



EUROPEAN COMMISSION
DG Competition

***Case M.11253 - SAFRAN / PART OF COLLINS
AEROSPACE's ACTUATION AND FLIGHT
CONTROL ACTIVITIES***

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: 04/04/2025

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EUROPEAN COMMISSION

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PUBLIC VERSION

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 Where possible the information omitted has been replaced by ranges of figures or a general description.

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**Subject: Case M.11253 - SAFRAN / PART OF COLLINS AEROSPACE's
ACTUATION AND FLIGHT CONTROL ACTIVITIES
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 14 February 2025, the European Commission received notification of a proposed concentration pursuant to Article 4 of the Merger Regulation by which Safran S.A.³ ("Safran", France or "Notifying Party") acquires sole control over part of the actuation business of Collins Aerospace ("Target"), a business unit of RTX Corporation ("RTX", United States), within the meaning of Article 3(1)(b) of the Merger Regulation (jointly, 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 OJ C, C/2025/1270, 21.2.2025.

1. THE PARTIES

- (2) Safran is a French-registered company, listed on the Paris stock exchange, active mainly in three areas: (i) aerospace propulsion; (ii) aircraft equipment, defence, and aerospace systems; and (iii) aircraft interiors. Safran supplies engines, systems, and equipment for civil and military aircraft, and provides aftermarket support.
- (3) The Target consists of part of Collins' actuation business. The Target supplies aerospace and defence products and provides aftermarket services. The Target's business is centred in the supply of actuation systems.⁴ Actuation systems include (i) flight control actuation systems⁵ – in turn, these include primary flight control actuation systems ("PFCA") (including rotary flight control actuation ("RFCA") systems), secondary flight control actuation systems ("SFCA"), trimmable horizontal stabiliser actuation systems ("THSA"), and missile actuation systems – (ii) nacelle actuation systems,⁶ such as thrust reverser actuation systems ("TRAS"), and (iii) utility actuation systems.⁷ The Target is also active in component maintenance, repair and overhaul ("MRO") services, the supply of spare parts, the supply of electronic control systems and other miscellaneous equipment and components, and in the supply of valves for incorporation in space launchers. RTX, the current owner of the Target, is an aerospace and defence company.

2. CONCENTRATION

- (4) On 20 July 2023, the Parties entered into a Put Option Agreement ("Put") and a Share and Asset Purchase and Sale Agreement ("SAPA"), through which Safran will acquire all the equity of the in-perimeter legal entities and the other relevant assets of the Target currently owned by RTX. (⁸) Safran exercised the put option on 4 October 2023 (the "Transaction"). As a result, Safran will acquire sole control of the Target, and the Transaction constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

⁴ Actuation systems are pieces of equipment that have as a purpose to move other pieces of equipment in an aircraft.

⁵ As explained in greater detail in Section 6.1.1.1, flight control actuation systems are the equipment that generates the movement of the flight control surfaces. Flight control surfaces are parts of an aircraft that steer the aircraft in flight (e.g., flaps, slats, elevators, rudders, etc.). For example, a primary flight control actuator moves the elevators located in the rear wings to create a movement around a lateral axis (pitch) and change the vertical direction of an aircraft. Similarly, a primary flight control actuator moves the ailerons that are located in back of the wings to rotate around a longitudinal axis (roll) and facilitate turning the aircraft.

⁶ A nacelle is the enclosure that contains an aircraft's propulsion system, that are often attached and located under the wings of an aircraft. As described in greater detail in Sections 6.1.1.1 and 6.1.1.2, TRAS enable the thrust reversers in a nacelle to deploy, reversing the airflow into the engine and enabling an aircraft to decrease speed faster when landing.

⁷ Utility actuation systems generally refer to non-flight actuation systems. Utility actuation systems include systems used to open doors (e.g., fan cowl doors, weapons bay doors, cargo doors, passenger doors), or systems that are incorporated within the aircraft (e.g., to change to position of the cockpit or passenger seats).

⁸ The Target includes the following legal entities: Goodrich Actuation Systems SAS, Microtecnica S.r.l., Goodrich Actuation Systems Limited, CT Group Limited, Claverham Group Limited and PT UTC Aerospace Systems Bandung Operations.

3. UNION DIMENSION

- (5) The Transaction has an EU dimension pursuant to Article 1(2) of the Merger Regulation. Safran and the Target have a combined aggregate global turnover in excess of EUR 5,000 million in the last respective full financial year (Safran: EUR 23,199 million; the Target: EUR [...], each in 2023). Each of them also has an EU-wide turnover in excess of EUR 250 million (Safran: EUR [...]; the Target: EUR [...]). None of the undertakings concerned achieves more than two-thirds of its aggregate EU-wide turnover within one and the same Member State.

4. OVERVIEW OF THE AIRCRAFT MANUFACTURING INDUSTRY

- (6) In order to provide relevant background information, this section summarises the main characteristics of the aircraft manufacturing industry, as typically considered by the Commission and developed by the Notifying Party in the Form CO.⁹ This section introduces terms and concepts that are used in the remainder of the decision, namely (i) the different types of aircraft, (ii) how aircraft are developed and how an individual aircraft's components are sourced, and (iii) specifically how actuation systems are developed and sourced.

4.1. Types of aircraft

- (7) The Commission has considered typically the following main categories of aircraft: (i) commercial aircraft, (ii) military aircraft, (iii) general aviation aircraft, and (iv) helicopters.¹⁰
- (8) Within commercial aircraft, the following categories have generally been retained for merger control purposes:
- (a) Large commercial aircraft: aircraft with more than 100 seats, a range of over 2,000 nautical miles and a cost in excess of USD 35 million. Large commercial aircraft can be “narrow-body” or “wide-body”. Narrow-body aircraft generally have around 100-200 seats and are used to move passengers across medium distances (2,000-4,000 nautical miles).¹¹ Wide-body aircraft generally have between 200 and 850 seats, and are used to move passengers across larger distances (more than 4,000 nautical miles).¹²
 - (b) Regional aircraft: aircraft that generally have between 30 and 90 seats, a range of 2,000 nautical miles and a cost up to USD 30 million. Regional aircraft can be small (30 to 50 passengers) or large (70 to 90 passengers).¹³
 - (c) Business jets/corporate aircraft: aircraft designed for corporate activities, typically with a cost between USD 3 million and USD 50 million. There are

⁹ Form CO, Chapter I, paragraphs 101-201.

¹⁰ See e.g., M.8425 – *Safran / Zodiac Aerospace* (“Safran/Zodiac”), paragraphs 9 *et seq*; case M.8658 – *UTC / Rockwell Collins* (“UTC/Collins”), paragraphs 8 *et seq*.

¹¹ Examples of narrow-body aircraft include the Airbus A220 and A320 families, the Boeing 717, 737 and 757 families, and the Comac C919.

¹² Examples of wide-body aircraft include the Airbus A300, A310, A330, A340, A350 and A380 (and derivatives), and the Boeing 747, 767, 777, 787 (and derivatives).

¹³ Regional aircraft suppliers include (i) Embraer, with the ERJ 135/145, E170, 175, 190 and 195 regional jets and E2 families), (ii) ATR with ATR 42 and ATR 72, (iii) Comac, with the ARJ21, (iv) BAE Systems with the Avro RJX, and BAe 146, and (v) Mitsubishi Heavy Industries, with the CRJ700/900/1000.

light (five to eight seats), medium (nine to 12 seats) and heavy corporate aircraft (more than 13 seats).¹⁴

- (9) Military aircraft are aircraft designed for military purposes. The cost of the aircraft varies greatly in accordance with its intended purpose. Military aircraft can be derivatives of commercial aircraft. Two broad types of military aircraft can be distinguished: combat aircraft and non-combat aircraft (*i.e.* those that are designed for search and rescue, reconnaissance, transport, observation and training).¹⁵
- (10) A residual category of aircraft, that are not intended for commercial air transportation or aerial work,¹⁶ is referred to in the industry as “general aviation.” General aviation aircraft typically are powered by piston engines, fly at altitudes below 15,000 feet, have a range up to 400 miles, and can seat one to six passengers.
- (11) Finally, helicopters can be segmented into normal helicopters, and transport rotorcrafts. Helicopters are typically propelled by turbine engines and are used for both civil and military applications.¹⁷
- (12) In its practice, the Commission has also considered a distinction between civil and military aircraft (put differently, a distinction by segment of demand). Typically, customers in the military segment are the Ministries of Defence of sovereign countries. The purpose of military aircraft is to participate in military assignments, whereas the purpose of civil aircraft is to participate in civil assignments such as commercial air transport, business transport, recreational activities, or in police and firefighting.

4.2. Development of new aircraft

- (13) Aircraft development and manufacturing is a particularly complex and long process: it involves the design, integration, procurement and assembly of numerous parts; the parts and the aircraft are subject to stringent quality controls (e.g., certification across the supply chain for individual products); and whilst it is led by the aircraft manufacturer (also referred to as “airframer”¹⁸) that intends to develop a new aircraft (often producing in-house many of its key components), it is a shared design and production effort between the airframer and its supply chain.

¹⁴ Suppliers of business include (i) Textron Aviation (e.g., Cessna Citation Longitude, Beechcraft 390), (ii) Bombardier (e.g. Learjet 70/75, Global 5000/6000, Challenger 300/350), (iii) Gulfstream (e.g., GV, G280, G500/600, G700/800), (iv) Embraer (e.g., Legacy family), and (v) Dassault (e.g., F6X, F7/8X, F10X).

¹⁵ Suppliers of military aircraft include Airbus (A400M), Dassault (Rafale), Eurofighter (Typhoon), Boeing (V22, F-18, KC135 refueler, C-17), Lockheed Martin (e.g. Hercules), Northrop Grumman (e.g. Hawkeye) and Embraer (C-390).

¹⁶ Aerial work is any paid work undertaken by an aircraft (other than public transport). Aerial work includes the use of aircraft in specialised services, such as agriculture, construction, photography, surveying, observation and patrol, and aerial advertisement.

¹⁷ Suppliers of helicopters include Bell (525), Sikorsky (Lockheed Martin) (CH53-K, S76, H-19), Boeing (B407/412/429/525), Airbus Helicopters (EC135/145), Leonardo/AgustaWestland (AW139), Russian Helicopters, HAL, Kawasaki, NH Industries, Denel Aerospace, and Korean Aerospace Industries (KAI).

