

Completed acquisition by Element Materials Technology Group of Exova Group plc

Decision on relevant merger situation and substantial lessening of competition

ME/6695/17

The CMA's decision on reference under section 22(1) of the Enterprise Act 2002 given on 1 September 2017. Full text of the decision published on 14 September 2017.

Please note that [X] indicates figures or text which have been deleted or replaced in ranges at the request of the parties for reasons of commercial confidentiality.

Contents

	<i>Page</i>
SUMMARY	2
ASSESSMENT	4
Parties.....	4
Transaction	4
Jurisdiction	4
Counterfactual.....	5
Frame of reference	5
Competitive assessment.....	12
Third party views.....	23
Decision	24

SUMMARY

1. On 29 June 2017, Element Materials Technology Group Limited (**Element**) acquired Exova Group plc (**Exova**) (the **Merger**). Element and Exova are together referred to as the **Parties**.
2. The Competition and Markets Authority (**CMA**) believes that it is or may be the case that the Parties' enterprises have ceased to be distinct and that the turnover test is met. The four-month period for a decision has not yet expired. The CMA therefore believes that it is or may be the case that a relevant merger situation has been created.
3. The Parties overlap in Testing, Inspection and Certification (**TIC**) services; in particular, in the supply of Testing services to the aerospace and the oil and gas industry, in the UK.
4. The CMA assessed how closely the Parties competed pre-Merger with one another and whether sufficient competition would remain post-Merger or whether concerns might arise from the loss of Element or Exova as an independent competitor.
5. With regard to the supply of TIC services generally, the CMA did not identify concerns. With regard to the supply of Testing services specifically to the aerospace and the oil and gas industry, the CMA also believes that the Merger will not give rise to concerns. Specifically:
 - (a) With regard to the **supply of Testing services to UK aerospace customers nationally**, evidence from third parties and the Parties' internal documents indicate that Element and Exova have different capabilities in the UK and are not particularly close competitors. In addition, there are credible alternative suppliers in the UK and also suppliers in the EEA which pose a constraint on the Parties. The majority of customers who were contacted did not express any concerns.
 - (b) With regard to the **supply of Testing services to UK oil and gas customers nationally**, evidence from third parties and internal documents indicate that there are credible alternative suppliers in the UK and that suppliers located in the EEA also pose a constraint on the Parties. Most customers that responded to the CMA's investigation submitted that they were not concerned as they could procure services from other suppliers.
6. The CMA also received specific concerns from some third parties with regard

to the supply of certain Testing services to oil and gas customers in Scotland. However, the CMA did not identify competition concerns on this narrower geographical frame of reference, given the number of competitors based in Scotland and in the rest of the UK which offer similar services to the Parties. Most customers that responded to the CMA's investigation that also procure these services in Scotland, submitted that there were alternative providers to the Parties. Moreover, Element and Exova have different capabilities in the UK with respect to certain specific tests which are procured by customers in Scotland (see paragraphs 73 to 76 below).

7. The CMA believes that, for the reasons set out above, the Merger does not give rise to a realistic prospect of a substantial lessening of competition (**SLC**) as a result of horizontal unilateral effects.
8. The Merger will therefore **not be referred** under section 22(1) of the Enterprise Act 2002 (the **Act**).

ASSESSMENT

Parties

9. Element is a laboratory-based materials and product Testing services provider with a focus on the aerospace, oil and gas and automotive end markets. The turnover of Element in 2016 was [X] worldwide and [X] in the UK.
10. Exova is also a laboratory-based Testing services group, which tests and advises on the safety, quality and performance of products, systems and operations. Exova operates across 11 customer sectors, namely: aerospace, oil and gas, calibration, construction, defence, environmental, fire building products and certification, food, industrials, pharmaceuticals, and transportation. The turnover of Exova in 2016 was [X] worldwide and [X] in the UK.

Transaction

11. The acquisition vehicle for the Merger is a wholly-owned indirect subsidiary of Element, Greenrock Bidco Limited (**Greenrock**). Greenrock acquired the entire issued ordinary share capital of Exova.
12. The Parties informed the CMA that the Merger was also the subject of review by competition authorities in Germany¹, Sweden² and the USA³. Following receipt of the applicable non-UK regulatory clearances, the Merger completed on 29 June 2017.

Jurisdiction

13. As a result of the Merger, the enterprises of Element and Exova have ceased to be distinct.
14. The UK turnover of Exova exceeds £70 million, so the turnover test in section 23(1)(b) of the Act is satisfied.
15. The Merger was first made public on 19 April 2017 and completed on 29 June 2017. The four-month deadline for a decision under section 24 of the Act is 29 October 2017.

¹ Clearance was received on 16 June 2017.

² Clearance was received on 15 May 2017.

³ The Waiting Period under the Hart–Scott–Rodino Antitrust Improvements Act of 1976 in the USA expired on 2 June 2017.

16. The CMA therefore believes that it is or may be the case that a relevant merger situation has been created.
17. The initial period for consideration of the Merger under section 34ZA(3) of the Act started on 14 July 2017 and the statutory 40 working day deadline for a decision is therefore 8 September 2017.

