



EUROPEAN COMMISSION
DG Competition

Case M.8242 - ROLLS-ROYCE / ITP

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 6(1)(b) in conjunction with Art 6(2)
Date: 19/04/2017

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EUROPEAN COMMISSION

Brussels, 19.04.2017
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In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

To the notifying party:

**Subject: Case M.8242 – Rolls-Royce / ITP
Commission decision pursuant to Article 6(1)(b) in conjunction with
Article 6(2) of Council Regulation No 139/2004¹ and Article 57 of the
Agreement on the European Economic Area²**

Dear Sir or Madam,

- (1) On 24 February 2017, the European Commission received notification of a proposed concentration pursuant to Article 4 of the Merger Regulation by which the undertaking Rolls-Royce Holdings plc ("Rolls-Royce", United Kingdom) acquires within the meaning of Article 3(1)(b) of the Merger Regulation control of the whole of the undertaking Industria de Turbo Propulsores SA ("ITP", Spain) by way of a purchase of shares (the "Transaction").³ Rolls-Royce is designated hereinafter as the "Notifying Party", and Rolls-Royce and ITP are together referred to as the "Parties".

¹ OJ L 24, 29.1.2004, p. 1 (the 'Merger Regulation'). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ('TFEU') has introduced certain changes, such as the replacement of 'Community' by 'Union' and 'common market' by 'internal market'. The terminology of the TFEU will be used throughout this decision.

² OJ L 1, 3.1.1994, p. 3 (the 'EEA Agreement').

³ Publication in the Official Journal of the European Union No C69 of 04.03.2017, p. 15

1. THE PARTIES AND THE OPERATION

- (2) Rolls-Royce is the holding company of the Rolls-Royce group, whose principal activities involve the development and manufacture of aircraft engines and power systems for civil aerospace, defence aerospace, marine and energy applications.
- (3) ITP is a joint venture between Rolls-Royce and Spanish SENER Grupo de Ingeniería SA ("Sener") established in 1989. ITP is currently jointly controlled by Rolls-Royce and Sener, which respectively have a shareholding of 46.875% and 53.125%.
- (4) ITP specialises in the manufacture of aircraft engine components and includes among its activities design, research and development, manufacturing and casting, assembly and testing of aircraft engine components. It also provides maintenance, repair and overhaul ("MRO") services for a range of engines for regional airlines, business aviation, helicopters, industrial and defence applications.
- (5) On 7 July 2016, Sener exercised a put option in relation to its shares in ITP, pursuant to which Rolls-Royce is required to purchase Sener's entire shareholding in ITP. On 24 November 2016, Rolls-Royce and Sener signed a share purchase agreement, pursuant to which Rolls-Royce will acquire from Sener all of its issued shares of ITP, such that Rolls-Royce's total equity interest in ITP on completion of the Transaction will be 100%.
- (6) The Transaction will lead to a change of control over ITP, from joint to sole control, as Rolls-Royce, by purchasing Sener's shares, will acquire sole control over ITP. Therefore, the Transaction constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

2. EU DIMENSION

- (7) The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 000 million⁴ (Rolls-Royce: EUR 18 909.6 million; ITP: EUR 710.1 million). Each of them has an EU-wide turnover in excess of EUR 250 million (Rolls-Royce: EUR [...] million; ITP: EUR [...] million), but they do not achieve more than two-thirds of their aggregate EU-wide turnover within one and the same Member State.
- (8) The notified operation therefore has an EU dimension under Article 1(2) of the Merger Regulation.

3. RELEVANT MARKETS

3.1. Industry overview

- (9) In the aviation industry, engine original equipment manufacturers ("OEMs") design and manufacture the aircraft engines. The main engine OEMs are General

⁴ Turnover calculated in accordance with Article 5 of the Merger Regulation.

Electric ("GE"), Honeywell, Pratt & Whitney ("P&W"), Rolls-Royce, and Safran/Snecma.

- (10) These engine OEMs sell engines to airframe manufacturers ("airframers"). Airbus SAS ("Airbus", France) and The Boeing Company ("Boeing", USA) are the two largest airframe manufacturers of large commercial aircrafts ("LCA"), including narrow-body and wide-body commercial aircrafts. Bombardier Inc. ("Bombardier", Canada) and Embraer S.A. ("Embraer", Brazil) are the two largest manufacturers of regional aircrafts, whereas for business jets, Bombardier, Embraer, Cessna Textron Aviation ("Cessna", USA), Dassault Aviation ("Dassault", France) and Gulfstream Aerospace Corporation ("Gulfstream", USA) are the main players. With regard to military aircrafts, fighter jet airframers include Boeing, Dassault, Sukhoi (Russia), Eurofighter Jagdflugzeug GmbH ("Eurofighter", Germany), Lockheed Martin Corporation ("Lockheed Martin", USA), Saab AB ("Saab", Sweden) and Russian Aircraft Corporation MiG (Russia), while important military transport airframers include Lockheed Martin, Airbus, Boeing, and Kawasaki Heavy Industries ("KHI", Japan).
- (11) For the purpose of designing and manufacturing the necessary components for the aircraft engine, engine OEMs rely on supply of components from upstream components manufacturers. Some engine OEMs, such as GE and P&W, are vertically integrated with in-house component manufacturing capabilities, but still rely on third party suppliers for the provision of certain engine components.
- (12) Due to the significant investment required to design and produce a new engine, sometimes one or more OEMs may come together with additional partners to share the risk and reward of a particular engine programme. Supply agreements between engine OEMs and component suppliers are often in the form of risk and revenue sharing partnership ("RRSP") agreements, whereby the component supplier partner shares both the risks and revenues for the life of an engine programme, rather than receiving its full payment upon delivery of the relevant component. In particular, the partner typically shares in the development programme expenses, aircraft certification costs and sales concessions. In return it receives a fixed share of engine and spare parts revenues pre-negotiated with the engine OEM. Component manufacturers may also enter into long-term agreements ("LTAs") with engine OEMs to provide components either for an agreed period or for the life on an engine programme. Component manufacturers may also participate alongside engine OEMs in consortia, which produce engines for defence purposes.
- (13) Engine OEMs and component manufacturers may also participate in consortia or joint ventures for the development of aircraft engines for specific programmes.
- (14) ITP is an upstream supplier of engine components to Rolls-Royce and other engine OEMs, whereas Rolls-Royce is mainly active in the downstream production of aircraft engines for airframers. The principal relationships between the Parties' activities are therefore mainly of vertical nature. Moreover, Rolls-Royce and ITP are both members of three engine consortia for military programmes, namely Europrop International GmbH ("EPI"), Eurojet Turbo GmbH ("Eurojet") and MTU Turbomeca Rolls-Royce ITP GmbH ("MTRI").

3.2. Upstream markets for engine components

- (15) In the past, when analysing the markets for aerospace components, the Commission considered that, given that each component performs a distinct and vital function in the operation of the engine and the aircraft it is used for, and is engine and aircraft specific, there is *very limited demand-side substitutability for each engine component*. On this basis, the Commission considered that each aerospace component, and in particular individual complex components, could constitute a market in itself.⁵
- (16) Notwithstanding the limited demand-side substitutability, the Commission also acknowledged that there is a certain degree of supply-side substitutability on the basis of the functionality of the products and suppliers' capabilities across the applications.⁶ On this basis, the Commission previously considered a distinction between the following categories of aerospace components: (i) casting of aerospace components⁷; (ii) machined components; and (iii) fabricated components. Each category will be further examined in greater detail below.

3.2.1. Casting of aerospace components

- (17) Casting is the process of producing parts by re-melting the input product and pouring the liquid metal into a mould. The casting product is then processed in some other way to create a finished component.
- (18) As indicated in footnote 7, in previous decisions, the Commission considered that casting of aerospace components can be distinguished from other manufacturing techniques of aerospace components. Moreover, the Commission found that casting products for aerospace applications can be further segmented between (i) aerofoil castings (various blades and vanes), and (ii) structural castings (large, single structural components or their smaller subcomponents), due to the very different foundry assets required to produce each.⁸ The Commission also considered a distinction by material between (i) titanium-based, (ii) aluminium and (iii) alloy/super-alloy castings.⁹ Given that both ITP and Rolls-Royce are active only in the production of super-alloy castings the latter possible distinction will not be further discussed.

⁵ See Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 17, Commission decision of 23 August 2002 in case M.2892 - *Goodrich / TRW Aeronautical Systems Group*, paragraph 7; Commission decision of 17 April 2002 in case M.2738 - *GEES / Unison*, paragraph 9.

⁶ Commission decision of 23 August 2002 in case M.2892 - *Goodrich / TRW Aeronautical Systems Group*, paragraph 7; Commission decision of 23 April 2007 in case M.4561 – *GE / Smith Aerospace*, paragraphs 21 and 30.

⁷ The Commission previously found that the casting of aerospace components is distinct from components produced by way of other manufacturing techniques such as forging and extrusions: Commission decision of 11 June 2015 in case M.7593 – *Alcoa / RTI International Metals*, paragraph 9.

⁸ Commission decision of 11 June 2015 in case M.7593 – *Alcoa / RTI International Metals*, paragraphs 25-26; Commission decision of 19 December 2012 in case M.6765 – *Precision Castparts / Titanium Metals*, paragraphs 39 and 43.

⁹ Commission decision of 19 May 2000 in case M.1919 – *Alcoa / Cordant*, paragraph 17; Commission decision of 11 June 2015 in case M.7593 – *Alcoa / RTI International Metals*, paragraph 25.

- (19) ITP, via its subsidiary Precision Casting Bilbao S.A.U. ("PCB"), manufactures both structural and aerofoil castings, using nickel-based super-alloys. Rolls-Royce has limited production of turbine aerofoils.
- (20) As regards the geographic scope of the engine components markets and the respective possible sub-segmentations, in previous decisions the Commission considered the markets for casting of aerospace components to be either EEA-wide or worldwide.¹⁰

3.2.1.1. The Notifying Party's view

- (21) The Notifying Party considers the distinction between the casting of structures and the casting of aerofoils to be a valid one, due to the very different foundry assets required to produce each, in particular the different sized furnaces and supporting infrastructure.
- (22) The Notifying Party also submits that, within each of these two types of castings, there is a spectrum of different casting technologies and materials, which vary in complexity. However, the Notifying Party submits that there is a certain degree of supply-side substitutability, as a structural casting supplier with the capability to produce the largest and most complex structural castings will broadly be able to switch production to simpler structural castings. Similarly, a supplier with the capability to produce the highest technology aerofoils will be able to cast simpler, lower technology aerofoils.
- (23) The Notifying Party does not take a view as regards the geographic scope of the markets for casting of aerospace components.

3.2.1.2. Results of the market investigation and Commission's assessment

- (24) Most machined part competitors that responded to the market investigation questionnaire consider that turbine aerofoil castings and structural castings are different products, on the basis that, from a demand-side, they serve different functions and from a supply-side, different alloys and castings method are used for their production.¹¹ The results of the market investigation support a worldwide geographic scope of the markets for casting of aerospace castings.¹²
- (25) In light of the above, the Commission considers that for the purposes of this Decision, the exact product and geographic market definition for the markets for supply of aerospace castings can be left open, since the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible product and geographic market definition.

¹⁰ Commission decision of 19 May 2000 in case M.1919 – *Alcoa / Cordant*, paragraphs 19 and 27; Commission decision of 11 June 2015 in case M.7593 – *Alcoa / RTI International Metals*, paragraph 29; Commission decision of 19 December 2012 in case M.6765 - *Precision Castparts / Titanium Metals*, paragraph 47.

¹¹ See replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, question 18.

¹² See replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, question 21.

3.2.2. *Machined components*

- (26) Machined components are usually produced via various techniques such as subtractive manufacture (cutting and drilling) and forming, primarily from sheet and plate inputs, which either results in a finished component, or parts that will be joined into a fabricated component. As indicated in paragraph (15), in previous decisions relating to aerospace components markets, the Commission has considered whether each aerospace component should constitute a market in itself. The Commission also considered a possible segmentation of machined parts according to the type of aircraft. However, the Commission ultimately left open the question whether each type of machined part should constitute a distinct product market and whether a further distinction should be applied according to the type of aircraft.¹³
- (27) ITP supplies a number of machined parts including blisks, shafts, turbine discs, rigid pipes and front jet pipes, seals, cover plates, nozzle guide vanes, and casings.
- (28) As regards the geographic scope of the market for machined components and its possible segmentations, in previous decisions the Commission considered the geographic dimension to be worldwide.¹⁴

3.2.2.1. The Notifying Party's view

- (29) The Notifying Party submits that the same basic production processes are used for all machined parts and as a result, a distinction by individual machined parts and/or by type of aircraft is not relevant from supply-side considerations. According to the Notifying Party the relevant factor in determining whether a supplier can provide a specific machined part is whether it has the necessary machinery; to the extent that it does not, it would be possible to purchase the tooling required for the component in question.
- (30) The Notifying Party does not take a view as regards the geographic scope of the market for machined components and its possible segmentations.
- (31) In any event, the Notifying Party submits that there is no need to determine the precise scope of the relevant product and geographic market for machined components since the Transaction does not raise competition concerns under any possible delineation of the market/s.

¹³ See Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 17; Commission decision of 23 April 2007 in case M.4561 – *GE / Smith Aerospace*, paragraphs 21 and 22; Commission decision of 23 August 2002 in case M.2892 - *Goodrich / TRW Aeronautical Systems Group*, paragraph 7.

¹⁴ Commission decision of 19 May 2000 in case M.1919 – *Alcoa / Cordant*, paragraphs 19 and 27; Commission decision of 11 June 2015 in case M.7593 – *Alcoa / RTI International Metals*, paragraph 29; Commission decision of 19 December 2012 in case M.6765 - *Precision Castparts / Titanium Metals*, paragraph 47.

3.2.2.2. Results of the market investigation and Commission's assessment

- (32) Most machined parts competitors that responded to the market investigation questionnaire support the view that each machined part should be considered separately, notably because, from a demand-side, each machined part has a distinct function within the engine.¹⁵ Engine OEMs unanimously indicated that there is no demand-side substitutability among engine components.¹⁶
- (33) The machined part suppliers also note that supply-side substitutability between the different machined parts is limited as manufacturers of machined parts tend to specialize in the production of one type of machined part or of a family of parts,¹⁷ which may have different certification requirements. Moreover, for each machined part, there are differences related to the type of machining required to produce the part and to the type of alloy being machined.¹⁸
- (34) As regards the question whether to distinguish the machined parts according to the type of aircraft, the machined parts suppliers indicated that they are generally able to produce machined parts that can be used in all types and segments of aircrafts, although they note that for some parts the machine tool size varies depending on the engine size.¹⁹ Most engine OEMs who responded to the market investigation questionnaire also considered that a supplier capable of producing component for one mission profile should be able to supply this machined part for another mission profile aircraft. However, they noted that there is still significant time and cost associated with developing new components for new engine and new aircraft, which will vary greatly depending on the machined part at stake.²⁰
- (35) The results of the market investigation support a worldwide geographic scope of the market for machined components and its possible segmentations.²¹
- (36) In light of the above, the Commission considers that for the purposes of this Decision, the exact product market definition for the supply of machined parts for aircraft engine can be left open, since the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible product market definition. The Commission considers that for the purposes of this

¹⁵ See replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, question 9.

¹⁶ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 8.

¹⁷ The market investigation results were not conclusive on whether some components which use similar manufacturing techniques, can or not be grouped together; See replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, question 11.

¹⁸ See replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, question 10.

¹⁹ See replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, question 13.

²⁰ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 9.

²¹ See replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, question 20.

Decision the relevant geographic scope of the market for machined parts and its possible segmentations is worldwide.

3.2.3. *Fabricated components*

- (37) Fabricated components are typically produced by assembling machined, forged or extruded parts, formed sheet metal and/or complex castings. There are many different types of fabricated components.
- (38) In the past, in *GE/Avio* the Commission considered whether each type of fabricated part (such as a low pressure turbine for example) constitutes a distinct product market or whether a distinction according to the aircraft size (wide-body LCA, narrow-body LCA, regional aircraft, etc.) is relevant.²²
- (39) ITP manufactures the following fabricated components: turbine frames,²³ turbine exit cases (also known as turbine exhaust cases),²⁴ convergent-divergent nozzles²⁵ and low pressure turbines.²⁶
- (40) As regards the geographic scope of the market for fabricated components and its possible segmentations, including by individual component, in previous decisions the Commission considered the geographic dimension to be worldwide.²⁷

3.2.3.1. Notifying Party's view

- (41) The Notifying Party submits that fabricated parts could be considered as a whole, given that, from a supply-side perspective, suppliers use the very similar production techniques to produce a wide range of fabricated components. The Notifying Party does not take a view as regards the geographic scope of the market for fabricated components and its possible segmentations.

²² Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraphs 20 and 21.

²³ A turbine frame is a generic term of a static structure that provides the mounting for a bearing chamber that supports one or more of the engine's turbine rotors. High pressure / intermediate pressure turbine structures, tail bearing housings and mid-turbine frames are all examples of turbine frames.

²⁴ The turbine exit case serves three primary functions: (i) providing the main structural mount for the rear of the engine; (ii) directing the hot gases that exhaust from the rear turbine through the vanes to optimise the exit flow in such a way as to optimise the engine's efficiency; and (iii) providing the structural support for the rear bearing and the necessary plumbing to provide the bearing section with lubricating oil and cooling air, if so designed.

²⁵ The convergent-divergent nozzle (con-di nozzle) directs the combined fan duct and core engine airflows to provide thrust to the aircraft and is important for the achievement of an efficient, low drag propulsion system. They are assemblies of different parts (rear jet pipe, strut ring, moving actuator ring, petals and flaps).

²⁶ For the purpose of this Decision, only low pressure turbines and turbine frames were investigated, as the supply of turbine exit cases (also known as turbine exhaust cases), con-di nozzles does not raise concerns: ITP supplies turbine exit cases only for two defence application engines: EJ200 (Eurojet consortium) and TP400 (Europrop consortium) and con-di nozzles for the EJ200. As explained in more detail in section 4.3 the Transaction does not raise competition concerns with respect to possible input foreclosure for any of the three consortia in which ITP and Rolls-Royce participate.

²⁷ Commission decision of 23 April 2007 in case M.4561 – *GE / Smith Aerospace*, paragraphs 23 and 32; Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 64.

3.2.3.2. Results of the market investigation and Commission's assessment

- (42) The engine OEMs who replied to the market investigation questionnaire unanimously indicated that there is no demand-side substitutability between engine components. One engine OEM stated that "*each engine component has specific needs and goals to achieve which may not be substituted between the different components. As an example, we may consider different modules (Fan, Low pressure compressor, High pressure compressor, Combustion Chamber, High pressure turbine, Low pressure turbine, Nozzle, Inlet, Nacelle, equipment, etc.). All of these modules have specific functions (compress, burn, guide, etc.) and specific conditions of operations (temperature, pressure, etc.)*".²⁸
- (43) The market investigation results did not provide a clear picture with respect to the possible supply-side substitutability for fabricated parts.
- (44) As regards low pressure turbines in particular, a fabricated parts competitor agreed with the Commission's approach in *GE/Avio*, that low pressure turbines constituted a product, distinct from other aerospace components, notably from high pressure turbine, because of their specific characteristics: high pressure turbines and low pressure turbines "*have different requirements and use different technologies*."²⁹ In relation to turbine frames, whereas it was acknowledged that, from a demand-side perspective, turbine frames cannot be substituted by another fabricated component, a market participant explained that although the turbine frame is a static part, it is complex in design and function. As specific know-how and capabilities are required to design and manufacture turbine frames, this market participant agreed that turbine frames should be considered as specific type of engine component distinct from other fabricated components.
- (45) As regards the question whether turbine frames should be further segmented between high pressure turbine structures, intermediate pressure turbine structures, tail bearing housings and mid-turbine frames, the market investigation was inconclusive.³⁰ Finally, the market investigation was also inconclusive as to whether turbine frames should be further segmented according to the type of aircraft.³¹
- (46) The results of the market investigation support a worldwide scope of the market for fabricated parts and its possible segmentations.³²

²⁸ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 8.

