2)(b) of the Act is satisfied with respect to the supply of policy administration systems (**'PAS'**) software to Lloyd's Market managing agents (**'MAs'**) in the United Kingdom (**'UK'**), and

    (b) the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition within a market or markets in the UK for goods or services, including the supply of PAS software to MAs in the UK.

    2. Therefore, in exercise of its duty under section 22(1) of the Act, the CMA hereby makes a reference to its chair for the constitution of a group under Schedule 4 of the Enterprise and Regulatory Reform Act 2013 in order that the group may investigate and report on, within a period ending on 24 May 2015, the following questions in accordance with section 35(1) of the Act:

    (a) whether a relevant merger situation has been created; and

    (b) if so, whether the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition within any market or markets in the UK for goods or services.

Sheldon Mills
Competition and Markets Authority
8 December 2014

Initial enforcement order

2. The CMA made an initial enforcement order on 30 September 2014 and derogations were granted on 9 October, 4 November, 13 November and 9 February 2015. The order and redacted derogations granted were published on our webpages.

3. On 30 December 2014 we published directions on our webpages to Xchanging to appoint a monitoring trustee and a monitoring trustee was appointed on 15 January 2015.

Conduct of the inquiry

4. We published biographies on the members of the inquiry group conducting the inquiry on 12 December 2014 and the administrative timetable for the inquiry was published on the CMA's webpages on 19 December 2014.

5. We invited a wide range of interested parties to comment on the acquisition. These included customers and competitors of Xchanging and Agencyport as well as relevant professional bodies and consultants. Evidence was also obtained from third parties through hearings, through telephone contact and through written requests. Summaries of hearings can be found on our webpages.

6. We received written evidence from Xchanging and Agencyport and a non-confidential version of their main submission is on our webpages. We also held separate hearings with Xchanging and Agencyport on 23 February 2015.

7. On 13 January 2015 we published an issues statement on our webpages, setting out the areas of concern on which the inquiry would focus.

8. On 16 January 2015 members of the inquiry group, accompanied by staff, visited the offices of Xchanging and Agencyport.

9. In the course of our inquiry, we sent to Xchanging and Agencyport and other parties some working papers and extracts from those papers for comment.

10. Following the hearing with Xchanging, we sent follow-up questions to clarify certain matters and invited the CTO of Xchanging to a hearing on 16 March 2015. Following this hearing the CMA requested an explanation for what

appeared to us to be a material discrepancy in the evidence submitted. We received a large amount of new material on 20 March 2015. Having considered this material, we sent a further request for strategy documents to Xchanging, using our formal information-gathering powers under section 109 of the Act. In response to this request, Xchanging provided additional relevant documents on 14 April 2015.

11. On 24 March 2015, we published on our webpages our full provisional findings report and a notice of provisional findings.

12. Following the publication of our provisional findings, we received a submission from the Parties, a non-confidential version of which was published on our webpages.

13. A non-confidential version of the final report was placed on the CMA's webpages on 29 April 2015.

14. We would like to thank all those who have assisted us in our inquiry.

Parties' financial information

Introduction

1. In this appendix, we provide some summary financial information on the Parties.

Xuber

2. Xuber is the insurance software division of Xchanging.[1] As stated elsewhere in this report, it has two legacy policy administration systems (Genius and Iris) and one new product suite (Xuber for Insurers).

3. Once an insurance company has purchased and implemented a PAS, it will typically continue to use it for several years[2] before contemplating a change to a new system. Xuber earns revenues from initial licence fees (typically perpetual licences, though five-year licences combined with maintenance are also available), fees charged for professional services (including system implementation), and annual maintenance fees. [✀]

4. Table 1 shows a breakdown of Xuber's UK PAS revenues [✀].

Table 1: Breakdown of Xuber UK PAS revenues by product, 2011–2013

[✀]

Source: Xchanging.

Table 2: Xuber UK PAS revenues in 2013 by product and market

[✀]

Source: Xchanging.

Figure 1: Iris UK revenues by type

[✀]

Source: Xchanging.

Figure 2: Genius UK revenues by type

[✀]

Source: Xchanging.

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[1] In this section, we use the term 'Xuber' to refer to Xchanging's Xuber division except where we specifically refer to Xuber suite branded software products, eg 'Xuber for Insurers'.
[2] Eight to ten years on average, according to NIIT (hearing summary, paragraph 7). Based on responses received from customers and competitors to our questionnaire, we estimated that both Lloyd's and LCM customers have been with their incumbent supplier for over ten years (see paragraph 6.13).

5. In the UK, Xuber earned revenues from [✂] customers in 2014. Of these, [✂] customers generated revenues in excess of £ [✂] and [✂] customers generated revenues in excess of £ [✂]. The top 10 customers accounted for approximately [✂]% of revenues; the top 26 customers accounted for [✂]% of revenues. [✂]

6. Table 3 summarises Xuber's management accounts for 2010 to 2014. [✂]

Table 3: Xuber Management Accounts 2010–2104

[✂]

Source: Xchanging.

7. In 2014, the geographic split of revenues was: UK [✂]%; US [✂]%; and Malaysia [✂]%. The geographic split for the prior years was [✂].

8. The cost of developing the new Xuber suite product has been significant. [✂]

Agencyport

9. Since its acquisition by Thomas H. Lee in 2011, Agencyport consistently grew its revenue and EBITDA and increased its profitability (see paragraph 12).

10. [✂]

Table 4: Agencyport PAS revenues split by product, 2011–2014

[✂]

Source: Agencyport.

Figure 3: OPEN Core: Lloyd's revenues by type

[✂]

Source: Agencyport.

Figure 4: OPEN Core: Commercial revenues by type

[✂]

Source: Agencyport.

11. Agencyport has users of its software in Singapore, Hong Kong, China, US and Bermuda as well as mainland Europe, the UK and Ireland. Agencyport told us that, as at April 2014, it had [✂] healthcare clients, [✂] commercial insurers, [✂] Lloyd's clients, [✂] MGAs and [✂] brokers and reinsurers within its client base. In the UK, Agencyport earned revenues from [✂] customers in 2014. The top 10 customers accounted for approximately [✂]% of UK revenues, and the top 21 customers accounted for [✂]% of UK revenues.

12. Table 5 gives an overview of Agencyport's profit & loss over the period 2011 to 2013.[3]

Table 5: Agencyport P&L overview, 2011–2013

[✂]

Source: Agencyport.

[3] [✂]

Main types of player in the insurance sector and their software requirements

Introduction

1. In this appendix, we provide a brief description of the main types of player in the insurance sector before going on to give an overview of their software requirements.

Main types of player in the insurance sector

2. Paragraphs 3 to 20, which provide an overview of the main types of player in the insurance sector, are partly derived from the Parties' initial submission.

Insurers

3. An insurer (also known as an insurance carrier) is a company selling the insurance, and insurers are often large international companies taking on risks around the world. The insurer agrees to take on risks on behalf of its customer, in exchange for a fee (the premium). The insurance policy offered will cover the customer (the policyholder) for many of the costs they have to meet as a result of a risk occurring. The premium an insurer receives from a policyholder, and the terms and conditions of the policy, are based on the chances of the risk occurring and the estimated value in that event.[1]

4. Insurance is sold through a range of sales channels including through brokers, through MGAs (discussed further below), and through direct sales by insurers.

5. Insurance companies hire underwriters (discussed in paragraphs 13 to 15) to evaluate and accept business for insurers. More specifically, the underwriter will decide whether applications for insurance (ie risks) should be accepted, and if granted, the level of premium that should be charged and conditions of the cover.

[1] Insurers receive premiums on policies and pool these funds in order to invest them and increase the value of the pool. This pool of funds is subsequently used to pay an insured policyholder which makes a claim under the terms of their policy.

Reinsurers

6. Reinsurance is essentially insurance of the risk borne by insurers, and is generally offered by specialist reinsurance firms (also known as reinsurance carriers). Reinsurers obtain business directly from insurers, and through insurance brokers.

7. Insurers are able to reduce their insurance risk by sharing this risk with one or more reinsurers in return for a share of the original premium received from the client. In the event of a claim, the reinsurer will compensate the insurer for a proportion of the risk which it has insured.[2] The act of reinsurance, therefore, allows insurers to protect themselves against very large claims and increase their insurance capacity.

8. It is also possible for the reinsurer to reduce their risk of loss by passing on the reinsurance cover provided to another reinsurance company (this is known as retrocession or retro-ceding), and is effectively reinsurance for reinsurers. The aim is to spread the risk of having to pay out very large claims among a number of different reinsurers.

Brokers

9. Insurance brokers act as an intermediary between customers and insurance companies. They use their knowledge and experience of risks and the insurance market to find and arrange suitable insurance policies for their customer. Insurance brokers collect information from their clients regarding their insurance requirements and risk profile, which are provided to under-writers for use in their risk assessments.

10. Reinsurance brokers act in the same way as insurance brokers but are an intermediary between insurers and reinsurers. They are generally used for complex reinsurance programmes or where insurance firms have limited reinsurance capacity and expertise. Reinsurance brokers earn a commission for finding and negotiating reinsurance contracts on behalf of the insurer (their customer).

11. Brokers are independent from insurance firms and therefore typically offer products from more than one insurer/reinsurer to ensure that their clients get the best deal in respect of price and terms. Brokers receive a commission for

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[2] Reinsurance may be ‘proportional’, ie the reinsurer takes an agreed proportion of the entire risk under a policy, or ‘non-proportional’, for example ‘excess of loss’ reinsurance. Excess of loss cover means the primary insurer takes 100% of the risk up to a given level and the reinsurer takes all or an agreed proportion of the risk above that level. Most PAS can manage proportional outward reinsurance but not non-proportional outward reinsurance.

placement of insurance and reinsurance, and other services rendered (typically using their market knowledge to identify the appropriate insurance or reinsurance solution).

12. Lloyd's brokers are broking firms that have been approved by Lloyd's (having met certain minimum standards). Lloyd's brokers are able to place business with Lloyd's underwriters (through Lloyd's MAs). Each firm's suitability is assessed by Lloyd's before it can be accredited as a Lloyd's broker. Accredited Lloyd's brokers can place insurance in Lloyd's (as well as in any other insurance market place outside of Lloyd's) on behalf of customers.

Underwriters

13. Underwriting is the process by which the risk of a potential customer is assessed. The risk, and thus the probability of a claim on a policy, determines whether the potential customer is eligible for insurance, the level of the premium and terms of the insurance contract.

14. An underwriter conducts detailed risk assessments of potential clients to determine their appropriate risk band. This classification of clients into risk bands enables the insurer to determine the appropriate premium and terms for the policy. Insurers develop underwriting guidelines which provide general rules for underwriters to follow when classifying risk. Underwriters use these underwriting guidelines to place business in insurance companies' books (ie acquire business on behalf of insurance companies).

15. Insurance companies typically employ in-house underwriters. However, it is also common for insurers to outsource their underwriting activity to third party underwriting agents.

Managing agents

16. MAs are companies set up to manage one or more Lloyd's syndicates, on behalf of the members who provide the capital. Members essentially delegate all responsibility for the management of the underwriting business of a syndicate to the MA. The MA, therefore, employs the underwriting staff and handles the day-to-day running of a syndicate's infrastructure and operations (for instance, claims processing). MAs are equivalent to insurance carriers outside of Lloyd's.

Managing general agents

17. MGAs are a type of insurer/broker that typically have authority to quote, set conditions, and bind insurance on behalf of an insurer, and typically handle

specialist lines of business. Accordingly, MGAs perform certain functions ordinarily handled by insurers, such as underwriting, pricing, and settling claims.

18. The role of MGAs varies. At one extreme they operate as scheme brokers, whereby they formulate a specific proposition based upon a defined niche (eg caravan insurance) which streamlines the sales process, packages a better proposition and ultimately improves the benefit to both insured and insurer. A scheme broker performs similar functions to a traditional broker. At the other extreme MGAs also operate along similar lines to insurers/reinsurers with specific underwriting authority to write their own policies (although the insurer ultimately controls the capacity in relation to the amount of risk that the MGA can underwrite). Between these two extremes exist MGAs, which operate as a mix of both scheme brokers and have underwriting authority to operate as an insurer.

19. MGAs benefit insurers in a number of ways: they are able to meet the demands of many small customers; they are able to tap into defined niche markets; they are able to enter new territories; and they are able to be more adaptable at a more granular level. In addition, the expertise of MGAs across certain specialised lines of insurance is often not available to insurers and would be more expensive to develop on an in-house basis.

Coverholders

20. A coverholder (also referred to as a service company if it is approved by Lloyd’s and is a wholly owned subsidiary of an MA or an MA’s holding company) is a party granted delegated binding authority by an insurer, providing it with rights to enter into contracts of insurance on the insurer’s behalf (specifying the terms and conditions of the insurance contract). Coverholders are typically paid on a commission basis and effectively perform the duties of the actual insurer, for instance, collecting premiums, policy document issuance and sometimes claims handling.

Insurance software

Introduction

21. In order to provide a context for a discussion of insurance software, we start by briefly outlining the ‘life cycle’ of an imaginary insurance policy and the various processes which an insurer needs to carry out, whether manually or by using automated systems or a combination of the two. For simplicity, in this example we will assume that the risk is not syndicated, ie split from inception between a number of different insurers. We then go on to discuss the different

types of insurance software as well as the specific requirements of Lloyd’s and the LCM.

