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Anticipated acquisition by Thales UK Limited of nCipher plc

ME/3780/08

The OFT's decision on reference under section 33(1) given on 23 September 2008. Full text of decision published 6 October 2008.

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**Please note that square brackets indicate figures or text which have been deleted or replaced at the request of the parties for reasons of commercial confidentiality.**

**PARTIES**

1. **Thales UK Limited (Thales)** is wholly owned by Thales S.A, a French international electronics and systems group with activities in the defence, aerospace and security sectors worldwide. In the UK, Thales provides information systems to organisations in all areas of government, defence, aerospace, banking, finance, energy and air travel. In addition to supplying defence electronics systems, Thales provides expertise in secure network communications and provides the security technology used to protect credit/debit card transactions.
2. **nCipher plc (nCipher)** is a UK-listed company. The firm provides encryption and key management solutions comprising net security products, technologies and services to public and private enterprises and institutions through a network of partners and offices in the UK, Europe, Asia-Pacific rim and the US. nCipher's UK turnover in 2007 was [ ].

## **TRANSACTION**

3. As a result of the proposed transaction, Thales will purchase the entire issued share capital of nCipher. Thales has offered consideration of 300 pence per share to nCipher's shareholders. Based on the number of outstanding shares being 16,905,534, this values the equity share capital at approximately £50.7 million.
4. The transaction is also subject to the provisions of the City Code on Takeovers and Mergers and will be implemented by way of a Court approved scheme of arrangement under Part 26 of the Companies Act 2006.
5. The parties notified the transaction to the Office of Fair Trading (OFT) on 28 July 2008. The administrative deadline for the OFT to decide whether to refer the merger to the Competition Commission (CC) is 23 September 2008.
6. The transaction was also notified to, and subsequently cleared by, the relevant authorities in Germany and Austria.

## **JURISDICTION**

7. As a result of this transaction, Thales and nCipher will cease to be distinct. The parties overlap in the supply of hardware security modules (HSMs) and the share of supply test in section 23 of the Enterprise Act 2002 (the Act) is met as the parties have a combined share of more than 25 per cent in relation to the production and supply of HSMs in the UK. The OFT therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

## **MARKET DEFINITION**

8. Both Thales and nCipher are active in the IT cryptography industry. Cryptography is used to protect the security of IT systems by encrypting the data transmitted, by providing a mechanism to enable recipients of that data to verify that the data has not been modified between transmission and receipt, and by providing a means of authenticating identities.

These various cryptographic processes can be carried out within a mainframe server or PC using software applications. Both parties provide devices commonly known as HSMs.

9. HSMs are hardware units that carry out the cryptographic processes in a highly secure, self-contained module. By isolating the cryptographic processes in a separate module it is possible to limit access to the keys more effectively, thereby increasing the level of security.
10. In the OFT's decision in 2006 on the anticipated acquisition by Safenet Inc of nCipher plc<sup>1</sup>, HSMs were defined as follows:

'An HSM comprises tamper resistant computer hardware protecting software which manages the encryption and decryption of data. HSM enables the secure exchange of information in order to protect the privacy of confidential information and guarantee the authenticity of electronic communications. The main characteristics of HSMs are a high level of encryption (FIPS 140-2 level 33) and a fast processing speed'.
11. The speed and functionality of HSMs can vary depending on their proposed use. According to the parties, the supply of HSMs should be further subdivided into two distinct areas: General Purpose HSMs (GP HSMs) and Payment HSMs.
12. GP HSMs are typically used to accelerate SSL processing (Secure Sockets Layer- SSL is used to secure internet connections for online sites). Essentially, they encrypt data before transmitting it to the web browser from the server, and they enable the browser to authenticate the server before transmitting data to it. In addition, GP HSMs are used to protect stored data, such as personal information, intellectual property, commercially sensitive data and legal information (database encryption). Finally, they are used in the secure creation and distribution of keys for network appliances, applications, personal tokens and smart cards (key management).
13. Payment HSMs are used by banks, card issuers, card payment schemes (like Visa and MasterCard) and financial transaction processors to provide

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<sup>1</sup> OFT decision on the anticipated acquisition by Safenet Inc of nCipher plc, 30 March 2006, para 6 (the 'the Safenet decision').

security for payment transactions carried out electronically, for example, using debit or credit cards and PoS (point of sale) systems.