²⁹ See replies to Commission questionnaire to fabricated parts manufacturers Q1 of 24 February 2017, question 7.

³⁰ See replies to Commission questionnaire to fabricated parts manufacturers Q1 of 24 February 2017, question 10.

³¹ See replies to Commission questionnaire to fabricated parts manufacturers Q1 of 24 February 2017, question 13 and replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 9.

³² See replies to Commission questionnaire to fabricated parts manufacturers Q1 of 24 February 2017, questions 20 and 21; replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 13; replies to Commission questionnaire to machined parts competitors Q2 of 24 February 2017, questions 20 and 21.

(47) In light of the above, the Commission considers that for the purposes of this Decision, the exact product market definition of the market/s for fabricated components can be left open, since the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible product market definition. The Commission considers that for the purposes of this Decision the relevant geographic scope of the market for fabricated parts and its possible segmentations is worldwide.

3.2.4. *Components for non-aerospace gas turbines*

(48) In the past the Commission has also considered whether there might be distinct market(s) for components for non-aerospace gas turbines (industrial and marine applications) leaving the precise product market definition open in this regard.³³

(49) The Commission did not take a view as regards the exact geographic scope of the possible market(s) for components for non-aerospace gas turbines.³⁴

(50) In view of the fact that the manufacturing process and certification requirements for non-aerospace components for gas turbines do not appear to be more burdensome or costly than those for their aerospace equivalents,³⁵ and given that both ITP and Rolls-Royce are already pre-Transaction producing aerospace engine components (and therefore can produce non-aerospace gas turbine components without significant investments) the Commission does not consider it necessary to look at aerospace and non-aerospace components separately for the purpose of this Decision.

3.3. **Downstream markets for aircraft engines**

(51) In its previous decisional practice relating to aircraft engines, the Commission adopted two approaches, distinguishing engines by: (i) aircraft "platform", as customers (airframers and airlines purchasing aircrafts) cannot use engines that do not meet the specific requirements of an individual aircraft platform and cannot switch to an engine that has not been certified for the specific aircraft platform;³⁶ and (ii) the "mission profile" of the aircraft (depending on seating capacity, flying range, price and operational costs) on which the engine is deployed into.³⁷ On the basis of the latter criterion, aircraft engines can be distinguished between:

³³ Commission decision of 3 September 2012 in case M.6581 – *GKN / Volvo Aero*, paragraphs 16-18.

³⁴ Commission decision of 3 September 2012 in case M.6581 – *GKN / Volvo Aero*. In Commission decision of 26 July 2012 in case M.6410 – *UTC / Goodrich*, paragraphs 198-200 the Commission noted that "*Most component MRO service providers are active globally and consider that the markets for component MRO services are worldwide in scope.*"

³⁵ Commission decision of 3 September 2012 in case M.6581 – *GKN / Volvo Aero*, paragraph 16.

³⁶ Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraphs 68-69.

³⁷ Commission decision of 3 July 2001 in case M.2220 – *General Electric / Honeywell*, paragraphs 10, 17, 19-20, 29, 32; Commission decision of 23 April 2007 in case M.4561 – *GE / Smith Aerospace*, paragraph 10.

- a) engines for LCA (more than 100 passengers, range of 2 000 to 8 000 nautical miles ("nm")) with possible further sub-segmentation between engines for wide-body LCA and narrow-body LCA;
 - b) engines for regional aircraft with a possible further sub-segmentation between engines for small regional aircraft (30 to 50 seats, range up to 2 000 nm) and large regional aircraft (more than 70 seats, range up to 2 000 nm); and
 - c) engines for corporate aircraft with a possible further sub-segmentation between engines for light, medium and heavy corporate aircraft.
- (52) With respect to engines for helicopters in particular, the Commission has previously only found a distinct market for the helicopter aircrafts themselves (with a possible distinction between military and civil helicopters and/or application or vehicle weight).³⁸ As ITP does not manufacture any components for helicopter engines,³⁹ any possible market segment for helicopter engines is not further discussed in this decision.
- (53) The Commission has not analysed previously a separate market for defence aircraft engines in any detail. The Notifying Party submits that engines for defence aircrafts may be considered separately from civil aircraft, possibly segmented by application (combat and transport).
- (54) In relation to all civil engines, the Commission has previously considered the geographic market to be worldwide.⁴⁰ The geographic market has been considered national for defence aircraft engines where there is a domestic supplier, or otherwise EEA-wide or worldwide, when there is no domestic supplier.⁴¹

3.3.1. Notifying Party's view

- (55) The Notifying Party submits that since the Transaction does not raise serious doubts under any possible approach, the precise product and geographic market definitions for aircraft engines can be left open.

³⁸ Commission decision of 26 July 2012 in case M.6410 – *UTC / Goodrich*, paragraphs 145-147.

³⁹ ITP participates in the MTRI helicopter consortium, but purchases the components it supplies for the relevant engine from third parties. It supplies two structural castings to one of these third parties for incorporation into the final component. It also supplies a casting to a third party component supplier which is ultimately used in the PW210 helicopter engine. The PW210 does not compete with any Rolls-Royce engines, nor does it power any helicopters that compete with Rolls-Royce powered helicopters.

⁴⁰ Commission decision of 3 July 2001 in case M.2220 – *General Electric / Honeywell*, paragraph 36; Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 75; Commission decision of 26 July 2012 in case M.6410 – *UTC / Goodrich*, paragraph 149.

⁴¹ Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraphs 214 and 215.

3.3.2. Results of the market investigation and Commission's assessment

- (56) The results of the market investigation did not provide any elements justifying a departure from the Commission's previous decisions.
- (57) On the supply-side, most respondents indicate that engine OEMs tend to specialize in the production of engines in one or more "mission profile" segments.⁴² Moreover, all respondents confirmed that an engine OEM active only in one engine segment cannot start developing and manufacturing engines for a different aircraft mission profile quickly and without significant cost.⁴³ The majority of respondents also consider that the requirements for development and manufacture of engines (such as the manufacturing techniques, assembly lines, know-how, required investment etc.) built to power different aircraft platforms within the same mission profile do not vary significantly with one respondent pointing out to the significant time and investment required to develop new engine even within the same mission profile.⁴⁴
- (58) On the demand-side, with respect to engines for corporate aircrafts, all the airframers that had an opinion on the question asked in the market investigation questionnaire, consider that the different engines for corporate aircrafts could be broadly segmented into engines for heavy, medium and light corporate aircrafts based on their product and/or technical characteristics.⁴⁵ An airframer explains that "[i]n general basis, the size of the aircraft (number of seats) and the range/thrust of the engine will determine its segment." and that "[t]he technical characteristics would be fan diameter, weight and thrust class."⁴⁶ The results of the market investigation did not provide a clear picture as regards the ability of engine OEMs specialised in the design and manufacture of engines for heavy corporate aircrafts to quickly and without significant costs switch to medium corporate aircraft engines design and manufacture.⁴⁷
- (59) With respect to the geographic scope of the relevant engine markets, the respondents to market investigation questionnaires, both airframers and engine OEM manufacturers, consider the markets for civil aircraft engines to be worldwide in scope.⁴⁸ In relation to defence aircraft engines, where there is no domestic supplier of military aircraft engines on the demand-side, some airframers which responded to market investigation questionnaire consider that the scope of the market is worldwide.⁴⁹ On the supply-side, this is confirmed by

⁴² See replies to Commissioner questionnaire to engine manufacturers Q3 of 24 February 2017, question 5.

⁴³ See replies to Commissioner questionnaire to engine manufacturers Q3 of 24 February 2017, question 6.

⁴⁴ See replies to Commission questionnaire to engine manufacturers Q3 of 24 February 2017, question 7.

⁴⁵ See replies to Commission questionnaire to airframers Q4 of 24 February 2017, question 5.

⁴⁶ See replies to Commission questionnaire to airframers Q4 of 24 February 2017, question 5.

⁴⁷ See replies to Commission questionnaire to airframers Q4 of 24 February 2017, questions 5.4 and 5.5.

⁴⁸ See replies to Commission questionnaire to engine manufacturers Q3 of 24 February 2017, question 11; and replies to Commissioner questionnaire to airframers Q4 of 24 February 2017, question 6.

⁴⁹ See replies to Commission questionnaire to airframers Q4 of 24 February 2017, question 7.

all engine OEM manufacturers which responded to the market investigation questionnaire.⁵⁰ Where there is a domestic supplier of military aircraft engines, the responses received during the market investigation are mixed.

- (60) In light of the above, the fact that the market investigation was not fully conclusive as to the possible segmentations of the engine markets, and in particular given that the Commission in any event will carry its assessment of the present case under the narrowest possible product market definition (the competitive assessment will focus on specific engines), the Commission considers that, for the purposes of this Decision, the precise delineation of the product markets for aircraft engines can be left open.
- (61) The Commission further considers that, for the purpose of this Decision, the markets for civil aircraft engines are worldwide. In relation to defence aircraft engines, the exact geographic market definition can be left open, since the assessment would not differ under any plausible geographic market definition.

3.4. Non-aerospace gas turbines

- (62) In relation to non-aerospace gas turbines (marine and industrial), the Commission previously found that the product market could be split according to the type of technology between industrial and aero-derivative gas turbines. The Commission also considered a possible segmentation according to power output⁵¹ or end-application (turbines used in oil & gas distinct from turbines used in the industrial power generation sector) ultimately leaving the precise product market definition open.⁵²
- (63) For completeness, the Commission has also considered in the context of propulsion system trains⁵³ (which include gas turbines), a distinction between naval and commercial propulsion trains due to specific requirements for characteristics such as robustness, shock, noise and vibration.⁵⁴
- (64) As regards aero-derivative and industrial gas turbines the geographic scope of the relevant market(s) was considered at least EEA-wide, and likely worldwide.⁵⁵
- (65) Rolls-Royce is currently active only in the supply of medium marine gas turbines (15 MW – 60 MW), having sold its industrial (energy) gas turbines business to Siemens in 2015.

⁵⁰ See replies to Commission questionnaire to engine manufacturers Q3 of 24 February 2017, question 12.

⁵¹ Small gas turbines with a power output of below 15 MW, medium with output of between 15 and 60 MW and large gas turbines with a power output of more than 60 MW.

⁵² Commission decision of 4 August 2014 in case M.7284 - *Siemens AG / John Wood Group / Rolls-Royce Combined ADGT Business / RWG*, paragraphs 16, 20, 26 and 33.

⁵³ Typically consisting of power generation equipment (driver: diesel engine, gas turbine), alternator or generator, electric distribution or control, VSD, electric motor, shaft line and propeller.

⁵⁴ Commission decision of 25 July 2011 in case M.6222 - *GE Energy / Converteam*, paragraph 54.

⁵⁵ Commission decision of 4 August 2014 in case M.7284 - *Siemens AG / John Wood Group / Rolls-Royce Combined ADGT Business / RWG*, paragraph 49

3.4.1. *Notifying Party's view*

- (66) The Notifying Party submits that it is active only in relation to sales of gas turbines to naval customers. The Notifying Party argues that the product and geographic market definition can be left open, as the Transaction does not raise concerns.

3.4.2. *Results of the market investigation and Commission's assessment*

- (67) The results of the market investigation did not provide any indication that it would be warranted for the Commission to depart from its previous practice for defining the relevant product and geographic market in the present case.
- (68) In any event, the Commission considers that, for the purposes of this Decision, the exact product and geographic definition of the markets for non-aerospace gas turbines can be left open, since the Transaction does not raise serious doubts as to its compatibility with the internal market under any plausible market definition.

3.5. MRO services

- (69) The Commission has in the past identified distinct markets for (i) engine maintenance services; and (ii) component maintenance services.⁵⁶
- (70) Within component maintenance services, the Commission has drawn a distinction between markets for commercial aviation and business aviation.⁵⁷ The Commission further concluded that the geographic scope of the markets for components maintenance services is global.⁵⁸
- (71) Within engine maintenance services, the Commission has further considered potentially separate product markets depending on the engine type, application and engine family.⁵⁹ The Commission also considered whether maintenance services for military aircraft engines and civil aircraft engines constituted separate markets.⁶⁰
- (72) The Commission has considered the geographic market for engine MRO services to be at least EEA-wide, both with respect to aircraft engines and aero-derivative engines, but narrower (possibly national) for defence.⁶¹
- (73) Although both Parties provide MRO services for engines and for components, they are not in competition with each other. As regards MRO services for engines, Rolls-Royce only provides MRO services for certain of its own engines,

⁵⁶ Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 42.

⁵⁷ Commission decision of 26 July 2012 in case M.6410 – *UTC / Goodrich*, paragraphs 192-194; Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 42.

⁵⁸ Commission decision of 13 September 2012 in case M.6554 - *EADS/ STA/ EFW JV*, paragraph 26.

⁵⁹ Commission decision of 16 February 2009 in case M.5399 - *Mubadala / Rolls-Royce / JV*, paragraphs 17-21.

⁶⁰ Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 43.

⁶¹ Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 62.

but not for any third party engines, whereas ITP in general does not provide MRO services for Rolls-Royce engines with the exception of Rolls-Royce's Model 250 and RR300, for which Rolls-Royce does not provide MRO services.

- (74) Rolls-Royce does not provide component maintenance services for third party engines and ITP provides limited component maintenance services on civil engines, but does not supply component maintenance services for any Rolls-Royce engines.⁶²
- (75) Therefore, given that the Transaction does not give rise to horizontal overlap with respect to MRO services, the precise product and geographic markets for MRO services can be left open, and MRO services are not further discussed in this Decision.

4. COMPETITIVE ASSESSMENT

- (76) In this Section, the Commission will first carry out its horizontal assessment of the Transaction in Section 4.1. Subsequently, it will assess the vertical effects of the Transaction in Section 4.2. Finally, in Section 4.3 below, the Commission will analyse the effects the Transaction will have on the three consortia in which both Rolls-Royce and ITP are members.

4.1. Horizontal assessment

- (77) As mentioned in paragraphs (4) and (14), ITP is mainly active as supplier of components and MRO services, and is not active in the downstream production of engines, where Rolls-Royce is active. Therefore, the Parties' activities do not overlap with respect to the market for the production of aircraft engines.
- (78) Moreover, the Parties' activities do not overlap with regard to the production of fabricated and machined parts components for engines. ITP produces and sells both machined and fabricated parts to third parties, whereas Rolls-Royce only produces certain engine components for captive production.⁶³
- (79) The Transaction gives rise to a limited overlap between the Parties' activities only in relation to castings, as both ITP and Rolls-Royce supply certain casting products. More specifically, Rolls-Royce, through its subsidiary Europea Microfusioni Aerospaziali ("EMA"), and its joint venture with Xi'an Aero Engine Company (XR Aero-components Ltd ("XRA")), supplies a small quantity of aerofoils castings to third parties.⁶⁴ ITP, through its subsidiary PCB, also supplies

⁶² Rolls-Royce provides a very limited amount of light component repairs for the V2500 engine, pursuant to a transitional arrangement following Rolls-Royce's exit from the International Aero Engines ("IAE") joint venture in 2012. However, ITP has no involvement in the MRO services for that engine.

⁶³ According to the Notifying Party, Rolls-Royce maintains a certain supply of components to third parties, but for historical reasons (Form CO, paragraph 6.62).

⁶⁴ According to the Notifying Party, EMA supplies turbine blades and turbine vanes for aerospace engines and non-aerospace gas turbines amounting to approximately EUR [...] million sales for third party industrial turbines and approximately EUR [...] million for aerospace engines; XRA supplies turbine blades to Chinese national engine manufacturers pursuant to a licence for a Chinese version of Rolls-Royce's Spey engine, representing around USD [...] million in sales.

castings, including aerofoils.⁶⁵ However, this overlap does not give rise to a horizontally affected market, as the Parties' combined market share in relation to castings and the narrower segment of aerofoils castings (which is where the Parties would overlap) would be below [0-5]% at worldwide level. Furthermore, the Commission notes that respondents to the market investigation did not raise concerns with respect to the supply of castings, indicating that post-Transaction alternative suppliers for castings would be available.⁶⁶

- (80) In light of the above, the Commission considers that the Transaction does not give rise to serious doubts as regards its compatibility with the internal market because of horizontal overlaps with respect to the markets (i) for the production of aircraft engines; (ii) for the production of castings; (iii) for the production of machined parts; (iv) for the production of fabricated parts; and (v) for the provision of MRO services.

4.2. Vertical assessment

- (81) As mentioned in paragraph (14), given that ITP is a manufacturer of components for aircraft engines and that Rolls-Royce manufactures and supplies aircraft engines, the Transaction raises issues of a vertical nature and is mostly susceptible of raising input foreclosure concerns with respect to competing downstream engine OEMs.⁶⁷ More specifically, post-Transaction, the merged entity may have the ability and incentive to frustrate the supply of the components that ITP currently provides to engine OEMs competing downstream with Rolls-Royce. This could hamper engine OEMs' ability to compete against Rolls Royce.
- (82) In line with the competitive assessment of previous cases, there are two potential foreclosure scenarios that can arise when considering vertical relationships between an upstream engine components supplier and a downstream engine manufacturer in the context of competition for existing programmes.⁶⁸
- (83) The first one consists of input foreclosure based on **engine-to-engine** competition, where two engines have both been certified by an airframer on an

⁶⁵ According to the Notifying Party, PCB primarily focuses on the production of castings for structures ([...]% of its sales), which neither EMA nor XRA provide. PCB's revenues from castings was EUR [...] million in 2015. ITP's share of aerofoils castings was [0-5]% worldwide and [0-5]% EEA-wide in 2015.

⁶⁶ See replies to Commission questionnaire to machined parts providers Q2 of 24 February 2017, question 40; replies to Commission questionnaire to fabricated parts manufacturers Q1 of 24 February 2017, question 40.

⁶⁷ With respect to possible customer foreclosure concerns (that is to say, whether Rolls-Royce would have the ability and incentive to purchase engine components only from ITP rather than from other upstream components suppliers competing with ITP, which would be foreclosed), the Commission notes that suppliers of machined and fabricated components responding to the market investigation did not raise customer foreclosure concerns and indicated that post-Transaction a sufficient number of alternative downstream customers would remain available (see replies to Commission questionnaire to machined parts providers Q2 of 24 February 2017, questions 38, 40 and 41; replies to Commission questionnaire to fabricated parts manufacturers Q1 of 24 February 2017, questions 37, 38, 40 and 41). Therefore, customer foreclosure is not discussed further in this Decision.

⁶⁸ Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraphs 91-92.

aircraft platform or, for marine gas turbines, where a marine customer has a choice between two turbines, thus giving the customers a choice between two rivals' engines/turbines. In this scenario, where a Rolls-Royce engine competes directly with another engine option on the same platform, the foreclosure concern is that Rolls-Royce could try to disrupt upstream supplies of ITP's components to that competing engine in order to divert sales to its own engine option for such platform. In this case, following the disruption, the airframer would be diverted to Rolls-Royce's engine for its platform.