Counterfactual

18. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual). For completed mergers the CMA generally adopts the pre-merger conditions of competition as the counterfactual against which to assess the impact of the merger. However, the CMA will assess the merger against an alternative counterfactual where, based on the evidence available to it, it believes that, in the absence of the merger, the prospect of these conditions continuing is not realistic, or there is a realistic prospect of a counterfactual that is more competitive than these conditions.⁴
19. In this case, there is no evidence supporting a different counterfactual, and the Parties and third parties have not put forward arguments in this respect. Therefore, the CMA believes the pre-Merger conditions of competition to be the relevant counterfactual.

Frame of reference

20. Market definition provides a framework for assessing the competitive effects of a merger and involves an element of judgement. The boundaries of the market do not determine the outcome of the analysis of the competitive effects of the merger, as it is recognised that there can be constraints on merger parties from outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others. The CMA will take these factors into account in its competitive assessment.⁵

⁴ [Merger Assessment Guidelines](#) (OFT1254/CC2), September 2010, from paragraph 4.3.5. The [Merger Assessment Guidelines](#) have been adopted by the CMA (see [Mergers: Guidance on the CMA's jurisdiction and procedure](#) (CMA2), January 2014, Annex D).

⁵ [Merger Assessment Guidelines](#), paragraph 5.2.2.

Product frame of reference

The supply of TIC services

21. Element and Exova overlap in the provision of TIC services, these include:
- (a) **Testing** refers to the execution of tests, typically in a fixed laboratory, on materials, products or samples. It incorporates a broad range of services across different stages of product and industry lifecycles.
 - (b) **Inspection** services involve inspection of facilities and products or audits of systems or processes to ensure they comply with a particular set of standards.
 - (c) **Certification** services involve the provision of a certificate which enables the customer to demonstrate that products, processes, systems or services are compliant with national and international regulations and standards (eg ISO 9001 certificate).
22. The supply of TIC services has been considered most recently in the proposed merger between Stiftelsen Det Norske Veritas and Germanischer Lloyd SE (**SDNV/Germanischer**).⁶ In this case, the European Commission adopted the supply of TIC services as the relevant product market. Nevertheless, the European Commission assessed the merger considering the overlapping business segments in maritime, renewable energy (and wind turbine certification) and oil and gas separately because it was considered that the distinction between the segments lay in the level of technical knowledge and capabilities in each sector.⁷
23. In *SDNV/Germanischer*, the European Commission found that no further segmentation of TIC services in oil and gas was appropriate either according to the type of service or separately between offshore and onshore⁸ segments. It looked at TIC services, mainly because it received evidence that such services are often interlinked and are offered as one service. However, the Commission segmented renewable energy TIC services further and assessed the transaction on both i) TIC services in the renewable energy sector and in ii) wind turbine certification.⁹

⁶ [Case No COMP/M.6885 - SDNV/ Germanischer Lloyd - Commission decision pursuant to Article 6\(1\)\(b\) of Council Regulation No 139/2004, 15 July 2013.](#)

⁷ [SDNV/ Germanischer case](#), page 3.

⁸ The reasons for this were that the management systems, governance structure and financial management procedures do not normally distinguish between these services.

⁹ [SDNV/ Germanischer case](#), page 6.

Further segmentation within TIC services

24. In this case, the Parties submitted that they focus predominantly on Testing services rather than on Inspection or Certification, but that Testing services does not itself constitute a relevant product market. In particular, the Parties submitted that they do not consider that the dynamics of the TIC industry have changed significantly since 2013 in relation to the factors considered by the Commission in its assessment in *SDNV/Germanischer* and that it is appropriate to consider the TIC market on a sector-by-sector basis.
25. In undertaking its assessment, and consistent with past decisional practice, the CMA adopted as a starting point a product frame of reference of TIC services. However, all of the Parties' EEA TIC revenue appears to be derived from Testing services, indicating that the Parties predominantly overlap in Testing services only in the EEA, with no significant activity in Inspection and Certification. In addition, most customers said that they contract for Testing services only and do not contract over a range of services that include other TIC services, such as Certification and Inspection.
26. Given the narrower focus of the overlap in the present case than in *SDNV/Germanischer*, the CMA adopted as a product frame of reference the supply of Testing services.

Further segmentation within Testing services by sector (aerospace and oil and gas)

27. The CMA has received consistent evidence from third parties that the aerospace and oil and gas segments should be considered as separate frames of reference.¹⁰
28. In light of the above and, on a cautious basis, the CMA narrowed its focus to the supply of Testing services to each of customers in aerospace and customers in the oil and gas industry. The CMA notes that the Parties have low combined shares of supply on any broader basis (eg the supply of Testing services generally).