Life cycle of an insurance policy

22. For the sake of this example, we have assumed that a ship owner, S, who owns and operates a dry bulk carrier, wishes to take out hull and machinery cover for his vessel for a period of 12 months.

23. S approaches his broker, B, with a view to arranging the insurance. B approaches a number of insurers, whom he knows from past experience are willing to underwrite marine risk. One of these insurers is M.

24. Having taken a note of the details of the vessel, its owner and its intended trade, M then uses a rating engine to run complex algorithms in order to calculate the appropriate premium for the risk he is being asked to cover. M then produces a written quote, including the required premium and key details of the terms of the cover he is willing to provide, and issues it to B.

25. After comparing M’s quote with the quotes he received from the other insurers he contacted, B then calls S recommending acceptance of M’s quote. S agrees, and B contacts M, who agrees to accept the risk (in insurance terms, he is ‘bound’) subject to receipt of the premium. B issues an invoice for the premium to S.

26. S pays the premium to B, who forwards it (less his commission) to M. M checks that the correct premium has been received, and B issues the written insurance policy to S.[3] M notes the details of the policy, and the risk covered, in his records and passes the relevant accounting entries relating the premium in his general ledger.

27. A week later, M examines a report showing statistics relating to his risk concentrations, and decides to reduce his exposure to the marine sector. As part of this risk reduction, he decides to reinsure 40% of the risk from S’s policy with a reinsurer, R. M pays the agreed reinsurance premium to R, passes the relevant accounting entries, and notes in his records that 40% of the risk taken on under S’s policy has been reinsured with R.

28. Three months later, while S’s vessel was in port being unloaded, one of the hatch covers was damaged and it is feared that it is no longer watertight. S orders the ship to a repair yard to have the damage repaired, and makes a

[3] For a commercial risk of this nature, the broker would typically handle and issue invoices and policy documents although carriers also have the option to create their own policy documents if required.

first notification of loss to B, including the yard's estimate for the cost of the repair. B passes on the information to M.

29. M notes the details of the claim in his records and offers to settle the claim for a given sum. However, he believes that S will probably not accept this offer and that he will probably have to increase his offer. He raises a provision for the higher amount in his accounting records. He also notifies R of the claim.

30. After some toing and froing between S, B and M, M agrees to settle the claim for a little more than the higher amount he had previously anticipated. M notifies R of the agreed settlement and makes a payment of the full amount to B, who forwards it to S. The following day, R pays 40% of the agreed settlement to M. M checks that the correct amount has been received from R, passes the relevant accounting entries relating to the claim paid and the reinsurance received, and updates his records to show that the claim has been closed, and on what terms.

31. In month 12, M calculates a renewal premium in case S wishes to renew the policy, and issues a renewal invitation to B.

32. Throughout the life of the policy, information held on M's records about the policy and the risk covered is used to compile regular risk management reports for M's senior management as well as reports which M prepares for his regulator.

Types of insurance software

33. The following is a generic summary of different types of software which an insurer may have chosen to install and use, in order to assist it in managing the processes set out in paragraphs 22 to 32.[4]

Transaction processing systems (also known as PAS)

34. Broker, underwriter and reinsurer specific systems designed to address core business and account needs of an organisation. They typically have automatic input/output capability for interface to third party systems. They commonly feed the central/corporate general ledger for corporate accounting purposes.

35. Policy administration systems enable insurers to manage the entire life cycle of insurance policies and scope of products, namely:

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[4] The information in paragraphs 34–43 is derived from Lloyd's Market Association, *London Market Modernisation Activity, a Buffer's Guide to Process Change in the London Market*, Appendix B.

(a) product definition;

(b) sales;

(c) commissions management;

(d) application management;

(e) underwriting;

(f) policy issuance;

(g) billing and collections management;

(h) reinsurance;

(i) ongoing policy administration;

(j) claims management; and

(k) support for personal and commercial, or even specialty lines.

36. Packages will often also include basic technology functions, such as workflow and process management, or will even contain an enterprise service bus facilitating integration with other applications such as the general ledger or customer and agent portals. Some of the non-life insurance PAS are designed as rather monolithic software suites covering the entire value chain of general insurers. Some other packages are designed on a more modular service-oriented architecture allowing insurers to deploy, for instance, only the policy management component.

37. These systems have often been in place for some time, and are difficult and expensive to upgrade or change in total for a variety of reasons, although many firms have aspired to upgrade and replace older mainframe systems.

Document repository

38. This is a central storage location for electronic documents of all forms, ie Word, Excel, PowerPoint, Adobe PDF, Visio, images and video. They generally have a strong search and retrieval capability, indexing and optical character recognition.

Workflow

39. This is a relatively new technology that has allowed organisations to automate routine and repeating processes. It sits across all technology platforms and

defines the processing steps that specific documents or transactions should pass through, with associated service level agreements.

General ledger systems

40. These are corporate systems to record all company business. They are central to all budgeting, expense recording, tax and forecasting information and provide balance sheet and profit and loss positions. They may be local systems processing only local information or may be part of a global or corporate aggregation.

XML message processing gateway

41. This is used by organisations operating in markets with central bureaux, such as the London market. It supports ACORD XML messages – primarily structured data – output/input from/to core transactional processing systems. It can also process unstructured or scanned documents for exchange between workflow and repository systems. It enables machine-to-machine interface of data fields, hence data is only keyed once within the insurance risk cycle and then shared between companies for consistency. Gateways support send/receive/acknowledge functionality.

Rating engine

42. A rating engine is built to provide automatic quotations where underwriting rules are repetitive and consistent, eg motor or household insurance.

Aggregate exposure and modelling system

43. This allows carriers to monitor risk accumulation in a variety of ways and results are often used to determine outwards reinsurance programmes. In Lloyd's, they are used to support Lloyd's Realistic Disaster Scenario returns.

Binder management solutions

44. If an insurer also deals with binder business, it will typically also have a binder management solution. 'Binder' business is the term used to describe an insurer's business of selling insurance or reinsurance by delegating authority to an MGA.[5]

[5] The term 'binder' derives from the MGA's authority to 'bind' insurance contracts on behalf of the insurer.

45. MGAs with delegated authority report back to the insurer, usually on a monthly basis, to inform them of their positions in relation to premiums, claims and risks. The reports they send to the insurer are termed ‘bordereaux’. In order to ensure that the MGA has been acting within the terms of its delegated authority (facility), the insurer compares these bordereaux to the facility.

46. However, an insurer will typically receive bordereaux from a large number of MGAs and these bordereaux are typically not provided in a standardised format. Binder management solutions deal with the process of cleaning and managing this bordereaux reporting and facility monitoring process.

Specific software requirements for Lloyd’s and the LCM

47. As described in Section 2, both Lloyd’s and the LCM are subscription markets and use a central bureau to manage back office processes such as collection of premium and settlement of claims.

Lloyd’s

48. The key functionality included in software supplied to Lloyd’s managing agents relates to the interface with the Lloyd’s bureau. The bureau communicates with managing agents by means of electronic messages, of which the key types are ‘USM’ cash collection/disbursement messages, and ‘SCM’ claims messages. Most Lloyd’s bureau messages are now available in the ACORD format, though some still use the older EDIFACT format. Once received, a managing agent’s PAS must be able to act on the message and carry out various processes which would normally be instigated manually, eg book premium received, handle a claim etc.[6] If a broker has oversold a particular risk (ie the risk has been oversubscribed), then a scale-back message is sent electronically to the managing agent’s PAS, which must be able automatically to adjust the premium in its ledger and its record of the quantum of risk assumed.

49. PAS for Lloyd’s managing agents also require data in certain formats in order to be able to cope with regulatory reporting requirements which are specific to Lloyd’s.[7] Further, such systems must be able to support the unique accounting requirements of Lloyd’s[8] and include some Lloyd’s-specific data (eg risk codes).

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[6] Athito hearing summary, paragraph 24.
[7] NIIT hearing summary, paragraph 22.
[8] Lloyd’s syndicates close off their accounts three years after the start of the year in which business was written, eg a 2014 syndicate would normally declare results following the end of December 2016 and members would be paid their share of underwriting profit (or meet their share of any loss) in 2017.

LCM

50. The key differences between a Lloyd’s managing agent’s requirements and those of a carrier in the LCM are:

(a) All Lloyd’s managing agent transactions are settled centrally through the bureau. Therefore they have no requirement to enter ‘cash’ into the system. Carriers in the LCM choose, on a transaction-by-transaction basis, whether or not to use the bureau and, to the extent they choose not to, would need the capability to enter cash from brokers, producing agents, direct from clients etc.

(b) Lloyd’s has a different set of messages than the LCM. For example, in Lloyd’s the managing agent receives a signing message from the bureau which confirms (signs) the policy, at which point he knows when he will be paid (centrally by the bureau). On the LCM there is a different set of messages (signing and payment are separate messages). There are similar differences for claim messages.

(c) The LCM does not have the Lloyd’s-specific data (eg risk codes) or reporting requirements.

Functionalities of the Parties' PAS and componentisation

Introduction

1. In this appendix, we summarise the key functionalities of Xchanging's and Agencyport's policy administration software products for insurance carriers (including related products such as Elgar). The products described will be: Xuber for Insurers (Xuber Policy; Xuber Claims; Xuber Billing; and Xuber Ceding); Genius; Iris; Elgar; OPEN Core Platform: Lloyd's/Commercial.

2. According to Gartner,[1] PAS enable non-life insurers to manage the entire life cycle of insurance policies and scope of products, namely:

   (a) product definition;

   (b) sales;

   (c) commissions management;

   (d) application management;

   (e) underwriting;

   (f) policy issuance;

   (g) billing and collections management;

   (h) reinsurance;

   (i) ongoing policy administration;

   (j) claims management; and

   (k) support for personal and commercial, or even specialty lines.

3. Packages will often also include basic technology functions, such as workflow and process management, or will even contain an enterprise service bus facilitating integration with other applications such as the general ledger or customer and agent portals. Some non-life insurance PAS are designed as rather monolithic software suites covering the entire value chain of general insurers. Some other packages are designed on a more modular service-

[1] Gartner is a research company focusing on the IT industry.

oriented architecture allowing insurers to deploy, for instance, only the policy management component.[2]

Description of the products

4. In this section, we provide a very brief description of each of the products listed in paragraph 1. We then provide a table comparing the key functionalities of each of the products.

Xuber for insurers

5. Xuber for Insurers is a componentised PAS product, consisting of four modules: Xuber Policy, Xuber Claims, Xuber Billing and Xuber Ceding. Each module can be deployed separately or as part of a fully integrated end-to-end PAS product.[3]

6. If all four components of Xuber for Insurers are taken together, then the resulting system has somewhat greater functionality than a typical end-to-end PAS (see Table 1). For example, a typical PAS can manage claims administration, but active claims management would normally require an additional claims management system (such as supplied by Guidewire or Fineos). Similarly, a typical PAS can manage proportional reinsurance, but non-proportional (excess of loss) reinsurance normally requires an additional reinsurance system (such as Elgar – see paragraph 9). Conversely, Xuber Policy, taken on its own, does rather less than a typical PAS. A Xuber customer seeking the functionality of a full PAS would therefore either have to purchase all four modules of Xuber for Insurers (possibly over time rather than on one go, if it was upgrading an existing system rather than installing a new system from scratch) or else purchase one or more components of Xuber for Insurers and combine it/them with other components from different suppliers.

Genius

7. Genius is an end-to-end PAS designed for the property and casualty insurance market. It does not have Lloyd's-specific functionality although it can be installed with LCM messaging capability. Genius provides most of the basic PAS functions. Separate systems are required to achieve automated underwriting if this functionality is required. A screen to show differences in policy details at two points in time is achieved through programmers adding/modifying the solution's code base. Genius offers some of the

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[2] Gartner, *Market Guide for European Non-Life Insurance Policy Administration Systems*, 21 July 2014.
[3] Parties' initial submission, paragraph 3.7.

advanced quote management, workflow, and rules functionality through configuration by a non-technical business user. It also has integrated ceded reinsurance functionality (facultative and proportional treaty).

Iris

8. Iris is an end-to-end PAS designed for Lloyd's, LCM and international insurance and reinsurance underwriters which supports insurance and reinsurance business and provides risk processing, claims management, technical accounting and ceded reinsurance functionality (facultative and proportional reinsurance only).[4]

Elgar

9. Elgar is a system designed for excess of loss recoveries and general credit control, to help administer all aspects of outward reinsurance programmes except for proportional reinsurance.[5]

OPEN Core Platform: Lloyd's/Commercial

10. OPEN Core Platform: Lloyd's is an end-to-end PAS tailored for Lloyd's. OPEN Core Platform: Commercial is a very similar system, designed for LCM carriers and the wider commercial insurance market. The programmes vary to the extent that they reflect the nuances of the requirements of the different customers which they serve.

Comparison of functionality

11. Table 1 compares the functionality of the different systems referred to above (a tick (✓) means that the system has the functionality described, and a circle (O) means that it only partly has that functionality).

Table 1: Comparison of functionality

[✂]

Source: Xchanging and Agencyport.