- (84) The second scenario consists of input foreclosure based on **aircraft-to-aircraft** competition, where airline customers must choose between competing aircraft platforms, which are powered by competing engines: for instance, one engine of an engine OEM is certified for a given aircraft platform and Rolls-Royce (or a Rolls-Royce JV) offers its own engine on a separate competing platform. The foreclosure concern in this case is that Rolls-Royce could disrupt ITP's supply to the engine of a given aircraft platform, which would divert the aircraft buyer to choose the aircraft platform on which a Rolls-Royce engine is installed. Therefore, to succeed, any such foreclosure strategy would require that sales are diverted to an entirely different aircraft. If there are other competing third party aircrafts (not relying on ITP for components supply to the engine), it is unlikely that a foreclosure strategy would succeed, as Rolls-Royce would not have the guarantee that a supply disruption on the part of ITP would automatically divert an aircraft buyer from one aircraft with an engine relying on ITP components to the aircraft with the Rolls-Royce engine.
- (85) These two input foreclosure concerns are analysed in turn below with respect to competition for existing programmes. As regards potential concerns of input foreclosure by the merged entity towards engine OEMs for future programmes, the Commission notes that engine OEMs responding to the market investigation questionnaire indicated that they do not source components from ITP for engines that could be competing with a Rolls-Royce engine for future programmes.⁶⁹ Therefore, the Commission will not further analyse competition for future programmes (with the exception of the [potential new aircraft engine], see Section 4.2.4.3 below), as the Transaction does not raise input foreclosure concerns with respect to future programmes.

4.2.1. *Legal framework*

- (86) According to the Non-Horizontal Merger Guidelines,⁷⁰ non-coordinated effects may significantly impede effective competition as a result of a vertical merger if such merger gives rise to foreclosure. Foreclosure occurs where actual or potential competitors' access to supplies or markets is hampered or eliminated as a result of the merger, thereby reducing those companies' ability and/or incentive to

⁶⁹ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 31.

⁷⁰ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Non-Horizontal Merger Guidelines"), OJ C 265, 18.10.2008, p. 6-25.

compete.⁷¹ Such foreclosure may discourage entry or expansion of competitors or encourage their exit.⁷²

- (87) The Non-Horizontal Merger Guidelines distinguish between two forms of foreclosure. Input foreclosure occurs where the merger is likely to raise the costs of downstream competitors by restricting their access to an important input. Customer foreclosure occurs where the merger is likely to foreclose upstream competitors by restricting their access to a sufficient customer base.⁷³
- (88) According to Paragraph 31 of the Non-Horizontal Merger Guidelines, "*input foreclosure arises, where, post-merger, the new entity would be likely to restrict access to the product or services that it would have otherwise supplied absent the merger, thereby raising its downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger*".⁷⁴
- (89) In assessing the likelihood of an anticompetitive foreclosure scenario, the Commission examines, first, whether the merged entity would have, post-merger, the ability to substantially foreclose access to inputs or customers, second, whether it would have the incentive to do so, and third, whether a foreclosure strategy would have a significant detrimental effect on competition.⁷⁵
- (90) As regards ability to foreclose, under the Non-Horizontal Merger Guidelines, input foreclosure may lead to competition problems if the upstream input is important for the downstream product.⁷⁶
- (91) An input may be deemed important when it represents a significant cost factor relative to the price of the downstream product or when it constitutes a critical component, without which the downstream product could not be manufactured or effectively sold on the market. An input may also be important when it represents a significant source of product differentiation, or when switching costs to alternative inputs are relatively high.⁷⁷ For input foreclosure to be a concern, a vertically integrated merged entity must have a significant degree of market power in the upstream market. It is only in those circumstances that the merged entity can be expected to have significant influence on the conditions of competition in the upstream market and thus, possibly, on prices and supply conditions in the downstream market.⁷⁸

⁷¹ See Non-Horizontal Merger Guidelines, paragraph 18.

⁷² See Non-Horizontal Merger Guidelines, paragraph 29.

⁷³ See Non-Horizontal Merger Guidelines, paragraph 30. For the reasons outlined in footnote 67 above, customer foreclosure is not further discussed in this Decision.

⁷⁴ See Non-Horizontal Merger Guidelines, paragraph 31.

⁷⁵ See Non-Horizontal Merger Guidelines, paragraph 32.

⁷⁶ See Non-Horizontal Merger Guidelines, paragraph 34.

⁷⁷ See Non-Horizontal Merger Guidelines, paragraph 34.

⁷⁸ See Non-Horizontal Merger Guidelines, paragraph 35.

- (92) The Non-Horizontal Merger Guidelines also specify that “[t]he merged entity would only have the ability to foreclose downstream competitors if, by reducing access to its own upstream products or services, it could negatively affect the overall availability of inputs for the downstream market in terms of price or quality”.⁷⁹
- (93) With respect to incentives to foreclose, paragraph 40 of the Non-Horizontal Merger Guidelines states that the incentive of the merged entity to foreclose depends on the degree to which foreclosure would be profitable. The vertically integrated firm will take into account how its supplies of inputs to competitors downstream will affect not only the profits of its upstream division, but also of its downstream division. Essentially, the merged entity faces a trade-off between the profit lost in the upstream market due to a reduction of input sales to (actual or potential) rivals and the profit gain, in the short or longer term, from expanding sales downstream or, as the case may be, being able to raise prices to consumers.⁸⁰ Additionally, paragraph 42 of the Non-Horizontal Merger Guidelines indicates that “[t]he incentive for the integrated firm to raise rivals’ costs further depends on the extent to which downstream demand is likely to be diverted away from foreclosed rivals and the share of that diverted demand that the downstream division of the integrated firm can capture”.
- (94) As regards the effects of input foreclosure, the Non-Horizontal Merger Guidelines explain that such conduct raises competition concerns when it leads to increased prices on the downstream market. First, anticompetitive foreclosure may occur when a vertical merger allows the merging parties to increase the costs of downstream rivals in the market thereby leading to an upward pressure on their sales prices. Second, effective competition may be significantly impeded by raising barriers to entry to potential competitors.⁸¹ The Horizontal Merger Guidelines further state that if there remain sufficient credible downstream competitors whose costs are not likely to be raised, for example because they are themselves vertically integrated or they are capable of switching to adequate alternative inputs, competition from those firms may constitute a sufficient constraint on the merged entity and therefore prevent output prices from rising above pre-merger levels.⁸²
- (95) Additionally, the Non-Horizontal Merger Guidelines recognise that a vertically integrated entity may gain access to commercially sensitive information on the activities of its upstream or downstream rivals. This may give the vertically integrated entity a competitive advantage to the detriment of consumers. For instance, a vertically integrated entity which is also the supplier of a downstream competitor may obtain critical information regarding the latter’s activities.⁸³

⁷⁹ See Non-Horizontal Merger Guidelines, paragraph 36.

⁸⁰ See Non-Horizontal Merger Guidelines, paragraph 40.

⁸¹ See Non-Horizontal Merger Guidelines, paragraphs 47-49.

⁸² See Non-Horizontal Merger Guidelines, paragraph 50.

⁸³ See Non-Horizontal Merger Guidelines, paragraph 78.

4.2.2. Input foreclosure concerns on engine-to-engine competition

4.2.2.1. The Notifying Party's view

- (96) According to the Notifying Party, there are currently two aircraft engines that compete on an engine-to-engine basis with a Rolls-Royce engine and that receive components' supplies from ITP. These engines are indicated in Table 1 below, together with the competing Rolls-Royce engine, the relevant aircraft platform and the components supplied by ITP.

Table 1 – Aircrafts where there is engine-to-engine competition with a Rolls-Royce engine

Name of engine and Engine OEM	Name and type of aircraft platform	Rolls-Royce engine	Components supplied by ITP
GP7000, Engine Alliance (GE/P&W JV)	Airbus A380 (wide-body LCA)	Trent 900	Structural and aerofoil castings
GENx, GE	Boeing 787-8/9/10 (wide-body LCA)	Trent 1000	Structural castings

Form CO, Annex 5

- (97) Moreover, ITP supplies components to the GE LM2500, an engine that is an aero-derivative gas turbine used for (mostly) energy applications and (to a lesser extent) marine propulsion applications. This engine is in engine-to-engine competition with the Rolls-Royce MT30 engine for marine propulsion applications.⁸⁴ More specifically, ITP supplies to GE the compressor case, thermal shield and shafts for the marine applications of the LM2500.

GP7000 and the GENx engines

- (98) As regards the GP7000 and the GENx, the Notifying Party submits that ITP does not supply final components to Rolls-Royce's competitors, but only castings as inputs to [component supplier], another engine component supplier, which, in turn, supplies the components that are ultimately used in the engine. These casting parts are purchased by [component supplier] on a dual-source basis, so that [component supplier] could easily switch the supply to its second supplier. Furthermore, these casting parts are not complex parts, and post-Transaction there will be a number of alternative suppliers, *inter alia* Alcoa, PCC and Doncasters, which could also supply them. Finally, the Notifying Party submits that, since Airbus and Boeing are key customers of Rolls-Royce, Rolls-Royce would have no incentive to damage these relationships by disrupting ITP's supply of components to the GP7000 or the GENx respectively.

LM2500 engine

- (99) In relation to the LM2500 engine, ITP is GE's sole supplier for the compressor case, thermal shield and turbine shafts used in this engine. However, the Notifying Party submits that GE could easily switch to an alternative supplier, if the merged entity were to disrupt supply. This is because (i) the supplied

⁸⁴ Rolls-Royce is only active in marine gas turbines, as it sold its energy gas turbines to Siemens in 2015.

components are not complex; (ii) the components are only supplied on a make-to-print basis;⁸⁵ (iii) there are alternative suppliers to ITP, which only has a market share of [5-10]%; (iv) GE may have in-house capability; and finally (v) the components are not subject to the same certification process as the aircraft engine components, which facilitates switching.

4.2.2.2. Commission's assessment

- (100) The engine OEMs' responses to the market investigation questionnaire did not indicate other engines competing on an engine-to-engine basis with Rolls-Royce engines, for which ITP supplies components.⁸⁶ Therefore, the Commission will focus its assessment on the three aforementioned engines.

GP7000 and the GENx engines

- (101) With respect to the two GE aircraft engines identified in Table 1 above, the Commission notes that ITP's market share on the upstream market for the supply of castings is low.⁸⁷ This suggests that ITP lacks any degree of market power as regards castings.⁸⁸ Additionally, as mentioned in paragraph (98), ITP does not supply castings to GE, but to [component supplier], which then uses them as material to manufacture components for the GP7000 and the GENx engines.
- (102) Moreover, the Commission notes that [component supplier] dual-sources castings from ITP and another alternative supplier. Therefore, even if the merged entity were to engage in an input foreclosure strategy towards GE by withholding supply of castings to [component supplier], the latter could rely on an alternative source, which would frustrate any attempt of input foreclosure. In addition, respondents to the market investigation questionnaire indicated that post-Transaction a sufficient number of suppliers of castings would remain available.⁸⁹ It is therefore unlikely that post-Transaction Rolls-Royce would have the ability to engage input foreclosure towards GE with respect to the GP7000 and the GENx engines. Furthermore, the fact that [component supplier] could switch to an alternative supplier other than ITP and that GE's supply of castings would not be disrupted also makes it unlikely that Rolls-Royce would have the incentive to foreclose supply to GE, as this conduct would make the merged entity lose the upstream profits without any guarantee that this is outweighed by downstream profits. The fact that [component supplier] could change to its alternative supplier

⁸⁵ As opposed to a design/make context, in which the component supplier usually develops and owns the design IP associated with the component in question. In a make-to-print context, the design IP is typically owned by the engine OEM and licensed to the supplier.

⁸⁶ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 14.

⁸⁷ Based on information submitted by the Notifying Party, ITP's market share in 2015 in the market for castings of aerospace components was [0-5]% worldwide and [0-5]% EEA-wide. In the potentially narrower segments of structural casting and aerofoil castings, ITP's share was [0-5] % and [0-5]% worldwide respectively ([0-5]% and [0-5]% EEA-wide respectively).

⁸⁸ Non-Horizontal Merger Guidelines, paragraphs 23-24 and 35.

⁸⁹ See replies to Commission questionnaire to machined parts providers Q2 of 24 February 2017, question 40; replies to Commission questionnaire to fabricated parts manufacturers Q1 of 24 February 2017, question 40.

also reduces the likelihood that a foreclosure strategy would have effects on GE as a downstream competitor.

- (103) Finally, the Commission notes that during the market investigation GE indicated that it did not have concerns in relation to its aircraft engines that are in engine-to-engine competition with Rolls-Royce, and that Airbus and Boeing (on whose platforms GE's aircraft engines are installed) also did not raise concerns.⁹⁰

LM2500

- (104) With respect to the LM2500 engine, ITP is the sole supplier of the compressor case, thermal shield and turbine shafts. However, ITP's market share for each of these three components is very low, which suggests that there are several alternative suppliers for these components and thus the merged entity would lack the ability to foreclose competitors.⁹¹ Therefore, while ITP may be the sole supplier of those components, this does not imply that ITP is a particularly special supplier for which GE cannot find an alternative.⁹² Moreover, given the lower level of complexity of the components and the fact that those components for energy or marine gas turbines are not subject to the same testing and certification process as the components for engine aircrafts, the supply of the components ITP provides could be resourced from an alternative supplier in 12-18 months or less, with a shorter period possible if a buyer acts with urgency. In terms of investment, costs to switch would not be high or prohibitive given the large number of competitors in this area.
- (105) Finally, as mentioned in paragraph (103) for aircraft engines, GE did not raise input foreclosure concerns with regard to the LM2500.
- (106) Therefore, in light of the above findings, the Commission considers that the Transaction does not raise input foreclosure concerns with respect to any of the engines that compete on an engine-to-engine basis with Rolls-Royce's engines.

4.2.3. Input foreclosure concerns on aircraft-to-aircraft competition

4.2.3.1. The Notifying Party's view

- (107) According to the Notifying Party, there are currently seven engine programmes for which Rolls-Royce competes on an aircraft-to-aircraft basis and for which ITP is a supplier of components. These engines are listed in Table 2, together with the relevant aircraft on which the engine is installed, the closest competing platform powered by a Rolls-Royce engine, and the components supplied by ITP to the competing engine.

⁹⁰ See GE's email dated 8 March 2017; replies to Commission questionnaire to airframers Q4 of 24 February 2017, question 21.

⁹¹ See also list of alternative suppliers provided by the Notifying Party in Annex 5 to the Form CO.

⁹² ITP's 2015 worldwide share was: for casings, [0-5]%; for thermal shields, [0-5]%; for shafts, [5-10]%.

Table 2 – Aircraft-to-aircraft competition with Rolls-Royce engines

Name of engine and Engine OEM	Name and type of aircraft platform	Closest Rolls-Royce powered platform	Components supplied by ITP
GE90 (GE)	Boeing 777-300ER (Wide-body LCA)	Airbus A350-800/800/1000 (Trent XWB)	[Structural components] (to GE's subsidiary Avio)
[...] (GE)	Boeing 777-8X/9X (Wide-body LCA)	Airbus A350-800/800/1000 (Trent XWB)	[Structural components] (to [component suppliers])
F414 (GE)	Boeing F/A-18 and SAAB JAS 39E/F Gripen (defence combat)	Eurofighter Typhoon (EJ200 engine, produced by Eurofighter consortium)	Seals and cover plates
PW800 (P&W)	Gulfstream G500 and G600 ⁹³ (heavy corporate)	Bombardier Global 5000/6000 (BR700 Series)	[Structural and compressor machined components]
Silvercrest (Safran)	Dassault 5X ⁹⁴ and Cessna Hemisphere ⁹⁵ (heavy corporate)	Bombardier Global 5000/6000 (BR700 Series)	Structural castings
TFE731 (Honeywell)	Dassault Falcon 900 (trijet aircraft, heavy corporate)	Gulfstream G450 and Embraer Legacy 650 (AE3007)	Turbine discs, seals
HTF7000 (Honeywell)	Bombardier Challenger 350, Gulfstream G280, Cessna Citation Longitude, ⁹⁶ Embraer Legacy 500 (medium corporate)	Cessna Citation X (AE3007) Embraer 650 (AE3007)	Nozzle guide vanes, exit guide vanes, casing

Form CO, Annex 5

(108) The Notifying Party argues, first, that Rolls-Royce already exercises joint control over ITP pre-Transaction and has the ability to disrupt the supply of components that ITP provides to downstream engine competitors of Rolls-Royce but has not done so and the Transaction reduces any incentive Rolls-Royce might have in this respect. Second, the Notifying Party submits that the range of components supplied by ITP is generally not very complex and for each of the components supplied by ITP there is a sufficient number of alternative providers. Third, ITP's market share is above 30% only with respect to three components that in any event are unproblematic given that the only ITP customer for these components is Rolls-Royce; these components being: turbine discs, nozzle guide vanes and low

⁹³ Entry into service expected in [date].

⁹⁴ Entry into service expected in [date].

⁹⁵ Entry into service expected in [date].

⁹⁶ Entry into service expected in [date].

pressure turbines (all for wide-body commercial aircrafts) supplied for RR Trent engine series.

- (109) The Notifying Party also submits that it does not have the ability or incentive to engage in input foreclosure for the following reasons: (i) ITP's contracts for supply of components provide for strict obligations in relation to price, quality and delivery times that ensure significant contractual protection to components customers in case of supply disruption; (ii) for certain engines listed in Table 2, ITP is not the sole supplier for the given component therefore the customer could partially or fully shift volumes to its alternative vendor; (iii) for each of the components supplied by ITP there is a number of alternative suppliers to which the component customers can switch (in relation to switching the Notifying Party claims that barriers to switching for these components are relatively low and switching could occur over one or two years).
- (110) The Notifying Party further submits that it lacks the incentive to foreclose any downstream engine competitors mainly because in order to recoup any loss of upstream component revenue, Rolls-Royce would need to recapture sales at downstream aircraft level. In other words, Rolls-Royce would need to ensure that the disruption of components supply by ITP to its engine customers would result in the downstream aircraft customer moving away from its current aircraft to a Rolls-Royce-powered aircraft. The likelihood of such diversion of sales to a Rolls-Royce-powered aircraft is - according to the Notifying Party - remote and speculative given the significant cost and delay involved for the aircraft customer and the significant competition that Rolls-Royce faces in each downstream market. Finally, Rolls-Royce will face reputational damage and any inability to meet delivery obligations including by its subsidiaries would likely affect Rolls-Royce's ability to compete for downstream customers.

4.2.3.2. Commission's assessment

- (111) The engine OEMs' responses to the market investigation questionnaire did not indicate other engines competing on an aircraft-to-aircraft basis with Rolls-Royce engines, for which ITP supplies components.⁹⁷ Therefore, the Commission will focus its assessment on the aforementioned engines. In addition, the Commission will also analyse possible input foreclosure concerns in relation to the [potential new aircraft engine specified in section 4.2.4.3.].
- (112) As noted in paragraph (84), in order to be successful and profitable an input foreclosure strategy carried out towards a third party engine competing on an aircraft-to-aircraft basis, such as those illustrated in Table 2 above, requires that sales are diverted to an entirely different aircraft, specifically in this case to an aircraft powered by a Rolls-Royce engine. Accordingly, the presence of other competing third party aircrafts (not relying on ITP for components supply to the engine) reduces the likelihood of success of a foreclosure strategy, as Rolls-Royce would not have the guarantee that a supply disruption on the part of ITP would automatically divert an airline customer from one aircraft with an engine relying on ITP components to an aircraft with a Rolls-Royce engine. The more alternative aircrafts are present, the less likely it is that an input foreclosure strategy would

⁹⁷ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 15.

succeed. Therefore, the presence of third party powered aircrafts diminishes Rolls-Royce's ability to engage in an input foreclosure conduct towards engines competing aircraft-to-aircraft. In addition, in those instances where ITP is not the exclusive supplier of components to the competing engine OEM, Rolls-Royce's ability to foreclose would be further reduced, as that engine OEM has an alternative source to rely upon.