Possible further segmentation within Testing services

29. Testing services can be further segmented between materials testing (**MT**)

¹⁰ The Parties also overlap in the supply of Testing services in construction, petrochemicals, power generation, primary metal and welding in the UK. However, with respect to these sectors in the UK, the Parties have low combined shares of between approximately [0-5]% and [5-10]%. Only one customer expressed concerns. These sectors are not considered further in the decision.

and product qualification testing (**PQT**)¹¹:

- (a) MT tests the material properties of a cut out sample of a material under simulated harsh conditions in order to determine the physical and mechanical properties of raw materials and components, including destructive (eg testing what the limit of a material or product is) and non-destructive (eg x-ray analysis on structures to check faults).
 - (b) PQT tests an entire component, system of components or finished product in representative 'life-in-use' conditions to qualify it for release and/or late stage research and development testing.
30. Within Testing services broadly but also within the PQT and MT segments, there are also a further number of different testing types, eg corrosion testing, fatigue testing, radiographic testing, fire resistance etc. These testing types can be split even further into individual tests. For example, corrosion testing includes autoclave sour tests, stress corrosion cracking tests and hydrogen induced cracking tests among a number of other specific tests. Element estimates that there are approximately 3,500 different tests.
31. Some customers appear to view the market broadly as Testing services (for oil and gas or for aerospace) whilst other customers identified specific categories of tests. Customers appear to refer to tests differently, based on their requirements (scope and individual tests required) for the tests. There are many different tests and customers will use these to differing degrees and may use different language in describing the tests.
32. The CMA investigated, as part of the competitive assessment of the supply of Testing services to each of aerospace and oil and gas customers, whether there were any specialised areas of Testing services where particular concerns could arise (if, for example, the Parties had significant shares of supply for specific types of Testing services, which other providers of Testing services cannot easily offer). With regard to Aerospace Testing, given that Element is predominantly active in MT and Exova in PQT (such that on a narrower basis the Parties would have limited overlap), on a cautious basis the CMA did not delineate between the two for the purpose of the frame of reference. However, it took into account this potential differentiation where relevant when assessing the closeness of competition between the Parties.

¹¹ PQT relates more to some segments than to others. For example, PQT is not generally used as a term with respect to Oil and Gas Testing services as very little PQT is carried out in this sector.

Conclusion on product scope

33. For the reasons set out above, the CMA has focussed its assessment of the impact of the Merger on the supply of Testing services to Aerospace customers and Testing services to Oil and Gas customers.
34. However, it was not necessary for the CMA to reach a conclusion on the product frame of reference, since, as set out below, no competition concerns arise on any plausible basis.

Geographic scope

35. In *SDNV/Germanischer* the geographic scope was considered to be EEA-wide. However, the Commission noted in its decision that in relation to oil and gas services, the local presence of a supplier was not essential, but customers appeared to have a certain preference for geographic proximity when selecting potential providers.¹²
36. The Parties submitted that the geographic market in the present case is at least EEA-wide and that this is in line with *SDNV/Germanischer*. The Parties have a material presence in EEA countries,¹³ but only a small share of the Parties' revenue from UK-based customers was generated in the EEA (ie outside the UK), particularly, from Testing services to oil and gas customers. Therefore, the CMA considers that this demonstrates that the Parties' UK customers use the Parties' UK laboratories far more intensively than the Parties' EEA laboratories outside the UK.¹⁴ This is consistent with the geographic frame of reference being no wider than the UK.
37. Views from competitors were mixed. Some competitors¹⁵ submitted that laboratories outside the UK compete with UK laboratories to some degree or to a small degree. For example, one competitor submitted that due to the cost of transportation and logistics most testing is completed close to the

¹² [SDNV/ Germanischer case](#), page 7.

¹³ Element generated turnover of [X] in the EEA, of which [X] was generated in the UK, whilst Exova generated [X] in the EEA, of which [X] was generated in the UK in 2016. In the EEA Element has laboratories in Germany, the Netherlands, Spain and the UK. In the EEA Exova has laboratories in Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Latvia, Lithuania, the Netherlands, Norway, Portugal, Spain, Sweden and the UK.

¹⁴ With respect to aerospace, approximately [10-20]% of Element's and approximately [5-10]% of Exova's customers generate revenue for their laboratories in the EEA (outside of the UK) and approximately [20-30]% of Element's customers generate revenue for their laboratories outside of the EEA. With respect to oil and gas, approximately [0-5]% of Element's customers generate revenue for Element's laboratories in the EEA, and approximately [0-5]% outside of the EEA. Exova has been unable to provide a specific figure but considers that the percentage of its customers that generate revenue from Exova's laboratories globally would be approximately [0-5]%.

¹⁵ One competitor is not active in aerospace, whilst the majority competitors who responded to the CMA questionnaire are active in both aerospace and oil and gas.

customer. Another customer, however, stated that as global transport routes into Europe are good, it makes no difference where testing laboratories are located.

38. Most customers said that geographic location is important primarily due to turnaround times, due to the costs associated with transporting materials to laboratories and as there is a need to visit laboratories to inspect the testing facilities and process. Views on the importance of proximity of a laboratory to the customer also differed between Testing services to Aerospace customers and Testing services to Oil and Gas customers. These differences are explored further below.