Componentisation v end-to-end platforms

12. One customer said that it thought the distinction between componentised and end-to-end platforms had no tangible relevance and described componentised

[4] Parties' initial submission, paragraph 3.8.
[5] ibid.

solutions as ‘smoke and mirror’. It thought that most customers would buy a whole PAS and not just one component. Another customer said that a supplier suggested that componentised solutions were more suited to larger customers and end-to-end platforms were aimed at smaller customers. However, this customer did not consider the two options to be substantially different and described the distinction made by the supplier as ‘marketing spin’. Two customers said that an end-to-end platform had benefits: it was less complex because it required less passing over of data and making changes and maintenance would be cheaper.

13. Some customers said that they preferred a componentised solution, as this gave the customer the opportunity to fit the best components together.[6]

14. Athito[7] told us that the ability to provide componentised solutions might be interesting to some insurers; however, the implementation of a new component would not necessarily mean the decommissioning of existing legacy systems. Some implementations of components were in conjunction with legacy systems, with the new component managing a specific business activity such as claims or rating, but using a feed from the legacy system, managing the process, then feeding data back into the legacy at certain points to maintain the underlying system of record.

15. It said that managing bureau messaging could be dealt with in a similar fashion with a legacy system receiving and translating the message with a componentised system reading the translation and initiating workflows, whilst the message remained in the legacy system and flowed into downstream reporting and regulatory returns. This approach had benefits in that reporting and interfaces need not change to maintain regulatory reporting and key inputs into downstream systems such as the general ledger, but the end user could use the enriched functionality within the componentised software – whilst the legacy continued processing in the background. In short it was possible (and may be preferred due to the reduced risk and fewer changes to some downstream activities) that when a module was implemented the underlying system with the Lloyd’s/bureau functionality would remain, therefore the module itself did not really require messaging capability in itself (as long as it could ‘read’ a suitable trigger from within the legacy system or warehouse) and thus in this implementation approach the component would fail to displace those that had the legacy, Lloyd’s-compliant PAS installed.[8]

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[6] Composite summary of customer calls, paragraphs 7 & 8.
[7] Athito is a consultant specialising in providing advice to participants in Lloyd’s and the LCM on specific technology systems.
[8] Athito hearing summary, paragraphs 29 & 30.

16. Athito told us that it remained sceptical of end-to-end PAS providers claiming to have componentised solutions. In a number of demonstrations and sales meetings vendors had often cited the ability to segment the system into smaller parts and components. However, in practice, Athito had found this approach to be difficult unless the architecture of the system had been specifically designed from the very beginning to support this.[9] Often, when vendors tried to sell a 'component' of a system, they implemented the entire solution but did not enable the other areas. It said that alternatively, where a vendor had taken a more correct technical approach to componentising an end-to-end solution, some issues still arose as the component actually required shared reference tables and shared system tables that worked effectively when the system was integrated and worked less well when the system had been componentised. It said this obviously ignored the fact that an end-to-end solution had been designed to interface with upstream and downstream parts of the same system.

17. Athito said that, when looking at PAS, there was actually very little to componentise. Whilst the systems were large and complex, their complexity was around the fact that they were integrated and strove to provide a total solution. If one were to look at the components that could be derived from the various offerings, these were quickly distilled into policy management, recording risk details, premiums and the like and claim management as two distinct components. Outside of that, the other functions that a PAS performed were not easily represented as a componentised solution. It said that, for example, whilst bureau messaging could be componentised from 'product A', it would be difficult to integrate it into 'product B'. By way of illustration, it said that bureau messages would 'sign down' an insurer's share of a policy from a commitment of 10% to an actual share of 5%. Whilst manually this might be done by overtyping values if the process was triggered by a bureau message, product B would need an interface and an automated system process to take in the message and make the changes to the policy and trigger downstream changes such as reducing expected premiums. Athito said that stand-alone policy management systems – such as Duck Creek – were available, but not often used by London market insurers. Similarly, Guidewire and Fineos had proven stand-alone claims systems. Implementing both these systems required significant integration work.

18. Athito told us that PAS also included functionality to manage receiving expected premiums and paying claims for inwards and outwards contracts. A stand-alone system providing this functionality would need substantial integration with policy and claim inputs/outputs and processing (especially

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[9] Xchanging told us that Xuber's architecture had been designed specifically to do this.

when including complexities of bureau processing), which was ultimately why technical accounting was provided within end-to-end solutions.

19. It said that outwards reinsurance functionality within the majority of end-to-end PAS was typically limited to proportional contracts, although some vendors could also process excess of loss. Only a componentised solution that processed both proportional and non-proportional reinsurance would appear logical if one were implementing a componentised approach. It said there were vendors who provided stand-alone systems currently for outwards reinsurance due to its complexity and these were established products in the marketplace.[10]

[10] ibid, paragraphs 23–26.

Barriers to entry

Introduction

1. We focus in this appendix on barriers to entry for the provision of PAS into Lloyd's and the LCM. We first provide a brief overview of the history of entry into these markets before going on to discuss what scale of entry is required to constitute a constraint on the Parties (ie what sort of track record, if any, does a supplier have to have in order to establish credibility with potential customers) and then examining certain characteristics of Lloyd's and the LCM which might give rise to barriers to entry.

History of entry in Lloyd's and the LCM

2. We have not received evidence of successful new entry into the supply of PAS to either Lloyd's or the LCM in the last five years of a scale sufficiently large to constrain the Parties. Almost all the existing suppliers began by designing software specifically for these markets and then went on to sell versions of their systems to customers outside Lloyd's and the LCM.

3. There have been some attempts to enter Lloyd's and the LCM. In 2011, eBaoTech (a Chinese company) won a contract to supply a PAS to Argo, a Lloyd's MA. [✂]

4. Guidewire, a large supplier of insurance software worldwide, developed a claims management system with messaging capability and now has four clients in the London market which use that software [✂].

5. CSC, another large provider of insurance software, entered the London market in the 1990s when it won a contract to supply PAS software to [✂], a Lloyd's MA. More recently, it won a contract in 2013 to supply [✂], another MA. Although it only has two Lloyd's clients at present, [✂] told us that they sometimes found themselves competing against CSC in tenders for new business.

6. The Parties told us that, in their view, there was evidence of effective entry into Lloyd's. Their argument is summarised in paragraphs 50 to 67.

Track record and reputation

7. As discussed in Section 2, both Lloyd's and the LCM have certain specific features which a PAS must be able to handle. To reiterate briefly:

(a) both markets are subscription markets (ie brokers syndicate risks among a number of different carriers) and PAS must be able to accommodate this;

(b) both markets use central bureaux for back office processing, so PAS must be able to send, receive and act upon the electronic messages used by each bureau;

(c) Lloyd's acts as a regulator for carriers operating within its market, and MAs' PAS must be able to handle the regulatory reporting requirements of Lloyd's;

(d) Lloyd's syndicates have three-year accounting periods which PAS must be able to accommodate; and

(e) PAS for Lloyd's MAs must be able to accommodate certain Lloyd's-specific risk codes.

8. Given these features, a number of Lloyd's and LCM carriers told us that the reputation of a PAS supplier in the relevant market, and a track record of successful implementation of PAS with other Lloyd's or LCM clients, would be important considerations in their selection of potential suppliers of PAS. We considered the possibility that this might constitute a barrier to entry for new suppliers.

Views of Parties

9. The Parties told us[1] that the historical entry of various PAS suppliers into Lloyd's showed that having an installed user base within Lloyd's was not critical for a new entrant to enter and win customers. They said that a number of suppliers had been able to successfully enter into supplying Lloyd's software, and win contracts to supply Lloyd's MAs, without facing any material reputational disadvantage. Moreover, a number of successful Lloyd's PAS suppliers were relatively small, confirming that having an installed user base was not important.

10. The Parties said that existing experience within Lloyd's and references to existing Lloyd's customers were not critical to build and successfully integrate Lloyd's functionality, or 'signalling' to the market that you could credibly supply software to Lloyd's customers. This was evidenced by the fact that non-

[1] Parties' initial submission, paragraph 9.38.

Lloyd’s PAS suppliers such as Guidewire had (and did) credibly and successfully bid to supply Lloyd’s.

11. Xchanging also told us that Lloyd’s and the LCM were very concentrated insurance markets. A lot of customers talked to each other, and so reputation was even more important in those environments. It said that it was not just the reputation of a solitary implementation, but it was the reputation and the ability to support a product over a period of time that was important. Most customers would not have purchased the product if they did not believe that this was the case.

Views of customers and competitors

12. Several customers told us that, if they had to switch supplier for their PAS, they would only consider switching to a supplier that had an established presence in Lloyd’s or the LCM and a good reputation.

13. For example, a customer ([✂]) told us that, among the factors that it would take into consideration in selecting a PAS were the supplier’s reputation and existing client base. It said that it would be more likely to go with a proven supplier as it would want to limit the risk as much as possible when choosing a product. It would not select a supplier that did not have a track record of servicing Lloyd’s, and said it did not have the manpower to be a ‘guinea pig’ customer for a supplier established elsewhere that was trying to enter Lloyd’s. This customer told us that, before it would consider Guidewire, it would have had to have seen successful implementation for a couple of customers. It said that it was a brave customer who went first.

14. Another customer ([✂]) told us that it would not consider sourcing a PAS from a supplier that did not have Lloyd’s capability and then working with it jointly to develop the functionality.

15. Another customer ([✂]) told us that switching PAS was a big decision and a long-term investment. It emphasised the importance of references from those already using the software and said that one of the reasons it had not spoken to Guidewire was that its PAS was unproven in the London market. This customer said that, to look at a supplier, that supplier would need to have around five Lloyd’s MAs or five London market companies as customers.

16. Another customer ([✂]) told us that, when it had found out that no-one had taken Guidewire’s PAS product, it had decided to choose suppliers that it knew and which had reputations in Lloyd’s. This customer said that getting a first customer would be critical for Guidewire. It thought that, to be taken seriously, it would only need one or two successful implementations. From the

point of sale up to being up and running, this customer thought it would take around three years, as the implementation would take a year to 18 months and then the following year would be important reputationally as others would be looking at how well the system worked.

17. Another customer ([✄]) told us that if it considered changing to a new PAS it would go through a rigorous process. It would speak to other MAs and syndicates about the systems they had and their experiences.

18. Another customer ([✄]) told us that it would want to ensure that whichever supplier it picked for a new PAS had experience in Lloyd's. It said that reputation in the market was key.

19. Another customer ([✄]) said that it would look at non-Lloyd's systems and ask the suppliers to work with it to build a product suitable for its Lloyd's operations. It said that it would only do that with a large, committed vendor. It said, as an example, that it had looked at Guidewire's PAS product, PolicyCenter, and would be willing to work with it (or a similar vendor), but would want to see a desire by the vendor to expand its Lloyd's customer book, and show that it had a stable platform. It said that implementation of a project like this would take 18 months.

20. Another customer [✄]. It said that while it currently used a variety of platforms around the world, its longer-term strategy was to standardise on a single, global platform in order to benefit from efficiencies by having a common workflow for front-end underwriters. It told us that the use of disparate systems with a central data warehouse for high-level reporting was not sufficient to enable it to achieve the cost savings it was after. It said that no one vendor today had a PAS with all the features that it was looking for, and one possible outcome of its strategy review was a single, global system for everywhere except London with a separate system for its operations in London.

21. Another customer ([✄]), which operates in the LCM [✄], told us that its [international parent] had a bespoke software solution [for its group's operations] [✄]. There had been modifications for local subsidiaries, including for this customer. It was currently testing the system before replacing its legacy PAS [✄]. This customer said that once the rules had been defined regarding messaging, it was simple to replicate them for the new system. It had taken a few months and there had been lots of testing, but from a technological perspective, it had been simple to build the capability into the system.

22. NIIT told us that the London market had always been a closed market, partly because of the fact that it was deemed to be a very special market. There had traditionally been a very strong 'London-ism' or 'Lloyds-ism'. It said that vendors had found it very difficult to gain entry into this market from outside. Most of the existing products were built by people who came from these markets. There were very many vendors who had been trying to enter into this market, but they had not been able to do so because of the challenges and the complexities that this market put in terms of entry.

23. Northdoor said that it could not see why a supplier would bother trying to move into the London market, as even dissatisfied customers did not change supplier. It said that another barrier would be credibility. Credibility outside Lloyd's would help, but probably only for large customers. It said that large companies with London wings typically allowed those wings to act autonomously.

Assessment

24. The evidence supplied by many of the customers we spoke to in Lloyd's and the LCM shows that a supplier's reputation in those markets is an important consideration in the selection of a PAS supplier for most customers. From those customers who mentioned the extent of the track record they would wish to see, it appears that a new entrant would need to have between two and five successful implementations in Lloyd's or the LCM, with some months of successful operation post-implementation. However, some large customers ([✂]) were willing to work with suppliers with no experience in those markets and help them develop their system to meet their requirements. Some large carriers with global operations, [✂], had a desire to standardise on a single, global platform and to achieve this might mean working with a supplier which did not have a prior presence in Lloyd's or the LCM; for large carriers such as these, Lloyd's represents a relatively small part of their overall business and so Lloyd's functionality is not necessarily a key consideration in their choice of global platform.