- (113) Moreover, the presence of other aircrafts competing on an aircraft-to-aircraft basis would also diminish the incentive to engage in input foreclosure, as the merged entity would be less willing to forego the upstream revenues from components supply, if the potential downstream gains of a customer switching to a Rolls-Royce powered aircraft were too remote or speculative to occur.⁹⁸
- (114) Against this background, the Commission first notes that, for certain of the engines listed in Table 2 above, ITP is not the sole supplier of the relevant components. Therefore, for those engines the merged entity would lack the ability to foreclose the competing engines. More specifically, the components for the GE90 and [...] are dual-sourced from another supplier, which limits the merged entity's ability to engage in input foreclosure.⁹⁹ In addition, during the market investigation GE indicated that in its view the Transaction does not raise input foreclosure concerns as regards its engines competing on an aircraft-to-aircraft basis.¹⁰⁰
- (115) Second, for the other engines in Table 2 (which have ITP as their sole supplier for certain engine components), the Commission notes that there are a number of third party engines that do not rely on components from ITP and that compete on an aircraft-to-aircraft basis with Rolls-Royce's engines. The presence of those alternative engines and platforms thus reduces the likelihood of success of an input foreclosure strategy by Rolls Royce/ITP, as the merged entity would have no certainty that a customer would switch to the Roll-Royce powered platform. The most relevant alternative engines are listed in Table 3 below.

⁹⁸ See Non-Horizontal Merger Guidelines, paragraph 42.

⁹⁹ In the case of the [...], ITP supplies [component] to both [component suppliers]. The [component] to [component supplier] are supplied only by ITP, whereas [component supplier] has an alternative supplier. Moreover, the Notifying Party explains that, since the [...] engine is in the development phase, ITP (through PCB) is only supplying a low volume of [component] on the basis of purchase orders, which [component suppliers] will be using to trial different component designs. Once the designs are finalised, [component suppliers] are expected to convert this relationship into a standard long term supply agreement with PCB. For this "purchase order" activity, ITP has not invested in any special tooling, and it would only do so following a long term agreement. There is therefore much more scope for [component suppliers] to switch supply, and there are a number of alternative suppliers.

¹⁰⁰ GE's email dated 8 March 2017.

Table 3 – Other engines in aircraft-to-aircraft competition with Rolls-Royce engines

Name of engine and Engine OEM	Name and type of aircraft platform	Closest Rolls-Royce powered platform	Most relevant competing platforms powered by a third party engine
F414 (GE)	Boeing F/A-18 and SAAB JAS 39E/F Gripen (defence combat)	Eurofighter Typhoon (EJ200 engine, produced by Eurofighter consortium)	Lockheed Martin F-35 (P&W F135) Dassault Rafale (Snecma M88)
PW800 (P&W)	Gulfstream G500 and G600 ¹⁰¹ (heavy corporate)	Bombardier Global 5000/6000 (BR700 Series)	Dassault 7X/8X (Trijet, P&W PW300) Dassault Falcon 5X (Snecma Silvercrest) Cessna Hemisphere (Snecma Silvercrest)
Silvercrest (Safran/Snecma)	Dassault 5X ¹⁰² and Cessna Hemisphere ¹⁰³ (heavy corporate)	Bombardier Global 5000/6000 (BR700 Series)	Gulfstream G500 (P&W PW800)
TFE731 (Honeywell)	Dassault Falcon 900 (heavy corporate)	Gulfstream G450 and Embraer Legacy 650 (AE3007)	Bombardier Challenger 600 series (GE CF34) Cessna Hemisphere (Snecma Silvercrest) Dassault Falcon 2000 (P&W PW300)
HTF7000 (Honeywell)	Bombardier Challenger 350, Gulfstream G280, Cessna Citation Longitude, ¹⁰⁴ Embraer Legacy 500 (medium corporate)	Cessna Citation X (AE3007) Embraer 650 (AE3007)	Dassault Falcon 2000S (P&W, PW300) Cessna Citation Latitude (P&W, PW300) Cessna Citation Sovereign (P&W, PW300)

Form CO, Annex 5

(116) The fact that there are other platforms not powered by Rolls-Royce limits the likelihood that Rolls-Royce would be able to divert sales from competing engines to its own engine programmes. This also weakens the merged entity’s incentive to adopt a foreclosure strategy, as the merged entity would not have the guarantee that the loss of the ITP’s upstream revenues would be made up for by the acquisition of downstream customers switching to an aircraft powered by a Rolls-Royce engine. More specifically, the Commission notes the following with respect to the engines competing on an aircraft-to-aircraft basis with Rolls-Royce and relying on components by ITP.

¹⁰¹ Entry into service expected in [date].

¹⁰² Entry into service expected in [date].

¹⁰³ Entry into service expected in [date].

¹⁰⁴ Entry into service expected in [date].

F414 engine

- (117) The F414 engine is manufactured by GE and powers the Boeing F/A-18 and the SAAB JAS 39E/F Gripen, which are both combat aircrafts potentially competing with the Eurofighter Typhoon platform, which is powered by the EJ200, an engine produced by the Eurojet consortium of which Rolls-Royce and ITP are members. The F414 powered aircraft compete against a number of other (non-Rolls-Royce powered) aircrafts, including the F-35 and Rafale (neither of which ITP supplies). Therefore, Rolls-Royce would have no certainty that a customer switching away from the F/A-18 or the Gripen would select the Eurofighter Typhoon. Moreover, since the EJ200 is a consortium engine, Rolls-Royce would only gain its share of the sale ([...] % post-Transaction), which further limits the potential gains from an input foreclosure conduct.

Silvercrest engine

- (118) The Silvercrest engine is manufactured by Safran and powers the Dassault 5X and Cessna Hemisphere, both heavy corporate aircrafts, due to enter into service in 2017 and 2021 respectively. Rolls-Royce's engine (the BR700) powers the Bombardier Global 5000/6000. Another heavy corporate aircrafts closely competing is the PW800-powered Gulfstream G500. In order for a foreclosure strategy to be successful, Rolls-Royce would thus need to disrupt supply to both Safran's Silvercrest and P&W's PW800 (which also relies on components from ITP, see Section 4.2.4.1 below). However, even in such case, Rolls-Royce would not have the certainty of diverting sales to the aircraft powered by a Rolls-Royce engine, as there are other platforms competing in the heavy corporate jets sector, such as the Bombardier Challenger 600 series (powered by the GE CF34) and the Bombardier Global 7000/8000 (powered by the GE Passport).¹⁰⁵ In addition, the Commission notes that ITP supplies structural castings to Safran, which are less complex components, for which ITP lacks market power (see paragraph (101) above). Therefore, it is unlikely that the merged entity would have the ability and incentive to engage in input foreclosure towards the Silvercrest. Finally, it should be noted that during the market investigation, Safran indicated that it could switch to other available suppliers of castings; that it has contractual guarantees with ITP and that the Transaction would not affect Safran's ability to compete.¹⁰⁶

TFE731 engine

- (119) The TFE731 engine, which is manufactured by Honeywell, is smaller than any of Rolls-Royce's corporate aircraft engines.¹⁰⁷ Hence, in principle it would not usually compete on an engine-to-engine or aircraft-to-aircraft basis with Rolls-Royce's engines. However, the engine powers the Dassault Falcon 900, a trijet aircraft (that is, an aircraft powered by three engines), which is considered a heavy corporate aircraft. Therefore, there may be instances where the TFE371

¹⁰⁵ Form CO, Annex 5.

¹⁰⁶ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, questions 17, 24, 38, 39 and 40. See also Minutes of conference call of the Commission with Safran of 10 November 2016, point 9.

¹⁰⁷ Form CO paragraph 6.120 (v)

would compete on an aircraft-to-aircraft basis against a Rolls-Royce engine such as the AE3007. However, based on the information provided by the Notifying Party,¹⁰⁸ the Commission notes that the Falcon 900 more directly competes against non-Rolls-Royce powered aircrafts, such as the Bombardier Challenger 600 series (powered by the GE CF34), the Bombardier Global 7000/8000 (powered by the GE Passport), the Dassault Falcon 2000 (powered by the PW300 engine) and the Cessna Hemisphere (powered by Snecma's Silvercrest engine). As a result, given the availability of other third party platforms that are closer competitors to the Falcon 900, the likelihood of diversion of a customer's purchases from an aircraft powered by a rival's engine to an aircraft powered by a Rolls-Royce engine is unlikely. Rolls-Royce would have no guarantee that an attempted input foreclosure strategy would result in a successful diversion of a platform powered by one of its engines.

- (120) Therefore, the Transaction is unlikely to raise competition concerns based on input foreclosure with respect to the F414, the Silvercrest and the TFE731 engines, which compete on an aircraft-to-aircraft basis with Rolls-Royce engines.
- (121) During the market investigation, specific input foreclosure concerns were raised by P&W and Honeywell for the PW800 and the HTF7000 ([...]) respectively. As mentioned above in Table 2, these two engines compete with Rolls-Royce on an aircraft-to-aircraft basis. These concerns are analysed in more detail below.

4.2.4. *Input foreclosure concerns with respect to the PW800, the HTF7000 and the [potential new aircraft engine]*

4.2.4.1. PW800

- (122) In response to the market investigation questionnaire to engine OEMs, P&W raised input foreclosure concerns in relation to the PW800, an engine that powers heavy corporate jets. P&W submitted that ITP is the sole supplier to the PW800 of two fabricated components, the mid-turbine frame and the low pressure compressor, which it supplies on the basis of an RRSP agreement.¹⁰⁹
- (123) According to P&W, the PW800 currently competes with Rolls-Royce's BR700 engine on an aircraft-to-aircraft basis.¹¹⁰ However, P&W indicated that in the future competition with Rolls-Royce may also occur on an engine-to-engine basis.¹¹¹
- (124) P&W also raised concerns that post-Transaction, Rolls-Royce would acquire access to proprietary technical information and commercially sensitive business information concerning the PW800 that P&W shares with ITP for the development of the engine on the basis of its ongoing contractual relationship.

¹⁰⁸ Form CO paragraph 6.120 (v)

¹⁰⁹ See P&W's reply to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 16.

¹¹⁰ See P&W's reply to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 14.

¹¹¹ See Minutes of conference call of the Commission with P&W of 3 November 2016, point 7.

According to P&W, that information is not protected by firewalls that ensure its non-disclosure to Rolls-Royce post-Transaction.¹¹²

- (125) With respect to aircraft-to-aircraft competition, the Commission notes that there are other heavy corporate jet platforms powered by a non-Rolls-Royce engine (see paragraphs (118) and (119) above), which limits the likelihood of success of a foreclosure strategy towards the PW800, and thus the merged entity's ability and incentive to engage in input foreclosure. Therefore, the merged entity is unlikely to have the ability and incentive to engage in input foreclosure towards the PW800 in relation to aircraft-to-aircraft competition, given that it would not have guarantees that downstream customers would necessarily switch to an aircraft platform powered by a Rolls-Royce engine.
- (126) In case of future engine-to-engine competition between the PW800 and the Rolls-Royce BR700, however, it cannot be entirely excluded that the merged entity would have the ability and incentive to foreclose supply of components towards P&W, given that ITP is the sole supplier of two fabricated components for the PW800 (the mid-turbine frame and the low pressure compressor) and that in case of engine-to-engine competition Rolls-Royce would have a greater certainty to recapture an airframer customer diverted from the PW800, with its BR700 engine (which has a [20-30]% market share in terms of installed base in corporate engines, and a [50-60]% installed base within the engines for heavy corporate aircrafts).¹¹³
- (127) On 24 March 2017 P&W entered into a contractual assurances agreement with Rolls-Royce and ITP, which amends P&W's RRSP agreement with ITP and remains in effect until the RRSP agreement is terminated.¹¹⁴ The contractual assurances agreement includes among others the following guarantees and protections towards P&W with respect to the PW800.
- [...].
 - [...].
 - [...].
 - [...].
 - [...].
 - [...].
 - [...].

¹¹² See Minutes of conference call of the Commission with P&W of 3 November 2016, point 9.

¹¹³ Annex 8 to the Form CO.

¹¹⁴ That is to say, until P&W has no further obligations towards its PW800 customers (including any obligations to provide parts or aftersales support).

- (128) The Commission considers that the contractual assurances agreement entered into by P&W, Rolls-Royce and ITP removes the merged entity's ability to engage in input foreclosure towards P&W for the PW800.
- (129) In particular, the provisions relating to [details of the contractual assurances agreement entered into by P&W, Rolls-Royce and ITP] guarantee that Rolls-Royce/ITP will not [...] it provides to P&W. In addition, the [details of the contractual assurances agreement] will protect P&W from any risk [...] for the PW800. Furthermore, the provisions on [...] will enable P&W to identify [...], and the contractual assurances agreement ensures that P&W will have [details of the contractual assurances agreement]. In the latter hypothesis, the provisions on [details of the contractual assurances agreement] will allow P&W to [...].
- (130) Furthermore, the provisions related to [...] included in the contractual assurances agreement address and remove the potential risk of Rolls-Royce [...] P&W's engine programmes through [...], as those provisions guarantee [details of the agreement] protections, a [details of the agreement], and [details of the agreement] (including [...]).
- (131) In light of all the above, the Commission considers that the Transaction does not raise serious doubts as to its compatibility with the internal market as regards potential input foreclosure for the supply of components by the merged entity to P&W for the PW800, in relation to both aircraft-to-aircraft and engine-to-engine competition.

4.2.4.2. HTF7000

- (132) During the market investigation, Honeywell raised concerns in relation to its HTF7000 engine that powers business jets, for which ITP designs, develops and produces certain components of low pressure turbine on the basis of an RRSP agreement (Honeywell then proceeds to the assembly of the components supplied by ITP in-house). Honeywell explains that the HTF7000 competes with Rolls-Royce's AE3007 on an aircraft-to-aircraft basis, as well as in bids for future corporate jets. Honeywell explains that while the AE3007 is an older engine, it expects it to be updated by Rolls-Royce (for instance, by means of a technology infusion programme), and argues it would remain a competitive engine for future bids.¹¹⁵
- (133) In Honeywell's view, post-Transaction, Rolls-Royce would have the ability and incentive to foreclose supply of components to the HTF7000, which would put it at a competitive disadvantage against the AE3007. In particular, Honeywell submits that, while there are possible alternative suppliers for the low pressure turbine components that Honeywell currently sources from ITP, those suppliers either are not necessarily available or they do not have full capabilities to supply the component.¹¹⁶ Furthermore, Honeywell does not have in-house capabilities to

¹¹⁵ See Honeywell's reply to the Commission questionnaire to engine OEMs Q3 of 24 February 2017, questions 2828.1, 29 and 30.3. See also Honeywell's reply to the Commission's RFI of 14 March 2017, question 13.

¹¹⁶ Honeywell's reply to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 17.

produce the low pressure turbine and/or its components.¹¹⁷ Therefore, an input foreclosure conduct relating the low pressure turbine (components) would negatively affect Honeywell, insofar as there are limited switching options for the supply of the component and the switching would entail delays and additional costs that would affect the production and delivery of the engine.

Ability to foreclose

- (134) In relation to the merged entity's ability post-Transaction to engage in input foreclosure in relation to the HTF7000, the Commission notes the following.
- (135) Under the current RRSP agreement with Honeywell, ITP is the sole supplier to Honeywell of some components of the low pressure turbine for the HTF7000.¹¹⁸ Therefore, should Rolls-Royce engage in input foreclosure, either by not supplying the components or downgrading their quality, Honeywell would not have an immediately available alternative source of supply. Additionally, the responses to the market investigation questionnaires indicated that, in those instances where an engine OEM were to have to switch supplier for a given component, while full engine recertification may not be required, a substantiation plan would need to be approved, which takes time to complete.¹¹⁹ Should Honeywell change to an alternative supplier for the components of the low pressure turbine, even if such supplier were available, the change of supplier would require a substantiation plan of the component, which entails additional delays and costs. Therefore, an input foreclosure conduct with respect to the supply of the components of the low pressure turbine in relation to the HTF7000 would affect the availability of these components for Honeywell and the engine's competitiveness.
- (136) However, as mentioned in paragraphs (84) and (109), the ability to engage in input foreclosure against an engine competing on an aircraft-to-aircraft basis is limited to the extent that there are other competing third party aircrafts (not relying on ITP for components supply to the engine), as Rolls-Royce would not have the guarantee that a supply disruption on the part of ITP would automatically divert an airline customer from one aircraft with a third party engine to an aircraft with a Rolls-Royce engine. Therefore, the presence of third party powered aircrafts diminishes Rolls-Royce's ability to engage in an input foreclosure conduct towards engines competing on an aircraft-to-aircraft basis.
- (137) As can be seen in Table 3 above, the HTF7000 is currently installed on four aircrafts (Bombardier Challenger 350, Gulfstream G280, Cessna Citation Longitude, Embraer Legacy 500), whereas the AE3007 is installed on the Cessna

¹¹⁷ Honeywell's reply to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 18.1.

¹¹⁸ See Honeywell's reply to the Commission's RFI of 14 March 2017, question 7; Notifying Party's reply to the Commission's RFI of 23 January 2017, question 3; Notifying Party's reply to the Commission's RFI of 3 February 2017, question 3.

¹¹⁹ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 21.

Citation X and the Embraer Legacy 650. Therefore, in principle Rolls-Royce would have to foreclose supply of components of the low pressure turbine with respect to four competing HTF7000-powered aircrafts.

- (138) In addition, based on the information submitted by the Notifying Party, the Commission notes that the Embraer Legacy 650 is usually considered a heavy corporate aircraft, which competes on the lower end of that segment. It therefore can be seen as possibly present in the medium corporate segment, but it is not a close competitor to the HTF7000-powered aircrafts, given that it has a series of different characteristics.¹²⁰ Therefore, it would be rather unlikely that customers would consider the Embraer Legacy 650 as an alternative to switch to.
- (139) Even in case it were to foreclose all HTF7000-powered aircrafts, Rolls-Royce would still not have the certainty to successfully divert sales to its platforms, given the presence of another competing engine, namely the PW300 engine, which is installed on three aircrafts (Dassault Falcon 2000S, Cessna Citation Latitude and Cessna Citation Sovereign).
- (140) Therefore, the presence of the PW300 further reduces the likelihood of success of a potential input foreclosure strategy for Rolls-Royce, and its ability to engage in such conduct.
- (141) With respect to future bids for medium corporate aircrafts, the Commission notes that competition may occur on an engine-to-engine basis, that is, Rolls-Royce would compete against Honeywell for the installation of an engine on a new corporate aircraft. The responses to the market investigation questionnaires indicated that it can be expected that a certain number of bids for engines for medium corporate aircrafts will take place in the next ten years.¹²¹
- (142) However, even with respect to future bids for medium corporate engines, Rolls-Royce's ability to successfully foreclose the HTF7000 and divert sales to the AE3007 would be limited, given that in those competitions, P&W would also be present with the PW300.
- (143) Moreover, the Commission also notes that, while Rolls-Royce has an engine for medium-corporate jets, the AE3007, this engine has a much more limited commercial presence in the space and appears to be less competitive than the HTF7000 and PW300. Based on the information submitted, the Commission notes that Rolls-Royce's presence in engines for medium corporate jets is mostly a legacy one, based on the Cessna Citation X, for which Rolls-Royce [delivery

¹²⁰ In particular, the Embraer Legacy 650 has greater range (it is considered to be capable of transatlantic crossings, unlike the HTF7000-powered aircraft); has larger cabin size and passenger capacity; and is more expensive. Additionally, the aircraft is based on a design that is nearly 20 years old and will therefore have worse performance in relation to [performance characteristics] than more recently designed aircraft. See [...].