14. In the Safenet decision the OFT defined Payment HSMs as follows:

'Payment HSMs have been used to allow the secure flow of information in financial transactions and are mostly used by banks and financial organisations.'

## **TYPES OF HSM**

### **Demand-side substitutability**

15. According to the parties, GP HSMs are in a separate product market to Payment HSMs, because they do not offer substitutable functionality, are priced quite differently, and have different lifecycles before requiring replacement: GP HSMs do not perform the payment processing functions of a Payment HSM and are instead used in other applications across a range of sectors. For instance, one of the earliest applications of GP HSMs was in public key infrastructures (PKI). A PKI HSM enables users of unsecured public networks such as the internet to exchange data securely and privately through the use of a public and private cryptographic key pair that is obtained and shared through a trusted authority.<sup>2</sup> The parties submit that these differences in performance, purpose and price imply a lack of demand-side substitutability between the two types of HSM. Furthermore, the parties argue that, if the OFT were to treat the two types of HSMs as offering substitutable functionality, then it must follow that, by the same logic, a much wider range of HSM encryption products (TPMs, Smartcard HSM, Network Encryptors, Encrypting PIN pad) should also be included within the candidate product market.

16. In contrast, a competitor submitted that there is a degree of demand-side product substitution. In particular, it argued that Payment HSM customers could buy and use its GP HSM rather than have developed a bespoke Payment HSM offering. In addition the same third party stated that

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<sup>2</sup>In the Safenet Decision, the OFT defined PKI HSMs as: *'to date PKI HSMs have been used to allow the secure flow of information between members of the same organisation or over the internet and are mainly used in internet commerce operations'*.

payment applications customers are now increasingly using software more closely based on GP HSM software.

### **Supply-side substitutability**

17. The parties further argue that it is extremely time consuming and expensive to move from the supply of GP HSMs to the supply of Payment HSMs (or vice versa). In particular, they argue that such a switching of production would require a commercially unjustifiable investment on resources and internal technical development, considering that the technology used in GP HSMs is different from the one used in Payment HSMs.
18. Conversely, some comments from third parties, in particular from one competitor, indicated that Payment and GP HSMs could be considered to be substitutable from the supply-side perspective and therefore should potentially be considered in the same product market. First, the OFT was told that the technology required to create a Payment or a GP HSM is very similar and that both types of HSMs fundamentally perform the same encryption/decryption function. A third party argued that HSMs (Payment and GP) are based on the same technology and that while there is a difference in the software loaded into a HSM to customise it for use as a GP or Payment application, the vast majority of the software is identical. In addition, some competitors argued that GP and Payment HSMs had minor, if any, hardware differences. Second, the fact that some competitors operate in both fields and developed both types of HSMs internally was argued to be indicative that supply-side substitution is feasible. In particular, a number of competitors opined that it was possible to switch production for GP to Payment HSMs and vice versa, although considerable costs and time would be required.
19. In particular, one competitor stated that switching production from GP HSM to Payment HSM will take up to twelve months with £1 million costs. Other competitors confirmed that the switching from GP to Payment HSMs was possible but could be lengthy and involve considerable costs. In addition, the same competitors argued that switching from Payment to GP HSMs would be possible but not trivial. However, one supplier stated that the switching could be immediate and with no costs. The majority of suppliers providing both GP and Payment HSMs developed both types of HSMs internally without the need to acquire another existing GP or Payment HSM supplier.