Lloyd's and LCM functionality

25. In paragraph 7, we set out certain specific features which a PAS must be able to handle in Lloyd's or the LCM.

26. The Parties told us that the core functionality of PAS for Lloyd's and non-Lloyd's customers was the same and that the sunk costs for a supplier of developing the additional Lloyd's functionality were low and could be recouped by a single contract. They said that there was past evidence of effective entry into Lloyd's, with a number of suppliers (of varying size)

currently supplying PAS software to Lloyd's MAs, as well as evidence of planned future entry. They also said that Lloyd's MAs could (and did) use bespoke in-house systems, and third parties confirmed that customers could sponsor entry, which suggested that developing the Lloyd's functionality was not particularly costly or onerous.[2]

27. We now consider each of these points in turn.

The core functionality of PAS to Lloyd's and non-Lloyd's customers is the same

Views of Parties

28. The Parties estimated that approximately 90% of PAS functionality was common to all commercial insurers. This reflected the fact that all insurers carried out the same activity of writing insurance. They said the incremental Lloyd's needs were limited to functionality for Lloyd's bureau communication and meeting Lloyd's reporting requirements. These additional software requirements were limited in scope and did not require material changes in the existing software infrastructure. They said that, moreover, the continued standardisation of much of the Lloyd's functionality under the ACORD global standard allowed Lloyd's software functionality to be added with reduced integration time, at lower cost and lower implementation risk.[3]

Views of competitors and customers

29. Northdoor said that it was generally difficult to sell into Lloyd's. Northdoor was periodically approached to help software companies enter Lloyd's. It was approached by a German software company which it tried to educate in order to bring it in as another competitor, but understanding the market was a big hurdle. Northdoor said that it took 12 years to gain a full understanding of the market, and it had never seen a non-London player successfully move into the London market.

30. NIIT told us that Lloyd's was a very niche market. The basic principles of commercial insurance did not change but, at the same time, how reporting worked, for example, for Lloyd's was very different from the way reporting was done elsewhere. Data needed to be stored in a certain format to meet the reporting requirements of Lloyd's. It was not simply a question of switching on or switching off the Lloyd's reporting functionality. If reports were required,

[2] Parties' initial submission, paragraph 9.3.
[3] ibid, paragraphs 9.6 & 9.7.

say, on a daily basis, it would not be practical if the report took 10 or 20 hours to run. Lloyd's functionality was quite intrinsic to its software, rather than something which was bolted on (although this was not true to the same extent for the LCM; it said the main difference between the two was the regulation implied in the reports required for Lloyd's).

31. Sequel told us that Lloyd's was very stable because MAs found it very hard to justify moving away from a core underwriting solution because of the pain it involved. From a cost and disruption point of view it took a long time and was very expensive, and so to move away from one system to another, they needed to have a very good reason, which normally meant customers stuck with their supplier for five to ten years.

32. Sequel said that the difference between the London market and the global insurance market was that people only came to the London market if they had something large and complex to insure, whereas if they were insuring something which was not complex or large, they could normally find insurance somewhere else. In terms of the software, what people who provided solutions to the global market had found difficult was to adapt their software to the London market because they were used to dealing with low-value, high-volume types of insurance, which was the global market. The London market was more about high value, low volume. It said that [✂] large global insurance providers had found it difficult to enter the London market for that reason.

33. Sequel said that any supplier wishing to enter the London market would have to adapt its software to deal with the bureau messaging. Thereafter it was just a matter of building relationships and understanding the nature of the London market. It said that there were elements of the business that were done in a particular way in London that a software supplier needed to understand; it needed to understand the difference between London and how that same business would be run in other parts of the world. [✂] It told us that this was not a massive barrier to entry but it did require some understanding of why the London market was different.

34. [✂]

35. Eurobase told us that adapting an existing PAS to function in Lloyd's was not just a matter of bolting on messaging capability. The way in which the whole PAS worked had to change when messaging was introduced. After making the changes, a significant amount of testing would also be required.

36. CSC said that handling messaging could be complex and that Lloyd's was a challenging market in which to operate for any PAS. It said that the Lloyd's

reporting requirements and tax requirements meant that the system must capture and handle additional data in comparison with other markets, and that the increasing regulation applied to overseas companies managed by Lloyd’s syndicates also imposed additional requirements on PAS.

37. Another customer ([✂]) told us that currently, Lloyd’s required MAs to accept the Lloyd’s message files on a mandatory basis, whereas participants in the LCM could elect to take their equivalent message files from XIS or choose to process manually. This customer said it might prefer to opt for manual processing if it was undertaking a large deal and the underwriter wanted to review treaty statements before processing.

38. [✂]

The sunk investment costs of developing the Lloyd’s functionality are low

Views of Parties

39. The Parties said that the main additional functionality that would need to be added to an existing commercial product would be support for Lloyd’s-specific messaging. They said that the minor specific Lloyd’s reporting requirements that a solution would need to fulfil could all be handled by an insurance software product with a reasonable report-generating capability.[4]

40. Xchanging estimated that the total cost of developing messaging functionality for use in Lloyd’s and the LCM was approximately £[✂], assuming that this messaging functionality was built completely ‘from scratch’. [✂][5,6] Xchanging said that if a developer was already developing (or already had developed) software that provided messaging functionality for the LCM, the incremental cost of adding Lloyd’s messaging functionality would be relatively small.[7]

41. The Parties estimated that the investment costs of developing Lloyd’s-specific functionality (in accounting terms) to an existing PAS were low, within the range of £0.5–£1.0 million, with the likely economic costs of entry (ie the incremental costs) being lower for a number of potential entrants. They said that, in particular, the majority of costs incurred were in relation to the salaries of the software engineers, who were already employed by the PAS software providers. As the wage costs of these software engineers were essentially fixed (ie incurred by the supplier irrespective of whether it decided to develop

[4] Parties’ initial submission, paragraph 9.11.
[5] [✂]
[6] [✂]
[7] ibid, paragraph 9.15.

the additional Lloyd's functionality or not), a large proportion of these costs were not incremental to the cost of developing Lloyd's functionality (particularly if the software engineers had any spare capacity).[8]

Views of competitors

42. [✂]

43. [✂]

44. Sequel said that it did not know how much would it cost for a supplier of insurance software to the global market to adapt that software to deal with the peculiarities of the London market. It said it would depend on the starting position, on how good the supplier was at making changes to its software, how quickly it could do it, and the cost of making changes to its software.

45. Northdoor told us that the cost of adding appropriate functionality to a PAS system to cope with Lloyd's requirements would be approximately £1 - £2 million over two years.

46. Eurobase told us that it was easy to underestimate the cost of adding Lloyd's messaging capability. It said that the investment required would be considerable and probably in excess of £1 million.

47. CSC said that it was hard to estimate the cost of adapting a PAS in order for it to be Lloyd's-compliant, and that the length of time and size of investment required would depend on one's starting position. However, as a rough estimate it thought that the process could take between [✂] and [✂] years and cost in excess of £ [✂].

A single contract is sufficient to recover the initial investment

Views of Parties

48. The Parties told us that, based on their Lloyd's customers, the average annual PAS spend of a Lloyd's MA was £ [✂] in 2013. They said that as contracts were typically awarded with a duration of five to ten years, and most third party customers had not tendered their contract for seven years or longer, the Lloyd's investment of £0.5–£1.0 million could be recovered by winning a single Lloyd's contract. More specifically, a single contract generating annual revenues of £ [✂] would allow an entrant to recover the initial investment in Lloyd's functionality within [✂]. Moreover, once the initial sunk investment

[8] ibid, paragraph 9.16.

costs to develop the Lloyd's functionality had been incurred, a PAS supplier had the incentive to compete aggressively for additional Lloyd's customers.[9]

Views of competitors

49. [✂]

There is evidence of effective entry into Lloyd's

Views of Parties

50. The Parties said there were a number of recent examples of non-Lloyd's insurance software providers either supplying Lloyd's MAs (using their existing PAS) or bidding for tenders by Lloyd's MAs. They said that, in particular, Guidewire had won contracts to provide its ClaimCenter software to [✂],[10] and Zov Solutions supplied Charles Taylor Insurance and Sciemus.[11,12]

51. The Parties said that the entry by Guidewire provided evidence that a supplier considered developing Lloyd's functionality viable for only a part of a PAS. Once the Lloyd's functionality had been developed, it would be relatively straightforward to add that functionality on to the other componentised products within their PAS software. [✂][13]

Views of competitors

52. Northdoor told us that competitors were the same in Lloyd's and the LCM, although CSC had more success in the company market. It said that CSC's functionality was geared towards general insurance companies, where CSC was massive.

53. [✂] Coming up with a software solution that dealt with bureau messaging was complex and difficult, and finding people who knew about these things was hard but not impossible. [✂] The other aspect of operating in the London market was that in general carriers were dealing with more complex risks that

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[9] Parties' initial submission, paragraphs 9.20–9.22.
[10] Note that ClaimCenter is a claims management system, not a full PAS. However, the Parties said (initial submission, paragraph 9.26) that the claims management component was a fundamental part of any PAS software and competed directly with Xchanging's Xuber product. They said that a number of customers preferred to create an end-to-end PAS by combining software components from different suppliers which, once individual components had been purchased, reduced the likelihood of those customers choosing an end-to-end product like Agencyport's OPEN Core Platform.
[11] Zov Solutions told us that it had won a contract with Sciemus (a provider of risk analytics to the insurance sector) in partnership with Charles Taylor Insurance Services Ltd in August 2014 to supply a PAS and Lloyd's market functionality had been developed. It said [✂] and it was not currently in negotiations to sell this product, or any other products, to other Lloyd's customers.
[12] Parties' initial submission, paragraph 9.25.
[13] ibid, paragraph 9.27.

would traditionally be found in other markets. It said that, for example, when one insured a plane or a fleet of planes, dealing with those risks was quite complicated and the software needed to be quite advanced in order to deal with those scenarios. [✂]

54. Guidewire said that insurers that operated in the London market had very complex and sophisticated requirements, which required software vendors to combine full business functionality across multiple lines of business with the specific proprietary messaging unique to the market. Without the full functionality across all aspects of a Lloyd's insurer, it was difficult to build a client base in Lloyd's. Given that there were fewer than 100 companies in Lloyd's, of which fewer than 25 had revenues in excess of $100 million, it said the opportunity for a software vendor was limited in this space and, with a few established players, the market was not attractive for many new entrants.

55. Guidewire told us that the LCM, which included the majority of the larger multi-billion-dollar international insurers, was very attractive to software vendors. But, in order to address requirements outside London, these insurers required a vendor to offer software solutions designed to operate in multiple languages and multiple jurisdictions, plus to have local support and language capability in numerous international locations. It that said it therefore saw a significant barrier to entry, which is why there was limited competition in this niche sector.

56. [✂] Guidewire told us it was not aware of any new entrants into Lloyd's for the supply of PAS in the last five or ten years, and it was aiming to be the first one. It said that the barriers to entry were quite high and Lloyd's was quite small, so it was unlikely that either of the other two large global players (Accenture and SAP) would seek to develop Lloyd's functionality when there were already two or three incumbent suppliers and a new entrant trying to get into the market.

Lloyd's MAs can (and do) use bespoke in-house systems and sponsor entry

Views of Parties

57. The Parties believed that eight Lloyd's MAs currently used a bespoke in-house PAS. The fact that they did so, and were not at a competitive disadvantage from doing so, demonstrated that such solutions provided a viable and realistic alternative to the out-of-the-box PAS software of the Parties.[14]

[14] Parties' initial submission, paragraph 9.32.

58. The Parties said they considered that the examples of in-house supplies provided further evidence to demonstrate the ease and likelihood of new entry. Specific bespoke systems could be developed with the required Lloyd's functionality relatively easily (using external software engineers), and on the basis of the requirements of a single customer. They said that this indicated that a single customer contract was sufficient to recover the development costs. They said that software engineers were available on the open market with the requisite skills to develop bespoke systems with the requisite Lloyd's functionality.[15]

Views of competitors and customers

59. Northdoor told us that customers were generally moving away from in-house solutions. It said it was not sure why, but thought in-house solutions were much higher-risk, had much higher requirements to maintain them, and had experienced high-profile failures, for example at Sturge MA (a 'spectacular failure').

60. NIIT said that the trend in the insurance industry was not to invest in heavily customised technology solutions but to buy off-the-shelf products. It was very rare to find insurers who had built their own PAS (although they may develop their own spreadsheet for exposure management or build their own analytics or reporting systems). It said that even those insurers who had gone down the line of developing in-house systems were now changing their decision and looking outside, because it was hard to track the amount spent internally and keep control of the project.

61. Sequel told us that five years ago a lot of customers were building their own systems, whereas now they were looking to just buy software solutions and not build their own. Every now and again Sequel came up against an IT department who had decided to build an in-house solution, with or without the assistance of an outsourcing company [✄]. However, this was less common these days. Sequel said that what was available today with new innovative software was very specialised [✄]. Sequel said it did not think insurers would want to go and get those very specialist skills because it would involve moving away from a normal IT department to almost creating a software company. [✄]

62. Another customer ([✄]) said it was too small an organisation to consider trying to create an in-house bespoke system. It thought that it would probably take around 50 people to build a PAS and it only had [✄], so it would not

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15 ibid, paragraph 9.34.

undertake a project of this size. This customer also added that it knew of examples of people in the market who had built a PAS ‘and it was glad it never attempted it’. It said the size of the company mattered (small ones were constrained option-wise, while big ones could develop their own IT systems).