¹²¹ See replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 30; replies to Commission questionnaire to airframers Q4 of 24 February 2017, question 16.

details]. Production of the AE3007 would [production details] in respect of the Embraer Legacy 650, until it goes out of production in [date].¹²²

- (144) In this respect, respondents to the market investigation questionnaire to airframers also highlighted that the AE3007 is an older engine, which is likely to be less competitive in future competitions.¹²³ For instance, Embraer said that the engine could compete but "*since is an older technology, it can be not so competitive in some aspects for future projects.*" For the same reason, Bombardier said that the AE3007 will not successfully compete in the future because it is an "*old engine not selected in recent new platforms*". In response to the market investigation questionnaire, Honeywell emphasised itself that the AE3007 is a less successful engine, explaining that "*over the past decade, the Rolls-Royce engine has been less competitive and the HTF7000 [sic] has been the most successful engine for corporate jets*".¹²⁴
- (145) The AE3007's minor competitive role is also confirmed by the fact that the AE3007 is currently installed only on two platforms, the Cessna Citation X and the Embraer Legacy 650, whereas Honeywell and P&W's engines power several corporate aircrafts (see paragraph (137) and (139) above). This is also reflected in Rolls-Royce's share in the segment of engines for medium corporate jets. In terms of installed base, Rolls-Royce had a share in 2015 of [10-20]% against Honeywell's [40-50]% and P&W's [30-40]%. In terms of backlog orders Rolls-Royce's 2015 worldwide share was [0-5]% against Honeywell's [60-70]% and P&W's [20-30]%.
- (146) A further indication of the limited competitiveness of the AE3007 is provided by past bids of engine for corporate jets, which show that Rolls-Royce's engine is less successful. Indeed, according to the Notifying Party, in the last ten years Rolls-Royce presented the AE3007 only for [details of Rolls- Royce bidding].¹²⁵
- (147) The information provided by other engine OEMs concerning bids for corporate engines in the last ten years further confirms that Rolls-Royce has a limited presence with respect to corporate engines. In this respect, P&W indicated that the bids for corporate engines in the last ten years in which it participated with the PW300 were won either by Honeywell or P&W itself.¹²⁶ Similarly, when providing bidding information for corporate engines over the last ten years, Honeywell, while submitting that the AE3007 was presented in certain bids by

¹²² Annex 5 to the Form CO and Notifying Party's reply to the Commission's RFI of 23 January 2017, question 2.

¹²³ See replies to Commission questionnaire to airframers Q4 of 24 February 2017, question 13.

¹²⁴ See Honeywell's reply to the Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 23.4. Honeywell further confirmed that its HTF7000 won bids against the AE3007 for the Gulfstream G250, G280 in 2004 and 2010, Embraer Legacy 450 & 500 in 2008 and Cessna Textron Longitude in 2015. See also Honeywell's reply to the Commission's RFI of 14 March 2017, question 13.

¹²⁵ Notifying Party's reply to the Commission's RFI of 23 January 2017, question 7 and Notifying Party's reply to the Commission's RFI of 3 February 2017, question 7.

¹²⁶ See reply of P&W to the Commission's RFI of 10 February 2017, question 2.

Rolls-Royce, also indicated that the bids were always ultimately won by either the HTF7000 or the PW800.¹²⁷

- (148) The Notifying Party's internal documents also indicate that Rolls-Royce's position for medium corporate engines is very limited. For instance, as can be seen in Figure 1 below, taken from Rolls-Royce's 2015 Mid-Year Review for "Aerospace", Rolls-Royce's share in "medium" is much behind those of Honeywell and P&W.

Figure 1 – Rolls-Royce's market coverage in aerospace [...]

[...]

Annex 14.13 to the Form CO, page 10

- (149) The Notifying Party's internal documents also highlight that the AE3007's presence in the market is diminishing. For instance, Rolls-Royce's Mid-Year Reviews for "civil small and medium engines" of 2014 and 2015 predict [analysis of future sales revenues].¹²⁸
- (150) The downward trajectory of Rolls-Royce's presence with respect to engines for medium corporate jets is also found in another excerpt from Rolls-Royce's 2014 Mid-Year Review for civil small and medium engines. The document depicts Rolls-Royce's expected market share evolutions and, as can be seen in Figure 3 below, [Rolls-Royce's projection of its market share in medium corporate aircraft engines].

Figure 2 – Rolls-Royce's expected evolution of market share for CSME (civil small and medium engines) [...]

[...]

Annex 14.10 to the Form CO, page 10

- (151) Rolls-Royce's ability to divert sales from the HTF7000 to the AE30007 in the context of bids for corporate aircrafts is therefore further limited by the minor competitive role downstream of the AE3007. Should Rolls-Royce decide to engage in input foreclosure, customers would more likely switch to the more successful PW300 than to Rolls-Royce's own engine.
- (152) The Commission further notes that the results of the market investigation indicated that other engines can be considered as competing in the segment for medium corporate jets, which further limits the likelihood that input foreclosure to Honeywell would divert customers to Rolls-Royce. For instance, P&W indicated that "[o]ther engines that generally operate in the same thrust range as the AE3007 include Honeywell's HTF7000 and GE's CFE738. Snecma's Silvercrest engine, which has a slightly higher thrust range than the AE3007, is

¹²⁷ See Honeywell's reply to the Commission RFI of 14 March 2017, question 3.

¹²⁸ Annex 14.10 to the Form CO, pages 33 and 34; Annex 14.11 to the Form CO, pages 22-23. See also Rolls-Royce 2016 Strategy Review, page 32 (Annex 14.19 to the Form CO), which describes Rolls-Royce's position with the AE3007 as [...].

also a potential competitor".¹²⁹ Safran also indicated that GE's CF34 – 3B1 (powering the Bombardier challenger 850) and CF34 – 3B MTO (powering the Bombardier challenger 650) can be seen as competitors to the AE3007.¹³⁰

- (153) The Commission also notes that in the near future, it is unlikely that the AE3007 will become a more attractive engine option for medium corporate jets. Based on the information provided by the Notifying Party, the AE3007 is expected to [commercial strategy in relation to the AE3007], and Roll-Royce is [details on Rolls-Royce's commercial strategy in relation to corporate aircrafts].¹³¹ Therefore, the ability of Rolls-Royce to successfully divert downstream customers as a consequence of input foreclosure would remain unlikely even going forward, as Rolls-Royce would lack a competitive downstream engine.
- (154) Finally, as explained in further detail in paragraph (194) below, even in case the merged entity were actually to foreclose supply of components to the HTF7000, there would remain alternative suppliers with design and manufacturing capabilities for the low pressure turbine.
- (155) In light of the above, the Commission concludes that it is unlikely that the merged entity would have the ability to engage in input foreclosure towards the HTF7000.

Incentive to foreclose

- (156) In relation to the merged entity's incentive post-Transaction to engage in input foreclosure towards the HTF7000, with respect to aircraft-to-aircraft competition and bids for future corporate aircrafts, the Commission notes the following.
- (157) First, in light of the findings illustrated in paragraphs (135) to (153) above, the fact that a foreclosure strategy would likely not succeed in diverting downstream customers towards the AE3007 also weakens the incentive for the merged entity to engage in such conduct, as Rolls-Royce would forego upstream revenues without having the guarantee of downstream returns.¹³²
- (158) Second, based on the information [submitted to the Commission], the Commission considers that Rolls-Royce would further lack the incentive to engage in input foreclosure post-Transaction because the AE3007 engine is not only less competitive and unlikely to attract customers, but is also [commercial strategy of AE3007]. In this respect, in addition to the considerations made in paragraphs (149) and (150), the Commission takes note of the fact that whilst Rolls-Royce indicates that [commercial strategy of the AE3007], production has

¹²⁹ See reply of P&W to the Commission's RFI of 10 February 2017, question 1.

¹³⁰ See Safran's reply to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 27. See also Bombardier's reply to Commission questionnaire to airframers Q4 of 24 February 2017, question 12.

¹³¹ See the Notifying Party's replies to the Commission's RFI of 23 January 2017, question 2,5 and 6, to the Commission's RFI of 8 March 2017, question 3, and to the Commission's RFI of 14 March 2017, question 8. See further paragraphs (159) to (165) below discussing Rolls-Royce's [commercial strategy in relation to corporate engines].

¹³² See Non-Horizontal Merger Guidelines, paragraph 42.

[...]: deliveries for the Cessna Citation X [...],¹³³ and production of the AE3007 for corporate applications will continue until the Embraer Legacy 650 goes out of production in [date]. The AE3007 will also continue to be produced [commercial strategy of the AE3007].¹³⁴

- (159) Third, based on the information provided to the Commission, it appears that Rolls-Royce [details of Rolls-Royce's commercial strategy on the AE3007]. Therefore, Rolls-Royce would lack the incentive to foreclose the HTF7000, as [details of Rolls-Royce's competitive position in future bids].
- (160) As regards the possible improvement, upgrade or development of the AE3007, Rolls-Royce has decided [details of Rolls-Royce's commercial strategy on AE3007].¹³⁵ For example, the AE3007 has proven to be uncompetitive [technical characteristics of the AE3007]. There is [technical analysis of engine's design and capabilities]. However, that would [technical analysis of engine's design and capabilities]. [Technical characteristics of the AE3007] which further reduces its competitiveness.¹³⁶
- (161) Rolls-Royce also [future engine plans and commercial strategy] engines for medium corporate applications (which typically require an engine in the region of 5 000 - 8 000 lbs thrust), as [technical information on Rolls-Royce engines].¹³⁷
- (162) The Commission notes that Rolls-Royce is [future engine plans and commercial strategy]. However, based on the information submitted by the Notifying Party, it appears that the [future engine plans].¹³⁸
- (163) In this respect, [details of the future engine commercial strategy].¹³⁹ Rolls-Royce would therefore [details of the future engine commercial strategy].
- (164) Therefore, given the scheduled upcoming bids [...] (see further paragraph (199) below) a realistic assumption is that [details of future engine strategy].¹⁴⁰ Before

¹³³ According to the Notifying Party, the Cessna Citation X [...]. The aircraft model is 20 years old ([...]), having entered into service in 1996. Deliveries of this aircraft [sales trends]. Cessna selected the AE 3007 for this aircraft in September 1990 (Notifying Party's reply to the Commission's RFI of 23 January 2017, questions 1 and 2).

¹³⁴ Notifying Party's reply to the Commission's RFI of 23 January 2017, question 2.

¹³⁵ Notifying Party's reply to the Commission's RFI of 23 January 2017, question 2.

¹³⁶ See Rolls-Royce's reply to Commission to the Commission RFI of 8 March 2017, point 4.1.

¹³⁷ Notifying Party's reply to the Commission's RFI of 23 January 2017, questions 2, 5 and 6; Notifying Party's reply to the Commission's RFI of 8 March 2017, question 3; Notifying Party's reply to the Commission's RFI of 14 March 2017, question 8.

¹³⁸ See Rolls-Royce's reply to Commission to the Commission RFI of 8 March 2017, point 2.1, where Rolls-Royce explains that [potential future engine development plans and commercial strategy].

¹³⁹ See Rolls-Royce's 2016 Strategy Review (Annex 14.19 to the Form CO) discusses the [potential future engine] at pages 53, 57, 58, 65 and 131 of the document, [...].

¹⁴⁰ Notifying Party's reply to the Commission RFI of 8 March 2017, points 2.2 and 2.3; Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, points 3.13 and following and 3.20 and 22 specifically.

then, Rolls-Royce would lack an engine (and thus the incentive) to engage in input foreclosure.

- (165) As regards future bids for corporate engines, the Commission takes note of the fact that [AE3007 commercial strategy].¹⁴¹ As regards the eventuality that Rolls-Royce [future engine plans], the Commission notes that the Notifying Party believes that the next open opportunity in the medium corporate aircraft segment is a potential [manufacturer] aircraft with an entry into service date of [date] and for which bids would have to be provided around [date].¹⁴² However, based on the expected development and deployment of the [future engine commercial strategy] discussed in paragraph (164), this bid would be [Rolls-Royce's commercial plans], especially given the currently [...] involved (and [...] this would present for both Rolls-Royce and the airframer).¹⁴³
- (166) Fourth, the Commission notes that, based on the information provided by the Notifying Party, Rolls-Royce's main business objectives have been [details of Rolls-Royce's commercial strategy]. Rolls-Royce has focused most of its resources on [details of Rolls-Royce's commercial strategy],¹⁴⁴ [...]. Therefore, the Notifying Party would lack incentives to engage in input foreclosure to the benefit of a downstream market segment where it has a limited (current and future) presence, no relevant engine that could recapture sales and [future engine plans].
- (167) In this respect, in its Mid-Year Reviews of 2014 and 2015 for "Aerospace", Rolls-Royce set as its main objectives [commercial strategy in certain aircraft engines segments].¹⁴⁵
- (168) Rolls-Royce's [commercial strategy in certain aircraft engines segments] is also reflected in Rolls-Royce's planned market coverage goals for the future. For instance, in its 2014 Mid-Year Review for "civil small and medium engines" (CSME), Rolls-Royce identified the objectives to reach in terms of market shares for [...]. As can be seen by the representation in Figure 3 below, Rolls-Royce aims to [commercial strategy in certain aircraft engines segments].

¹⁴¹ Notifying Party's reply to the Commission's RFI of 23 January 2017, question 8; Notifying Party's reply to the Commission's RFI of 3 February 2017, question 7; Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, point 3.24.

¹⁴² Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, point 3.23.

¹⁴³ Notifying Party's reply to the Commission's RFI of 23 January 2017, question 8. See also the Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, section 3(iv), points 3.23 and 3.24 specifically.

¹⁴⁴ Notifying Party's reply to the Commission's RFI of 23 January 2017, question 2.

¹⁴⁵ Annex 14.8 to the Form CO, page 3 and Annex 14.13 to the Form CO, page 9. See also Rolls-Royce 2016 Strategy Review, pages 32-33 (Annex 14.19 to the Form CO) which, according to the Notifying Party, describes how Rolls-Royce is [commercial strategy in certain aircraft engines segments].

Figure 3 – Rolls-Royce’s expected market coverage for CSME [...]

[...]

Annex 14.10 to the Form CO, page 10

- (169) A further indication of [...] Rolls-Royce future plans (or market share acquisitions) with regard to medium corporate engines is also found in Figure 1 above, which is from the 2015 “Aerospace” Mid-Year Review. In that figure, Rolls-Royce’s market share per segment is reproduced in dark blue, with the “target” market share gain appearing in light blue. As can be thus seen from Figure 1, Rolls-Royce aims to acquire shares in [aircraft engines segments].
- (170) In a similar fashion, Figure 2 above is also illustrative of where Rolls-Royce has set its market objectives. As can be seen by that figure, Rolls-Royce’s [details of Rolls-Royce's commercial strategy in certain aircraft engines segments].
- (171) The above considerations, based on the Notifying Party’s internal documents discussing business strategies and objectives for aviation, thus indicate that Rolls-Royce [details of Rolls-Royce's commercial strategy in certain aircraft engines segments]. This makes it more unlikely that Rolls-Royce would have the incentive to engage in input foreclosure against Honeywell (foregoing the upstream revenues ITP would generate), as Rolls-Royce does not appear to have [details of Rolls-Royce's commercial strategy].
- (172) Therefore, Rolls-Royce would likely not have the incentive to foreclose the HTF7000, as: it would not have a competitive engine that could recapture potentially diverted customers; Rolls-Royce [future engine plans]; Rolls-Royce [commercial strategy for future bids]; going forward, Rolls-Royce does not [future commercial strategy in certain aircraft engines segments], as illustrated in the Notifying Party’s internal documents.

Effects of input foreclosure

- (173) As regards the possible effects of input foreclosure towards the HTF7000 in relation to aircraft-to-aircraft competition, the Commission notes that the fact that post-Transaction there will still be P&W as a remaining competitor not relying on ITP for components for the PW300 (see paragraphs (139) and (140) above) limits the likelihood of such foreclosure effects.
- (174) As regards the possible effects of a foreclosure strategy carried out against the HTF7000 in bids for new corporate aircrafts, the Commission notes that, as mentioned in paragraphs (142) and (152), even if Rolls-Royce were to decide to engage in input foreclosure, such conduct could only be enacted against the HTF7000 engine, whereas other third party engines such as the PW300 would remain able to compete in the space for engines for new medium corporate aircrafts. The presence of the more competitive and successful PW300 would thus frustrate an input foreclosure strategy, as an alternative competitor would remain an exercise a competitive constraint on the merged entity.¹⁴⁶ Moreover, there

¹⁴⁶ See Non-Horizontal Guidelines, paragraph 50.

would also be alternative suppliers of components for the low pressure turbine that would further limit the effects of input foreclosure.

- (175) Finally, the Commission also notes that no customer of engine for medium corporate aircrafts raised concerns in relation to a hypothetical input foreclosure towards the HTF7000.¹⁴⁷ In particular, Embraer explained that if the merged entity were to engage in such a conduct, "*[a]ny action taken on this direction could affect Rolls-Royce actual business at Embraer and harm their brand for future negotiations.*"¹⁴⁸

Conclusion

- (176) In light of the above findings, the Commission therefore concludes that the Transaction does not raise serious doubts as to its compatibility with the internal market with respect to possible input foreclosure concerns against the HTF7000 in relation to aircraft-to-aircraft competition and/or to possible future bids for engines for medium corporate aircrafts.

4.2.4.3. [Potential new aircraft engine]

- (177) During the market investigation, Honeywell also raised similar input foreclosure concerns in relation to the [potential new aircraft engine] (also referred to as [...]). Honeywell explained that this engine is currently in development phase. In this framework, Honeywell and ITP have discussed and developed the requirements relating to the performance and the efficiency of the engine and the low pressure turbine module. In order to meet the specified performance cycles, ITP performed trade studies to develop the desired design concepts, using its own design methods and technologies. However, there is no contract in place between Honeywell and ITP, so that ITP is not contractually obliged to continue its cooperation on Honeywell's future engine.¹⁴⁹

Ability to foreclose

The Notifying Party's view

- (178) The Notifying Party submits that it has no ability to harm the development of the future [potential new aircraft engine], because Honeywell cannot be said to be reliant on ITP for any input.
- (179) First, the Notifying Party argues that ITP's involvement in preliminary design study work does not tie Honeywell to ITP for future design work or component supply.
- (180) In this respect, the Notifying Party submits that ITP completed a preliminary design study for the [potential new aircraft engine] in [...]. This study considered

¹⁴⁷ See Commission questionnaire to airframers of 24 February 2017, questions 24 and 25.

¹⁴⁸ See Embraer's reply to Commission questionnaire to airframers of 24 February 2017, question 24.3.