## Characterisation of overlaps between the parties' HSM products

20. Consistent with their view of a lack of demand- and supply-side substitutability, the parties claim to be active in essentially different markets. nCipher sells GP HSMs and key management systems, storage encryption, time stamping and developer solution products used in developing secure IT systems. The parties argued that nCipher did not supply Payment HSMs. By contrast, Thales supplies Payment HSMs and has very limited sales of GP HSMs, which constitute a very small component of Thales' overall business.
21. The parties' characterisation was supported by a number of third parties, who expressed the view that Thales and nCipher fundamentally operate in different markets, but contradicted by others: a significant number of third parties said they believe that the parties are individually active in both the supply of GP HSMs and Payment HSMs. Some of this confusion related specifically to nCipher's Payshield product, and over whether this product is in fact a Payment HSM or a GP HSM (or neither). According to nCipher, Payshield has effectively been removed from the market place, and even when it was offered it fulfilled a very different purpose from the device that operators generally considered to be a Payment HSM, but some customers and competitors believe it was a Payment HSM.
22. The OFT reviewed the parties' internal documents to verify which view of the marketplace was supported by contemporaneous written evidence. According to relevant nCipher internal documents, Payshield served the needs of a subset of emerging segments within the payment sector, in circumstances where the 'legacy market' for Payment HSMs was highly customized and essentially out of reach for nCipher. Other documents corroborate nCipher's statements to the OFT that Payshield does not cover all the functions that traditional Payment HSMs do<sup>3</sup>. Furthermore, according to the data provided by the parties, [ ].
23. Thales internal documents suggested that nCipher was a competing supplier in the supply of Payment HSMs, but not a significant one<sup>4</sup>. A competitor argued that in addition, a number of third parties, including

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<sup>3</sup> nCipher internal document: [ ].

<sup>4</sup> Thales internal document: [ ].

competitors and customers, considered Payshield to be a Payment HSM. It was argued to the OFT that, even if the recent sales of Payshield have been minimal, this evidence is supportive of the argument that nCipher has the technological capability to develop further Payment HSMs (even if not necessarily the more traditional or 'legacy' Payment HSM products).

## **Conclusion**

24. In sum, there was considerable disagreement across the industry on the definition of and distinction between Payment and GP HSMs, the degree for demand- and in particular supply-side substitutability, and in which category some of the merging parties' products, in particular nCipher's Payshield, should be classified. However, it has not been necessary for the OFT to reach a definite view as to whether Payment and GP HSMs constitute separate markets and where the distinction lies because the merger does not raise horizontal competition concerns irrespective of market delineation, because the weight of evidence is that the parties are not close actual (or potential) competitors in HSMs, moreover, conglomerate effects concerns are speculative and unsupported in this case. In terms of using market definition as means to calculate market concentration and predict merger effects, while the OFT therefore considers it prudent to consider the HSM segments individually and combined, it attaches greater weight to share data in respect of the individual categories, as the more reliable relative guide to competition and the impact of the merger.

## **Geographic scope**

25. The parties considered the relevant geographic market to be wider than national in this case, if not worldwide. In particular, the parties argued that HSM products are globally homogeneous and that all principal suppliers including the merging parties themselves operate worldwide.
26. The information received from third parties on this respect is mixed. Six customers appeared to choose, or at least hold preferences, for HSM suppliers with local representation in the UK. Two customers argued that the geographic location of the supplier was irrelevant, or at least that it was not the most important factor to consider when choosing a supplier of HSMs. In addition, competitors confirmed that they operated worldwide

and that the supply of HSM was wider than national and likely to be at least European-wide, if not global.

27. The OFT was told that there are different national accreditations standards that HSM products need to satisfy in order to be sold in each country. The parties clarified that the accreditation standards in the UK are lower than in other countries such as Germany, and that therefore the UK market is more amenable to imports.
28. On the basis of the evidence submitted, the OFT's on balance view is that the relevant geographic market, certainly in terms of manufacture and supply of HSMs, is likely to be wider than the UK, and in all probability global. However, there is an issue as to whether UK customer preferences dictate a UK-based presence. Accordingly, the OFT considered it prudent to consider the impact of the merger with reference to a UK geographic lense, as well as wider European and global candidate geographic market definitions, and, as set out below, concludes that no concerns arise irrespective of market definition adopted.