63. One customer ([✂]) told us that it was not interested in a bespoke in-house solution because of the costs and risks involved. It said that it had never tried to develop its own system in-house as its core competencies were understanding and pricing risk. Hence it just wanted to buy a product that would help it administer this process and provide record keeping.

64. Another customer ([✂]) said it would not want to try to develop a whole PAS in-house and it did not think that many companies actually had the capability to do this, although [✂] had. Even when negotiating with suppliers for a PAS, it would not be credible enough for this customer to say it might consider it and it thought it would be difficult to quantify what the cost might be.

65. Another customer ([✂]) told us that it could not have continued with its existing in-house system as it was not acceptable from an audit and regulatory perspective. It said that a PAS was an extremely complex piece of software and it would be difficult to find people with the technical knowledge and business skills to develop a new system in-house. It was not something it would want to do as an MA as it would be building a long-term risk into the business by developing a PAS and then trying to support it in the long term.

66. Another customer ([✂]) said that realistically PAS solutions were just databases that would capture information, store it and then report it. Therefore nothing should stop anyone writing their own PAS, but the things to consider were delivery time and cost.

67. It said that building a PAS was expensive and time intensive and not a solution for it at the moment. It said that the environment it was operating in was changing all the time, so to accommodate the requirement it would need to be very fluid in the solutions implemented, and hence the time to market would be key. As this customer was a growing company, building its own PAS was not its preferred solution. However, it said that if it became more set in the market in the future, it might consider it.

Market shares and tendering data

Introduction

1. This appendix outlines the findings from our analysis of the market shares and tendering data. The analysis shows that the Parties have a combined market share of 30 to 40% or 40 to 50%, depending on the basis of the calculation. The available tendering data suggests that they were not providing a particularly strong competitive constraint on each other or on other suppliers before the merger.

2. Due to shortcomings of the data and because of some specific characteristics of the relevant markets, however, we need to interpret these results with caution and in the context of our qualitative analysis of the way suppliers compete and the changing nature of the competitive landscape.

Market shares

Xchanging's submission

3. Xchanging submitted that, even if the market was considered on a narrow basis in relation to the supply of PAS to Lloyd's MAs,[1] the evidence clearly showed that competition between the Parties pre-merger was limited. In particular:

   (a) the Parties' market shares were not high and well below the level at which competition concerns generally arise;

   (b) the tendering data over the last five years confirmed that the Parties were not close competitors in tenders for Lloyd's MAs;

   (c) there were a number of strong competitors participating to tenders and winning contracts in relation to the supply of PAS to Lloyd's MAs; and

   (d) the Parties' products were differentiated (with Xchanging's Iris product being a legacy product) which reduced the extent to which they were viewed as substitutes.[2]

[1] Xchanging did not make any specific comments on the LCM in relation to market shares and tendering data.
[2] Initial submission, paragraph 7.1.

4. As regards market shares, [✂] and that their combined share may be overestimated, in that some customers may purchase PAS software in Lloyd's from different suppliers.

5. Xchanging also noted that market shares calculated on GWP (used as proxy of revenue shares by the CMA in its phase 1 inquiry) led to inaccurate estimates, as the ratio between the Parties' shares is very different from the ratio between their actual revenues (in particular, Agencyport appears to have a smaller share than Xchanging where it in fact generated [✂] higher revenues than Xchanging in 2013). Also, Xchanging showed that there is no clear correlation between a customer's GWP and its software spend.[3]

The analysis of the CMA

6. We have calculated market shares by collecting (and cross-referencing) data on revenues from customers and competitors, as well as market shares based on customer count.[4]

7. We have updated the market shares by count calculated in phase 1 with the additional information collected during this inquiry and we have estimated revenue market shares as part of the phase 2 investigation. In order to collect revenue data, we have adopted two (largely) complementary strategies. First, we have asked for a customer-level breakdown of revenues from all providers which operate in Lloyd's and/or in the LCM. Secondly, we have sent a short questionnaire to all customers within Lloyd's and within the LCM asking for their average yearly spend[5] in each of the PAS products they use in Lloyd's and/or in the LCM.

8. As regards suppliers, we obtained the breakdown of revenue by customer from both Sequel and NIIT, and more limited information from other competitors.[6] As regards customers, we have contacted 48 MAs which only operate in Lloyd's, 28 carriers which only operate in the LCM and 14

[3] The full argument is set out in paragraphs 7.14–7.21 of Xchanging's initial submission.
[4] We have also considered using market shares based on the number of licences available under the contract, as a different metric to account for customer size. However, a significant proportion of customers is under a contractual arrangement with unlimited licences. It was therefore impossible to estimate accurate market shares on these bases.
[5] Including licensee fee, implementation fees, other spend (not related to license fees), etc. The rationale for preferring a broad figure to the exact amount spent with each product was to reduce the burden to respond to the minimum, thereby maximising the response rate. The cost of this strategy is lower precision in the estimates, which do not match, in some cases, the figures provided by suppliers.
[6] We have also received a response from Northdoor, but have not included its data in the tables, as we consider that it does not operate within the relevant markets (see market definition working paper). For completeness, we have indicated in a footnote the impact of including Northdoor in the dataset on the combined market shares of the parties.

customers which operate in both markets.[7] We received 31 responses from Lloyd's MAs (65%), 14 from LCM carriers (50%) and 14[8] from customers in both markets (100%).

9. As this data was not perfectly aligned, we calculated separate figures for the customer and supplier data. We have also filled in gaps in responses from customers with the relevant data from suppliers (and vice versa) to give a more complete picture in each case. Where neither was available, we have estimated individual customer spend based on average spend within the market.[9]

10. The results relative to Lloyd's and the LCM are set out in Tables 1 and 2 below.

Table 1: Market shares in Lloyd's, 2013

	Market share (Lloyd's)		
Supplier name	*Revenue method (customer data)*	*Revenue method (supplier data)*	*Count market shares based on number of customers*
Market size	**£24.9m**	**£26.1m**	**46**
Xchanging (%)	[5–10]	[5–10]	[10–20]
Agencyport (%)	[20–30]	20–30]	[20–30]
Combined (%)	[**30–40]**	[**30–40]**	[**40–50]**
NIIT (%)	[40–50]	[40–50]	[30–40]
Sequel (%)	[5–10]	[5–10]	[10–20]
Eurobase (%)	[0–5]	[0–5]	[0–5]
CSC (%)	[0–5]	[0–5]	[0–5]
eBaoTech (%)	[0–5]	[0–5]	[0–5]
Unknown (%)	[0–5]	[0–5]	[0–5]

Source: CMA analysis of data received from customers and suppliers.
*NB those managing agents using in-house solutions have been considered 'outside' the market for the purposes of these calculations. We have also excluded suppliers which provide bespoke solutions to MAs. If we were to include Northdoor, market shares of the Parties would be as follows: Xchanging [5–10]%, Agencyport [20–30]% and combined [30–40]% (customer data); Xchanging [5–10]%, Agencyport [20–30]% and combined [30–40]% (supplier data); and Xchanging [10–20]%, Agencyport [20–30]% and combined [30–40]% (count method).
†NB some Lloyd's MAs use more than one PAS supplier.
‡One customer informed the CMA that it used CSC's products but did not give its estimate of spend. We have, therefore, estimated its spend based on the average spend on PAS in Lloyd's.
§One customer informed the CMA that it used eBaoTech's products but did not give its estimate of spend. We have, therefore, estimated its spend based on the average spend on PAS in Lloyd's.

[7] There were 60 Lloyd's MAs listed on the Lloyd's website in 2014. The CMA is also aware of three 'member agents' (which advised on Lloyd's syndicate participation) and two extra MAs which managed syndicates that are run off.
[8] Of the 14 responses, we received four incomplete submissions which were of limited use.
[9] In some instances customers had multiple products. For the purpose of computing market shares by count we counted the same customer multiple times, once for each supplier. However, when the same supplier had multiple contracts with the same customer, we counted it only once. In other instances customers purchased their PAS from the same supplier in Lloyd's and in the LCM but did not provide the split of the yearly spend. In these cases, to calculate revenue shares, we assigned 50% of the spend to Lloyd's and 50% to the LCM.

Table 2: Market shares in LCM, 2013

	Market share (LCM)		
Supplier name	*Revenue method (customer data)*	*Revenue method (supplier data)*	*Count market shares based on number of customers*
Market size	**£12.6**	**£12.5**	**36**
Xchanging (%)	[30–40]	[30–40]	[30–40]
Agencyport (%)	[5–10]	[10–20]	[5–10]
Combined (%)	**[40–50]**	**[40–50]**	**[40–50]**
Sequel (%)	[10–20]	[5–10]	[10–20]
NIIT (%)	[5–10]	[5–10]	[5–10]
EBIX (%)	[5–10]	[5–10]	[0–5]
CSC (%)	[0–5]	[0–5]	[0–5]
Unknown (%)	[20–30]	[20–30]	[30–40]

Source: CMA analysis of data received from customers and suppliers.
*We have not included those carriers using in-house solutions in the calculations as they are outside of the relevant market.
†Our research suggests that EBIX provides PAS to only one carrier in the LCM. While it is not a 'core' PAS, we have included it on the basis that this carrier did not list any other products it used.

11. Some customers changed suppliers in 2014. Xchanging submitted that [✂].[10] Also, we are aware that [✂]. Finally, Charles Taylor started operating as an MA in 2015, having chosen Sequel as a PAS supplier in 2014.[11] These changes are not reflected in the market shares above, as the above market shares were calculated for year 2013. In any event, even accounting for these switches would not affect the overall market shares.[12]

12. Whichever metric is used for market shares, the Parties appear to gain a relatively strong position in the two markets through the merger, as they hold a combined market share of [30–40]% in Lloyd's and [40–50]% in the LCM. Agencyport appears to be the stronger of the main Parties in Lloyd's, whereas Xchanging appears as the stronger one in the LCM. Among competitors, NIIT is the player with the largest market share in Lloyd's ([30–40]%) but is in a weaker position in the LCM, where it appears to be in a similar position to Sequel ([✂]) except for market shares based on number of customers, which diverge considerably).[13]

13. In principle, these market shares show that an SLC may not be simply ruled out on the basis of low market shares.

[10] The Parties also submitted that [✂].
[11] See Charles Taylor's website.
[12] We do not have Cathedral's spend with the new supplier in 2014; also, revenues from single customers may have varied between 2013 and 2014. Therefore, it is not possible to reliably calculate 2014 market shares in value. The Parties' combined market share by count would only marginally vary, from [40–50]% to [40–50]%.
[13] Market shares in revenue and by count may differ for a number of reasons. For example, such difference may reflect differences in customer size: a supplier with larger customers (which tend to spend more for a solution) might have a larger revenue market share than another supplier with the same number of smaller customers. Another possibility is that such differences may be due to different success of suppliers in tenders, as these may generate extra revenue from implementation fees in the year in which the contract is awarded. Further, the difference may be due to mergers between customers which use the same PAS supplier, as the supplier's revenues derived from these contracts remain the same but the customer count reduces.

14. These results, however, should be interpreted with care. First, these calculations are based on incomplete data from the industry participants and are subject to some assumptions. Secondly, aggregate data from suppliers and customers seems to align relatively well, but the same is not true at the individual customer level.[14] Further, market shares are likely to be subject to sudden changes when a supplier wins a contract, which may not necessarily mean a sudden change in the supplier's competitive strength.

15. Xchanging submitted that market shares were of limited explanatory value, as legacy market shares might not provide a reliable indicator of the nature of current competition in the market (as they reflected legacy contracts and not contracts coming up for renewal). In particular, Xchanging told us that its PAS software (Iris), which was supplied to all of Xchanging's Lloyd's customers, was a legacy product which was no longer actively marketed. In this regard, Xchanging submitted that when customers took on long-term contracts, a supplier's market share at any particular point in time might not accurately reflect the competitive constraint that it exerted on the next 'competition' (ie the next contract to come up for renewal), particularly if its market share was reflective of legacy contracts and/or products.[15]

Xchanging's response to the working paper

16. In its response to the working paper, Xchanging indicated that it was unclear how the CMA had estimated a total Lloyd's market size of £24.9–£26.1 million, and indicated that in its internal documents the Parties had estimated that the total Lloyd's market size was between £37.5 million and £50 million (with £50 million also being referred to in Xchanging's internal board document). We consider, however, that the way in which the Parties estimated the market size, using percentage of GWP, is highly imprecise, whereas we calculated market size and market shares using data obtained from customers on actual spend on PAS, and set out our methodology in paragraphs 7 to 9 above. For these reasons, we consider that our estimates of market size and market shares are more reliable than that submitted by Xchanging.

17. Xchanging also submitted that it was implausible that Sequel had a market share (by revenue) of just 5 to 10% and estimated Sequel's 2013 revenue using the number of customers from the tendering data in the CMA's working paper multiplied by the average spend per customer. However, we used

[14] This discrepancy may have been caused by the fact that suppliers interpreted questions differently (eg some suppliers gave us revenues for the calendar year 2013, others gave an impression over 2013/14 and some an average yearly figure).
[15] Initial submission, paragraphs 7.28 & 7.29.