¹⁴⁹ See Honeywell's reply to Commission questionnaire to Honeywell of 8 March 2017, questions 1 and 3; Honeywell's reply to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 23.4. Minutes of conference call of the Commission with Honeywell of 21 March 2017, point 14.

several conceptual designs for a low pressure turbine and evaluated those designed by reference to certain key metrics. The total number of engineer hours involved in this study was [...] hours (as compared to approximately [...] hours typically expected on the low pressure turbine design) at a cost for ITP of between EUR [...] and EUR [...]. While ITP [details on IP rights related to ITP's involvement in preliminary design study work].¹⁵⁰

- (181) The Notifying Party also explains that, since June 2015 and during all of 2016, ITP has [details on contractual arrangements with Honeywell].¹⁵¹ Honeywell and ITP are only currently [details on contractual arrangements with Honeywell]. ITP understands that [details on Honeywell's technical requirements for the potential new aircraft engine]. Thus, [details on IP rights related to ITP's involvement in preliminary design study work]. The [...] study itself might be used as a reference, but [details on Honeywell's technical requirements for the potential new engine].¹⁵²
- (182) Secondly, the Notifying Party claims that Honeywell has a number of alternatives for the design work and the supply of the low pressure turbine and its components for the [potential new aircraft engine].
- (183) In this regards, the Notifying Party considers that Honeywell could take the design of the low pressure turbine in-house. Rolls-Royce explains that the engineering competencies needed to design a low pressure turbine for medium corporate engines are a less complex subset of the competencies needed to successfully design a high pressure turbine for the same engine, as design and manufacture of high temperature / high pressure gas turbine engine components is more demanding than design and manufacture of lower temperature lower pressure components.¹⁵³
- (184) In addition, the Notifying Party argues that for the HTF7000, whilst ITP provided [details on contractual arrangements with Honeywell], Honeywell then [details on Honeywell's development strategy]. As a result, ITP had [details on contractual arrangements with Honeywell] and provided its parts [...]. In the Notifying Party's view, there is no reason to expect that Honeywell would not be in a position to do the same in relation to the [potential new aircraft engine].¹⁵⁴

¹⁵⁰ See Summary of key points covered on call with ITP on 15 March 2017 discussing the HTF7000 and [potential new aircraft engine], point 2.4; Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, points 2.1 to 2.7; Rolls-Royce summary of points raised on call with Commission on 10 April 2017, point 1.8.

¹⁵¹ See Rolls-Royce's summary of points raised on call with Commission on 10 April 2017, point 1.9, in which the Notifying Party confirmed that ITP has [...] in relation to the [potential new aircraft engine] in [...].

¹⁵² See Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, points 2.8 and 2.9.

¹⁵³ See Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, points 2.10 and 2.11.

¹⁵⁴ See Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017 point 2.12.

- (185) The Notifying Party also submits that there are a number of alternative third party suppliers that would also be able to provide design services for the low pressure turbine for the [potential new aircraft engine], including non-integrated suppliers, such as IHI or MTU; and integrated suppliers, such as GE Avio and Safran.¹⁵⁵
- (186) Finally, the Notifying Party reiterates the arguments made in relation to the HTF7000 in a similar fashion for the [potential new aircraft engine], in particular regarding its lack of an engine capable of competing for medium corporate aircrafts and the fact that it is not aware of any bids in the medium corporate aircraft space to which it would be able (and willing) to participate.

Commission's assessment

- (187) In relation to the merged entity's ability, post-Transaction, to engage in input foreclosure in relation to the [potential new aircraft engine], the Commission notes the following.
- (188) At the outset, it should be noted that, while in the case of the HTF7000, ITP supplies specific components to Honeywell (for the low pressure turbine), the [potential new aircraft engine] is still in development phase, and the supply of components has not yet started.
- (189) Regarding the work performed to date by ITP for the development of the low pressure turbine for the [potential new aircraft engine], the Commission notes that under the engineering services agreement between ITP and Honeywell, ITP delivered a trade study on the mechanical assessment of the low pressure turbine for the [potential new aircraft engine] in [...]. Based on the information provided by the Notifying Party and by Honeywell, the Commission understands that in order for ITP to complete this trade study, Honeywell and ITP exchanged documents and held technical meetings and phone calls. However, the Commission understands that the number of engineer hours that ITP dedicated to the project is very limited in comparison to the overall number of engineer hours that are typically spent for this type of project.¹⁵⁶ The Commission also takes note that (i) the purpose of the study was to allow Honeywell to consider which configuration of low pressure turbine would best suit the [potential new aircraft engine]; (ii) the study did not consider [...]; and (iii) the study would need to be revised in case of changes in requirements of the [potential new aircraft engine].
- (190) With regards to the IP of the study performed by ITP, it is the Commission's understanding that [details on IP rights related to ITP's involvement in preliminary design study work]. However, it would appear that if Honeywell were to redesign some requirements of the [potential new aircraft engine], this would lead to a modification of the requirements of the low pressure turbine within the [potential new aircraft engine]. Given a possible redesigning of the [potential new aircraft engine], [...] and a new/revised study on the design of the low pressure

¹⁵⁵ The Notifying Party notes that both GE and Safran offer engines used to power heavy corporate aircrafts, and thus do not directly compete in the medium corporate engine segment.

¹⁵⁶ See Honeywell's submission of 5 April 2017.

turbine for the [potential new aircraft engine] would need to be completed again.¹⁵⁷

- (191) Therefore, the Commission considers that the ITP studies carried out so far with regard to the [potential new aircraft engine] are unlikely to qualify as an important input under the Non-Horizontal Merger Guidelines.¹⁵⁸
- (192) Based on Honeywell's submissions, it appears that the input foreclosure concerns for the [potential new aircraft engine] do not relate to the results of ITP's prior work as such (irrespective of the significance and importance of that work product), but to the future availability of ITP itself as a partner with specific knowledge and experience for the development of the low pressure turbine module, in light of the prior working relationship that Honeywell developed.¹⁵⁹
- (193) In relation to the Notifying Party's argument according to which the engineering competencies required to design a low pressure turbine are less complex than the ones needed to design a high pressure turbine, the Commission notes that the market investigation did not fully support the Notifying Party's views. For instance, as mentioned at paragraph (44), one respondent indicated that for a company already specialized in the design and manufacture of high pressure turbines, *"it would be easier to develop low pressure turbines when already high pressure turbines know-how is available."* However, starting to develop low pressure turbines *"would still require high investments and a long learning curve."*¹⁶⁰
- (194) However, the market investigation results confirmed that there are several alternative suppliers of low pressure turbines with design capabilities, to which Honeywell could switch, in the event that the merged entity were to withdraw from the cooperation on the low pressure turbine for the [potential new aircraft engine]. This is the case of integrated suppliers such as GE/Avio and Safran. GE has the capability to design and manufacture low pressure turbines for medium corporate aircraft engines. Avio also designs and manufactures low pressure turbines, including for third parties and the company does not face capacity constraints¹⁶¹ although Avio has focused up to now on larger engines. Safran also indicated that it has design and manufacturing capabilities for low pressure turbines for medium corporate aircraft engines.¹⁶² As regards non-integrated

¹⁵⁷ See Notifying Party's submission "Input Foreclosure Concerns in Medium Corporate Jet Market" of 22 March 2017, points 2.3 to 2.5.

¹⁵⁸ Non-Horizontal Merger Guidelines, paragraph 34.

¹⁵⁹ Minutes of conference call of the Commission with Honeywell of 21 March 2017, point 6; Honeywell's reply to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 18.1; Honeywell's submission of 5 April 2017.

¹⁶⁰ See replies to Commission questionnaire to fabricated parts competitors of 24 February 2017, question 9.

¹⁶¹ See GE's responses to Commission's questionnaire sent on 21 March 2017, questions 5 and 6.

¹⁶² See Safran's responses to Commission's questionnaire sent on 21 March 2017, questions 5 and 6.

suppliers, MTU designs and manufactures low pressure turbines¹⁶³ and IHI indicated that it has design and supply capabilities for the low pressure turbine and its components and would be willing to provide these capabilities to a third party.¹⁶⁴

- (195) Furthermore, as regards ability to foreclose, the Commission recalls that, as mentioned at paragraphs (84), (109) and (142), the merged entity's ability to engage in input foreclosure against an engine competing on an aircraft-to-aircraft basis and in bids for future corporate aircrafts is limited by the presence of third party powered aircrafts, as the merged entity would have no guarantee that a supply disruption from ITP would automatically divert an airline customer from one aircraft with a third party engine to an aircraft with a Rolls Royce engine or to a Rolls-Royce engine in case of a future bid.
- (196) In relation to the [potential new aircraft engine] more specifically, the observations regarding the Notifying Party's lack of a competitive downstream engine capable to compete against the HTF7000 therefore also apply to the [potential new aircraft engine], which is an engine that will compete in the [civil aircraft segment] in the future.
- (197) As explained in greater details at paragraphs (142) to (155), (i) Rolls-Royce's AE3007 is already today a legacy engine with a limited [...] market presence; (ii) in the last ten years Rolls-Royce presented the AE3007 [details on past bids in which Rolls-Royce participated];¹⁶⁵ (iii) Rolls-Royce has [details of future engine plans].¹⁶⁶ Since the AE3007 is considered an old and [...] engine compared to the HTF7000, and given that the Notifying Party has [details of future engine plans], *a fortiori* the AE3007 could be considered even less as a competitive alternative to the [potential new aircraft engine] in the future.
- (198) With regard to Rolls-Royce's [details of future engine plans], the ability of this engine to compete [Rolls-Royce's commercial strategy], according to the Notifying Party's internal documents and submissions, [Rolls-Royce's commercial strategy].¹⁶⁷

¹⁶³ See MTU's replies to Commission questionnaire to fabricated parts competitors of 24 February 2017, question 4.

¹⁶⁴ See IHI's responses to the Commission's questionnaire sent on 24 March 2017.

¹⁶⁵ Notifying Party's reply to the Commission's RFI of 23 January 2017, question 7 and Notifying Party's reply to the Commission's RFI of 3 February 2017, question 7. [Details of Rolls-Royce's bidding]. See Form CO Annex 14_19 "Strategy Review 2016", page 32, and the "[...] Paper", page 4.

¹⁶⁶ See Rolls-Royce's reply to Commission to the Commission RFI of 8 March 2017, question 2.

¹⁶⁷ The Notifying Party submitted that, it could not entirely rule out the possibility that, in the future, a compelling business case may arise that would justify consideration of [details of future engine plans]. However, the Notifying Party submits that it is not currently aware of such opportunity and that this scenario is highly unlikely in practice (See Rolls-Royce submission "Input Foreclosure Concerns in Medium Corporate Jet Market" from 22 March 2017, updated on 7 April 2017, point 3.21 and footnote 7 and Rolls-Royce Summary of points raised on call with Commission on 10 April 2017, points 1.4 and 1.5).

- (199) As regards [details of future competitive opportunities],¹⁶⁸ [...].¹⁶⁹ Moreover, the Commission understands that these dates are based upon airframer indications of their anticipated timetables to launch, but the decision as to whether and, if so, when these platforms would launch is ultimately dependent on [...]. The Commission further notes that decisions to award the bid to an engine manufacturer are typically taken one year after the bids are organized and that bids take place approximately five years before the planned entry into service.¹⁷⁰ In light of these elements, the assumption would thus be that the Notifying Party would be expected to be able to participate in a bid with [details of future engine plans and commercial strategy]. In this regard, the Notifying Party has indicated that it is only aware of one upcoming opportunity in the medium corporate segment (for [...]), which has an expected entry in service in [date] and for which bids would have to be provided around [date], a time at which [details of future engine plans].¹⁷¹
- (200) Therefore, should the Notifying Party withhold from further cooperation with Honeywell regarding the [potential new aircraft engine], it is unlikely that it would be able to capture any downstream revenues concerning medium corporate engines, as Rolls-Royce would have [details of future engine plans].
- (201) More generally, the Commission notes that Rolls-Royce's position in medium corporate engines is limited, [details on Rolls-Royce's commercial strategy], This is reflected in the Notifying Party's internal documents mentioned in paragraphs (148) to (150) and (166) to (170). Similarly, Rolls-Royce's market share in the medium corporate aircraft segment is low ([10-20]% in terms of installed base in 2015) compared to Honeywell ([40-50]%) and PW ([30-40]%).¹⁷²
- (202) In addition, the Commission also notes that even in case of an input foreclosure strategy towards Honeywell for the [potential new aircraft engine] and assuming

¹⁶⁸ The Notifying Party also submitted that [the earliest application] for which it could bid is [details of future bids] which are powered by [non-Rolls-Royce] engines, which the Notifying Party considers may give [details of current engine suppliers] incumbency advantages when bidding starts. As a result, the Notifying Party considers more likely that it would have to wait until [...] at the earliest before it secured [successful application]. At that time [...], the Notifying Party would then be able to [details of future engine plans].

¹⁶⁹ Each of the airframers directly informed Rolls-Royce of these estimated dates either by way of a supplier conference (in the case of [...] replacement) or in other meetings with Rolls-Royce. To the best of Rolls-Royce's knowledge, these dates have not been made public. See Rolls-Royce's summary of points raised on call with Commission on 10 April 2017, point 1.11.

¹⁷⁰ See Notifying Party's submission "Input Foreclosure Concerns in Medium Corporate Jet Market" of 22 March 2017, updated on 7 April 2017, points 3.14 and Summary of points raised on call Commission on 10 April 2017, point 1.2.

¹⁷¹ See Notifying Party's reply to the Commission RFI of 8 March 2017, question 2, and Notifying Party's reply to the Commission RFI of 14 March 2017, question 12; Notifying Party's submission "Input Foreclosure Concerns in Medium Corporate Jet Market" of 22 March 2017, updated on 7 April 2017, points 3.19 to 3.24. In its summary of points raised on call with Commission on 10 April 2017, point 1.10, Rolls-Royce explained that [...] directly informed Rolls-Royce of the [...] opportunity but that this date is not yet public knowledge.

¹⁷² In terms of backlog orders Rolls-Royce's 2015 worldwide share was [0-5]% against Honeywell's [60-70]% and P&W's [20-30]%. See Annex 8 to the Form CO.

the Notifying Party would have a competitive engine in the same space, it would still have no certainty of actually diverting customers, given that there still would be another engine competing for medium corporate aircrafts, namely the PW300. In this regard, that there is no reason to expect that PW's position would weaken in the future.¹⁷³ As a result, the Commission notes that the presence of P&W's PW300 further limits Rolls-Royce's ability to successfully foreclose the [potential new aircraft engine] and divert sales to the [...] Rolls-Royce engine, given that in those competitions, P&W would also benefit from the possible foreclosing conduct.

- (203) In light of the above elements, the Commission concludes that it is unlikely that the merged entity would have the ability to engage in a type of input foreclosure by withdrawing ITP from the cooperation with Honeywell on the design of the low pressure turbine for the [potential new aircraft engine]. Even if one were to conclude that the merged entity would have the ability to engage in input foreclosure, the Commission considers that the merged entity would not have the incentive to do so.

Incentive to foreclose

The Notifying Party's view

- (204) The Notifying Party claims that it has no incentive to harm the development of the future [potential new aircraft engine] because, beside the [...] AE3007, it has no engine capable of competing in the future with the [potential new aircraft engine]. Without a competing engine, the Notifying Party considers that any sales diverted from the future [potential new aircraft engine] would therefore most likely be recaptured by P&W.

Commission's assessment

- (205) For similar reasons developed in greater details at paragraphs (156) to (172) in relation to the HTF7000, the Commission considers it unlikely that the Notifying Party would have any incentive to disrupt the development of the [potential new aircraft engine].
- (206) First, neither the AE3007 [details on Rolls-Royce's engines] can, to date, be considered as competitive engines to the [potential new aircraft engine] that would enable the Notifying Party to recapture sales of potentially diverted customers. The AE3007 is outdated and [details of future commercial strategy]. Before being able to bid for medium corporate aircrafts, [details of future engine plans].¹⁷⁴ Therefore the Notifying Party would not have any engine that would benefit from (and justify) an input foreclosure strategy against the [potential new aircraft engine].

¹⁷³ P&W advertises the PW300 as "the engine of choice for new generation mid-size jets", see: <http://www.pwc.ca/en/engines/pw300>.

¹⁷⁴ See paragraphs (198) to (200).

- (207) Second, the Notifying Party does not [details of future engine plans]; neither does it [details of future commercial strategy].¹⁷⁵
- (208) Third, going forward, as illustrated in its internal documents considered in paragraphs (166) to (170), the Notifying Party plans to [details of future commercial strategy].
- (209) In light of the above elements, the Commission concludes that it is unlikely that the merged entity would have the incentive to engage in a type of input foreclosure by withdrawing ITP from the cooperation with Honeywell on the design of the low pressure turbine for the [potential new aircraft engine].

Effects of input foreclosure

- (210) As regards the possible effects of a foreclosure strategy carried out against the [potential new aircraft engine] in bids for future corporate aircrafts, the Commission notes the following.
- (211) First, even assuming that the [potential new aircraft engine] would be delayed following the merged entity's withdrawal from the cooperation with Honeywell, it is uncertain that such delay would be material and would actually impede Honeywell's ability to compete. In this regard, the Commission notes that (i) Honeywell would still be in a position to participate in future bids with the HTF7000; (ii) given that the timing of these future bids is sufficiently further in time and that the amount of work performed by ITP is limited, Honeywell would be able to catch up on a potential delay on the low pressure turbine of the programme and still be able to participate in the future bids.
- (212) Second, the merged entity's attempt to foreclose the [potential new aircraft engine], could only be directed at Honeywell, and the PW300 would not be affected by this conduct and thus frustrate a potential input foreclosure strategy, as it would continue to exercise a competitive constraint on the merged entity.
- (213) Finally, given that the Notifying Party has [details of future engine plans] and that the [details of Rolls-Royce's engine] is expected to be able to bid [details of future commercial strategy] only in [date] at the earliest (and more likely in [date]),¹⁷⁶ it is unlikely that a potential input foreclosure conduct would ultimately be beneficial to the merged entity.
- (214) The Commission also notes that no customer of engine for medium corporate aircrafts raised concerns in relation to a hypothetical input foreclosure towards the Honeywell's engines.¹⁷⁷

¹⁷⁵ Notifying Party's reply to the Commission's RFI of 23 January 2017, questions 2, 5, 6 and 8; Notifying Party's reply to the Commission's RFI of 3 February 2017, question 7 Notifying Party's reply to the Commission's RFI of 8 March 2017, questions 2 and 3; Notifying Party's reply to the Commission's RFI of 14 March 2017, question 8.

¹⁷⁶ See paragraphs (198) to (200).

¹⁷⁷ See Commission questionnaire to airframers of 24 February 2017, questions 24 and 25.

Conclusion

(215) In light of the above findings, the Commission concludes that the Transaction does not raise serious doubts as to its compatibility with the internal market with respect to possible input foreclosure concerns against the [potential new aircraft engine] in relation to future bids for engines for medium corporate aircrafts.

4.3. Defence consortia

(216) As mentioned in paragraph (14), Rolls-Royce and ITP are both members of three military defence consortia, EPI, Eurojet and MTRI.

(217) In the Eurojet consortium, ITP holds a 13% share, Rolls-Royce a 33% share, while the other two shareholders MTU and GE have shares of 33% and 21% respectively. Eurojet manufactures the EJ200 engine for the Eurofighter Typhoon combat aircraft.