## **SHARE DATA**

29. As discussed above, the parties argued that there is no (or very limited) overlap between them. Consistent with the argument that the supply of HSMs is divided into GP HSMs and Payment HSMs, the parties provided the OFT with market shares of each HSM segment separately. For convenience, this section discusses European and global share data first, and spends the remainder of the analysis on the narrowest conceivable geographic market definition, the UK.

### **European and global share data**

30. According to the data provided to the OFT by the parties, the parties' combined shares of supply and the increments for each HSM segment, as well as when combining both types of HSMs, on a European or global basis are small. In addition, according to a complainant's data the parties' combined share of supply for Payment HSMs is [70-80] per cent and for the GP HSMs [35-45] per cent, but, critically, the increments for each HSM segment on a European and global basis are low. If both types of HSMs are combined, the complainant's estimates are that the worldwide combined share of supply of the parties is [50-60] per cent with an increment of [15-

25] per cent. Based on the mixed evidence received in respect of product substitutability, however, the best view of the share data is that more weight should be attached to the share data in the individual segments, and less weight to the combined share figures, which imply that every unit of sales of a Payment HSM as equivalent to every unit of sales of a GP HSM, in terms of the immediacy of the competitive constraint placed on another party's sales. This approach, without taking these figures in the context of overall evidence, runs a great risk of overstating the degree of competitive interaction between the products that both parties have actually historically been selling to UK customers in any significant volumes.

31. In light in particular of the low increments caused by the merger at European and global level, the clearance of the merger by other European competition authorities, and the more detailed evidence considered in respect of UK customers, below, the OFT does not believe the merger raises competition concerns at wider than national level or in any event that might be regarded as raising a realistic prospect of a substantial lessening of competition in the UK (in the context of a wider market).

#### **UK-based share data**

32. The parties have high combined shares of supply ([65-75] per cent) in the Payment HSM segment. However, considering the minimal presence of nCipher in Payment HSMs – nCipher made no sales of Payment HSM (Payshield) in the last financial year - the increment is small or even non-existent, even if Payshield is considered a Payment HSM. In addition in the GP HSM segment, the parties' combined market share is [35-45] per cent although the increment ([0-10] per cent) is minimal given the small presence of Thales in GP HSM.
33. The OFT received different share estimates from one competitor. Although the figures showed a significantly higher combined share [65-75] per cent in the GP HSM segment, the increment remained relatively small [0-10] per cent. Similarly, in the Payment HSM segment, the same competitor estimated that the combined entity had a higher combined share [70-80] per cent, although the increment (nCipher) was still relatively small [0-10] per cent. However, that competitor did not provide any supporting evidence to enable the OFT to reconcile this figure with that provided by the parties. For example, it did not provide further details or explain its [0-

10] per cent estimate for nCipher in Payment HSMs. (As noted above, even if sales for Payshield are taken into account, nCipher's share of Payment HSMs was zero in the last financial year).

34. Therefore, according to the data provided and in particular the very small increment in either HSM segment (on the basis of all estimates), the OFT does not believe that the merger raises competition concerns in either HSM segment.
35. However, as discussed above, the evidence available is not conclusive that the supply of HSMs should be split between GP and Payment HSMs and therefore on a cautious approach the OFT, without necessarily accepting this frame of reference, also calculated the parties' combined share for the overall supply of HSMs. In particular, the OFT combined the two different sets of share estimates, one provided by the parties and the other by a competitor. In particular, for the calculation of market shares for the overall supply of HSMs, the OFT used the parties' estimates for their combined market shares and in addition used a competitor's best estimates for the third parties' market shares.
36. Post-merger, the parties' combined share in the supply of HSMs in the UK is approximately [55-65] per cent (increment of [30-40] per cent). These figures are based on the notion that HSMs (and nothing else) are part of a single market. The other main HSM suppliers in the UK are Safenet (which would have a share of [5-15] per cent), IBM and Sun Microsystems.
37. Based on this share data, it seems that the parties are the first and second largest suppliers of HSMs in the UK, with more than [40-50] per cent of sales and its closest competitor, Safenet, in terms of share of supply with approximately [5-15] per cent. However, as set out above, the OFT attaches substantially more weight to the share data in respect of the individual categories, than on the categories combined, when considering other evidence on the closeness of the competition between the merging parties.