¹⁸ An airframe is the basic structure of an aircraft. The airframe includes all the principal components of an aircraft – wings, fuselage, tail, landing gear, etc. – and is designed to withstand all relevant aerodynamic forces that aircraft face in operation. For the purposes of this decision, airframers are the original equipment manufacturers that design and supply aircraft (such as Airbus, Boeing, Embraer or Gulfstream).

- (14) The aerospace industry is one in which aircraft manufacturing is at the centre and plays a pivotal role in the supply chain. In the following paragraphs, the Commission sets out certain characteristics of aircraft manufacturing that are important to understand the competitive dynamics between suppliers of components to airframers.
- (15) *First*, aircraft programmes are typically long and airframers develop new programmes infrequently.¹⁹ In other words, airframers release few new aircraft every decade (if any), and keep aircraft in service for several decades. The development period is commensurate to the level of complexity and technological advancement of each programme. In general terms, aircraft programmes include (i) a conception and development stage of the aircraft, which on average can last between three and six years; (ii) a production stage of the aircraft, i.e., between the delivery of the first and the last aircraft, which lasts typically between 20 and 25 years, and (iii) an exploitation stage of a new aircraft, i.e., the period during which the aircraft is used, which can span between 20 and 40 years depending on the type of aircraft (typically civil aircraft are used for shorter periods of time than military aircraft).²⁰ In other words, an aircraft designed in 2020 and with entry-into-service in 2025, may be in production until 2050 and in service until 2080.²¹ However, the conception and development stage can take much longer depending on the complexity and breadth of the changes made to a previous generation.²² It follows that tenders in the aerospace industry are infrequent and lead to long-term supply relationships.
- (16) For the entire period, airframers and their suppliers need to ensure the continuity of the supply and the maintenance of many aircraft essential components, with stringent quality levels. In turn, the longevity and complexity of each programme often leads airframers to seek from their suppliers commercial and contractual commitments to improve continuously (in performance or price) the parts chosen to be incorporated in the aircraft.²³
- (17) *Second*, airframers foster and benefit from competition among suppliers to drive the technological advancements necessary for the new generations of aircraft they intend to develop. Early in the concept stage, airframers decide on the technologies

¹⁹ An aircraft “programme” covers the entire period in the life of a specific aircraft, from conception, to production, and to production of spare parts until end-of-life. The infrequent nature of aircraft programmes is illustrated, for example, by the number of tenders initiated by airframers in the last 10 years across major products (such as THSA, PFCA, SFCA or TRAS). In that period, airframers of large or regional commercial aircraft opened tenders for one or two new programmes: one for Airbus (the A320 NEO family, comprising A319neo/A320neo/A321neo/A321neo XLR), and two for Boeing (for the B737 MAX and the B777-X) and Embraer (for Cap 010, and the E175/E190/195 and E2). See Annex Ch. II. S.2.6(iv).

²⁰ Form CO, paragraph 148.

²¹ Form CO, paragraph 149.

²² For example, in 2023, the CEO of Airbus, Mr Guillaume Faury mentioned that Airbus was preparing the entry into service of a new generation of airplanes in 2035. Mr Faury noted that a 12 year period of development is “*not a long time*,” as Airbus is preparing “*the replacement of platforms, not upgrades*”, unlike “*going from A320 to [A320neo] or from the [737NG] to the MAX*.” Mr Faury noted that “[e]ven though it seems like a lot of time, it means a launch of the program in 2027 or 2028, maybe 2030 at the latest. And we are just years away from those days where we need to have the technologies, all the partners ready, the suppliers [and] the industrial setup.” Interview available at <https://aviationweek.com/shownews/paris-air-show/airbus-ceo-guillaume-faury-reveals-plans-new-generation-narrowbody>.

²³ Form CO, paragraph 152. See also minutes of a conference call with an airframer.

and the suppliers that will contribute to the design of an aircraft. For that end, airframers identify and select (i) the technologies and products they develop or produce in-house to incorporate in the aircraft (where they apply own engineering expertise), (ii) the products or technologies they can consider outsourcing and tender competitively against their own products or technologies (i.e., where the airframer's products compete with other aerospace companies, such as the Parties), and (iii) the products in which they do not have any in-house capabilities and typically outsource. Often airframers co-develop technologies with their suppliers for incorporation in specific aircraft.²⁴

- (18) It follows that, unless an airframer selects early on its own products, the airframer engages with other aerospace companies in the development of new aircraft. This engagement starts before a formal procurement process begins, at the stage where certain products or technologies are developed. One manner of engaging with other aerospace companies is through research projects. These projects contribute to define the technologies/products used in the next generation of aircraft. For example, to develop hydrogen-fuelled aircraft, Airbus has partnered with Woodward to design a Fuel Cell Balance of Plant solution intended specifically for the ZEROe demonstrator aircraft based on hydrogen propulsion.²⁵ Or, in the context of the development of its next generation of aircraft, Boeing selected Safran to supply of the electrical power system in the X-66 flight demonstrator (part of Boeing's "thin wing" design project).²⁶ Once the airframer has reached product or technological maturity to start the formal tender process, it will organise the tenders that will lead ultimately to the procurement of components (such as a THSA from Collins).²⁷
- (19) Figure 1 below reflects the period of development of technologies/products generally, and the "trade studies" stage reflects the period in which this exchange between airframers and their suppliers contribute to the definition of the aircraft.

Figure 1 - Example of timeline for the procurement of products in the aerospace industry

[...]

Source: Form CO, Annex 5.4(xxi) – [...] Actionnement [...]

²⁴ See minutes of the conference call with an aircraft manufacturer, paragraph 28.

²⁵ See <https://ir.woodward.com/news/news-details/2022/Woodward-Selected-by-Airbus-to-Provide-Balance-of-Plant-Solution-for-ZEROe-Fuel-Cell-Demonstrator-Contributing-to-Zero-Emission-Flight/default.aspx>.

²⁶ See <https://www.safran-group.com/fr/espace-presse/safran-est-selectionne-boeing-demonstrateur-vol-durable-x-66-nasa-2024-07-23>.

²⁷ The fact that an airframer goes through the initial stages of development of an aircraft – where it often engages with third-party aerospace companies to develop new products or solutions –, and the fact that the airframer starts a formal tender process to source components, does not mean necessarily that it will produce the envisaged aircraft. On occasion, specific aircraft programmes are abandoned in the course of the tenders – i.e., after the initial engagement between suppliers and airframers. In other words, it also happens that despite initial engagement and co-development between airframers and their suppliers, that these co-developed products do not come to serial production. See Form CO, Annex Ch. II. S.2.6(iii) - SFCA bidding data, where in recent years two airframers cancelled tenders for SFCA systems.

- (20) The procurement process starts with the airframer approaching suppliers that have the requisite capabilities to be involved in a specific procurement process (e.g., they are able to support a specific technology of a product, such as a hydraulic THSA), and engaging with these prospective bidders in pre-proposal aircraft trade studies to support the architectural definition of the aircraft (the “RFTI” stage). This stage of the procurement procedure is referred to as Request for Information (“RFI”) stage. At this stage, the airframer draws up a list of potential suppliers, enquires about emerging technologies that can be incorporated in the aircraft programme, and assesses production and maintenance capabilities.²⁸ This allows the airframer to decide on a specific structure of the aircraft, and sequentially design the components that will integrate the aircraft. For example, specific flight control actuation systems – such as THSA, PFCA or SFCA – are chosen early on during the development process,²⁹ as the synchronisation in the commands of these components is essential for the integrity of the aircraft.³⁰
- (21) Subsequently, the airframer proceeds to the stage where it sends the suppliers identified a Request for a Proposal (“RFP”). During this stage, airframers typically solicit specific compliance responses to commercial, technical, programmatic, and service/support requirements from the suppliers, and further narrow down the pool of potential suppliers.³¹ The competing bidders are then required to submit “Best and Final Offers”. Following these offers, the airframer conducts final negotiations and makes its selection.³²
- (22) *Third*, the aerospace companies that airframers call upon to cooperate in the development and manufacturing of a new aircraft – such as the Parties – are organised, as in other industries, in a tiered structure: (i) Tier-1 suppliers design, manufacture and integrate complete systems, and supply the aircraft manufacturers directly;³³ (ii) Tier-2 suppliers generally supply Tier-1 suppliers (or aircraft manufacturers when they take charge of system integration themselves) with parts or subsystem assemblies, and typically participate with a lesser degree of intensity in the design and/or integration of complete systems;³⁴ (iii) Tier-3 suppliers generally manufacture components in accordance with designs provided by their downstream customer (i.e., “built-to-print”), or are sub-assembly suppliers.³⁵
- (23) Typically, each tier represents a potential instance of competition. Competition takes place first at Tier-1 level, then subsequently at Tier-2 and Tier-3 (if applicable). For a given system, a company that participates in the Tier-1 selection process and is not selected may still choose to participate in the lower tier selection processes. For example, a supplier that is not selected as the Tier-1 supplier for a complete actuation system could still seek to participate as a Tier-2 supplier in any subsequent tenders for the supply of subsystems that the selected

²⁸ Form CO, paragraph 156.

²⁹ See minutes of the conference call with a competitor, paragraph 33.

³⁰ *Id.*, paragraph 32.

³¹ Form CO, paragraph 157.

³² *Id.*

³³ Examples of suppliers known primarily as Tier-1 suppliers include Liebherr, Moog, Parker, Woodward, Honeywell, Triumph, SAAB, SABCA. Form CO, fn. 61.

³⁴ Examples of suppliers known primarily as Tier-2 suppliers include Umbra, Circor, Cobham Advanced Electronic Solutions, Kollmorgen, Sargent Aerospace and Defence. Form CO, fn. 60.

³⁵ Form CO, paragraphs 128-132.