(218) In the MTRI consortium, ITP and Rolls-Royce each have a share of 25%. The other two shareholders, MTU and Safran, also each hold a 25% share. MTRI manufactures the MTR-390E engine for the Eurocopter/Airbus Tiger helicopter.

(219) In the EPI consortium, pre-Transaction ITP holds a 16% share, Rolls-Royce a 28% share, whereas the other two shareholders MTU and Safran have a 28% share each. EPI manufactures the TP400 turboprop engine for the Airbus A400M, a four-engine turboprop military transport and patrol aircraft.

(220) Rolls-Royce produces engines that compete with those of each of the consortia to a varying extent.

(221) With respect to Eurojet, Rolls-Royce [details of Rolls-Royce's commercial strategy].¹⁷⁸

(222) With respect to MTRI, Rolls-Royce has joint control (with Honeywell) of the Light Helicopter Turbine Engine Company ("LHTEC"), a US-based company. LHTEC manufactures the T800 military helicopter engine which is similar in some respects to the MTRI-390-E.

(223) With respect to EPI, Rolls-Royce's AE 2100 engine powers the Lockheed Martin C-130J (also referred to as C130 Hercules), which is also a four-engine turboprop military transport aircraft. Therefore, Rolls-Royce's AE2100 engine can be seen as being in aircraft-to-aircraft competition with the EPI TP400.

(224) In relation to these three consortia, in the following the Commission will analyse two possible types of concern arising from the Transaction. First, the Commission will assess whether post-Transaction Rolls-Royce would have the ability and incentive to foreclose supply of components to any of the three consortia to favour its own competing engine(s). Second, given that following the Transaction Rolls-Royce will acquire ITP's share in each of the three consortia, the Commission will assess whether Rolls-Royce's increased stakes in the consortia

¹⁷⁸ [...].

would enable Rolls-Royce to influence the decision-making process of those consortium and limit their ability to compete against Rolls-Royce.

4.3.1. *Input foreclosure towards the consortia*

4.3.1.1. The Notifying Party's view

- (225) The Notifying Party first argues that it has no ability to engage in an input foreclosure strategy against the various consortia, most notably because the consortia are contractually protected against potential delays of component deliveries which result in penalties against the liable supplier.
- (226) The Notifying Party further argues that it has no incentive to engage in such a strategy for the following reasons: (i) Rolls-Royce has had, pre-Transaction, the ability to frustrate the supply of its own components to the consortium, but has not done so; and (ii) in fact, Royce faces a greater incentive for the consortia to compete effectively (given Rolls-Royce's increased stake in the consortia profits); and for ITP to continue supplying the consortia (given Rolls-Royce's increased stake in ITP's profits).

4.3.1.2. Commission's assessment

- (227) The Commission considers that the Transaction would not give Rolls-Royce the ability and incentive to engage in input foreclosure with respect to the consortia's engines for the following reasons.
- (228) In terms of ability, the Commission notes that Rolls-Royce is already a member of each of the three consortia. Therefore, to the extent it already supplies components to the consortia, Rolls-Royce would already have the ability pre-Transaction to engage in input foreclosure towards the consortia.
- (229) For instance, Rolls-Royce already supplies components to the EPI consortium, which include complex components, such as the high pressure compressor and the low pressure turbine shaft.¹⁷⁹ Therefore, Rolls-Royce could have engaged in an input foreclosure strategy towards the EPI consortium already pre-merger, and the Transaction does not materially increase its ability to do so.
- (230) With respect to MTRI specifically, the Commission notes that ITP does not supply components itself to the consortium (nor does it perform assembly activities), but simply acquires the components it is responsible for from third parties and then sends them to the other consortium partners for incorporation into the full MTR-390E engine. Conversely, Rolls-Royce already supplies to MTRI complex components such as the power turbine and the drive shaft for the MTR390 engine. Thus, Rolls-Royce could already engage in input foreclosure by denying or delaying supply of these components to that consortium.¹⁸⁰ Therefore, the Transaction does not grant to Rolls-Royce any ability to foreclose, in addition to what it would already enjoy pre-Transaction.

¹⁷⁹ Submission of the Notifying Party to the Commission of 22 March 2017, "Existing supply relationship between Rolls-Royce and EPI".

¹⁸⁰ See Notifying Party's reply to the Commission's RFI of 6 April 2017, question 12.

- (231) As regards the Eurojet consortium specifically, Rolls-Royce already supplies the high pressure turbine, the combustor, a number of casings and the bearing support for the EJ200.¹⁸¹ Therefore, with respect to this consortium Rolls-Royce could already engage in input foreclosure pre-Transaction, and the Transaction does not grant to Rolls-Royce any ability to foreclose, in addition to what it would already enjoy. The Commission further notes that, should Rolls-Royce engage nonetheless in input foreclosure, it would not have guarantees that such strategy would be successful. As mentioned in paragraph (221), Rolls-Royce currently has [details of the nature of Rolls-Royce's competition for future opportunities]. This limits the likelihood that Rolls-Royce would be able to recapture a customer should it engage in input foreclosure towards Eurojet. In addition, as noted in paragraph (117), there are several alternative military aircrafts competing with the Eurojet, including the F-35 and Rafale (neither of which ITP supplies). Therefore, Rolls-Royce would have no certainty that a customer switching away from the Eurofighter Typhoon would select [Rolls-Royce's engine]. This unlikelihood also reduces Rolls-Royce's incentives to engage in an input foreclosure strategy.
- (232) As regards incentives, the Commission notes that following the Transaction Rolls-Royce would actually increase its stake in the consortia, which would increase its share of profits from successful sales by the consortia. Therefore, the Transaction would actually diminish Rolls-Royce's incentive to adopt a input foreclosure strategy towards the consortia.
- (233) Finally, the Commission notes that consortia members responding to the market investigation questionnaire did not raise input foreclosure concerns, with the exception of Safran, which argued that Rolls-Royce would have the ability and incentive to engage in input foreclosure towards the EPI consortium.¹⁸² However, for the reasons set in paragraph (228), the Commission considers that the Transaction does not increase any ability to foreclose the EPI consortium that Rolls-Royce already had pre-Transaction.

4.3.2. *Rolls-Royce's increased share in the consortia*

- (234) Following the Transaction, Rolls-Royce would increase its share in each of the consortia. In this Section, the Commission assesses whether Rolls-Royce would have an increased influence in the consortia because of its higher stake, and whether this limits the competitiveness of any of the consortia vis-à-vis Rolls-Royce itself, to the extent that there is a Rolls-Royce engine competing against a consortium engine.
- (235) With respect to MTRI and Eurojet, the Commission notes that the governance rules of these two consortia require that [details of the governance rules of the consortia]. Therefore, the Transaction does not increase Rolls-Royce's influence within these two consortia, and therefore does not raise concerns, as Rolls-Royce [details of the governance rules of the consortia].

¹⁸¹ See Notifying Party's reply to the Commission's RFI of 6 April 2017, question 12.

¹⁸² See response to the Q3 questionnaire to engine manufacturers, question 37

(236) Conversely, decisions of the EPI consortium [...] are adopted by [details of the governance rules of the consortia]. Post-Transaction, Rolls-Royce would [...], which will confer upon Rolls Royce control of [...]. This would technically allow Rolls-Royce to [details of the governance rules of the consortium].

4.3.2.1. The Notifying Party's view

(237) The Notifying Party argues that Rolls-Royce's greater influence in EPI would not give it in practice the ability to prejudice any of the consortium's decisions to compete against Rolls-Royce, notably because certain matters that are key to EPI's ability to compete will continue [details of the governance rules of the consortia].¹⁸³

(238) Moreover, the Notifying Party argues that the EPI-powered aircraft, the Airbus A400M, is technically and functionally different from the Lockheed Martin C-130J on which the Rolls-Royce's engine is installed, therefore little competition between the two platforms is expected in the future.

(239) Finally, the Notifying Party submits that it would also have no incentive to use any additional influence in EPI against the consortium to favour its engine on the Lockheed Martin C-130J. This behaviour would cause reputational damage for Rolls-Royce in the eyes of Airbus (on whose aircraft the EPI engine is installed), which is one of Rolls-Royce's key customers. To the contrary, as a larger shareholder in the consortium, Rolls-Royce would have now more incentives to make the EPI consortium successful, rather than disrupt it.

4.3.2.2. Commission's assessment

(240) With respect to the Notifying Party's argument that Rolls-Royce's [...] would not grant it influence over the consortium on matters that relate to its competitiveness, the Commission notes that [details of EPI's governance rules]. These matters can be considered as key to EPI's ability to compete. Therefore, Rolls-Royce's [...] would grant it additional influence on the decision-making process of the EPI consortium, on matters that affect its competitiveness.

(241) As regards the Notifying Party's claim that the Airbus 400M and the Lockheed Martin C-130J cannot be deemed as competing platforms, the airframers' responses to the market investigation questionnaire did not support the Notifying Party's view. In particular, respondents among airframers (including Airbus) considered that the two platforms competed against each other.¹⁸⁴ Engine OEMs also replied that the AE2100 engine can be seen as being in aircraft-to-aircraft competition with the EPI TP400.¹⁸⁵ Respondents to the market investigation questionnaires also did not provide indications of the existence of many other aircrafts competing with respect to military transport.

¹⁸³ Matters requiring [details of EPI's governance rules] are, notably [...].

¹⁸⁴ Replies to Commission questionnaire to airframers Q4 of 24 February 2017, question 8.

¹⁸⁵ Replies to Commission questionnaire to engine OEMs Q3 of 24 February 2017, question 36. This is also in line with the Commission's findings in *GE / Avio*, where the Commission notes that the A400M primarily competes against the Lockheed Martin C-130J (Commission decision of 1 July 2013 in case M.6844 – *GE / Avio*, paragraph 148).

- (242) Moreover, the Commission notes that its internal documents (including in the 2014 and 2015 Mid-Year Reviews for “Defence”), the Notifying Party considers the two platforms (and respective engines) as competing against each other within “transport and patrol” and in “transport”.¹⁸⁶
- (243) Therefore, the Commission concludes that following the Transaction Rolls-Royce’s [details of EPI’s governance rules] would grant it an increased influence over the decision-making process of the consortium. This would lessen competition between the consortium’s engine and the Rolls-Royce engine.

4.4. Conclusion on competitive assessment

- (244) In light of the above, the Commission concludes that the Transaction does not give rise to serious doubts as regards its compatibility with the internal market because of horizontal overlaps with respect to the markets (i) for the production of aircraft engines; (ii) for the production of castings; (iii) for the production of machined parts; (iv) for the production of fabricated parts; and (v) for the provision of MRO services.
- (245) Based on the above, the Commission concludes that the Transaction does not raise serious doubts as regards its compatibility with the internal market with respect to input foreclosure against the third party engines relying on supply of components from ITP and in competition on an engine-to-engine and aircraft-to-aircraft basis with Rolls-Royce.
- (246) With respect to the consortia, the Transaction does not raise serious doubts with respect to input foreclosure against the consortia, nor in relation to Rolls-Royce’s additional vote within the Eurojet and MTRI consortia.
- (247) The Transaction, however, raises serious doubts as regards its compatibility with the internal market with respect to the fact that post-Transaction Rolls-Royce would [...], which, given the governance rules of the consortium, would limit competition between the consortium and the competing Rolls-Royce engine.

5. COMMITMENTS

- (248) In order to address the serious doubts identified by the Commission in relation to the increased influence over the EPI consortium, described in Section 4.3.2, on Friday 24 March 2017, Rolls-Royce submitted commitments pursuant to Article 6(2) of the Merger Regulation (the “Initial Commitments”).
- (249) The Commission launched a market test of the Initial Commitments on 27 March 2017. The Commission informed the Notifying Party of the results of the market test on 3 and 4 April 2017.
- (250) Following the feedback received from the Commission, the Notifying Party submitted revised commitments on 5 April 2017 (the “Final Commitments”).

¹⁸⁶ Annex 14.14 to the Form CO, pages 1-2; Annex 14.9 to the Form CO, pages 4 and 6; Annex 14.15 to the Form CO, slide15; Annex 14.17 to the Form CO, page 15.

5.1. Description of the Initial Commitments

- (251) In order to remove Rolls-Royce's increased influence over the EPI consortium, the Initial Commitments are focused on [modification of EPI governance rules].
- (252) To that end, under the Initial Commitments the Notifying Party commits that:
- [details of the way in which EPI will be governed going forward, notably on how the consortia will operate and take strategic decisions].
 - [...].
 - [...].
- (253) Under the Initial Commitments, an "EPI Conflict of Interest" is defined as a tender where the A400M, powered by EPI's T400 engine (including any variant or update of the aircraft), is understood to be in competition with the C130 Hercules, powered by Rolls-Royce's AE 2100 engine (including any variant or update of the aircraft).
- (254) Pursuant to the Initial Commitments, an EPI Conflict of Interest arises [...].
- (255) The Initial Commitments also include an arbitration mechanism (under the ICC Rules of Arbitration), that [members of the EPI consortium] can activate in case they claim that Rolls-Royce or an Affiliated Undertaking is failing to comply with its obligations arising from the Commitments.
- (256) The Initial Commitments will remain in place until the EPI agreement is amended [...] where the A400M and C130 Hercules compete in the same tender. The amendment is subject to prior approval by the Commission. The Commitments will also cease to apply if [conditions for termination of commitments].

5.2. Results of the market test of the Initial Commitments

- (257) During the market test, the Commission sought the input of the other two shareholders of the EPI consortium, Safran and Airbus, as well as of the consortium's sole customer, Airbus.
- (258) Responses to the market test highlighted certain shortcomings to the Initial Commitments.
- (259) First, [...]. In addition, it was not sufficiently clear to respondents that [...].¹⁸⁷
- (260) Second, respondents pointed to [...] relate to a tender where EPI's T400 engine competes with Rolls-Royce's AE 2100 engine and that [...].¹⁸⁸ For instance, Safran mentioned [...]. MTU also mentioned [...].

¹⁸⁷ See replies to Commission questionnaire to EPI members Q5 of 27 March 2017, questions 1 and 2; replies to Commission questionnaire to EPI members Q6 to third parties of 27 March 2017, questions 1 and 2

(261) Third, Safran and Airbus also suggested that the notion of EPI Conflict of Interest should cover not only the sale of the engine and the aircraft, but also cover other related matters, such as after-sale services and sales of spare parts.¹⁸⁹

(262) Respondents to the market test agreed that the arbitration mechanism would provide a means for resolution of any disputes relating to the Initial Commitments.¹⁹⁰

5.3. Description of the Final Commitments

(263) Following the communication to the Notifying Party of the results of the market test and the Commission's own assessment of the Initial Commitments, on 5 April 2017 the Notifying Party submitted revised commitments (the "Final Commitments"), aimed at improving the Initial Commitments.

(264) In particular, the following modifications were included in the Final Commitments:

- [...].
- [...].

5.4. Commission's assessment of the Final Commitments

5.4.1. Principles

(265) Where a concentration raises serious doubts as to its compatibility with the internal market, the parties may undertake to modify the concentration so as to remove the grounds for the serious doubts identified by the Commission and thereby gain clearance of their merger in Phase I.

(266) It is for the parties to the concentration to put forward commitments. The Commission only has power to accept commitments that are deemed capable of rendering the concentration compatible with the internal market. In Phase I, commitments can only be accepted where the competition problem is readily identifiable and can easily be remedied. The competition problem therefore needs to be so straightforward and the remedies so clear-cut that it is not necessary to enter into an in-depth investigation and that the commitments are sufficient to clearly rule out serious doubts within the meaning of Article 6(1)(c) of the Merger Regulation. Where the assessment confirms that the proposed commitments remove the grounds for serious doubts on this basis, the Commission clears the merger in Phase I.

¹⁸⁸ See replies to Commission questionnaire to EPI members Q5 of 27 March 2017, question 4; replies to Commission questionnaire to EPI members Q6 to third parties of 27 March 2017, question 4.

¹⁸⁹ See replies to Commission questionnaire to EPI members Q5 of 27 March 2017, question 3; replies to Commission questionnaire to EPI members Q6 to third parties of 27 March 2017, question 3.

¹⁹⁰ See replies to Commission questionnaire to EPI members Q5 of 27 March 2017, question 5; replies to Commission questionnaire to EPI members Q6 to third parties of 27 March 2017, question 5.

- (267) As concerns the form of acceptable commitments, the Merger Regulation leaves discretion to the Commission as long as the commitments meet the requisite standard.
- (268) While divestiture commitments are generally the best way to eliminate competition concerns resulting from horizontal overlaps, other structural commitments, such as access remedies, or other non-divestiture remedies may be suitable to resolve concerns if they are equivalent to divestitures in their effects.
- (269) In the ultimate assessment of proposed commitments, the Commission considers all relevant factors including inter alia the type, scale and scope of the proposed commitments, judged by reference to the structure and particular characteristics of the market concerned, including the position of the parties and other participants on the market. The commitments must be capable of being implemented effectively within a short period of time.
- (270) It is against this background that the Commission analysed the Final Commitments in this case.

5.4.2. Assessment of Final Commitments

- (271) The Commission considers that the Final Commitments address the shortcomings of the Initial Commitments identified by the market test.
- (272) First, the modifications [...] remove the complexity and uncertainty to activate the EPI Conflict of Interest. Respondents to the market test had concerns that [...]. Under the Final Commitments, [...]. This revised solution is therefore sufficiently simple and straightforward to be activated, [...].
- (273) Moreover, the Notifying Party's clarification that [...] between the A400M and C130 Hercules removes any uncertainty with regard to [...].
- (274) Second, [...] in case of competition between the A400M and C130 Hercules. This inclusion addresses the criticism raised by certain respondents to the market test, [...] (see paragraph (260)).
- (275) The Final Commitments [...] (see paragraph (260)). However, the Commission notes that, [...]. Therefore it is not necessary to include them within the Final Commitments.
- (276) Third, the Commission notes that [...].
- (277) As mentioned in paragraph (261), respondents to the market test suggested that the Initial Commitments should be extended to apply also after a relevant tender has been concluded with the selection of the aircraft, in order to capture issues such as after-sale services, or sales of spare parts. However, the Commission notes that after-sales and related matters are usually negotiated with the customer prior to the conclusion of the sale of an aircraft. Given that the Final Commitments include those relevant matters [...], those decisions thus would also fall within the scope of the revised EPI Conflict of Interest of the Final Commitments. Therefore the Final Commitments also ensure that Rolls-Royce would not acquire a greater influence over the consortium in relation to matters that pertain to post-tender activities.

- (278) Furthermore, the Commission also notes that to the extent that [...]. Therefore, [...].
- (279) Finally, the Commission notes that, once a tender is concluded, there would be no competition between the A400M and the C130 Hercules for a particular customer. In the case that [...]. Therefore, Rolls-Royce would lack the incentive to take decisions against the consortium as this would compromise Rolls-Royce's (increased) source of revenues with no actual benefit, as there would be no competition against another Rolls-Royce powered aircraft.
- (280) Therefore, given that the Final Commitments remove the shortcomings related to [...] and the issue of the aftersales activities, the Commission considers that the Final Commitments remove the serious doubts raised by the Transaction with respect to Rolls-Royce's increased influence over the EPI consortium.