## **UNILATERAL EFFECTS**

### **The parties are not close competitors**

38. The share data and other evidence clearly demonstrate that the parties principally operate in different HSM segments (or indeed relevant markets). and have had limited 'real-world' commercial success in the segment in which they are not the leading UK supplier, if they are regarded as having an overlap product that, technically speaking, may be substitutable with the other party's product. In particular:
- Thales has a strong presence in Payment HSMs. It has been supplying a GP HSM (WebSentry), but it has not been widely sold [ ].
  - nCipher is mainly a supplier of GP HSMs. It has introduced Payshield, which, as analysed above, some third parties consider to have Payment HSM functions, but nCipher made no sales of this product in the UK in the last financial year. Even if nCipher's Payshield is considered to cover some Payment HSM functions, as argued by a number of third parties and reflected in some of the parties' internal documents, it still cannot be considered the closest alternative for Thales Payment HSMs.
39. A small number of customers have told the OFT that they consider Thales and nCipher to be directly competing and should be considered as each other's closest competitors. Two competitors and a number of other customers stated that the merging parties do not compete closely and that their product lines are complementary or used for different functions, rather than competing with each other. In particular, one competitor stated that there was very limited product overlap between the parties, as Thales and nCipher appear not to have made serious inroads into the GP and Payment HSM sector respectively.
40. According to the parties' pre-transaction internal documents (that is, documents prepared in the ordinary course of business and before the transaction was envisaged by either party), Thales and nCipher do not consider each other as their closest competitor. In particular, in one of Thales's documents it is said that 'the two companies rarely compete. Thales is a weak/minor supplier of GP HSMs (where nCipher is strong), and is strong supplier of Payment HSMs (where nCipher is a minor/weak supplier)<sup>5</sup>. [ ].

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<sup>5</sup> Thales internal document: [ ].

41. On the balance of the evidence available to it, the OFT believes that the parties' products do not constitute each other's next best alternatives.

**Other credible suppliers such as Safenet, IBM, HP, and Sun are closer (or at least as close) competitors**

42. There are a number of alternative suppliers who would appear to be closer competitors to each of the parties, in each of their respective areas of strength, than they are to each other. Customers of Thales Payment HSMs would not consider nCipher their next-best or only alternative to Thales, given suppliers such as IBM, Atalla-HP and Safenet, while customers' next-best alternative to nCipher is likely to be Safenet, who, in respect of GP HSMs and PKI in particular, was found by the OFT in 2006 to be the closest competitor to nCipher and vice versa,<sup>6</sup> other competitors variously identified as credible suppliers that customers would consider were IBM, Utimaco, and Sun Microsystems, all of whom have brand reputations and an IT hardware and/or software presence in the UK as globally, even if their recent historical sales volumes in HSM in the UK has not been high.
43. Given that the OFT considers that the merging parties are not close competitors given their product lines and therefore a merger between the two will not prevent customers from switching to the best rival product in the event of a post merger price increase. In this case, Thales would not appear to have the post-merger incentive to raise price of either its Payment HSM or nCipher's GP HSM product because the beneficiaries of a price rise would be its major competitors, and it would not recoup sufficient lost sales by virtue of its common ownership of both product lines to make a price increase profitable. Analogous considerations apply in respect of product quality and service, and innovation.

**Entry, expansion and buyer power**

44. Given that the evidence suggest that the parties are not close competitors, and that each will remained constrained from other substantial and credible suppliers in GP and Payment HSMs, respectively, nothing turns on whether de novo entry would be timely, likely and sufficient to replicate any

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<sup>6</sup> See the Safenet decision, based principally on customer views and available bidding data.

competition lost by the merger, or on whether customers could sponsor such entry, self-supply or otherwise exercise buyer power.