Tier-1 supplier may launch.³⁶ Accordingly, Safran acts as a Tier-1 supplier of THSA systems in some programmes, and as Tier-2 in others.³⁷

- (24) *Fourth*, because of the critical nature of the components procured by airframers for the design of the aircraft, in most cases, contracts between Tier-1 suppliers and airframers are concluded for the full duration of the aircraft programme.³⁸ Typically, for airframers it is very costly to replace a product and/or be supplied the same compliant product from another company (*second source*) during the period of the programme. This is usually only considered in case of major issues with the supplier or the product.³⁹ On occasion, airframers commit to shorter periods of time – e.g., 5 to 10 years – and launch new tenders for equipment or systems before the end of a programme.
- (25) As contracts are typically concluded for the full duration of the programme, it is frequent to include contractual mechanisms that (i) set out how price can be adjusted through the contract,⁴⁰ (ii) require suppliers to remain competitive and/or continue improving the performance of the components supplied to airframers,⁴¹ and (iii) set out stringent requirements in terms of reliability and security of the products (including safety standards, etc.).⁴²
- (26) *Finally*, every product (e.g., flight control systems) goes through an acceptance procedure called Acceptance Test Procedure (“ATP”) before it is shipped out to the airframers. This procedure verifies that each product meets the acceptance criteria set by authorities such as the Federal Aviation Administration (“FAA”) in the United States or the European Aviation Safety Agency (“EASA”) in the European Union. The ATP is typically carried out by the “owner” or manufacturer of the product (the “owner” is the supplier that has design authority over the specific component – Safran and the Target are typically the “owner” of the products they design and supply to airframers). The owner also has qualification responsibility for the product(s) they design, i.e. demonstrating that all requirements stipulated by the customer have been met. The agreement on product compliance is documented in a Qualification Test Report, which is written by the product owner, and agreed to formally by the airframer. Certification of the product is accomplished by the certification of the aircraft, which is the responsibility of the airframer.⁴³

5. OVERVIEW OF THE SPACE LAUNCHER INDUSTRY

- (27) Space launchers are vehicles based on rocket engines used to deliver products (such as satellites or other equipment) into orbit. According to the Parties, space launchers are made up of systems, subsystems and equipment. Valves are components of equipment that regulate the passage of fluid between the launcher engine and different stages of the launcher, such as, in Ariane 6 the solid propulsion stage (boosters) and the fairing (which encapsulates the payload).⁴⁴

³⁶ See minutes of the conference call with a rival Tier-1 supplier, paragraph 3.

³⁷ Form CO, paragraph 135.

³⁸ Form CO, paragraph 161.

³⁹ See minutes of the conference call with a competitor, paragraph 19.

⁴⁰ Form CO, paragraph 163.

⁴¹ Form CO, paragraph 164.

⁴² Form CO, paragraph 166.

⁴³ See minutes of a conference call with a competitor, paragraph 23.

⁴⁴ Form CO, paras. 1128-1129.

Valves are the only components of equipment for space launchers that the Parties manufacture.⁴⁵ In Europe, space launchers are historically developed and used by the European Space Agency (ESA),⁴⁶ an intergovernmental organisation with 23 Member States⁴⁷ dedicated to the exploration of space. ESA has been responsible for the development of European space launchers. These programmes essentially consist of a development phase and a support exploitation phase.

- (28) The development phase consists of the carrying out of preliminary R&D and feasibility studies as well as the development and the manufacturing of the first launch system according to the requirements specified by ESA. The development phase is concluded when the launch system development has been successfully completed and the launch system acceptance has been declared by ESA.
- (29) The exploitation phase follows the development phase. During this phase, the launcher is manufactured in series and used to provide launch services, which are commercialized by a launch services provider in order to meet its customers' needs (i.e., satellite operators that need to place their satellites into orbit, such as Intelsat). The exploitation of developed ESA space launchers (i.e., Ariane 6 and Vega-C) is currently entrusted to Arianespace and Avio.⁴⁸
- (30) For each launcher programme, ESA selects a European industry operator as one main contractor, the 'prime contractor' which will be responsible for building the launcher, and selecting several subcontractors, which will produce the different launcher subsystems and equipment. The development of the current Ariane 6 launcher and of its predecessor Ariane 5 has been entrusted to the ArianeGroup (a joint venture between Airbus and Safran)⁴⁹. The development of the current Vega-C launcher and its predecessor Vega, as well as of the future Vega-E has been entrusted by ESA to Avio.
- (31) For such contracts, ESA designates its industrial partners on the basis of those partners' known expertise and the so-called geographical 'juste retour' principle enshrined in the ESA Convention.⁵⁰ According to this principle, the share of business awarded to manufacturers in a given ESA Member State needs to be closely related to the share of financial contribution from that Member State to the respective programme.
- (32) Subcontractors, suppliers of systems, sub-systems, equipment, components for space launchers are selected by the prime contractor under the supervision of ESA. Tenders for these systems, sub-systems, equipment and space launcher components

⁴⁵ Form CO, paragraphs 1127 and 1129, and footnote 514.

⁴⁶ Used both for institutional and commercial launches.

⁴⁷ 20 EU Member States, Norway, Switzerland and the United Kingdom.

⁴⁸ Arianespace is a subsidiary of ArianeGroup, which holds a majority controlling shareholding in its capital. Arianespace does not commercialize launchers, only launch services. [...]. The ESA Council adopted a resolution on 5 July 2024 according to which the Vega family space launchers will, from the end of 2025, be commercialized by their prime contractor, Avio.

⁴⁹ The ArianeGroup, formerly Airbus Safran Launchers, is a French joint venture between Safran and Airbus, specialised in the design, production and manufacture of space launchers, satellite systems, sub-systems and missile propulsion.

⁵⁰ According to Article VII (c) of the ESA's Convention, which can be found on ESA's website at: https://esamultimedia.esa.int/multimedia/publications/SP-1337/SP-1337_EN.pdf.

are organised based on ESA's best practices, giving ESA oversight over the selection of subcontractors.⁵¹

- (33) In the context of the global trend of an emerging private space industry, ESA is looking into the advantages and disadvantages of the *juste retour* principle.⁵² Nowadays, a number of private companies, both at European level and worldwide have started to develop launchers and provide launch services independently, being less reliant on initial funding by government entities. Examples of these launch service providers, also known as New Space companies, are Space X, Blue Origin, Rocket Lab, PLD Space, Isar Aerospace, HyImpulse Skyrora and Latitude, to name a few. Some of these companies have already developed and offered launching services, while others are at advance stages of development, performing their first flights.⁵³
- (34) In November 2023, during its Council meeting in Seville, Spain, ESA decided to open the market for space launchers and services around it, beyond Avio and the ArianeGroup, to new European launch service providers.⁵⁴ It announced its European Launcher Challenge, an initiative to enhance and diversify Europe's access to space. The aim of the European Launcher Challenge is to stimulate competition among European launch service providers. It is foreseen that these new launch service providers will be able to select their subcontractors (e.g. their valves suppliers) by themselves, with limited or no oversight from ESA.⁵⁵
- (35) The European Launcher Challenge adopts a new approach to securing launch services whereby launch companies – based in ESA or EU Member States – will have to pass milestones on time to unlock ESA payments and to validate that the launch service deployment is on track.⁵⁶ Furthermore, successful participants will be given opportunities to bid for institutional launch service contracts, potentially securing business from ESA and other European governmental bodies.
- (36) As part of the preparatory phase, ESA issued an RFI in June 2024, inviting European launch service providers to submit their proposals. Twenty-six companies responded to the European Launcher Challenge RFI in June and more than 75 companies attended the European Challenge industry day held on 8 November 2024, where some of these companies presented their offerings.
- (37) For instance, nine companies presented their launch system developments, namely HyImpulse, HyPrSpace, Isar Aerospace, MaiaSpace, Orbex, PLD Space, Rocket Factory Augsburg, Skyrora and The Exploration Company. Additionally, seven space launcher components suppliers, including of valves presented their products,

⁵¹ Best Practices for the Selection of Subcontractors by Prime Contractors in the frame of ESA's Major Procurements ("ESA's Best Practices") have been laid down by ESA for the selection of subcontractors by Prime Contractors in the frame of ESA's major procurements, Annex Ch/VII. S.7.1. to the Form CO.

⁵² See "The competitiveness of ESA's Geo-return policy" dated 20 March 2023 on ESA's website, available at: <https://vision.esa.int/the-competitiveness-of-esas-geo-return-policy/>.

⁵³ See for example 'The scene is set for the European Launcher Challenge', dated 13 November 2024 on ESA's website, available at: [ESA - The scene is set for the European Launcher Challenge](#).

⁵⁴ Non-confidential minutes from a call with a market participants held on 31.07.2024. It is foreseen that these new launch service providers will not only build the space launcher, but also provide all launch services around it, to space transportation.

⁵⁵ Non-confidential minutes from a call held with a market participant on 11.07.2024.

⁵⁶ See "The scene is set for the European Launcher Challenge" dated 13 November 2024 on ESA's website, available at: [ESA - The scene is set for the European Launcher Challenge](#).

namely Sabca, Almatech, invent, Beyond Gravity, Sener, SoftingWay and TestFuchs.⁵⁷

- (38) In March 2025, the European Launcher Challenge opened to proposals. A two-stage competitive tender to select a number of European launch service providers will be organised, with successful providers being awarded contracts for two distinct components, namely (i) Component A: launch services for ESA and other European institutional customers, to be performed in the period of 2026-2030, and (ii) Component B: launch service capacity upgrade demonstration, including at least one flight demonstration of the upgraded launch service capacity planned to be performed by 2028.⁵⁸
- (39) Valves are the only components for an equipment for space launchers that the Parties manufacture.⁵⁹ The Target is not a prime contractor. Safran is not itself a prime contractor either. It is only active in prime contracting in its capacity as a joint-controlling shareholder of ArianeGroup, alongside Airbus.⁶⁰ Thus, for the purpose of this decision, the market for valves for space launchers and the provision of prime contracting services will be analysed.

6. RELEVANT MARKETS

6.1. Product market definition

- (40) The Target's main business is actuation systems for the aerospace industry. The Target also supplies certain products that are ancillary or complementary to its actuation systems. As Safran's presence in actuation is relatively limited, the Parties' businesses are largely complementary:⁶¹ the Parties only compete with each other in the supply of a limited number of products, including in the supply of THSA systems and of valves for space launchers.⁶²
- (41) In addition, the Transaction gives rise to certain vertical relationships between categories of products, such as between TRAS and thrust reversers, between valves for space launchers and prime contracting for space launchers, and between the supply of wiring systems and, in particular, actuation systems.