Aerospace Testing services

39. UK-based customers said that they prefer to procure from UK laboratories but noted that they either already use laboratories outside the UK or would consider using laboratories outside the UK following a price increase. One customer said that they choose UK providers as this reduces the risk of materials for testing becoming lost or delays being incurred. Another customer said that, dependant on the available capacity of laboratories, it uses other laboratories across the globe when necessary but that UK laboratories are always a first preference.
40. Two customers noted that due to import and export controls not all materials can be tested outside the UK and that the importance of location is dependent on the test type. For example, certain whole engine tests require specific atmospheric conditions. Rolls Royce, noted that Rolls Royce in Germany and the US use suppliers that can be different from those used by Rolls Royce in the UK, indicating that there might be some country-by-country specifics.

Oil and Gas Testing services

41. Customers expressed mixed views on the importance of geographic proximity to a laboratory. However, the majority of UK customers appeared to prefer using UK laboratories. A third of customers submitted that they currently use laboratories outside of the UK interchangeably. The majority of customers indicated that they would consider switching to laboratories outside the UK following an increase in price. Although these customers noted that the costs associated with transporting a material further would need to be lower than the price increase.
42. Responses were also received from some customers based in Scotland who procure specific tests. These customers said that they would not consider using laboratories outside Scotland because the geographic proximity to a laboratory is important as they need to be able to attend testing facilities to

observe testing. Also, if a laboratory is further away, this can have an impact on the cost of transportation and turnaround times. One customer said that large parts, such as pipes, do not travel well by air freight.

43. The CMA gathered additional evidence from other customers in Scotland in order to establish whether the geographic frame of reference may be more regional due to concerns from customers in Scotland. However, it found that other customers who also had a presence in Scotland did not share the same concerns. These customers appeared to be willing to procure similar tests from more distant competitors and they did not consider transport costs to be an insurmountable impediment. The Parties also submitted that they split some of the work of these tests between their laboratories in Scotland, between more distant laboratories in the UK and further afield (the Netherlands).¹⁶ This is discussed in more detail in the competitive effects section below.

Conclusion on geographic scope

44. For the reasons set out above, the CMA has considered the impact of the Merger in the UK, taking into account constraints from other suppliers in the EEA in its competitive assessment.
45. However, it was not necessary for the CMA to reach a conclusion on the geographic frame of reference, since, as set out below, no competition concerns arise on any plausible basis.

Conclusion on frame of reference

46. For the reasons set out above, the CMA has considered the impact of the Merger in the following frames of reference:
 - (a) The supply of Aerospace Testing services in the UK.
 - (b) The supply of Oil and Gas Testing services in the UK.

¹⁶ The Parties have laboratories in various locations in the UK and abroad and it may not be the case that Testing services will always be conducted at the laboratory which is geographically closest to the customer. For example, Exova stated that it “*can and does sub-contract its work in this area to different labs within its network, with no material impact on turnaround time*”.

Competitive assessment

Horizontal unilateral effects

47. Horizontal unilateral effects may arise when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged firm profitably to raise prices or degrade quality on its own and without needing to coordinate with its rivals.¹⁷ Horizontal unilateral effects are more likely when the merger parties are close competitors. The CMA assessed whether it is or may be the case that the Merger has resulted, or may be expected to result, in a substantial lessening of competition in relation to unilateral horizontal effects in Aerospace Testing services in the UK and Oil and Gas Testing services in the UK.

Aerospace Testing services

Shares of supply

48. The Parties provided their sales revenues for Aerospace Testing services in 2016, as shown in Table 1.¹⁸

Table 1: Market share estimates for Aerospace Testing services (UK, 2016)¹⁹

Market shares: testing-only segmentation		
Supplier	Aerospace – UK	
	UK market size: £129m	
	Sales £m	Share
Element	[redacted]	c.[5-10]%
Exova	[redacted]	c.[5-10]%
Combined share	[redacted]	c.[10-20]%
TUV SUD	[redacted]	[10-20]%
ITS	[redacted]	[10-20]%
Westmoreland Mechanical Testing	[redacted]	[10-20]%
Special Metals Wiggins	[redacted] ²⁰	[5-10]% ²¹
ECCI	[redacted]	[0-5]%
Intertek	[redacted] ²²	[0-5]% ²³

¹⁷ [Merger Assessment Guidelines](#), from paragraph 5.4.1.

Keighley Laboratories	[REDACTED]	[0-5]%
Others	[REDACTED]	c.[30-40]%
Total segment	129	100%

49. According to these estimates, the Parties' combined share in Aerospace Testing services would be small at [10-20]%. Post-Merger, three other suppliers (TUV SUD, ITS and Westmoreland Mechanical Testing) would have a similar share of supply and a further four smaller players would also remain present. However, the CMA faced some difficulties in accurately verifying these shares of supply estimates and has therefore only been able to place limited weight on this evidence.

Closeness of competition

50. The Parties' internal documents indicate that globally the Parties refer to each other as one of the main competitors in the TIC market and that they discuss competition both on a national and EEA-wide basis. One internal document also shows that Exova considers Element to be its closest global competitor in Aerospace Testing services. However, internal documents also show that the Parties consider each other as one of four main competitors and note that they have different capabilities in the EEA, as illustrated below.