## CONGLOMERATE EFFECTS

45. The OFT also considered whether the merger could lead to a realistic prospect of a substantial lessening of competition as a result of any potential conglomerate effects. Conglomerate mergers involve firms that operate in different products markets. As the OFT's Substantive Assessment Guidance for mergers (OFT Guidance) makes clear, such mergers rarely lead to a substantial lessening of competition as a result of their conglomerate effects.<sup>7</sup> In recognition of this fact, the European Court of Justice has made it clear that the evidentiary standard for conglomerate mergers is higher than for horizontal mergers.<sup>8</sup>
46. In a small number of cases, usually where the products acquired are complementary to the acquirer's products, potentially adverse effects can be identified to so-called 'portfolio power'. When the market power deriving from a portfolio of brands exceeds the sum of its parts, a firm may be said to have 'portfolio power'. This may enable the firm to exercise market power in individual markets more effectively, with the result that competition is substantially lessened. Portfolio effects may have anti-competitive effects where they directly affect market structure, increase the feasibility of entry deterrence strategies and/or eliminate the competitive constraint imposed by firms in neighbouring markets.<sup>9</sup>
47. In the present case, Thales and nCipher could be considered, as analysed above, as operating in two separate markets, where the products are complementary, rather than competing with each other. Therefore, the OFT examined whether post merger adverse effects could be identified related to portfolio power.

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<sup>7</sup> See paragraph 6.1, see also Commission Notice Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, paragraph 92.

<sup>8</sup> The European Court of Justice stated that the evidence on which the Commission relies must be particularly convincing, given that the chains of cause and effect between the merger and the predicted adverse effects 'are dimly discernible, uncertain and difficult to establish' Case C-12/03 P Commission v Tetra Laval BV [2005] ECR-I-987, [2005] 4 CMLR 8, paragraph 44.

<sup>9</sup> See paragraph 6.2 of OFT Guidance.

48. Post merger, the new entity will be the largest supplier of GP and Payment HSMs in the UK with shares of supply of [65-75] per cent and [35-45] per cent respectively in the two HSM segments.
49. Some very generalised concerns were raised by third parties regarding the conglomerate effects of the merger. One competitor articulated a more specifically-formulated argument, raising the prospect of Thales and nCipher bundling GP and Payment HSMs products together, by linking the products to those customers who buy both types of HSMs. That complainant argued that the parties will be able to offer discounts for Payment HSMs to those customers wishing to buy GP HSMs and to offer customers Payment HSMs on the proviso they obtain their GP HSMs (tying). As a consequence, according to that same rival, the parties' ability to link sales of GP and Payment HSMs would effectively exclude other suppliers from the market.
50. However, tying and bundling products are not necessarily anti-competitive practices, are commonly used by firms with a portfolio of products, and can often lead to lower prices for bundled products, and other customer benefits. Such commercial strategies can cause competition concerns only if they reduce the competitive pressure on the merging parties by reducing the ability or the incentive of the rival firms to compete. Such conduct is likely to result in adverse effects on competition only if it would be difficult for rival firms or new entrants to provide competing bundles, and be unable to constrain the behaviour of the merged entity which could then engage in profitable price increases, output reductions or other profitable strategies. For the reasons set out below, the OFT does not consider that such adverse effects will arise in this case.
51. GP and Payment HSMs are not normally bought simultaneously, as their functions and life-span differ. This was reflected in the fact that the OFT found no evidence of bundling or tying notwithstanding that a number of firms currently supply both GP and Payment HSMs, which in principle would present bundling opportunities for industry suppliers already. In addition, the OFT received no evidence that customers perceive the 'one-stop shop' strategy a better option in terms of negotiating prices and discounts such that suppliers unable to offer a bundle would suffer exclusionary effects.