⁵⁷ See 'The scene is set for the European Launcher Challenge', dated 13 November 2024, available on ESA's website: https://www.esa.int/Enabling_Support/Space_Transportation/The_scene_is_set_for_the_European_Launcher_Challenge.

⁵⁸ See 'Submit your proposal to the European Launcher Challenge', dated 24 March 2025, available on ESA's website, at: [ESA - Submit your proposal to the European Launcher Challenge](#). Proposals will be evaluated in two stages. For the first stage, companies are invited to submit proposals and ESA will then evaluate and recommend proposals for decision at the ESA Council at ministerial level in November 2025. The second stage of the tendering will take place after the ESA council meeting

⁵⁹ Form CO, footnote 514.

⁶⁰ Form CO, footnote 551.

⁶¹ See Form CO, Table 1.1-2.

⁶² The Parties supply certain other products in which they compete directly, but where their relative importance in the market is not significant and, as a result, such products do not lead to the creation of affected markets. These include certain actuation systems such as the supply of missile actuation and utility actuation. Additional products include anti-ice valves, hydraulic components, fuel distribution components, cockpit control components, safety oxygen bottles and oil cooling systems and oil pumps.

- (42) Finally, on occasion, actuation systems are sold jointly and/or together with other products. Since as a result of the Transaction the Parties would acquire very high combined market shares in certain products, such as THSA, that can be sold in conjunction with other products supplied by the Parties', such as PFCA, SFCA and pilot controls, the Commission will also analyse whether any potential conglomerate relationships could create harm for competition. Each of these categories of products will be assessed in the sections below.

6.1.1. Relevant product market

6.1.1.1. Aerospace actuation systems

- (43) Actuation systems (or “actuators”) are parts in an aircraft that move physically other parts.⁶³ At the most basic level all actuators perform the same function – to move other parts, such as wings, doors, seats, etc. However, there are significant differences in the level of complexity of each actuator, the type of technology employed, and their importance to the safe operation of a flight.
- (44) A first traditional segmentation between different types of actuators is based on their role in the operation of an aircraft. Certain of these actuators are directly related to the flight of an aircraft. These are termed “flight control actuators”.⁶⁴ For example, the THSA system “trims” the horizontal tail of the aircraft by slowly moving the surface of this tail during flight. PFCA systems move the rudder, the ailerons, or the spoilers that determine the flight path. SFCA systems move the flaps and slats to increase lift and/or slow down an aircraft during take-off and landing. Flight control actuators are represented in Figure 2 below:

Figure 2 - Flight Control Actuators

[...]

Source: Safran, *Actuation* [...] (Form CO, Annex 5.4(xxvi)), p. 5)

- (45) Flight control actuators are typically segmented into primary flight controls (PFCA) and secondary flight controls (SFCA and THSA).⁶⁵ Primary flight controls perform the most critical flight functions: they steer an aircraft, are subject to constant movement during flight, and their failure could result in the loss of the aircraft.⁶⁶ Secondary flight controls also carry out very important functions in an aircraft. However, in theory, their loss does not lead to the critical failure of an aircraft: it is possible to fly and land an aircraft without secondary flight control

⁶³ Form CO, paragraph 176.

⁶⁴ Flight control actuators also include RFCA (i.e., the PFCA for helicopters), and missile actuation systems.

⁶⁵ THSA systems are a type of flight control actuation that shares characteristics that define both PFCA and SFCA. THSA systems are often considered alongside PFCA systems (e.g., Form CO, Annex 5.4(xvii) - Kearney - Collins Actuation System preliminary study (2022)), as well as SFCA systems (e.g., Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 37), although more frequently with SFCA systems. With the PFCA systems, the THSA systems share the characteristic that they are in frequent or constant use during flight (as opposed to SFCA systems, that are only used for take-off and landing). With SFCA systems, THSA systems share the characteristic that its failure is not critical for the flight of the aircraft.

⁶⁶ See Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 30.

actuators.⁶⁷ In that respect, the criticality to the aircraft of an actuator is also a distinguishing feature among different types of actuators.

- (46) An aircraft includes several other actuators that are not directly related to the flight of the aircraft (and, as a result, not critical to the aircraft). These include TRAS, that move the thrust reversers in a nacelle, and utility actuators, that control inlet doors, cargo doors, open the doors, landing gear, the position of seats, etc.
- (47) Actuators are also frequently segmented according to their underlying technology, between mechanical, hydraulic and electric actuators. This segmentation pertains to how the actuator applies force to move the parts connected to it (e.g., how it moves a flap, or a horizontal stabiliser wing). Originally, control of an aircraft was ensured through the strength of the pilot⁶⁸ that would operate the flight control surfaces through mechanical systems/actuators, without any hydraulic or electrical assistance. As aircraft became faster, heavier and larger, it became necessary to amplify pilot control inputs through hydraulic powered actuators.⁶⁹ With the development of electronics, electromechanical actuators became available.⁷⁰ Today, aircraft use actuators with different underlying technologies, often used in combination.⁷¹ The largest sub-categories of actuators include hydraulic actuation,⁷² electrohydrostatic actuation,⁷³ electromechanical actuation,⁷⁴ and hydromechanical actuation,⁷⁵ all of which combine to an extent mechanical, hydraulic and electric actuation,⁷⁶ and which airframers often use in combination.⁷⁷

⁶⁷ See minutes of a conference call with a competitor, paragraph 25.

⁶⁸ See Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 20.

⁶⁹ Hydraulically powered actuation systems use a pressurised fluid to drive the actuators. The hydraulic system of an aircraft consists of a power generation system that provides fluid power, regulation of pressure, and distribution of the fluid power across the aircraft, through pumps and accumulators. Hydraulic power systems may be either centralized and shared between different actuation systems within the aircraft, or exclusive to a particular actuation system. Form CO, paragraphs 186-187.

⁷⁰ Form CO, paragraph 180.

⁷¹ Form CO, paragraph 179.

⁷² Hydraulic actuation systems can be conventional hydraulic actuators (used usually where large forces are needed) or electrohydraulic actuators, that use the hydraulic power from the central hydraulic system of the aircraft to move a hydraulic actuator and are controlled electronically (i.e., conventional fly-by-wire (“FBW”) systems). Currently, these are the most common types of actuators used for primary flight controls, rudder, elevator, aileron, spoiler & flaperon surfaces on FBW aircraft. See Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), pp 21-22.

⁷³ Electrohydrostatic actuators (EHA) couple an electric motor to a hydraulic piston actuator through an electric motor and hydraulic pump. EHA have a self-contained hydraulic supply within the unit, and require only electric power and a control signal to operate. EHA has the benefit of being a standalone actuator (i.e., independent of a central hydraulic system), and the drawback of being heavier and more expensive. EHA can also be used within an Electric Backup Hydraulic Actuation (EBHA) system, in backup mode (for use in the event of failures of the central hydraulic system). See Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), pp 24-25.

⁷⁴ Electromechanical actuators (EMA) combine a gearbox, screw or rack-type mechanism integrated as part of the electric motor package, that interface with a flight control computer (or similar). Because EMA may jam, their use in flight control actuation has been limited to SFCA and THSA systems, where the loss of function can be catered for by a second channel or is not critical (or a mechanical disconnect device can be incorporated). See Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4 (xlii), p. 28.

⁷⁵ Hydromechanical actuators (HMA) include a gearbox or rack-type mechanism is integrated in the hydraulic actuator (Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 28), that converts the hydraulic power into mechanical motion provided to a mechanical actuator (Form CO, paragraph 188).

⁷⁶ Form CO, Figure 1.4-1.

- (48) Another useful element distinguishing actuators is the power that they are able (and required) to generate to move the intended parts (flaps, landing gear, doors, seats, etc.). The existing trend is that the smaller the required power or the size of the actuator, the likelier it is that the actuator will be electric, and the farther the actuator is from the centre of the aircraft – where the central hydraulic systems are located – the likelier it is also that it will be electric.⁷⁸ Conversely, the higher the required power, the likelier it is that the actuator will be hydraulic.
- (49) Finally, to improve fuel efficiency in aircraft – necessary to reach net zero carbon emissions⁷⁹ – the current industry trend is one of greater adoption of electric motors in aircraft, and the increasingly smaller reliance on hydraulic power.⁸⁰ As airframers design the next generations of aircraft, they are required to consider trade-offs between hydraulic and electric actuators, which relate to weight, size, cost, maintenance or access to a central hydraulic system.⁸¹ For example, thin (or larger) wing designs⁸² are expected to include a higher number of actuators that have to be fit in smaller spaces (i.e., that would theoretically favour electric actuators).⁸³ However, the expectation is that hydraulic and electric actuators will coexist for the next decades.⁸⁴
- (50) As indicated in paragraph (3), the Target is a supplier of a diverse range of actuation systems. However, with respect to actuators, the Transaction only creates affected markets in relation to the supply of (i) THSA systems, (ii) PFCA systems, (iii) SFCA systems, and (iv) TRAS. In the following sections, the Commission will assess in turn the relevant product markets for each of these types of actuators.

6.1.1.1.1. Trimmable Horizontal Stabiliser Actuator

- (51) THSA systems move the horizontal stabiliser wing that is incorporated in the tail of an aircraft (Figure 3 below). This movement is created through the product represented in Figure 4: a hydraulic or electric motor drives, in a vertical motion, the ball screw that is connected to the wing, adjusting the position of the wing. This motion is commanded by electronic control units and aided by sensors, that also form part of the THSA system. The purpose of this movement is to trim out deflections to the elevator (the PFCA located in the tail of the aircraft),⁸⁵ so that the elevator keeps full deflection capability to manoeuvre the aircraft.
- (52) THSA systems are particularly important in larger aircraft because, with higher speeds, aerodynamic shock waves form on parts of the tail wing and prevent the elevator panels from ensuring a “clean wing configuration” during flight.⁸⁶ The

⁷⁷ The Airbus A350, the most up-to-date design of a large commercial aircraft, uses a two hydraulic / two electric actuation architecture, with (i) EHAs in backup mode on the rudder, (ii) ailerons and elevators with a single pair EBHA, and (iii) a dual electric motor THSA. Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 26.