Sequel's actual 2013 revenue to calculate its market share, which is more reliable than Xchanging's estimate.

18. Xchanging also submitted that the CMA had calculated the Parties' market shares in the LCM on the basis of a market size of only £12.5–£12.6 million, and only 36 customers. Xchanging noted that XIS provided data on the number of customers which access its bureau services for LCM carriers. According to Xchanging, this data revealed that, in 2014, XIS recorded revenue from (and therefore provided bureau services to) 222 customers, with 74 of these customers being currently 'fully active' LCM carriers. Xchanging therefore argued that our estimate of market size was too small (as it was based on 36 instead of 74 customers) and, as a consequence, our estimate of the Parties' market share in the LCM was too large.

19. However, we could not reconcile Xchanging's submission that there are 74 'fully active' carriers with the data provided by XIS. We have analysed the data provided by XIS and have identified the 'fully active' carriers in the data by using the definition of 'fully active' carrier provided by XIS (ie that fully active carriers are those which showed an expenditure greater or equal to £72,000 per year). We have also avoided double-counting companies which feature multiple times in the data because, as explained by XIS, different branches of the same group may appear multiple times. The number of customers which appeared to be within the same company group and whose total expenditure was £72,000 or above was 46,[16] which broadly corresponds to the members of the IUA (which is 43; the number of customers in our calculation of market shares, however, is lower, (36), as customers using in-house or bespoke solutions were excluded from the market).

20. Xchanging also submitted that the inconsistencies in the market shares for the LCM set out in Table 2 were further highlighted by the non-Lloyd's tendering data submitted by Xchanging in the email of 12 February 2015. Xchanging noted that out of the [✂] LCM tenders that it was aware of that had taken place over the last five years, Xchanging had won [✂]. Xchanging submitted that it could not reconcile how the CMA could have estimated it to have a market share of 30 to 40% (across all three measures presented in Table 2) in the LCM.[17]

21. We note that the Parties have [✂] customers combined in the LCM, most of which have been acquired over a longer period than the one covered by the

[16] We also considered an alternative filtering rule, using the 'subscription' spend as opposed to the 'total' spend. Only two customers were filtered out, which present very small or no subscription spend and so appear implausible to be live customers. In any event, the number of customers in the LCM would not vary significantly even if these were excluded.
[17] Paragraph 3.7(d).

tendering data. As a result, the Parties' market share is higher than the share that would result by solely considering the [✂] customers recently won by Xchanging.

Tendering data

22. The terms 'tender' is used in this appendix in a broad sense, which encompasses a wide spectrum of activities undertaken by customers to select a PAS product. At the one end of the spectrum, customers undertake a formal tender process; at the other end of the spectrum, customers engage in informal discussions with different suppliers (and sometimes with other customers) and form a view over the different products and the different suppliers. A selection process may also evolve over its course. For example, a preliminary list may be drawn up facilitating informal discussions and demonstrations. As the number of suppliers is whittled down, the process may become more formal.

23. Xchanging submitted that the data provided included all opportunities in which either Party had been involved in the last five years, including opportunities which might not have reached, or been conducted through, formal tender processes, but in relation to which the Parties had engaged in discussions with the relevant customer, potentially over several years.

24. Xchanging submitted that tendering data was preferable to market shares, as this reflected the competition for Lloyd's MA contracts over the last five years, rather than an artificial metric for calculating shares of supply.[18] We have analysed the data provided by Xchanging, have eliminated tenders that did not relate to the provision of PAS in Lloyd's, and have complemented it with customers' responses and with responses received from competitors. On one occasion, we found that a customer [✂] had recently [✂] but it appeared in the tendering data as though [✂]. We also identified [✂] additional tenders which were not covered by the data provided by Xchanging through speaking with another customer [✂], suppliers [✂] and another third party [✂]. In all these tenders Agencyport was mentioned and Xchanging competed against it in [✂] tenders.

25. Instead, we have eliminated from the data five tenders. In three cases, we found that the customer was not a Lloyd's MA (in one we could exclude it was not an MA at the time of the tender but the tender appeared to have occurred far earlier than five years ago in any event). In two cases customers had run tenders for products other than PAS.

[18] Initial submission, paragraph 7.30.

26. We consider that the broad definition of 'tenders' adopted in this paper may leave scope for different interpretations as to what should be regarded as an instance of competition between the Parties. For example, one Party may have been initially 'considered' by one customer without being aware of it and may have not made it to the later selection stages. Also, Xchanging submitted that it had compiled the tendering data based on the Parties' recollection of the tenders they took part in, or were aware of, and recognised that the data provided was not comprehensive where none of the Parties took part in the tenders.

27. Further, by cross-referencing the tendering data with customers' and competitors' responses to our market questionnaires and with the discussions held during the hearings and the telephone conversations, we found nine examples of tendering data which involved customers renewing their contract with the same supplier but which were unclear as to whether a competitive process had been carried out before such renewal. These examples involved all competitors but particularly NIIT (all the five tenders NIIT won raised doubts in these regards). Given the broad definition of tenders adopted in this context, however, we have included these observations in the tendering data.

28. Although these limitations may cast doubts over the overall degree of accuracy of this data set, we will examine such data taking these limitations into account.

Analysis of tendering data

29. We have amended the tendering data provided by Xchanging and complemented it with information from customers, suppliers and other third parties. In total, we considered data from [✂] tenders for PAS in Lloyd's over the last five years. Xchanging was involved in [✂] of these tenders, Agencyport in [✂]. Xchanging and Agencyport came up against each other [✂] times. Of these [✂], [✂] resulted in neither Party winning the contract, with Agencyport winning [✂] and [✂] still pending. Agencyport therefore participated to [✂] of the [✂] tenders where Xchanging was involved ([✂]%) and Xchanging was present in [✂] of the [✂] tenders where Agencyport was involved ([✂]%).

30. Taken at face value, the tendering data appears to show that Xchanging and Agencyport were not competing particularly closely with each other prior to the merger.

31. We do not have full visibility over the participation of other players to tenders, as there are tenders that the Parties may not have been aware of and, even where the Parties were aware of a certain tender, they may still not have been aware of the other participants taking part to it. Nonetheless, taking the

aggregate data from all sources available (set out in Table 3 below), the most successful player appears to be Sequel with [✄] contracts won, followed by NIIT and Agencyport with [✄] wins each in the past five years. Agencyport outperformed Xchanging [✄]. Northdoor ([✄]) and Eurobase ([✄]) were the only other parties to win multiple tenders during this time period (although [✄] tenders are still pending).

Table 3: Tendering data

Supplier name	*Xchanging's data** *Number of tenders won*	*Xchanging's and extra data* *Number of tenders won*
Xchanging	[✄]	[✄]
Agencyport	[✄]	[✄]
Combined	[✄]	[✄]
Sequel	[✄]	[✄]
NIIT	[✄]	[✄]
Northdoor	[✄]	[✄]
Eurobase	[✄]	[✄]
CSC	[✄]	[✄]
eBaoTech	[✄]	[✄]
Pending/unknown†	[✄]	[✄]
Total	**34**	**32**

Source: CMA's elaboration of the data provided by Xchanging, amended and integrated with information from third party oral and written responses.
*Xchanging's data also includes tenders that were not related to the provision of PAS to Lloyd's MAs, as explained above.
†[✄]

32. On the basis of the tendering data that was available to us, the Parties therefore appear not to provide a particularly strong competitive constraint on each other and appear to face competition from NIIT and Sequel, as well as four other suppliers.

Profiles of the main PAS suppliers

Introduction

1. This appendix provides a summary of the evidence from customers and one specialist consultant on the different suppliers of PAS. We have grouped suppliers based on whether they offer products with London market functionalities, as customers generally indicated that they have a strong preference for suppliers who offer such functionalities.

2. The following sections set out the information we received from third parties on each supplier, separately.

Xchanging

Products

3. Xchanging submitted that it supplied two relevant PAS products: Iris, a legacy PAS product which was installed by Xchanging's existing [✄] Lloyd's MAs, and its current PAS system, Xuber for Insurers, which was launched in 2012 to replace a number of legacy software products, including Iris. [✄] Xchanging also submitted that both Iris and Xuber were sold in the same format, and with the same marketing, to customers active inside and outside of the Lloyd's market (and to those customers active in both areas).[1]

4. Xchanging also sells Genius, a solution for the commercial Property & Casualty insurance market. Xchanging told us that Genius supported all major lines of business, including specialist and niche lines, as well as handling multiple classes and complex policies.[2] Genius did not have Lloyd's messaging functionality and was not used by Lloyd's managing agents.[3] Genius did not have LCM bureau functionality, but it was used by [✄] carrier operating in the LCM.[4]

[1] Initial submission, paragraph 1.5.
[2] ibid, paragraph 3.8(b).
[3] ibid, footnote 40.
[4] Whilst Lloyd's mandates the use of the bureau's central services, the use of the bureau is not mandatory in the LCM and it can be decided for each single transaction. Customers may therefore decide to opt out of processing claims through the bureau in the LCM and use a PAS that is not enabled to do so.

Table 1: Xchanging's PAS offering

[✂]

Source: Xchanging.
*[✂]

Customers' views

5. We received mixed views about Xchanging's legacy products, Iris and Genius. Two customers told us that this software was not good enough and/or was outdated. One of them said it had looked at Xchanging's offer some years ago and thought its systems (Genius and Iris) were not very good. Another customer said it had not considered Xchanging's Iris and Elgar offerings as it considered them to be 'old, green-screen' systems.

6. Two other customers, however, appeared to be appreciative of the quality of Xchanging's legacy products. One of them told us that Iris was very dependable and robust and that the Iris system, with its London market messaging capabilities, provided a robust solution to its current business needs. The other customer told us that Genius was a bit slow and clunky, but that it had never failed and that it was difficult to see how a new PAS could add value relative to Genius, as all the users were happy with it and it met all of this customer's requirements. As a result, this customer said 'if it ain't broke, don't fix it'. In addition, one customer said that it had considered Iris in the initial long list, although it had not looked at Genius closely because it had been concerned about Xchanging's financial situation at the time. Another customer noted that the two systems had sold well worldwide.

7. As regards Xchanging's new product suite, Xuber, most customers appeared to have a positive impression. One customer said that if it were to change systems, it would definitely consider Xuber as an option. Another customer said that the Xuber platform was technologically stronger than Agencyport's as it had been designed from the ground up. Another customer said the Xuber suite had all the functionality it required, met all Lloyd's requirements, was highly configurable and flexible, and that it had a good reporting suite and could be linked with other systems. Another customer told us that it was surprised Xuber did not have more traction in the market. One customer also told us that the newer products (including Xuber) were better than the products supplied by the traditional providers. One customer told us it thought Xuber would be a good piece of software when it was fully functional.

8. One customer produced a scorecard [✂].

9. However, one customer appeared to have a more negative view of Xuber, as it said that one of the reasons Xuber was not taken forward in the selection process was because it was slow.

10. Several customers identified the lack of successful delivery in the London market as a limitation to the attractiveness of the Xuber suite. One customer said that although it would consider Xuber, it would wait a few years to see how successful any implementation was. Another customer said that to get its product ready for the market, Xuber needed a Lloyd’s customer to work with for 24 months. One customer said that it had decided that Xuber was not sufficiently established for it to move to it, as Xuber did not have an established client base. One customer said that Xuber would possibly not make the shortlist, that it had not been sold to any MAs and that the experience of getting the product into an MA was critical.

11. Several customers also indicated that at the time of its launch in 2012, Xuber was materially unfinished.[5] Although this was regarded as a positive feature by one customer, [✂]. One customer told us [✂]. One customer said that it was not convinced that the Xuber product was as finalised as it would like customers to believe. The same customer also said that whilst it [✂].

12. One customer said that Xuber had been in the making for three years but that it still had a lot of gaps particularly for a US system, and that Xuber did not appear to know how to fill some of those gaps. It also said that Xuber gave a good marketing spiel but that it was not convinced. Another customer said it thought that Xchanging would develop a fully-fledged underwriting platform, but it probably wouldn’t be before 2016. One customer told us that one of the reasons Xuber was discounted during the selection process was that it was a long way from being finished and that Xchanging had claimed that its software could perform tasks which it could not actually perform.

Other third parties

13. Athito told us that Xuber was priced way in excess of the other products in the market and provided the example of a selection it carried out in June 2014 where Xuber was priced significantly higher than Agencyport for the same customer.

14. In respect of the prospect of Xchanging being successful in the future, Athito said Xchanging had suffered from issues with past projects (as have other suppliers) and there was a perception that Xchanging were expensive. Even with an adjustment in pricing it would take some time for them to get traction

[5] [✂]

with the new product, insurers are risk averse when it comes to selecting software and Xuber was not commonly used across the market. Xchanging's position providing other systems and also professional services and outsourcing may lead clients to not wanting all their eggs in one basket.