52. In light of the above, it is far from clear whether bundling or tying would be a successful strategy in practice. The OFT, however, considered whether any adverse effects might arise were the merged entity to engage in any bundling or tying practices, and concluded this would not be the case - the OFT notes that the Thales/nCipher scheme document states that the merged entity will be able to leverage each party's position in HSMs although it does not specify how this might occur<sup>10</sup>. In this regard, a number of other firms already present in the supply of HSMs would be capable of offering competing bundles, should their customers require it, and therefore would constrain the behaviour of the merged entity.
53. Indeed, in the absence of compelling evidence to the contrary, the OFT would consider that any such bundling or tying of complementary products, should such a strategy be pursued by the merged entity, would, if anything, be beneficial to customers.
54. Furthermore, a large number of customers only purchase GP HSMs (Payment HSMs are mainly bought by financial institutions) and all GP HSMs suppliers will be able to supply such customers under the same pre-merger competitive conditions. Therefore, bundling or tying cannot apply to customers purchasing only GP HSMs and so such a strategy could only be an issue for customers who also purchase Payment HSMs. Finally, GP and Payment HSMs suppliers are not capacity-constrained, and the weight of evidence suggests they could target customers with a cheaper single-product proposition to deter the merged entity's bundling strategy.
55. Therefore, according to the evidence provided, the OFT is not persuaded that the conglomerate effects of the merger raise concerns sufficient to sustain a belief in a realistic prospect of a substantial lessening of competition.

### **THIRD PARTY VIEWS**

56. The OFT received comments and views about the merger from a large number of third parties, including competitors and customers of the merging parties.

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<sup>10</sup> Section 3 of the Thales/nCipher scheme document.

57. Three competitors raised concerns on the transaction. In particular, they expressed the view that the merger would allow the new entity to bundle GP and Payment HSMs and effectively drive them out of the market. However, two competitors acknowledged that the parties were supplying products which complement rather than compete with each other and that they did not see the parties as being close competitors.
58. One competitor was particularly vocal in its concerns. Its primary concern was that the merger would reduce by one the number of credible suppliers of HSMs to UK customers and that it would eliminate competition between the two largest UK HSM suppliers. In the alternative, the same competitor argued that the merger would raise conglomerate issues, in other words that the parties supplied complementary as opposed to competing products.
59. A minority of customers raised concerns about the merger. Those that did argued that the merger would limit the choice of HSMs suppliers in the UK available to them. However, these customers did not substantiate that the parties were in fact competitors and some of them were confused with regards to the differences between GP and Payment HSMs.
60. The concerns expressed by third parties have been dealt with above. Some concerns were not merger-specific.

## **ASSESSMENT**

61. The parties overlap in the production of HSMs. On a narrow market definition considering GP and Payment HSMs in separate markets, the parties combined share of supply is around [65-75] per cent for Payment HSMs but with a small increment ([0-10] per cent or less) and [35-45] per cent (or [60-70] per cent according to a complainant's estimates) for GP HSMs with an increment of only [0-10] per cent, on a wide market definition including both types of HSMs, the parties' combined share of supply is [55-65] per cent with an increment of [30-40] per cent, but these figures do not appear accurately to capture the competitive dynamics and likely merger effect in the UK supply of HSM products, because although the parties are the two largest suppliers of HSMs in the UK, they are not sufficiently close competitors to raise concerns.

62. This conclusion is supported by the low increments to shares of supply in the two individual HSM product categories considered, internal documentary evidence, and the views of many market participants, all of which suggests that the parties are not close competitors, that the merger will not remove an important competitive constraint, and that pricing and other supply terms of each of the product lines will be constrained to the pre-merger level by credible internationally-active rivals such as Safenet, IBM, HP and Sun.
63. Some conglomerate concerns were expressed by third parties, relating to ability of the parties to bundle GP and Payment HSMs and effectively drive rival firms out of the HSM market before raising their prices. However, the evidence before the OFT suggests that the merging parties will not have the ability to foreclose the HSM market through bundling their products, because bundling across the categories does not appear common practice, and to the extent it is or could become so, there are a number of suppliers of both types of HSMs who are equally capable of bundling their own products, or offering single-product propositions to customers of GP HSMs, without the risk of harm to UK customers.
64. Consequently, the OFT does not believe that it is or may be the case that the merger may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

## **DECISION**

65. This merger will therefore not be referred to the Competition Commission under section 33(1) of the Act.