⁷⁸ See Form CO, Annex 5.4(xxiii) - Etude actionnement groupe (October 2021), p. 6.

⁷⁹ See, e.g., <https://www.airbus.com/en/sustainability/respecting-the-planet/decarbonisation>.

⁸⁰ See Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 14.

⁸¹ *Ibid.*

⁸² See, e.g., https://www.boeing.com/content/dam/boeing/boeingdotcom/features/innovation-quarterly/2023/11/X-66A_Q4_2023.pdf.

⁸³ See Form CO, Annex 5.4(xxi) – [...] Actionnement [...], p.4.

⁸⁴ See Form CO, Annex 5.4(xxiii) - Etude actionnement groupe (October 2021), p. 5.

⁸⁵ See Figure 2 above.

⁸⁶ Form CO, paragraph 224. Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 37.

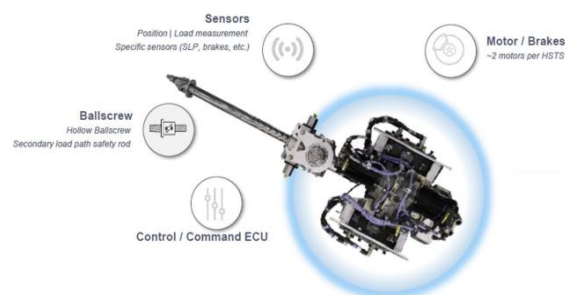
THSA system counters the aerodynamic forces created by these waves by adjusting the position of the horizontal stabiliser to compensate and maintain aircraft trim. THSA systems can also be employed to compensate for shifts in the centre of lift caused by the extension of flaps (the SFCA located in the wings).⁸⁷ By maintaining aircraft trim, a pilot's workload is reduced, as is the aircraft's fuel consumption, and the efficiency of the elevator panels improves in flight aircraft manoeuvring.⁸⁸

Figure 3 – Horizontal stabilizer on the A320 neo



Source: Form CO, Figure 2.1-6

Figure 4 – Example of a THSA system



Source: Figure Form CO, Figure 2.1-7

The Commission's practice

- (53) The Commission investigated the impact of a concentration that concerned the supply of THSA systems specifically in case M.8658 – *UTC/Rockwell Collins* (“*UTC/Collins*”).⁸⁹ In cases prior to *UTC/Collins*, in concentrations that affected competition in flight control actuators but that did not raise particular issues relating to the supply of THSA systems, the Commission left open the market definition, namely as to whether the supply of THSA systems belonged to a separate product market.⁹⁰ The Commission also left open the question as to whether separate markets should be defined for the supply of THSA systems according to the segment of demand (civil or military),⁹¹ or according to the type of aircraft in which the THSA systems are incorporated (e.g. large commercial aircraft, regional commercial aircraft, general aviation, helicopters etc).⁹²

⁸⁷ Form CO, Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 37.

⁸⁸ See, e.g., <https://www.safran-group.com/fr/produits-services/hsta-actionneur-compensation-du-stabilisateur-horizontale>.

⁸⁹ The decision in *UTC/Collins* is particularly relevant for the present case: UTC's (subsequently RTX) acquisition of Rockwell Collins resulted in a horizontal overlap in the supply of THSA systems deemed to raise serious doubts as regards its compatibility with the internal market (*UTC/Collins*, paragraph 229). The Commission decided not to oppose this transaction on condition that UTC would divest Rockwell Collins' THSA business (*UTC/Collins*, paragraphs 529 and 565). The divested THSA business, originally from Rockwell Collins, was acquired by Safran (see purchaser approval decision of 28 September 2018 in case M. 8658 – *UTC/Rockwell Collins*, C(2018) 6448 final). The present case therefore replicates the horizontal overlap investigated in *UTC/Collins*.

⁹⁰ See, in particular, decision in case M.6410 – *UTC/Goodrich*, paragraphs 91, 93 and 95. See also decision in case M.1493 – *United Technologies/Sundstrand*, paragraph 12; decision in case M.2183 – *Smiths Industries/TI Group*, paragraph 9; decision in case M.2892 – *Goodrich/TRW Aeronautical Systems Group*, paragraph 7.

⁹¹ Decision in case M.1493 – *United Technologies/Sundstrand*, paragraphs 12-13; M.2183 – *Smiths Industries/TI Group*, paragraph 9.

⁹² Decision in case M.2892 – *Goodrich/TRW Aeronautical Systems Group*, paragraph 7.

- (54) In *UTC/Collins*, the Commission found that the supply of THSA systems constitutes a separate product market⁹³ The Commission left open whether it was relevant to distinguish relevant product markets by segment of demand (civil or military).⁹⁴ The Commission indicated that, during the market investigation, respondents had submitted that it was not appropriate to further segment the relevant product market for the supply of THSA systems according the size of the aircraft concerned, but did not make a definitive finding in this respect.⁹⁵ The Commission also considered distinguishing the supply of THSA systems on the basis of the underlying technology used – i.e. hydraulic and electric THSA systems – and found that, despite the technological differences between the two broad types of THSAs, demand- and supply-side factors indicated that both types of THSA systems were in competition, and that no further segmentation was warranted.⁹⁶

The Notifying Party's views

- (55) The Notifying Party submits that PFCA, SFCA, and THSA systems belong to separate relevant product markets, as different flight control actuation systems (i) perform different functions, (ii) require different types of technologies, (iii) have distinct levels of complexity, (iv) are tendered separately, and (v) are not supplied by the same suppliers.⁹⁷
- (56) Specifically with respect to THSA, the Notifying Party submits that it is appropriate to segment the supply of THSA systems by type of technology (i.e., between hydraulic, “H-THSA”, or electric THSA systems, “E-THSA”).⁹⁸ The Notifying Party submits that the decision to use a hydraulic or electric actuation system is an early engineering decision made by the airframer before tenders are opened for the supply of an aircraft’s actuation systems. The Notifying Party claims that the airframers’ decision between hydraulic or electric THSA systems is not based on price and is connected to other structural decisions concerning the use of hydraulic or electric systems in the aircraft. The Notifying Party submits that, as a result, there is no competition between hydraulic and electric actuation systems within a particular tender.⁹⁹ The Notifying Party indicates as well that hydraulic and electric actuation involve different sets of expertise, and that suppliers of a type of THSA system (e.g., electric) would have to develop numerous capabilities to supply the other type (e.g., hydraulic).¹⁰⁰ Further, the Notifying Party estimates that only 30% of the parts in a THSA system are similar between hydraulic and electric THSA systems. The Notifying Party also indicates that electric THSA systems are 20-30% more expensive than hydraulic THSA systems.¹⁰¹

⁹³ *UTC/Collins*, paragraphs 35 and 42.

⁹⁴ *UTC/Collins*, paragraphs 37 and 42.

⁹⁵ *UTC/Collins*, paragraphs 35 and 42.

⁹⁶ *UTC/Collins*, paragraphs 38-42.

⁹⁷ Form CO, paragraphs 232, 234-235.

⁹⁸ Form CO, paragraphs 245, and 251.

⁹⁹ Form CO, paragraph 253 and 258(b).

¹⁰⁰ Form CO, paragraph 254. The Notifying Party submits also that it is not appropriate to segment further the hydraulic segment between HA, HMA, EHA, and EBHA, because airframers select the specific type of THSA before a tender, and because only suppliers active in hydraulic actuation can develop such systems. See, Form CO, paragraphs 260-261.

¹⁰¹ Form CO, paragraph, 258(c).

- (57) With respect to the distinction in supply of THSA systems by segment of demand (civil or military aircraft), the Notifying Party submits that a distinction is not relevant.¹⁰² Concerning THSA systems specifically, the Notifying Party indicates that combat aircraft do not incorporate THSA systems,¹⁰³ and that other military aircraft that have THSA systems are based on civil declinations and share the same specifications (or similar) as their civil equivalents.¹⁰⁴
- (58) Specifically with respect to the type of aircraft, the Notifying Party submits that it is not appropriate to segment the supply of THSA systems by type of aircraft – i.e., between large commercial aircraft, regional aircraft, business jets, helicopters, and general aviation – because (i) the functionalities of flight control systems across aircraft types are similar and the technologies are scalable,¹⁰⁵ and (ii) suppliers typically supply the full range of flight control systems across all aircraft types.¹⁰⁶

The Commission's assessment

- (59) The Commission finds that THSA systems are a product that is different in its characteristics, price and functionalities relative to other actuation products. As mentioned in greater detail in paragraphs (45), (46), (48) and (51), the intended use of THSA systems in an aircraft is different from other flight control actuators (it moves the horizontal stabiliser, whereas other flight control actuators move other flight control surfaces) and it is observable that the products themselves are different pieces of equipment.¹⁰⁷ Customers cannot substitute a THSA system for a PFCA system, as the THSA merely adjusts the flight path set by the PFCA system (and is not able to control the direction of the flight), or for an SFCA system, which is used only in take-off or landing (whereas the THSA system moves the horizontal stabiliser during flight).
- (60) In addition, THSA systems are different from other flight control actuators based on their power,¹⁰⁸ their importance (their flight-critical nature) and their use during flight.¹⁰⁹ Further, suppliers of THSA systems and of PFCA and SFCA systems are different.¹¹⁰ A majority of respondents to the market investigation confirmed that THSA systems differ and are not substitutable with PFCA and SFCA systems.¹¹¹ As indicated by a rival supplier, while THSA systems and other flight control actuators “*share some technologies, they each have specific design and performance features.*”¹¹²
- (61) With respect to the appropriateness of differentiating the supply of THSA systems by segment of demand (civil or military aircraft), the outcome of the investigation

¹⁰² Form CO, paragraph 262 and 265.

¹⁰³ Form CO, paragraph 274.

¹⁰⁴ For example, the Airbus A330 MRTT is a military derivative of the civil Airbus A330-200. Form CO, paragraph 265.

¹⁰⁵ Form CO, paragraph 271, and 274.

¹⁰⁶ Form CO, paragraph 271, and 275.

¹⁰⁷ See, e.g. <https://prd-sc102-cdn.rtx.com/-/media/ca/product-assets/marketing/a/actuation/actuation-data-sheet.pdf?rev=eac06d36413c4cc28870cea1f284ace9&hash=C4A6429264BCB558691C4763F78CF256>.