(a) An [REDACTED] report ([REDACTED])²⁴ includes Element and Exova in the same group as "*International Challengers*" in the global TIC market however it refers to different capabilities of Element and Exova in the EEA market.

(b) An Exova internal document²⁵ notes "*Element is the most direct global competitor*, but it also refers to "*seven other significant players*" in

¹⁸ The Parties used the 2016 annual ECB exchange rate (USD-EUR) to provide the figures in EUR. The figures in the table have been provided in GBR using the ECB exchange rate (EUR-GBP). The shares have also been rounded to the nearest whole number.

¹⁹ [Data submitted by Element having been produced by instructed consultants].

²⁰ Special Metals Wiggins submitted that it estimates that its sales were [REDACTED] in 2016. Special Metals Wiggins submission.

²¹ Special Metals Wiggins' [REDACTED] market share is calculated using the company's estimated sales. Special Metals Wiggins submission.

²² Intertek submitted that it estimates that its sales were [REDACTED] in 2016. Intertek submission.

²³ Intertek's [REDACTED] market share is calculated using the company's estimated sales. Intertek submission.

²⁴ [Data submitted by Element having been produced by instructed consultants].

²⁵ Exova Oil, Gas and Industrials Strategy, 21 July 2016.

Aerospace Testing services.

- (c) [Data submitted by Element having been produced by instructed consultants] refers to different capabilities and segments of Exova and Element in the EEA. For example, it notes²⁶ that “*Emerald [Exova] and Element are complementary as Emerald focuses on materials testing and does not have Product Qualification Testing footprint, while Element is not active in European MT*”.
51. Win/loss data provided by the Parties with respect to UK customers indicates limited switching between the Parties and shows that there are other suppliers which gain customers from either of the Parties more often than the Parties gain customers from each other. However, neither Element nor Exova systematically capture win/loss data, and so the CMA has placed limited weight on this evidence.
52. With regard to third party market testing, most competitors said that the Parties compete closely in Aerospace Testing services. However, they also noted differences in the types of tests offered. One competitor noted differences between the Parties and said that Element was not very active in Aerospace Testing services. Another competitor submitted that the Parties overlap with respect to one type of test in this field but that they offer a different service with respect to seven other types of tests.
53. Most customers noted that, while in some instances the Parties may compete with each other closely in a number of areas and capabilities concerning Aerospace Testing services, they did not perceive the Parties to be particularly close competitors as they are more active in different segments. For example, responses from customers stated:
- (a) “*Exova and Element do not compete very closely in MT. However, there is a small overlap in non-metallics testing*” and “*Element in the UK is not currently used by Rolls-Royce Plc for mechanical testing as they have little presence in materials mechanical testing.*”
- (b) “*For composite testing they [the Parties] are competitors but for the type of EMC testing that the avionics business requires, Exova is not viewed as competitive to Element*”.

²⁶ [Data submitted by Element having been produced by instructed consultants].

54. In light of the above, with regard to Aerospace Testing services, evidence indicates that the Parties may be close competitors. However, their services in the EEA are differentiated as they do not overlap with respect to a number of tests. For example, Element does not have a significant presence in MT testing, while Exova is more active in PQT testing.

Competitive constraints

55. Internal documents indicate that there are alternative suppliers to the Parties with respect to Aerospace Testing services in the UK:
- (a) The [REDACTED] report²⁷ includes Element and Exova as “*international challengers*” in the same category together with ABS, apave, DEKRA and UL. Intertek, SGS, ALS, Bureau Veritas, TUV Rheinland and TUV America are also listed as [REDACTED]. It also lists other suppliers in North America and the EU including NTS, CETIM, WMT&R, DTB and IMA. When the CMA spoke with the OC&C, it confirmed that it viewed these suppliers as credible alternatives to the Parties.
 - (b) An Exova internal document notes that “*there are seven other significant players in our markets*”.²⁸
 - (c) An internal Element document states that aerospace MT remains an “[REDACTED]” and that “[REDACTED]”.²⁹
56. Most competitors submitted that they compete closely with Exova in the area of Aerospace Testing services. These competitors also provided the names of between one to 30 alternative suppliers.
57. Most responses from customers indicate that customers of Aerospace Testing services consider there to be alternative suppliers in the UK and that they would consider using suppliers outside the UK. For example, responses were:
- (a) One customer said that when it was seeking different suppliers to switch away from Element, it did not consider Exova as the Testing services Exova offered did not fit its needs. Instead it is switching to TUV.
 - (b) Another customer said that there were three other credible alternative suppliers to Element and Exova.

²⁷ [Data submitted by Element having been produced by instructed consultants].

²⁸ See paragraph 50 (b) above.

²⁹ Element 2016 Strategy Review and 2017 Priorities.

(c) A third customer said that there were alternative suppliers to the Parties as well as multiple UK university institutions. Although it submitted that it prefers to have a single point of contact rather than procuring from several different providers, in 2016 it procured Testing services for its UK operations from Exova and from three other suppliers, but not from Element.

58. The United Kingdom Accreditation Service (**UKAS**), also said that there are 25 to 30 Aerospace Testing services suppliers in the UK.