5.5. Conditions and obligations

- (281) Under the first sentence of the second subparagraph of Article 6(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into *vis-à-vis* the Commission with a view to rendering the concentration compatible with the internal market.
- (282) The achievement of the measure that gives rise to the change of the market is a condition, whereas the implementing steps which are necessary to achieve this result are generally obligations on the parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the internal market no longer stands. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 6(3)(b) of the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation.
- (283) In accordance with the described distinction as regards conditions and obligations, the requirements set in the Final Commitments are considered to constitute obligations.
- (284) The full text of the Final Commitments is annexed to this Decision as Annex 1 and forms an integral part thereof.

6. CONCLUSION

(285) For the above reasons, the European Commission has decided not to oppose the notified operation as modified by the Final Commitments and to declare it compatible with the internal market and with the EEA Agreement, subject to full compliance with the obligations contained in the Final Commitments annexed to the present Decision. This Decision is adopted in application of Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation and Article 57 of the EEA Agreement.

For the Commission

(Signed)

*Margrethe VESTAGER
Member of the Commission*

Case M.8242 – Rolls-Royce/ITP

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 6(2) of Council Regulation (EC) No 139/2004 (the “**Merger Regulation**”), Rolls-Royce Holdings PLC (the “**Notifying Party**” or “**Rolls-Royce**”) hereby enters into the following Commitments (the “**Commitments**”) vis-à-vis the European Commission (the “**Commission**”) with a view to rendering Rolls-Royce’s acquisition of sole control of Industria de Turbo Propulsores SA (“**ITP**”) (the “**Concentration**”) compatible with the internal market and the functioning of the EEA Agreement.

This text shall be interpreted in light of the Commission’s decision pursuant to Article 6(1)(b) of the Merger Regulation to declare the Concentration compatible with the internal market and the functioning of the EEA Agreement (the “**Decision**”), in the general framework of European Union law, in particular in light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the “**Remedies Notice**”).

SECTION A. DEFINITIONS

1. For the purpose of the Commitments, the following terms shall have the following meaning:

A400M: the military transport aircraft designed, developed and supplied by Airbus (and any updates to, or any variant of, this aircraft).

Affiliated Undertakings: undertakings controlled by the Notifying Party and/or by the ultimate parents of the Notifying Party, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in light of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the "**Consolidated Jurisdictional Notice**").

Airbus: Airbus Military S.L., a company incorporated under the laws of Spain and having its registered office at Avenida de Aragon 404, 28022 Madrid, Spain.

C130 Hercules: the military transport aircraft (and any updates to, or any variant of, this aircraft to the extent powered by engines supplied by Rolls-Royce or its Affiliated Undertakings).

Confidential Information: any business secrets, know-how, commercial information, or any other information of a proprietary nature that is not in the public domain.

Effective Date: the date of adoption of the Decision.

EPI: Europrop International GmbH, a company incorporated under the laws of Germany and having its registered office at Max Planck Straße, 8 – 85716 Unterschleissheim, Germany.

EPI Agreement: the collaboration agreement between Rolls-Royce plc, MTU, Safran and ITP, entered into on [...], as amended.

[...].

EPI Conflict of Interest: a tender in relation to which: (i) an EPI Conflict of Interest Notice has been issued; and (ii) [...].

EPI Conflict of Interest Notice: a [...] that the A400M and the C130 Hercules are in competition [...].

ITP: Industria de Turbo Propulsores SA, a company incorporated under the laws of Spain and having its principal office at Edificio 300, Parque Tecnológico, 48016 Zamudio (Vizcaya), Spain.

[...].

Monitoring Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by the Notifying Party, and who has/have the duty to monitor the Notifying Party's compliance with the conditions and obligations attached to the Decision.

Monitoring Trustee Conflict of Interest: any conflict of interest that impairs the Monitoring Trustee's objectivity and independence in discharging its duties under the Commitments.

MTU: MTU Aero Engines AG, a company incorporated under the laws of Germany and having its principal place of business at Dachauer Straße 665, 80995 München, Germany.

[...].

Parties: the Notifying Party and the undertaking that is the target of the concentration.

[...].

Relevant EPI Partner: Airbus, MTU or Safran.

Rolls-Royce: Rolls-Royce Holdings plc, a company incorporated under the laws of England and Wales, having its head office at 62 Buckingham Gate, London SW1E 6AT.

Rolls-Royce plc: Rolls-Royce plc, a company incorporated under the laws of England and Wales, having its head office at 62 Buckingham Gate, London SW1E 6AT.

[...].

Safran: Safran Aircraft Engines SAS, a company incorporated under the laws of France and having its principal office at 2, Boulevard du Général Martial Valin, 75724 Paris Cedex 15, France.

[...].

SECTION B. COMMITMENTS

2. Rolls-Royce commits that:

- i. [details on the way in which the EPI will be governed going forward, notably on how the consortium will operate and take strategic decisions relating to an EPI Conflict of Interest];
- ii. [...]; and
- iii. [...].

3. Unless otherwise indicated, the commitments in this Section shall remain in place until the earlier of:
 - i. [...];
 - ii. [...]; and
 - iii. [...].

SECTION C. ARBITRATION

I. Fast track dispute resolution

4. In the event that [members of the EPI consortium] claim that Rolls-Royce or an Affiliated Undertaking is failing to comply with its obligations arising from the Commitments set out in Section B above (the “**EPI Commitments**”) vis-à-vis [members of the EPI consortium], the fast track dispute resolution procedure as described in this Section C shall apply.
5. [Members of the EPI consortium], who wishes to avail itself of the fast track dispute resolution procedure (a “**Requesting Party**”), shall send a written request to Rolls-Royce (with a copy to the Monitoring Trustee) setting out in detail the reasons leading that party to believe that Rolls-Royce is failing to comply with the requirements of the EPI Commitments. The Requesting Party and Rolls-Royce will use their best efforts to resolve all differences of opinion and to settle all disputes that may arise through co-operation and consultation within a reasonable period of time not exceeding fifteen (15) working days after receipt of the Request.
6. The Monitoring Trustee shall present its own proposal (the “**Monitoring Trustee Proposal**”) for resolving the dispute within eight (8) working days, specifying in writing the action, if any, to be taken by Rolls-Royce or an Affiliated Undertaking in order to ensure compliance with the commitments vis-à-vis the Requesting Party, and be prepared, if requested, to facilitate the settlement of the dispute.
7. Should the Requesting Party and Rolls-Royce (together the “**Parties to the Arbitration**”) fail to resolve their differences of opinion in the consultation phase, the Requesting Party shall serve a notice (the “**Notice**”), in the sense of a request for arbitration, to the International Chamber of Commerce (the “**ICC**”), with a copy of such Notice and request for arbitration to Rolls-Royce.
8. The Notice shall set out in detail the dispute, difference or claim (the “**Dispute**”) and shall contain, inter alia, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon shall be attached, e.g. documents, agreements, expert reports, and witness statements. The Notice shall also contain a detailed description of the action to be undertaken by Rolls-Royce (including, if appropriate, a draft contract comprising all relevant terms and conditions) and the Monitoring Trustee Proposal, including a comment as to its appropriateness.

9. Rolls-Royce shall, within ten (10) working days from receipt of the Notice, submit its answer (the “**Answer**”), which shall provide detailed reasons for its conduct and set out, *inter alia*, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon, e.g. documents, agreements, expert reports, and witness statements. The Answer shall, if appropriate, contain a detailed description of the action which Rolls-Royce proposes to undertake vis-à-vis the Requesting Party (including, if appropriate, a draft contract comprising all relevant terms and conditions) and the Monitoring Trustee Proposal (if not already submitted), including a comment as to its appropriateness.

II. Appointment of the Arbitrators

10. The Arbitral Tribunal shall consist of three persons. The Requesting Party shall nominate its arbitrator in the Notice; Rolls-Royce shall nominate its arbitrator in the Answer. The arbitrator nominated by the Requesting Party and by Rolls-Royce shall, within five (5) working days of the nomination of the latter, nominate the chairman, making such nomination known to the parties and the ICC which shall forthwith confirm the appointment of all three arbitrators.
11. Should the Requesting Party wish to have the Dispute decided by a sole arbitrator it shall indicate this in the Notice. In this case, the Requesting Party and Rolls-Royce shall agree on the nomination of a sole arbitrator within five working days from the communication of the Answer, communicating this to the ICC.
12. Should Rolls-Royce fail to nominate an arbitrator, or if the two arbitrators fail to agree on the chairman, or should the Parties to the Arbitration fail to agree on a sole arbitrator, the default appointment(s) shall be made by the ICC.
13. The three-person arbitral tribunal or, as the case may be, the sole arbitrator, are herein referred to as the “**Arbitral Tribunal**”.

III. Arbitration Procedure

14. The Dispute shall be finally resolved by arbitration under the ICC Rules of Arbitration, with such modifications or adaptations as foreseen herein or necessary under the circumstances (the “**Rules**”). The arbitration shall be conducted in London, UK in the English language.
15. The procedure shall be a fast-track procedure. For this purpose, the Arbitral Tribunal shall shorten all applicable procedural time-limits under the Rules as far as admissible and appropriate in the circumstances. The Parties to the Arbitration shall consent to the use of e-mail for the exchange of documents.
16. The Arbitral Tribunal shall, as soon as practical after the confirmation of the Arbitral Tribunal, hold an organisational conference to discuss any procedural issues with the Parties to the Arbitration. Terms of Reference shall be drawn up and signed by the Parties to the Arbitration and the Arbitration Tribunal at the organisational meeting or thereafter and a procedural time-table shall be

established by the Arbitral Tribunal. An oral hearing shall, as a rule, be established within two (2) months of the confirmation of the Arbitral Tribunal.

17. In order to enable the Arbitral Tribunal to reach a decision, it shall be entitled to request any relevant information from the Parties to the Arbitration, to appoint experts and to examine them at the hearing, and to establish the facts by all appropriate means. The Arbitral Tribunal is also entitled to ask for assistance by the Trustee in all stages of the procedure if the Parties to the Arbitration agree.
18. The Arbitral Tribunal shall not disclose confidential information and apply the standards attributable to confidential information under the Merger Regulation. The Arbitral Tribunal may take the measures necessary for protecting confidential information in particular by restricting access to confidential information to the Arbitral Tribunal, the Trustee, and outside counsel and experts of the opposing party.
19. The burden of proof in any dispute under these Rules shall be borne as follows:
 - i. the Requesting Party must produce evidence of a prima facie case; and
 - ii. if the Requesting Party produces evidence of a prima facie case, the Arbitral Tribunal must find in favour of the Requesting Party unless Rolls-Royce can produce evidence to the contrary.
 - iii. IV. Involvement of the Commission
20. The Commission shall be allowed and enabled to participate in all stages of the procedure by:
 - i. receiving all written submissions (including documents and reports, etc.) made by the Parties to the Arbitration;
 - ii. receiving all orders, interim and final awards and other documents exchanged by the Arbitral Tribunal with the Parties to the Arbitration (including Terms of Reference and procedural time-table);
 - iii. giving the Commission the opportunity to file *amicus curiae* briefs; and
 - iv. being present at the hearing(s) and being allowed to ask questions to parties, witnesses and experts.
21. The Arbitral Tribunal shall forward, or shall order the Parties to the Arbitration to forward, the documents mentioned to the Commission without delay.
22. In the event of disagreement between the Parties to the Arbitration regarding the interpretation of the EPI Commitments, the Arbitral Tribunal may seek the Commission's interpretation of the EPI Commitments before finding in favour of any Party to the Arbitration and shall be bound by the interpretation.

V. Decisions of the Arbitral Tribunal

23. The Arbitral Tribunal shall decide the dispute on the basis of the EPI Commitments and the Decision. Issues not covered by the EPI Commitments and the Decision shall be decided (in the order as stated) by reference to the Merger Regulation, EU law and general principles of law common to the legal orders of the Member States without a requirement to apply a particular national system. The Arbitral Tribunal shall take all decisions by majority vote.
24. Upon request of the Requesting Party, the Arbitral Tribunal may make a preliminary ruling on the Dispute. The preliminary ruling shall be rendered within one (1) month after the confirmation of the Arbitral Tribunal, shall be applicable immediately and, as a rule, remain in force until a final decision is rendered.
25. The Arbitral Tribunal shall, in the preliminary ruling as well as in the final award, specify the action, if any, to be taken by Rolls-Royce or an Affiliated Undertaking in order to comply with the commitments vis-à-vis the Requesting Party (e.g. specify a contract including all relevant terms and conditions). The final award shall be final and binding on the Parties to the Arbitration and shall resolve the Dispute and determine any and all claims, motions or requests submitted to the Arbitral Tribunal. The arbitral award shall also determine the reimbursement of the costs of the successful party and the allocation of the arbitration costs. In case of granting a preliminary ruling or if otherwise appropriate, the Arbitral Tribunal shall specify that terms and conditions determined in the final award apply retroactively.
26. The final award shall, as a rule, be rendered within six months after the confirmation of the Arbitral Tribunal. The time-frame shall, in any case, be extended by the time the Commission takes to submit an interpretation of the EPI Commitments if asked by the Arbitral Tribunal.
27. The Parties to the Arbitration shall prepare a non-confidential version of the final award, without business secrets. The Commission may publish the non-confidential version of the award.
28. Nothing in the arbitration procedure shall affect the power to the Commission to take decisions in relation to the EPI Commitments in accordance with its powers under the Merger Regulation.

SECTION D. MONITORING TRUSTEE

I. Appointment procedure

29. Rolls-Royce shall appoint a Monitoring Trustee to carry out the functions specified in this Section D. The Monitoring Trustee shall:
 - i. at the time of appointment, be independent of Rolls-Royce and its Affiliated Undertakings;

- ii. possess the necessary qualifications to carry out its mandate; and
 - iii. neither have nor become exposed to a Monitoring Trustee Conflict of Interest.
30. The Monitoring Trustee shall be remunerated by Rolls-Royce in a way that does not impede the independent and effective fulfilment of its mandate.

Proposal by Rolls-Royce

31. No later than two weeks after the Effective Date, Rolls-Royce shall submit the name or names of one or more natural or legal persons whom Rolls-Royce proposes to appoint as the Monitoring Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the person or persons proposed as Monitoring Trustee fulfil the requirements set out in paragraphs 29 and 30 and shall include:
- i. the full terms of the proposed mandate, which shall include all provisions necessary to enable the Monitoring Trustee to fulfil its duties under these Commitments; and
 - ii. the outline of a work plan which describes how the Monitoring Trustee intends to carry out its assigned tasks.

Approval or rejection by the Commission

32. The Commission shall have the discretion to approve or reject the proposed Monitoring Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Monitoring Trustee to fulfil its obligations. If only one name is approved, Rolls-Royce shall appoint, or cause to be appointed, the person or persons concerned as Monitoring Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Rolls-Royce shall be free to choose the Monitoring Trustee to be appointed from among the names approved. The Monitoring Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by Rolls-Royce

33. If all the proposed Monitoring Trustees are rejected, Rolls-Royce shall submit the names of at least two more natural or legal persons within one week of being informed of the rejection, in accordance with the requirements and procedure set out in paragraphs 31 and 32 of these Commitments.

Monitoring Trustee nominated by the Commission

34. If all further proposed Monitoring Trustees are rejected by the Commission, the Commission shall nominate a Monitoring Trustee, whom Rolls-Royce shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

II. Functions of the Monitoring Trustee

35. The Monitoring Trustee shall act on behalf of the Commission to ensure Rolls-Royce's compliance with the Commitments. The Commission may, on its own initiative or at the request of the Monitoring Trustee or Rolls-Royce, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.
36. The Monitoring Trustee shall propose to Rolls-Royce such measures as the Monitoring Trustee considers necessary to ensure Rolls-Royce's compliance with the Commitments, and the Monitoring Trustee shall propose necessary measures to the Commission in the event that Rolls-Royce does not comply with the Monitoring Trustee's proposals within the timeframe set by the Monitoring Trustee.
37. The Monitoring Trustee will act on behalf of the Commission as a trusted expert in the fast track dispute settlement procedure described in Section C.

Mandate of the Monitoring Trustee

38. The Monitoring Trustee shall:
 - i. provide to the Commission, sending Rolls-Royce a non-confidential copy at the same time, a report annually during the term of the Commitments, as indicated in Section B, regarding the status and outcome of any dispute between [members of the EPI consortium] and Rolls-Royce in which the Monitoring Trustee has participated;
 - ii. propose to Rolls-Royce such measures as the Monitoring Trustee considers necessary to ensure compliance with these Commitments;
 - iii. promptly report in writing to the Commission, sending Rolls-Royce a non-confidential copy at the same time, if it concludes on reasonable grounds that Rolls-Royce is failing to comply with these Commitments;
 - iv. advise and, if need be, make written recommendations to the Commission when any dispute between [members of the EPI consortium] and Rolls-Royce regarding compliance with these Commitments is brought before the Arbitral Tribunal.

III. Duties and obligations of Rolls-Royce in relation to the Monitoring Trustee

39. Rolls-Royce shall provide and shall cause its advisors to provide the Monitoring Trustee with all such co-operation, assistance and information, including copies of all relevant documents and access to relevant staff, as the Monitoring Trustee may reasonably require to perform its tasks in relation to these Commitments.
40. Rolls-Royce shall indemnify the Monitoring Trustee and its employees and agents (each an "**Indemnified Party**") and hold each Indemnified Party

harmless against, and hereby agrees that an Indemnified Party shall have no liability to Rolls-Royce for, any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.

41. At the expense of Rolls-Royce, the Monitoring Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Rolls-Royce's approval (this approval not to be unreasonably withheld or delayed) if the Monitoring Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Monitoring Trustee are reasonable. Should Rolls-Royce refuse to approve the advisors proposed by the Monitoring Trustee, the Commission may approve the appointment of such advisors instead, after having heard Rolls-Royce. Only the Monitoring Trustee shall be entitled to issue instructions to the advisors. Paragraph 40 of these Commitments shall apply *mutatis mutandis*.
42. For a period of ten (10) years from the Effective Date the Commission may request all information from the Parties that is reasonably necessary to monitor the effective implementation of these Commitments.

IV. Replacement, discharge and reappointment of the Monitoring Trustee

43. If the Monitoring Trustee ceases to perform its functions under the Commitments or for any other good cause, including its exposure to a Monitoring Trustee Conflict of Interest:
 - i. the Commission may, after hearing the Monitoring Trustee and Rolls-Royce, require Rolls-Royce to replace the Monitoring Trustee; or
 - ii. Rolls-Royce may, with the prior approval of the Commission, replace the Monitoring Trustee.
44. If the Monitoring Trustee is removed according to paragraph 43 of these Commitments, the Monitoring Trustee may be required to continue in its function until a new Monitoring Trustee is in place to whom the Monitoring Trustee has effected a full hand over of all relevant information. The new Monitoring Trustee shall be appointed in accordance with the procedure referred to in paragraphs 29 to 34 of these Commitments.
45. Unless removed according to paragraph 43 of these Commitments, the Monitoring Trustee shall cease to act as Monitoring Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Monitoring Trustee has been entrusted have been implemented or at the latest ten (10) years after the effective date.

SECTION E. GENERAL PROVISIONS

- 46. If the approval of the proposed transaction by another governmental authority is made subject to requirements that are potentially inconsistent with these Commitments, Rolls-Royce may request a review and adjustment of these Commitments in order to avoid such inconsistencies.

SECTION F. THE REVIEW CLAUSE

- 47. The Commission may, in response to a reasoned request from the Notifying Party showing good cause waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party.

SECTION G. ENTRY INTO FORCE

- 48. The Commitments shall take effect upon the date of adoption of the Decision.

(signed)

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duly authorised for and on behalf of Rolls-Royce Holdings PLC