¹⁰⁸ See Form CO, Annex 5.4 (xxiii) - Etude actionnement groupe (October 2021), p. 6.

¹⁰⁹ See paragraph (45) and minutes of a conference call with a competitor, paragraph 25.

¹¹⁰ See responses to Questionnaire 1, Question C.4.

¹¹¹ See responses to Questionnaire 1 Question D.A.A.A.1, and response to Questionnaire 2, Question C.5.

¹¹² See response of a competitor to Question C.5.1 of Questionnaire 2.

was inconclusive. Certain factors suggest that THSA systems used in civil aircraft are substitutable with those used in military aircraft. For example, one competitor indicated that it is often the case that THSA systems used in large military transport aircraft (e.g., the A400M, or the C-17) are largely equivalent in design and function to those used in commercial aircraft.¹¹³ The majority of the respondents to the market investigation also indicated that airframers engage with suppliers of THSA systems for both civil and military aircraft when designing a new aircraft – which indicates supply-side substitutability.¹¹⁴ However, a similar number of respondents indicated that THSA systems used in civil aircraft needed to be adapted to more demanding military performance requirements,¹¹⁵ and undergo different certification processes.¹¹⁶ Because the outcome of the Commission’s assessment would not change under the various alternative plausible market definitions, the existence of separate markets for the supply of THSA systems to civil and military aircraft can be left open.

- (62) With respect to the possible distinction in the supply of THSA systems according to the size of the aircraft, the outcome of the investigation was inconclusive. Respondents confirmed that the underlying technologies used by THSA suppliers are the same across different types of aircraft,¹¹⁷ and that when designing a new aircraft, airframers will engage with suppliers that are not currently suppliers for the specific type of aircraft in question (e.g., an airframer designing a large commercial aircraft will have technical discussions with a THSA supplier with current sales in regional aircraft, but no sales in large commercial aircraft).¹¹⁸ These factors suggest that THSA suppliers can offer a product that is similar in its characteristics across sizes of aircraft, and that airframers would consider all suppliers as capable of providing readily available THSA systems. However, as indicated by the Notifying Party, the specific characteristics of THSA systems change according to the size of the aircraft. A competitor confirmed that, across different sizes of aircraft, THSA systems “*have distinct design and safety requirements, operational profiles and performance criteria.*”¹¹⁹ Respondents during the market investigation submitted that THSA systems for different types of aircraft are either not substitutable, or only partially substitutable. Therefore, according to those respondents, on the basis of a specific product’s characteristics, it would be appropriate to distinguish THSA systems that are incorporated in the different types of aircraft.
- (63) Furthermore, other factors indicate that a segmentation by type of aircraft may be appropriate. *First*, the success of THSA suppliers in different segments of demand varies significantly. For example, the Target’s business outside of large commercial aircraft is [...], whereas one of its main rivals (Parker) has no business

¹¹³ See response of a competitor to Question C.12.1 of Questionnaire 2. A competitor confirmed that the market for THSA for military applications is small, as larger cargo or tanker (refuelling) aircraft often are derivatives from commercial aircraft (such as from the Airbus A330 or Boeing 767) – see minutes of the conference call with a competitor.

¹¹⁴ See responses to Questionnaire 1, Question D.A.A.C.2, and responses to Questionnaire 2, Question C.13.

¹¹⁵ See response of a competitor to Question C.12.1 of Questionnaire 2.

¹¹⁶ See response of a competitor to Question C.12.1 of Questionnaire 2.

¹¹⁷ See response of a customer to Question D.A.A.D.3.1 of Questionnaire 1.

¹¹⁸ See responses to Questionnaire 1, Question D.A.A.D.3.1, and responses to Questionnaire 2, Question C.16.

¹¹⁹ See response from a competitor to Questionnaire 2, Question C.15.1.

in this segment.¹²⁰ This indicates a mismatch, at least historical, between the ability to engage with airframers, to participate in tenders, to have a product offering encompassing all types of aircraft, and the ability to win significant business. *Second*, certain respondents to the market investigation indicated that, ultimately, aircraft-type specific experience is key to achieve success in a tender.¹²¹ Both factors indicate that airframers, in the past, for example, have not substituted THSA systems supplied to large commercial aircraft with those of regional aircraft, and there may be barriers or costs associated with supplying THSA systems in different segments of aircraft.¹²²

- (64) Because the outcome of the Commission’s assessment would not change under the various alternative plausible market definitions, the existence of separate markets for the supply of THSA systems according to the size of the aircraft can be left open.

- (65) With respect to the possible distinction between the supply of H-THSA and E-THSA, the Commission finds that suppliers of both types of THSA systems compete for their incorporation in new aircraft designs, irrespective of the differences in technologies employed. The results of the market investigation confirmed that the decision to incorporate an H-THSA or an E-THSA is an early engineering decision that is adopted ultimately by the airframer when it decides on the basic architecture of the aircraft.¹²³ For example, an airframer indicated that the decision to opt for an H-THSA or an E-THSA is based on a general trade-off related to the aircraft design as a whole, that is not specific to the THSA system.¹²⁴ In other words, the decision on which type of THSA system to use in an aircraft is also connected to decisions made with respect to other parts of the aircraft – and in particular the PFCA systems, and the proximity with (or existence of) a central hydraulic system – and general trade-offs between safety, weight, maintenance, performance and cost.¹²⁵

- (66) However, and contrary to the Notifying Party’s contentions, the fact that airframers decide on the type of technology employed for their THSA systems does not preclude the competition between suppliers of H-THSA and E-THSA systems that occurs at the stage where the aircraft is being designed. This is because, as confirmed in the market investigation, both H-THSA and E-THSA suppliers are considered by an airframer before such decision is made.¹²⁶ As indicated in paragraph (18) above, THSA suppliers and airframers often engage in technical discussions and joint research projects well ahead of the decision by the airframer to establish the requirements for the design of an aircraft.¹²⁷ At this stage, THSA suppliers compete through the solutions they propose to airframers and seek to

¹²⁰ See Form CO, Annex Ch. II. S.2.4(ii) - Market shares and Section 7.1.2.1 below.

¹²¹ A competitor indicated that “[t]he more relevant a particular THSA supplier’s experience is to the particular needs of an airframer, the more likely it is that such technical discussion may occur.” See response of a competitor to Question D.A.A.D.3.1.

¹²² With respect to the barriers on expansion and entry, please see paragraphs (184)-(187) below.

¹²³ See responses to Questionnaire 1, Question D.A.A.B.1, and responses to Questionnaire 2, Question C.7.

¹²⁴ See response of an airframer to Question D.A.A.B.2.1 of Questionnaire 1. Similarly, response of another airframer to Question D.A.A.B.2.1 of Questionnaire 1.

¹²⁵ See responses of three airframers to Question C.8 of Questionnaire 1.

¹²⁶ See responses to Questionnaire 1, Question D.A.A.B.2, and responses to Questionnaire 2, Question C.8.

¹²⁷ E.g., [...]. See, Form CO, Annex 5.4(xxi) – [...] Actionnement [...], pp 11-12.

influence the aircraft design to favour their own products. As a result, the fact that H-THSA and E-THSA are different products, that they require different capabilities in terms of engineering or experience, or that when suppliers are called to participate in a tender the specification (H-THSA or E-THSA) is already set, does not detract from the competition that occurs between suppliers at the design stage of an aircraft. This is illustrated in numerous internal documents that compare Collins and Safran's shares or positions in the supply of THSA systems.¹²⁸

- (67) Finally, the different prices practiced for H-THSA and E-THSA systems also do not detract from the fact that the two technologies compete. This is because the importance of price is not limited to the upfront acquisition but also includes the cost to operate the parts over their useful life (e.g., cost of maintenance) in a "total cost of ownership" approach.¹²⁹ Further, price is only one of many factors considered by airframers when selecting a THSA system, while they also value other factors such as product performance, the collaboration and responsiveness of the supplier, and the delivery capability.¹³⁰ As a result, the Commission considers that it is not appropriate to consider separately the supply of THSA systems by their underlying technology.
- (68) In sum, the Commission finds that the supply of THSA systems is in a separate product market, distinct from the supply of PFCA systems and of SFCA systems. The Commission finds that it is not appropriate to segment the supply of THSA systems by technology (hydraulic or electric THSA systems). With regard to the potential segmentation of the supply of THSA systems by segment of demand (civil or military), or by type of aircraft (large commercial aircraft, regional aircraft, business jets or general aviation), for the purposes of this decision the Commission leaves the market definition open and will carry out the competitive assessment for all plausible alternative market definitions.

6.1.1.1.2. Primary Flight Control Actuators

- (69) As indicated in paragraph (45) and Figure 2 above, PFCA systems steer an aircraft during flight by moving the main flight control surfaces (the elevators, the rudders, the ailerons and the spoilers) and are the most flight critical.¹³¹ Typically, PFCA systems are powered hydraulically.¹³²
- (70) In its past practice, the Commission found that the supply of PFCA systems belongs to a separate product market relative to other flight control actuators.¹³³ The Commission has considered, but ultimately left open, whether separate product markets should be retained for the supply of PFCA systems according to (i) the

¹²⁸ For example, in the Form CO, Annex 5.4(xxvi) - Actuation [...] – NSA, p. 28, Safran and Collins are identified as #1 and #2 suppliers of THSA systems, with the reference that the actuation market is "[...]".

¹²⁹ See Form CO, Annex 5.4(xvii) - Kearney - Collins Actuation System preliminary study (April 2022), p. 32.

¹³⁰ *Ibid.*

¹³¹ Form CO, paragraph 211.

¹³² As indicated in fns 72 and 74 above. The Notifying Party indicates that nearly all PFCA systems currently fitted in aircraft are hydraulic, and that airframers' use of electric (EMA) PFCA systems is limited to spoilers and ongoing research and technology (R&T) projects. See Form CO, paragraphs 212-216, 246-247, and Table 1.4-1.

¹³³ See fn. 90 above.

segment of demand (for civil or military aircraft),¹³⁴ and (ii) the type of aircraft (large commercial aircraft, regional aircraft, etc.).¹³⁵ The Commission has not considered a potential segmentation between hydraulic or electrically powered PFCA systems.