Conclusion on Aerospace Testing services

59. On the basis of the evidence set out above, and in particular the internal documents and third party submissions which indicate that, although the Parties are close competitors globally, the services they offer are more complimentary with respect to the EEA and that there is sufficient competition to constrain the Parties post-Merger, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in Aerospace Testing services.

Oil and Gas Testing services

Shares of supply

60. The Parties provided their sales revenues for Oil and Gas Testing services in the UK in 2016, as shown in Table 2.³⁰

Table 2: Market share estimates for Oil and Gas Testing services (UK, 2016)³¹

Market shares: testing-only segmentation		
Oil & Gas – UK		
UK market size: £133m		
Supplier	Sales £m	Share
Element	[REDACTED]	[5-10]%
Exova	[REDACTED]	[5-10]%
Combined share	[REDACTED]	[10-20]%
TWI ⁱ	[REDACTED] ³²	[10-20]% ³³
DNV GL	[REDACTED] ³⁴	[10-20]% ³⁵
Intertek	[REDACTED] ³⁶	[5-10]% ³⁷

SGS	[REDACTED]	[5-10]%
Sintef	[REDACTED]	[0-5]%
Others	[REDACTED]	[50-60]%
Total segment	133	100%

61. In addition, Doosan Babcock submitted that it estimated its sales in 2016 were approximately [REDACTED]. These sales equate to a market share of approximately [REDACTED].³⁸
62. The Parties' estimated combined market share in Oil and Gas Testing Services is not large at [10-20]%. Post-merger the combined entity will become the second or third largest supplier, five other suppliers account for [30-40]% of the market and a long tail of others account for [50-60]%. However, the CMA has been unable to accurately verify these shares of supply estimates.

Closeness of competition

63. Internal documents show that Exova includes Element in the same category as 'international challengers' in the global TIC market, (see paragraph 50 (a) above). However, in relation to Oil and Gas Testing services specifically, internal documents indicate that the Parties are competitors alongside other suppliers. Another document notes the capability of the Parties to be complimentary:

(a) An Exova internal document³⁹ notes that MT "*competitors are largely*

³⁰ The Parties used the 2016 annual ECB exchange rate (USD-EUR) to provide the figures in EUR. The figures in the table have been provided in GBR using the ECB exchange rate (EUR-GBP). The shares have also been rounded to the nearest whole number.

³¹ [Data submitted by Element having been produced by instructed consultants].

³² TWI submitted that it estimates that its sales were approximately [REDACTED] in 2016. TWI submission.

³³ TWI's [REDACTED] market share is calculated using the company's estimated sales. TWI submission.

³⁴ DNV submitted that it estimates that its sales were approximately [REDACTED] in 2016. DNV submission.

³⁵ DNV's [REDACTED] market share is calculated using the company's estimated sales. DNV submission.

³⁶ Intertek submitted that it estimates that its sales were approximately [REDACTED] in 2016. Intertek submission.

³⁷ Intertek's [REDACTED] market share is calculated using the company's estimated sales. Intertek submission.

³⁸ Doosan Babcock submission.

³⁹ Exova Oil, Gas and Industrials Strategy, 21 July 2016.

specialists, such as Element, [REDACTED] and [REDACTED].” The same document indicates that Exova is directly influenced by the actions of Element in that “competitive pressure from Element may have driven underperformance in 2012-14.”

(b) The [REDACTED] report⁴⁰ notes *“both parties have a complementary set of capabilities; in particular, in oil & gas where Element could very effectively utilise Emerald’s [Exova’s] expertise.”* The report also identifies a list of other competitors.

64. Most competitors indicated that the Parties compete closely in Oil and Gas Testing services mainly due to their global scale and because they overlap in services.⁴¹ One competitor said that the Parties compete closely. However, it had initially said that there are differences in the services and tests offered as Element undertakes more failure investigation and Exova undertakes more corrosion testing and simulating environment testing.

65. The CMA received 13 responses from oil and gas customers, and subsequently gathered additional evidence from some of these customers. The CMA also followed up with additional customers.

66. Most⁴² customers indicated that the Parties compete closely.⁴³ However, some customers stated that they procure different types of tests from the Parties. Similarly, other customers said that the Parties services are more complimentary in nature and most customers also identified other credible suppliers (see Competitive constraints section below). For example, responses stated:

(a) One customer indicated that *“they [the Parties] each know that it was either one or the other that most of the larger welding companies choose from.”*

(b) The Testing services required for the oil and gas industry are heavily specified and therefore all test facilities that perform this testing are extremely close in their supply of services.

(c) The Parties are similar in that they can cater for all types of tests and

⁴⁰ [Data submitted by Element having been produced by instructed consultants].

⁴¹ The CMA notes however that not all third parties may be aware what specific tests the Parties provide and therefore whether they are close competitors with respect to all tests.

⁴² One customer indicated that the Parties overlap in 40% of Testing services.

⁴³ Most customers who said that the Parties compete closely have operational bases in Scotland. This is discussed further in the competitive constraints section.

have sufficient capacity to provide tests quickly.