Agencyport

Products

15. Before the merger, Agencyport used to sell its PAS software under two product names: OPEN Core Commercial (marketed to customers outside Lloyd's) and OPEN Core Lloyd's (marketed to customers within Lloyd's). Each of these products was renamed in 2013 (from OPEN Co and OPEN Box respectively) at the time the software was upgraded. Xchanging submitted that the software underlying both OPEN Core products (OPEN Foundation) is the same, with different configurations required depending on whether the software is deployed to a customer active in the Lloyd's market or not.

16. Agencyport's pre-merger suite of OPEN products consisted of:

- OPEN Core Platform: Lloyd's – core PAS tailored for Lloyd's;
- OPEN Core Platform: Commercial – PAS configured for LCM and commercial carriers;
- OPEN Core Platform: Health – multi-channel PAS for domestic and international health carriers;
- OPEN Core Platform: MGA – multi-channel PAS configured for MGAs distributing insurance products;
- OPEN Xposure – a risk exposure and aggregation solution; and
- OPEN Data Warehouse – out-of-the-box data warehouse solution for clients of the OPEN Core Platform.

Table 2: Agencyport's PAS offering

[✂]

Source: Agencyport.
*Total includes a customer that has subsequently moved supplier.

Customers' views

17. Customers appeared to have mixed views about Agencyport's commercial offering. Some customers made positive comments about Agencyport or

indicated that they considered it to be a credible supplier. In particular, one customer appeared to appreciate Agencyport's front end. It said that Agencyport's front end was the most positive feedback from the rest of its business. It said that its testers had found it to be the 'slickest, most mature offering' and to have the most understanding of Lloyd's. The same customer also said the new product was a progression of Agencyport's previous product. Another customer told us it was happy with the service provided and had only good things to say about Agencyport. [✂] One customer said that Agencyport was one of the two suppliers that had the best solutions.

18. One customer also produced a scorecard, [✂].

19. Other customers made more negative comments about Agencyport. However, these comments appeared to refer to Agencyport at the time in which it was under previous ownership and management and/or to its old products. One customer said Agencyport's old product, OPEN Box,[6] used a weird configuration language and there was a history of implementation problems. Another customer said it had heard from other customers who used OPEN Box Plus that it was too slow and cumbersome. The same customer also said [✂]. We note, however, that Agencyport now has several customers for its newer products.

20. This issue was also raised by another customer, who also indicated that it had not appreciated the aggressive sales style of Agencyport and had been concerned by Agencyport's financial instability and ownership changes. We note, however, that management and ownership had changed since then, so this consideration may not apply to the current team of Agencyport.

21. Another customer said that OPEN BOX had come on the market in 2000 and so was now dated. It said that it had ruled out Agencyport as many knowledgeable market specialists in Intech had been leaving Agencyport in 2011. It also said that it did not have a lot of confidence in the two Agencyport offerings as they had run into a dead end with no clear strategy for re-development. However, we note that Agencyport launched a new product, OPEN Box Plus, under the new ownership and management and then recently rebranded it, which appears to be in contrast with this customer's statement.

22. Another customer said that it considered Agencyport's (and Sequel's) systems too complex for its requirements and would not consider Open Box

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[6] Agencyport launched a new product, OPEN Box Plus, which was recently renamed OPEN Core: Lloyd's and OPEN Core: Commercial.

Plus as an alternative. One other customer had not been aware of Agencyport at all.

Other third parties

23. Athito told us that Agencyport's PAS was purely web-based; it had a very well designed user interface and it could be delivered to a wide variety of devices. In addition, the underlying architecture was more open as a result of its recent refresh, which was something that customers appreciated.

24. Athito said that Agencyport had been bought and sold several times over the last six years and each time the management team had changed. It thought the current management had invested a lot in the product and had appropriately positioned its commercial strategy.[7]

Sequel

Products

25. Sequel's PAS solution is called Eclipse Underwriting. It covers quote and bind, billing and credit control, claims, reporting, outwards RI and financials (GAAP reporting & Finance Data Mart).

26. Sequel also supplies Eclipse Portal, a web-based front end for quote management and policy administration allowing underwriters to rapidly react to changing business requirements and providing self-service capabilities to trusted third parties; and Sequel Impact, a risk exposure and aggregation product which provides the ability to quickly and easily quantify and visualise risk exposure for any class of business. [✂]

Table 3: Sequel's PAS offering

[✂]

Source: Sequel.

27. Sequel indicated that it provided PAS to [✂] customers which operated in multiple markets.[8]

28. Sequel explained that when it started, customers usually bought from Sequel because it was very reliable, known in the market for being very good at

[7] Athito hearing summary, paragraph 31.
[8] [✂]

delivery and for being very trustworthy, and that customers were attracted by the improvements in functionality provided. [✂]

29. Sequel also explained that its growth strategy was to retain the clients previously won and to build a strong partnership with them. As a result, Sequel was winning new business without needing to replace lost business as it had not lost any of its PAS customers to date.

Customers' views

30. Customers generally viewed Sequel as a strong player, with a strong product offering and reliable servicing. In particular, one customer appeared to appreciate Eclipse's product functionalities. It said that its front end functionality was easy to access and that it appreciated Sequel's system as it integrated easily with Windows. It also said that Eclipse was suitable for customers whose underwriters inputted the information directly into the system, without the intermediation of back office staff.

31. One customer told us that it appreciated Sequel's credibility as a supplier and Eclipse's reliability. It said that Sequel had been the only supplier who had updated some of its product, got it working and managed to get traction in the market. It also said it thought that the software was priced correctly and that Sequel was hard to fault. The same customer also said that, whenever it had asked Sequel whether its product was able to do something, it had received a straightforward answer which had meant that it had been possible to estimate the cost of the enhancements that were needed. It also explained that Sequel's software could be deployed both within Lloyd's and the LCM, and that it could also be used in Europe. Another customer said that Sequel had stable ownership as it was owned by its management, and that it was also financially solvent.

32. One customer produced a scorecard, [✂].

33. Some customers also made some general positive remarks about Sequel. One customer said that Sequel's system was good and modern, and that it had been the first choice of the majority of MAs and LCM carriers. Another customer said that there was not much difference in offerings, and that Sequel provided the best overall solution and fit. Another customer defined Sequel as a leader among PAS suppliers and one of the best suppliers.

34. One customer told us that, ten years ago, the Sequel system had a sub-optimal aspect and feel and therefore was not intuitive for the user. However the same customer also said it had recently heard positive feedback about Sequel's offering. However, another customer said that, although Sequel had

improved its product, it still needed to improve further by developing a fully web-enabled solution and by making its product simpler. It said that Sequel was a strong contender and that it had developed in the past five years, but its architecture was not as modern as Agencyport's or Xuber's. For example, Sequel was still using a thick client. This customer did see Sequel as a viable option nonetheless. It said that it had a favourable view of Sequel and thought Sequel would be 'nice people to do business with'. This customer also said that [✂].

35. One customer indicated that Sequel was at present 'at the top of the bell curve', but also suggested that Sequel would fall down in time as it would become unable to deliver to all its customers.

36. One customer, instead, said that it had not been approached by Sequel. It also said that there was also a rumour that Sequel was expensive.

NIIT

Products

37. In October 2014 NIIT launched a new suite of products called AdvantageSuite which includes several packages. The PAS in the suite is named AdvantageSuite Navigator and includes policies, claims, message processing and outbound reinsurance (being developed). The suite also includes AdvantageSuite Exact, Geo-coding and Exposure Management solution, and AdvantageSuite Acumen: Analytics engine. NIIT also provides a legacy PAS product, called Subscribe.

Table 4: NIIT's PAS offering

[✂]

Source: NIIT.

38. NIIT said the AdvantageSuite was well received in the market. It provided customers with a system of decision-making, ie that was capable of analysing risk at the point of underwriting as opposed to a system of record-keeping, ie a system purely dedicated to the retrieval of information of information and management of claims. Customers were able to buy one or more combinations of the software packages, and as AdvantageSuite was componentised they were also able to purchase one or more components within the three individual software packages (eg the geocoding engine within Exact).

Customers' views

39. Customers' views of NIIT were mixed. Two customers made positive remarks about NIIT. One of these customers said it did not have concerns about NIIT as a company or its ability to implement systems for several reasons, including that NIIT's system was well structured, that it had established a good relationship with NIIT and that, partly thanks to such relationship, the migration from the previous system was jointly carried out over a short space of time and NIIT acted very professionally. The other customer said that it considered NIIT as one of the two vendors that had the best solutions. Also, another customer mentioned NIIT as one of the three suppliers [✂] it would potentially look into, should it decide to switch supplier.

40. However some customers had reservations about NIIT's reputation on delivery. One customer said that [✂], a Lloyd's MA, had committed to switch to NIIT and to work in partnership with it to develop the product a couple of years ago but the software had been so bad that they had switched back to [✂]. This customer said that this was the reason no-one had gone live with the AdvantageSuite. The same customer also said that it was not convinced that the product was as finalised as NIIT would like it to believe. Another customer confirmed this, and told us that NIIT's product was unfinished.

41. Other customers appeared to be wary of being NIIT's first customer for AdvantageSuite. One customer said it thought the MAs using Subscribe were 'waiting to see who would go [with AdvantageSuite] first and if no-one did, they would change to other systems. Another customer said AdvantageSuite was not being used by anyone in the market and therefore it had ruled NIIT out as it had decided that it was too risky to take on a revamped solution due to the tight timeframe that it was working to.

42. Some customers said that NIIT had not invested sufficiently in the development of its PAS in the past (although we note that NIIT has recently launched a new suite). One customer said that NIIT had not invested in its underwriting system and elements had been out of support. It said that the front end was on an old client server and the middle end had not been updated since the last millennium. The same customer said that there had been no commitment from NIIT to improve its legacy product. Another customer said it wouldn't go near NIIT as [✂]. Finally one customer said that there were some components that were out of support and did not work very well with Windows 7. [✂]

43. Other customers had reservations about NIIT's product offering more generally. One customer said it had not shortlisted NIIT because it only offered a product that was Lloyd's driven, and was not suitable for the LCM;

because it did not have a portal; and had not presented well. However, we note that NIIT's AdvantageSuite is Lloyd's and LCM compliant. Another customer said that NIIT's latest platforms had missed the mark regarding what this customer had been looking for and so had been ruled out.

44. Some customers also had reservations around the contractual arrangements offered by NIIT. One customer said it had not shortlisted NIIT because, [✂].

Northdoor

Products

45. Northdoor's main software products is the NdexInsure Suite for PAS, broking and data warehouse.

Table 5: Northdoor's PAS offering

[✂]

Source: Northdoor.

46. Northdoor said that its main aim was to sell consulting services (and it usually won when the customer liked Northdoor's philosophy). Northdoor offered a shared IP model which allowed customers to integrate the product into their systems landscape, where new customers gained access to what other customers had done, with the option to further develop it. Northdoor also offered many integration services.

47. Northdoor said it was most successful with small MAs, which liked its service profile. It had five full implementations, namely with Torus, Dale (part of Asta), MAP, Ark and WR Berkley. [✂]

Customers' views

48. Customers appeared to consider Northdoor's product as a different proposition from that offered by other PAS suppliers. One customer described Northdoor as more of a consultancy service and it thought its software was a work in progress, with a lot of functionality either still needing to be developed or completely missing. The same customer said that several of Northdoor's modules were not fully developed, [✂], and whilst Northdoor had been willing to work with this customer to develop them, this customer had not had enough time available for this option and needed a system with all the functionality already in place.

49. Another customer said that Northdoor's product was different to the other offerings as it was more modular than most and it tended to develop products

with the users and offer shared ownership. This customer said that Northdoor gave source codes to its customers so that they could run the systems themselves. The same customer said it that it had not included Northdoor on its shortlist. However, it said that, comparatively, it would be more likely to use Northdoor than [✂]. Another customer defined Northdoor's product as an amalgamation of numerous systems to create an overall PAS and said that it was not willing to use this proposition. One customer even said it did not see Northdoor as a systems provider. This customer said that it had used Northdoor as a consultancy service provider and saw this as being Northdoor's core offering. It said that for it to use Northdoor as a PAS provider, it would need to see that Northdoor was more established as a PAS provider in the market.

50. One customer said it thought that Northdoor was a good supplier. However, the same customer also said that, whilst it would talk to Northdoor, it put it on the periphery as it did not believe it had the necessary market penetration. The same customer said that it knew two MAs who used Northdoor, but that they were both small. This customer also said it thought that Northdoor's product was more suited to niche players. The same customer also said that for it to consider a supplier, that supplier would need to have at least five Lloyd's or five LCM customers (although it explained this should not be considered as an absolute figure).

51. Some customers had reservations about the risks involved in developing a PAS with a significant bespoke element in collaboration with Northdoor. One customer said that Northdoor's 'build it yourself' solution would provide customers with a nice system, but it thought that this route would be a lot riskier. Another customer suggested that the maintenance of the PAS, once developed, would be costly as it would be carried out in-house. It said that it would not consider Northdoor because, although it considered it had a reasonable product, it would require 10 to 20 .net developers to develop the product after Northdoor had provided the code and it said it was not willing to make such an investment.

52. One customer also said it did not think Northdoor had invested enough to make its platform a forward step. It would see it as an emergency sideways step.