- (71) The Notifying Party submits that the supply of PFCA systems belongs to a separate product market.¹³⁶ In addition, the Notifying Party submits that it is not appropriate to segment the supply of PFCA systems according to their technology, as there are very few examples of electric PFCA systems in use or that have been designed and tendered for incorporation in aircraft that will be in production.¹³⁷ Further, the Notifying Party submits that it is not appropriate to distinguish the supply of PFCA systems according to (i) the segment of demand (civil or military aircraft), as products are very similar and suppliers supply both segments,¹³⁸ or (ii) the type of aircraft in which the PFCA systems are incorporated (large commercial aircraft, regional aircraft, etc.), as technologies are scalable and suppliers are equally active across aircraft types.¹³⁹
- (72) With respect to the supply of PFCA systems, the Commission finds that PFCA systems are products that are distinct from other actuation products (and, in particular, of other flight actuators, such as SFCA and THSA systems), as noted in paragraph (59) above. Actuators that support primary flight control surfaces are distinct products that serve a different purpose from other actuators, and have a higher flight-critical importance relative to THSA and SFCA systems.¹⁴⁰ Due to their critical nature, PFCA systems are the most technologically demanding products in an aircraft,¹⁴¹ and – differently from other flight control actuators – almost all PFCA systems are hydraulic.¹⁴² The Commission therefore finds that the supply of PFCA systems constitutes a product market that is separate from the supply of other flight actuators, namely SFCA and THSA systems, as confirmed in the market investigation.¹⁴³
- (73) With respect to other possible distinctions by segment of demand (civil or military aircraft), or by type of aircraft (large commercial aircraft, regional aircraft, etc.), the responses received during the market investigation generally indicated that for the supply of PFCA systems the factors that support or oppose the appropriateness

¹³⁴ Decision in case M.1493 – *United Technologies/Sundstrand*, paragraphs 12-13; M.2183 – *Smiths Industries/TI Group*, paragraph 9.

¹³⁵ Decision in case M.2892 – *Goodrich/TRW Aeronautical Systems Group*, paragraph 7.

¹³⁶ Form CO, paragraph 234. The Notifying Party submits that the supply of PFCA systems should not be separated in the individual components supporting the different flight control surfaces (e.g., the actuators for the spoilers, or the actuators for the ailerons), as generally airframers tender the entire PFCA system (Form CO, paragraph 240). The responses to the market investigation confirmed that, generally, airframers tender the entire PFCA system – i.e., do not tender separately the PFCA for the spoilers and ailerons, and for the elevators and rudder – although some respondents indicated that separate tenders are possible and occur on occasion. See responses to Questionnaire 1, Questions D.A.B.2 and D.A.B.2.1, and responses to Questionnaire 2, Questions C.18 and C.18.1. As the outcome of the Commission's assessment does not change, a potential distinction in the supply of specific PFCA components can be left open.

¹³⁷ Form CO, paragraphs 246-247.

¹³⁸ Form CO, paragraphs 262 and 266.

¹³⁹ Form CO, paragraphs 271 and 275.

¹⁴⁰ See paragraph (45) above.

¹⁴¹ See Form CO, Annex 5.4(xxi) – [...] Actionnement [...], p.2.

¹⁴² See, Form CO, Annex 5.4(xxiii) - Etude actionnement groupe (October 2021), p. 3.

¹⁴³ See responses to Questionnaire 1, Questions D.A.A.1 and D.A.B.1, and responses to Questionnaire 2, Questions C.5 and C.17.

of distinguishing such relevant product markets are similar to those that exist in the supply of THSA systems.¹⁴⁴ Because the outcome of the Commission's assessment would not change under the various alternative plausible market definitions, the existence of separate markets for the supply of PFCA systems according to the segment of demand and according to the type (i.e. size) of aircraft can be left open.

6.1.1.1.3. Secondary Flight Control Actuators

- (74) SFCA systems move flaps and slats, in an extension and retraction motion, to change the aerodynamic profile of the wings of an aircraft (see Figure 2 above). The purpose of this movement is to increase lift and enable a reduced stall speed during flight to support take-off and landing.¹⁴⁵ As noted above, flaps and slats (through SFCA systems) are activated only temporarily during certain phases of the flight. As a result, SFCA systems are not considered critical to the operation of the flight.¹⁴⁶
- (75) The Commission assessed the supply of SFCA systems in the cases referred to in paragraphs (53) and (70) above. The Commission found that the supply of SFCA systems belongs to a separate market, and assessed but left open whether separate markets should be defined on the basis of (i) the segment of demand (civil or military aircraft) or (ii) the type of aircraft (large commercial aircraft, regional aircraft, etc.). As with PFCA, the Commission did not consider whether the supply of hydraulic or electric SFCA belong to separate product markets.
- (76) The Notifying Party submits that the supply of SFCA systems belongs to a separate product market.¹⁴⁷ The Notifying Party further submits that it is appropriate to distinguish between the supply of hydraulic and electric SFCA systems, for the reasons set out in paragraph (56).¹⁴⁸ For the reasons set out in paragraph (71), the Notifying Party also submits that it is not appropriate to distinguish the supply of SFCA systems (i) by segment of demand (civil or military aircraft),¹⁴⁹ and (ii) by type of aircraft.¹⁵⁰
- (77) The Commission finds that SFCA systems are products that are distinct from other actuation products (and, in particular, from other flight actuators, such as PFCA and THSA systems), as noted in paragraphs (59) and (72) above. As with the other types of flight control actuators, SFCA systems serve a distinct purpose, are distinct pieces of equipment, have a different risk-profile relative to PFCA systems (i.e., they are not considered flight-critical), and because they are only used for take-off and landing, they are less used during flight and subject to smaller degrees

¹⁴⁴ See responses to Questionnaire 1, Question D.A.B.1, and responses to Questionnaire 2, Question C.17.

¹⁴⁵ Form CO, paragraphs 222.

¹⁴⁶ However, failure to ensure that the wings are symmetrical when flaps or slats are extended or retracted may be catastrophic to the aircraft, as it induces a rolling movement. See Counterpoint Aerospace Actuation 2024 Report, Form CO, Annex 5.4(xlii), p. 34.

¹⁴⁷ Form CO, paragraph 234. Similar to the supply of PFCA systems, the Notifying Party submits that it is not appropriate to distinguish separate product markets for the supply of SFCA components, as typically all SFCA components are tendered as a system, and SFCA suppliers have the capability to produce all requisite components of a system. See Form CO, paragraph 242.

¹⁴⁸ Form CO, paragraphs 252-254.

¹⁴⁹ Form CO, paragraph 262.

¹⁵⁰ Form CO, paragraph 271.

of attrition.¹⁵¹ Relative to PFCA systems, SFCA systems are more often electric – which is an additional differentiating factor relative to PFCA systems.¹⁵² The respondents to the market investigation confirmed that it is appropriate to consider the supply of THSA systems as separate from other flight control actuators.¹⁵³

- (78) With respect to the possible distinctions by segment of demand (civil or military aircraft), by type of aircraft (large commercial aircraft, regional aircraft, etc.), or by technology, the responses in the market investigation indicated generally that for SFCA systems the factors that support or oppose the appropriateness of distinguishing such relevant product markets are similar to those that exist in the supply of THSA systems.¹⁵⁴ Because the outcome of the Commission’s assessment would not change under the various alternative plausible market definitions, the existence of separate markets for the supply of SFCA systems according to the segment of demand and according to the size of the aircraft can be left open.

6.1.1.1.4. Thrust Reverser Actuation Systems

- (79) The TRAS is the actuation system that powers and controls the deployment of the mobile structure of the thrust reverser. Once a signal is provided (by a sensor), the TRAS physically moves doors, cascades or target thrust reversers that reverse the airflow into the nacelle and reduces speed of the aircraft. As with other actuators, TRAS can be powered hydraulically (i.e., hydraulic TRAS, or “H-TRAS”) or electrically (i.e., electric TRAS, or “E-TRAS”).¹⁵⁵
- (80) In its past practice, the Commission has regarded the supply of TRAS as a separate product market and an input for thrust reversers,¹⁵⁶ although it left open whether the supply of TRAS and of thrust reversers belong to the same product market in the most recent decision in which the supply of TRAS was investigated.¹⁵⁷ The Commission found that it was not appropriate to consider separate markets for the supply of TRAS according to the type of aircraft in which ultimately they are incorporated (large commercial aircraft, regional aircraft or business jets).¹⁵⁸ The Commission has not addressed a possible distinction with respect to the segment of demand (civil or military aircraft), or the technology used in the TRAS (H-TRAS or E-TRAS).
- (81) The Notifying Party submits that the supply of TRAS belongs to a separate product market because (i) TRAS and thrust reversers suppliers are typically different companies (most suppliers of thrust reversers do not supply TRAS and *vice versa*), and (ii) there are considerable technological differences between the two products (nacelles and thrust reversers belong to a field of products known as “form

¹⁵¹ See Counterpoint Aerospace Actuation 2024 Report, Annex 5.4(xlii), p. 35. See also Form CO, Annex 5.4(xxi) – [...] Actionnement [...], p.2.

¹⁵² See e.g., Form CO, Annex 5.4(xvi) - Avascent - Outside-In Due Diligence (October 2022), p. 40.

¹⁵³ See responses to Questionnaire 1, Questions D.A.A.1 and D.A.C.1, and responses to Questionnaire 2, Questions C.5 and C.19.

¹⁵⁴ See responses to Questionnaire 1, Question D.A.C.1, and responses to Questionnaire 2, Question C.19.

¹⁵⁵ Form CO, paragraphs 591-592.

¹⁵⁶ See case M.2220 – *General Electric / Honeywell*, paragraphs 332-333; case M.2892 – *Goodrich / TRW Aeronautical Systems Group*, 5-7.

¹⁵⁷ See case M.4561 – *GE / Smiths Aerospace*, paragraph 106.