- (d) One customer submitted that it procures the same type of services from Element and Exova. It also noted that Element bought expert staff from Exova and is now considered to be the first competitor to Exova.
- (e) Both companies have come closer together in terms of competition ever since Element began offering metals testing. However, typically Halliburton uses Exova for metals testing and Element is used for plastics or rubber testing.ⁱⁱ
- (f) Both Parties competed in HMC's tender. However, although HMC regards Element and Exova as the only two major suppliers, it considers their services to be complementary.
- (g) The Parties are two of the three main Testing services laboratories in the UK.

67. With respect to Oil and Gas Testing services, the evidence shows that although the Parties are close competitors, some customers use the Parties for different types of tests and consider that their services are complimentary. This indicates that the Parties may offer to some extent complementary services which are used in conjunction with each other rather than alternatives. Moreover, most of the customers who said that they thought the Parties compete closely also listed other credible suppliers, as discussed below.

Competitive constraints

68. Internal documents indicate that there are alternative suppliers to the Parties in the UK:
- (a) An Exova internal document⁴⁴ notes that MT “*competitors⁴⁵ are largely specialists, such as Element, [REDACTED], and [REDACTED]; TIC majors (eg [REDACTED], [REDACTED]) focus more on inspection with limited MT capability ([REDACTED] as the exception).*”
 - (b) An Exova internal document⁴⁶ lists key competitors in the UK as [REDACTED], Element and [REDACTED].

⁴⁴ Exova Oil, Gas and Industrials Strategy, 21 July 2016.

⁴⁵ These competitors are not UK/EEA specific.

⁴⁶ Exova Management Presentation, March 2017.

(c) The [X] report identifies⁴⁷ a list of other competitors, (see Table 2 above). The OC&C later confirmed to the CMA that it considers these competitors to be credible alternatives.

69. Win/loss data provided by the Parties⁴⁸ with respect to UK customers indicates that customers which have an operational base in Scotland switch between Element and Exova. However, the reliability of this data is unclear as the data does not contain all records.
70. Most competitors submitted that they compete closely with the Parties. One competitor stated that *“We are direct competitors [to the Parties] in a number of offshore related testing requirements.”* Two competitors said that they compete closely with the Parties with respect to some tests but not with respect to other tests. However, one of these competitors also said that it *“considers that the merged entity will become similar to Intertek in terms of the services it could provide.”* Finally, a fourth competitor said that it did not compete closely with Element but that there was some overlap with respect to its customer base and Exova’s customer base. Some customers also indicated that they have plans to expand their Testing services.
71. The majority of customers indicated at least two credible alternatives to the Parties. Some customers listed a relatively high number of alternative suppliers which they considered credible whilst others named far fewer providers as credible alternatives. Third parties in total listed more than 20 different suppliers, which they consider to be alternatives to the Parties. Among these suppliers, a few of them, in particular, TWI, SGS, Intertek, the French Corrosion Institute, and Sintef were mentioned by several customers as credible alternatives to the Parties for Oil and Gas Testing services.
72. Some customers noted the extensive range of Testing services offered by Element and Exova and noted this as an advantage. However, one customer submitted that it could move its testing to different laboratories.
73. The majority of customers did not express concerns. However, in their responses, some customers considered there to be few alternatives to the Parties and raised concerns on that basis. A small number of these customers, which have an operational base in Scotland, submitted that they did not consider that there were alternative suppliers who could pose a constraint on the Parties due to the need for suppliers to have laboratories in

⁴⁷ [Data submitted by Element having been produced by instructed consultants].

⁴⁸ The Parties explained that neither Element nor Exova systematically capture win/loss data. The information provided by each of the Parties respectively was also inconsistent. The CMA has therefore not placed much weight on this evidence.

Scotland, the need for quick turnaround times and due to the fact that alternative suppliers could not provide the same range of services. For example, responses included the following:

- (a) Customers expressed concerns that the only other supplier in the Scotland area is Doosan Babcock, which they said offered a limited range of Testing services and therefore would not be considered as a credible alternative. One of the customers similarly noted that Doosan Babcock was not as efficient as the Parties with respect to turnaround times and prices. Another customer also noted that capacity at Doosan Babcock may be an issue at times.
- (b) These customers said that due to turnaround and proximity constraints, they would not consider laboratories based further away in the UK or outside the UK. However, following a targeted search which it undertook, CRC later said that alternative suppliers did exist but that it had doubts that any of these suppliers would have wide experience of offshore specifications and requirements.
- (c) Similarly, another customer said that there were other local suppliers and also other suppliers across the UK but that the majority of these suppliers were smaller academic or university institutions which do not offer the same range of tests as Element and Exova, particularly with respect to fracture mechanics and corrosion testing. It said that it is feasible to procure the services of other laboratories in the EEA but this would involve an increased cost and would increase turnaround time. It is easier to use laboratory facilities which are near to its operational base also in terms of flexibility and reactivity.
- (d) In order to assess whether these customers' concerns were shared, the CMA sought further evidence from other customers in Scotland which procure similar services from the Parties. One customer submitted that there are many facilities which offer Testing services with respect to various types of Testing services which the Parties also provide. Although it also considered geographical location to be important, it stated that it also procures services from Armultra Ltd which is based in Great Yarmouth and that it considers small Testing service providers to be an alternative.
- (e) Other customers which also have an operational base in Scotland, did not express any concerns as they consider there to be alternative suppliers. One customer considered SGS to be an alternative supplier in the UK and the another customer said it would consider using alternative suppliers in the US where it has a presence.