Other third parties' views

53. Athito said that Northdoor's PAS was different as, instead of buying a system with a licence of ongoing updates, a customer would buy a one-off instance of the offering, and the cost of ownership then fell on the client to maintain. Athito said that in the long run, the absence of licence fees would reduce the

cost for the client but also pointed out that the cost of maintaining the system would have to be incurred internally.[9]

Eurobase

Products

54. Eurobase supplies mainly two solutions, one for MAs and carriers, named synergy2, and one for banks, named siena.[10] The Eurobase solution for the insurance market was the product suite, synergy2, which (according to Eurobase) 'provides a fully integrated, complete, end-to-end insurance administration platform, configurable to your business needs from "paint your own screens" to governance and business process workflow setup'. According to the website, this solution is dedicated to supporting the needs of insurance underwriters, agents and brokers in General Insurance, Reinsurance, Captive Management and the London Market.[11]

Table 6: Eurobase's PAS offering

[✂]

Source: www.eurobase.com.
*Hearing summary, paragraph 3.

Customers' views

55. Customers' views on Eurobase were somewhat mixed. [✂]

56. [✂]

57. [✂]

58. Some of the other customers said that they would give some consideration to Eurobase's product. In particular, one customer said that Eurobase's product was good and noted that it was already in the market. This customer said that when it had attended the demonstration, it had found it hard to fault. However, the same customer also said that the reasons Eurobase had not been shortlisted were that it had not been clear on the strategy for its product going forward and that it did not offer a web portal.

59. Two other customers mentioned Eurobase as one of the suppliers available to them. In particular, one mentioned Eurobase as one of the three suppliers [✂] it would potentially look into, should it decide to switch supplier. The

[9] Athito hearing summary, paragraph 32.
[10] www.eurobase.com.
[11] www.eurobase.com/insurance-software-solution.

other included ‘possibly Eurobase’ in the list of the remaining suppliers of PAS within Lloyd’s after the merger.

60. However, some customers did not perceive Eurobase’s solution as an entirely credible one. One said that it [✂] had found out that its platform did not have all the functionality that it had said it had. It also said that Eurobase’s database was old-fashioned and its software was not capable of undertaking the more modern Lloyd’s functionality. Another customer said that it would not take Eurobase seriously. However, we note that this customer may have considered Eurobase before the launch of its newer synergy2 suite.

61. Two customers did not appear to have clear knowledge of Eurobase. One said it had heard of Eurobase and knew that it was used by one large MA, but its impression was that the product was ‘well out of date’. The other said that it had heard of Eurobase, but it thought it was an old company and was not aware of it having any up-to-date systems.

CSC

Products

62. CSC’s insurance and reinsurance Lloyd’s-compliant PAS product is called ‘SICS’ and is currently used by [✂] Lloyd’s Mas: [✂] and [✂].

63. SICS is a reinsurance and specialist commercial administration package. The software manages inward (assumed) and outward (ceded) reinsurance. SICS is a unified software package that contains modules for P&C business, Life, and Ceded. SICS consists of the following main areas:

(a) Reference data and system parameters/system configuration.

(b) Business partners.

(c) Business (treaty management).

(d) Cessions.

(e) Insurable objects.

(f) Risk accumulation.

(g) Claims handling.

(h) Accounting.

(i) Task management.

Table 7: CSC's PAS offering

[✄]*

Source: CSC.
*[✄]

Customers' views

64. Customers generally said that CSC was a large provider. One customer identified CSC as one of the large suppliers and said that it had solutions that catered for all markets and needs [✄] but also that it had not seen evidence of such solutions working in practice. One customer said it was aware of CSC because it was a big company.

65. Some customers said that CSC's product was very comprehensive but complex to use. One customer said that CSC's product was one of the most comprehensive that it had seen. Consequently, it was unusable and overly complex for its users. It also did not have a portal in any form. Another customer said that it had found CSC's user interface to be poor and clumsy. It said that CSC's PAS was more like a green screen where it was necessary to remember lots of codes. The same customer said that CSC's offering was tailored for back office staff as it was usually bigger companies that used its system. Another customer said that it had not chosen SICS because its user interface was too complex from an underwriter's perspective. Therefore whilst the PAS had strong features, it was not easy to use from a business perspective. The same customer also said that the reason for this was that the PAS had been developed for the back office and was aimed at companies with high-volume transactions, whereas Lloyd's had fewer underwriters doing higher-value business.

66. One customer also indicated that CSC's software was very expensive. One customer also said that [✄].

67. One customer said that [✄].

68. One customer, instead, told us it was not aware of CSC.

Other third party views

69. Athito said that CSC had a very large, very complex, quite extensive package that it was adapting to fit the working practices of London. It did not have a substantial London-based team to provide local support and implementation services.

PAS suppliers without London-market-specific functionalities

Guidewire

Products

70. Guidewire offers a number of insurance products, including:

    (a) **Guidewire PolicyCenter**: a flexible underwriting and policy administration system;

    (b) **Guidewire ClaimCenter**: the industry's first end-to-end, 100% web-based claims system; and

    (c) **Guidewire BillingCenter**: a web-based enterprise application that coordinates, executes, and records receivables transactions for general carriers.

71. Guidewire submitted that [✂].

72. Guidewire also offers two reporting software:

    (a) **Guidewire InfoCenter**: a business intelligence warehouse purpose-built for general insurance which provides information in easy to use formats for business intelligence, analysis, and enhanced decision making;

    (b) **Guidewire DataHub**: an operational data store that unifies, standardises, and stores data from the patchwork of a carrier's systems as well as external sources.

Table 8: Guidewire's PAS offering

[✂]

Source: Guidewire.

73. Guidewire submitted that [✂].

74. Guidewire also submitted that [✂].

75. Guidewire submitted that [✂].

Customers' views

76. Customers provided a consistent view that Guidewire was a respected supplier with a strong product proposition. One customer identified Guidewire as one of the large suppliers and said it had solutions that catered for all markets and needs [✂] but also that it had not seen evidence of such

solutions working in practice. One customer produced a scorecard [✂]. Conversely, one customer did not see Guidewire as a strong vendor of PAS software.

77. Several customers indicated that Guidewire was priced considerably higher than other suppliers in Lloyd's and the LCM. One customer said that Guidewire was extremely expensive and that [✂]. The same customer said that no-one in Lloyd's would invest that much. It also thought that Guidewire was so much more expensive because of the way the system was configured and put together. The same customer said that Guidewire, for example, used a third party [✂] to do the implementation work, which increased the overall cost. [✂]

78. Several customers also identified the lack of Lloyd's and LCM functionalities (as well as a track record of successful delivery in London) as significant gaps. One customer said that [✂]. It said that [✂]. It thought that to be taken seriously it would only need one or two successful implementations. This customer said that [✂] would be important from a reputation perspective as others would be looking at the extent to which the system had worked. Another customer also said that Guidewire would need to have successfully implemented a PAS for a couple of Lloyd's customers before it would be prepared to consider it. Another customer said it would be willing to work with Guidewire but would want to see desire by Guidewire to expand their Lloyd's customer book, and show it had a stable platform (it said the implementation of a similar project would probably require 18 months). Another customer identified the fact that Guidewire was unproven in the London market as a gap. Three customers said they would not consider products without the London functionalities.

79. Some customers also indicated that Guidewire offered a product that was more suited to large clients. One customer said it thought that Guidewire's solution would suit a tier 1 insurance company better and said that it would need to be about 20 times the size it was at present to take Guidewire's product. The same customer said it was not sure how well Guidewire's product actually suited the London market. It said that if one were to look at personal lines insurers who had repeatable processes throughout their whole book, Guidewire's software might make sense and therefore Guidewire lent itself well to companies that operated in markets that were much bigger than Lloyd's/London. Another customer said it thought that the underwriting system was suitable for retail in a large entity, but not wholesale.

80. Also, customers identified other limitations in Guidewire's offering. One customer said that the system had not been multi-currency, had not covered outwards reinsurance and it was unsure how well the component for London

market messaging worked. Another customer said it had not shortlisted Guidewire because of the timescales and costs for implementation.

Other third parties

81. Athito told us that Guidewire had a PAS but as its product was not designed specifically for the London market it needed some adapting if it were to be used in a London market environment. It was also more expensive than direct London market competitors.

Glossary

ACORD	The insurance industry non-profit association dedicated to improving the way insurance companies do business through the use of technology.
AdvantageSuite	**NIIT**’s new **PAS** product.
Agencyport	Agencyport Software Europe Limited, Agencyport Software Europe (Regional Hub) Limited, Agencyport Software Bermuda Limited, and Agencyport Software Europe Offshore Corporation.
Arma	Arma Partners LLP.
Athito	Athito Ltd.
Bespoke PAS	Customers hire a software house or consultancy firm to develop a bespoke **PAS** for them or in collaboration with them. Some may retain the intellectual property, others may buy a basic off-the-shelf product and then customise it.
Binder management	The process of cleaning and managing the **bordereaux** reporting and facility monitoring process.
Bordereaux	Reports by an insurance company listing the risks to which it has been exposed but which it has reinsured. Also the reports sent by **MGA**s with delegated authority back to the **insurer**, usually on a monthly basis, to inform them of their positions in relation to premiums, claims and risks.
Broker	Acts as an intermediary between prospective policyholders and insurance companies.
Bureau	The central processing unit that handles transactions between the market participants. Both **Lloyd’s** and the **LCM** have a central bureau.
Business intelligence and data warehousing	Data warehouses are central repositories of integrated data from one or more disparate sources. Business intelligence products assist customers with data analysis and reporting.
Carrier	**Insurer** and **reinsurer**.

Ceding	Reinsuring some or all of the risk that has been underwritten with a **reinsurer**.
Celent	A research and consulting firm focused on the application of information technology in the global financial services industry.
Componentised	A **PAS** consisting of modules, each of which can be deployed separately or as part of a fully integrated end-to-end PAS.
Coverholders	**MGA**s in the **Lloyd's** market. Authorised to enter into insurance contracts on the **insurer**'s behalf and perform the duties of the insurer.
CSC	Computer Sciences Corporation.
eBaoTech	eBaoTech Corporation.
EDI	Electronic Data Interchange.
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport, an international **EDI** standard developed under the United Nations.
Eurobase	Eurobase Insurance Solutions.
Exposure modelling	Modelling an **insurer**'s exposure if a hypothetical event were to happen, eg floods in a part of England.
Gartner	Research company focusing on the IT industry.
Genius	**Xchanging** legacy policy administration system.
Guidewire	Guidewire Software Inc.
GWP	Gross written premium.
In-house solution	Also self-supply. Where customers develop a **PAS** through their own internal IT department.
Insurer	Takes on risks on behalf of a customer/policyholder in exchange for a fee.
IP	Intellectual property.

Iris	**Xchanging** legacy policy administration system.
IUA	The International Underwriting Association. The representative and market organisation for non-Lloyd's international and wholesale insurance and reinsurance companies operating in the **London market**.
LCM	London Company Market.
Lloyd's	Lloyd's of London. A market where members join together as **syndicates** to insure risks.
London market	A distinct and separate section of the UK insurance and reinsurance industry that is centred on the City of London. It includes the **LCM**, **Lloyd's**, business written overseas (but controlled by London market participants) and **P&I** clubs.
MA	Managing agent. A company set up to manage one or more **syndicates**, on behalf of **Lloyd's** members.
MGA	Managing general agent. A type of **insurer**/**broker** who typically has authority to quote, set conditions, and bind insurance on behalf of an insurer.
NIIT	NIIT Insurance Technologies Ltd.
Non-proportional reinsurance	The **reinsurer** does not take a proportion of the entire risk under a policy. For example, in 'excess of loss' reinsurance, the primary **insurer** takes 100% of the risk up to a given level and the reinsurer takes all or an agreed proportion of the risk above that level.
Northdoor	Northdoor plc.
OPEN Core	**Agencyport**'s **PAS** are called 'OPEN Core: **Lloyd's**', and 'OPEN Core: Commercial'.
Packaged PAS	A **PAS** that is commercially available 'off the shelf', as opposed to customised software that fulfils the same functions as packaged PAS, but that is developed in-house and/or with the help of outside consultants.
PAS	Policy administration system(s).
P&I	Protection and indemnity. P&I clubs provide international maritime insurance. They are mutual insurance associations that provide risk pooling, information, and representation for

	their members, typically ship owners, ship operators or demise charterers.
Proportional reinsurance	The **reinsurer** takes an agreed proportion of the entire risk under a policy.
Reinsurer	Takes on a share of risks from an **insurer**, in return for a share of the original premium received from the policyholder.
SaaS	Software as a service – the service is ‘rented’ to the customer as opposed to the licence being sold to the customer.
Sequel	Sequel Business Solutions Limited.
Specialty insurance	The insurance of complex and/or unusual risks.
Syndicate	A group of members who provide capital and join together to insure and share risk at **Lloyd’s**.
THL	Thomas H. Lee Partners – a private equity firm.
Underwriter	Individual who conducts detailed risk assessments of potential clients to determine the appropriate premium and terms for the policy.
Xchanging	Xchanging plc. Xchanging Holdings Limited and Xchanging Inc. are wholly owned subsidiaries of Xchanging.
Xuber	Insurance software division of **Xchanging**, its products are branded ‘Xuber for Insurers’ and ‘Xuber for Reinsurers’. Following the merger, the OPEN Core platform has been rebranded Xuber Express.