74. Exova submitted that more complex and specialist corrosion tests for oil and gas customers are carried out at its Dudley and Daventry laboratories (ie not in Scotland), whereas its more routine tests were undertaken in its laboratories in Aberdeen and Edinburgh. With regard to the impact of location and delivery on turnaround time Exova submitted that it had recently undertaken projects for two customers in Scotland for which the agreed turnaround time ranged from [redacted] and as such the time taken to deliver material to a laboratory was not material. More generally, the Parties provided evidence indicating that delivery times were generally a relatively small proportion of the standard turnaround times in the industry and that faster delivery times were required only infrequently. Similarly, the Parties provided evidence indicating that the costs of delivery were generally a relatively small proportion of the overall costs of a project and, therefore, should not be a high priority to customers when choosing provider.
75. The Parties submitted additional evidence indicating that laboratories outside Scotland would usually be credible alternatives to laboratories in Scotland. For example, Exova submitted that, with respect to certain projects for customers in Scotland, it had outsourced Testing services from the Aberdeen laboratory to its other laboratories in the UK, the EEA and the USA. It also submitted that it was in the process of introducing remote-inspection whereby a customer can inspect testing via video link, thereby reducing the need for customers to attend laboratories in person.
76. There is evidence from some customers in Scotland which indicates that they do not consider other providers to be credible alternatives, mainly, because other providers in the region do not have the full range of services they require or because other providers are too far away. However, the additional evidence which the CMA gathered from other customers and from the Parties shows that there are other suppliers who are credibly able to provide the same Testing services as the Parties, whether they are located in Scotland or further afield and it did not appear that turnaround time is significantly impacted based on the location of a laboratory. In addition, some of the tests which customers in Scotland procure are not supplied by the Parties from their laboratories in Scotland, indicating that these customers could also use other suppliers of such tests based outside Scotland.

Conclusion on Oil and Gas Testing services

77. On the basis of the evidence set out above, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in the **supply of Testing services to UK oil and gas customers**. In particular, the Parties' internal documents and third party

submissions indicate that, although the Parties are close competitors, there is sufficient competition to constrain the Parties post-Merger. Some third parties submitted that the Parties offer a wider range of services than other suppliers and that they offer a 'one-stop shop' but the majority of third parties explained that there were alternative suppliers who would be able to offer the same tests. Some customers in Scotland did express concerns, in relation to turnaround times and transport costs associated with having to transport samples to laboratories which are further afield. However, other customers which also have an operational base in the same area did not express the same concerns and highlighted alternative suppliers both in Scotland and which are able to supply Testing services in a timely manner from other locations.

Barriers to entry and expansion

78. Entry, or expansion of existing firms, can mitigate the initial effect of a merger on competition, and in some cases may mean that there is no substantial lessening of competition. In assessing whether entry or expansion might prevent a substantial lessening of competition, the CMA considers whether such entry or expansion would be timely, likely and sufficient.⁴⁹
79. The Parties' internal documents indicate that there may be some barriers to entry for new competitors in that Testing service laboratories generally require highly skilled staff, capital investment and accreditation. However, UKAS said that it has approximately 25 to 30 aerospace accreditation customers, over 100 customers in oil and gas MT accreditation customers and there are no levels of accreditation whereby larger companies can receive higher accreditation. Smaller companies also pay much less for accreditation per annum. Based on this, the CMA considers that although there may be some barriers to entry and expansion with respect to investment and skilled staff, the high number of accredited providers indicate that the barriers to entry and expansion may not necessarily be significant.
80. However, the CMA has not had to conclude on barriers to entry or expansion as the Merger does not give rise to competition concerns on any basis.

Third party views

81. The CMA contacted customers, competitors of the Parties and the accreditation body in the UK, UKAS. Some customers raised concerns regarding price increases, a reduction in choice of suppliers and a reduction in

⁴⁹ [Merger Assessment Guidelines](#), from paragraph 5.8.1.

suppliers which can provide a full range of Testing services. No other third parties raised concerns about the Merger.

82. Third party comments have been taken into account where appropriate in the competitive assessment above.

Decision

83. Consequently, the CMA does not believe that it is or may be the case that the Merger has resulted, or may be expected to result, in a substantial lessening of competition within a market or markets in the United Kingdom.

84. The Merger will therefore **not be referred** under section 22(1) of the Act.

ⁱ The CMA was subsequently informed that TWI's sales in oil and gas testing services were approximately [REDACTED], and that it had a [REDACTED] market share in the provision of oil and gas testing services

ⁱⁱ The CMA was subsequently informed that the views attributed to Halliburton, were on behalf of Halliburton Arbroath