¹⁵⁸ See case M.2220 – *General Electric / Honeywell*, paragraphs 334; case M.2892 – *Goodrich / TRW Aeronautical Systems Group*, 7.

aerostructures and composites,” whereas TRAS belong to the actuation field).¹⁵⁹ Further, the Notifying Party submits that the supply of H-TRAS and of E-TRAS form part of distinct product markets,¹⁶⁰ as the choice of TRAS technology is ultimately a decision from the airframer and suppliers of H-TRAS and of E-TRAS do not compete in tenders, and because the technologies employed in each type of TRAS are different.¹⁶¹ Conversely, the Notifying Party submits that it is not appropriate to distinguish the supply of TRAS according to (i) the segment of demand,¹⁶² (ii) the type of aircraft,¹⁶³ and (iii) the type of thrust reverser in which the TRAS is incorporated (as TRAS are similar across types of thrust reversers).¹⁶⁴

- (82) The Commission finds that TRAS are products that are distinct from other actuation products.¹⁶⁵ The Commission notes that the TRAS is an input and a component of a thrust reverser. Put differently, TRAS and thrust reversers are different products, that contribute to end use, but not directly substitutable.¹⁶⁶ The results of the market investigation confirm that suppliers of TRAS are often distinct from those that supply thrust reversers (or nacelles).¹⁶⁷ Respondents to the market investigation tended to agree that TRAS and thrust reversers belong to separate product markets: while a larger number of respondents indicated that TRAS and thrust reversers belong to separate markets,¹⁶⁸ some respondents indicated that TRAS and thrust reversers rely on similar concepts and are not wholly unrelated.¹⁶⁹
- (83) With respect to a possible distinction between the supply of TRAS by segment of demand (civil or military aircraft), the Commission finds that TRAS are technologically similar for military and commercial applications (the latter including larger business jets and commercial transport aircraft) and that military aircraft typically do not have thrust reversers (and, as a result, TRAS) unless they are a commercial derivative or a transport (cargo) aircraft.¹⁷⁰ Respondents to the market investigation tended to indicate that it is not appropriate to distinguish the supply of TRAS by segment of demand, although most respondents did not take a definitive view on the matter.¹⁷¹
- (84) Similar reasons apply to the appropriateness of considering separate product markets according to the type of aircraft. For example, business jets tend not to incorporate TRAS and thrust reversers, as the aircraft are light enough to be

¹⁵⁹ Form CO, paragraph 646.

¹⁶⁰ Form CO, paragraph 649.

¹⁶¹ *Ibid.*

¹⁶² Form CO, paragraphs 655-664.

¹⁶³ Form CO, paragraph 652.

¹⁶⁴ Form CO, paragraph 654.

¹⁶⁵ As follows from paragraphs (59), (72) and (77). For the sake of completeness, the Commission investigated and determined that a product market comprising both the supply of TRAS and of thrust reversers would be eligible for review under the Notice on Simplified Procedure.

¹⁶⁶ See e.g., Form CO, Annex 5.4(xxiv) – [...] actionnement (October 2021), p. 35.

¹⁶⁷ As will be addressed further in Section 7.2.2.1.1 below, the main suppliers of TRAS are Woodward, Honeywell, Nordam and (to a lesser extent) Safran, whereas the main suppliers of thrust reversers are Safran, Spirit, Mras and Nordam, and the main suppliers of nacelles include RTX, Safran, Rolls-Royce, GKN, and Nordam. See also the response of an airframer to Question C.6 of Questionnaire 2.

¹⁶⁸ See responses to Questionnaire 1, Question D.A.E.1, and responses to Questionnaire 2, Question D.5.1.

¹⁶⁹ See response from a competitor to Questionnaire 2, Question D.5.

¹⁷⁰ See minutes of a conference call with a competitor, paragraph 21. Similarly, minutes of a conference call with a customer, paragraph 29.

¹⁷¹ See responses to Questionnaire 1, Question D.A.F.2, and responses to Questionnaire 1, Question D.6.

stopped with brakes and ground spoilers.¹⁷² Likewise, the majority of the respondents to the market investigation who expressed a view indicated that it is appropriate to distinguish the supply of TRAS by type of aircraft.¹⁷³ However, the overall response was inconclusive, as most respondents did not take a definitive view on the matter.¹⁷⁴

- (85) Finally, with respect to the appropriateness of considering separate product markets for the supply of H-TRAS and E-TRAS, The Commission finds that H-TRAS and E-TRAS are different products.¹⁷⁵ The results of the market investigation confirmed that the suppliers of H-TRAS and E-TRAS tend to be different companies.¹⁷⁶ When an airframer requires the incorporation of a H-TRAS, Safran – a supplier of E-TRAS, thrust reversers and of the nacelles – that incorporate these products – sources from the Target or from Woodward. Safran is therefore required to purchase H-TRAS from third parties, although it has (E-)TRAS capabilities. This indicates that H-TRAS and E-TRAS incorporate different technologies and require different skill sets.¹⁷⁷
- (86) However, respondents to the market investigation tended to indicate that it is not appropriate to distinguish the supply of TRAS by type of technology employed, with a greater number of the respondents which provided their views indicating that it is not appropriate separate product markets between the supply of H-TRAS and of E-TRAS (albeit a larger number of respondents did not provide a definitive view).¹⁷⁸ And for reasons similar to those expressed in paragraphs (65)-(67), the fact that suppliers of H-TRAS and E-TRAS do not compete in specific tenders does not detract from the fact that both technologies/products compete at the early stage of the design of the aircraft. As a result, because the outcome of the Commission's assessment would not change under the various plausible alternative market definitions, the existence of separate markets for the supply of TRAS according to the technology used can be left open.
- (87) In summary, for the purposes of the decision, the Commission considers that it is appropriate to distinguish the supply of TRAS from that of other actuators, namely PFCA, SFCA and THSA systems. Because the outcome of the Commission's assessment would not change under the various alternative plausible market definitions, the existence of separate markets for the supply of TRAS according to the segment of demand (civil or military aircraft) and according to the size of the aircraft can be left open. Likewise, the Commission leaves open whether it is appropriate to define separate product markets for the supply of H-TRAS and of E-TRAS. The Commission will therefore carry out the competitive assessment in all plausible alternative market definitions.

¹⁷² See minutes of a conference call with a competitor, paragraph 21.

¹⁷³ See responses to Questionnaire 1, Question D.A.F.2, and responses to Questionnaire 2, Question D.6.

¹⁷⁴ *Ibid.*

¹⁷⁵ See e.g., Form CO, Annex 5.4(xxiv) – [...] actionnement (October 2021), p. 35.

¹⁷⁶ See further detail in Section 7.2.2.1.1 below. Woodward and the Target are the main suppliers of H-TRAS (although the Target [...]), and Safran is currently [...]. See responses to Questionnaire 2, Question D.3.

¹⁷⁷ See e.g., Form CO, Annex 5.4(xxiv) – [...] actionnement (October 2021), p. 12.

¹⁷⁸ See responses to Questionnaire 1, Question D.A.F.2, and responses to Questionnaire 2, Question D.6.

6.1.1.2. Thrust reversers

- (88) Thrust reversers are a component of nacelles¹⁷⁹. The thrust reverser is located next to the engine and is used to decrease the speed of an aircraft in preparation for landing.¹⁸⁰ As represented in Figure 5 to Figure 7 below, there are three types of thrust reversers: (i) thrust reversers with cascades, (ii) thrust reversers with doors, and (iii) target thrust reversers, each representing a different manner to open the thrust reversers that reverse the airflow to the engine.¹⁸¹

Figure 5 - Thrust reverser with cascades



Source: Form CO, Figure 3.1-3

Figure 6 - Thrust reversers with doors



Source: Form CO, Figure 3.1-4

Figure 7 - Target thrust reversers



Source: Form CO, Figure 3.1-5

- (89) In its past practice, the Commission has found that the supply of thrust reversers belongs to a separate product market.¹⁸² The Commission found that a segmentation of thrust reversers according to their type (cascade, door or target) is not appropriate because most suppliers are able to supply the different types of thrust reversers.¹⁸³ The Commission considered but ultimately left open a potential segmentation of the market for the supply of thrust reversers by types of aircraft (large commercial aircraft, regional aircraft, etc.).¹⁸⁴
- (90) The Notifying Party submits that it is appropriate to regard the supply of thrust reversers as belonging to a separate product market from the supply of TRAS.¹⁸⁵ Further, the Notifying Party submits that it is not appropriate to segment the market for the supply of thrust reversers by type of thrust reverser (cascade, door or target), as different types of thrust reversers have the same basic structure and all suppliers are able to design the different types of thrust reversers.¹⁸⁶ In addition, the Notifying Party submits that it is not appropriate to distinguish thrust reversers according to the type of aircraft, also because the technological capabilities required to design thrust reversers are the same across different types of aircraft, and suppliers are also the same.¹⁸⁷ The Notifying Party also submits that it is not

¹⁷⁹ Form CO, paragraph 579.

¹⁸⁰ As indicated in paragraph (79) above, this is achieved by reversing the airflow to produce a backward force that results in a shorter stopping distance. Form CO, paragraph 585.

¹⁸¹ Form CO, paragraphs 586-589.

¹⁸² See cases M.2168 – *Snecma / Hurel-Dubois*, paragraph 8; case M.6410 – *UTC / Goodrich*, paragraphs 116-117; case M.8425 – *Safran / Zodiac*, paragraph 107, case M.10760 – *Airbus / Safran / TAC / Aubert & Duval*, paragraph 68.

¹⁸³ See case M.8425 – *Safran / Zodiac*, paragraph 110; case M.10760 – *Airbus / Safran / TAC / Aubert & Duval*, paragraph 69.

¹⁸⁴ See case M.8425 – *Safran / Zodiac*, paragraph 111; case M.10760 – *Airbus / Safran / TAC / Aubert & Duval*, paragraph 69, and 73.

¹⁸⁵ Form CO, paragraph 633.

¹⁸⁶ Form CO, paragraph 635.

¹⁸⁷ Form CO, paragraphs 628 and 637.

meaningful to differentiate the supply of thrust reversers according to segment of demand, as most military aircraft that have thrust reversers are derivatives of civil platforms.¹⁸⁸

- (91) With respect to the different types of thrust reversers – with cascades, with doors and with targets – the Commission finds that suppliers often offer all types of thrust reversers, which indicates that suppliers are able to position their product offering across the different types.¹⁸⁹ By contrast, responses to the market investigation were mixed on whether the different types of thrust reversers are directly substitutable or should be regarded as belonging to separate product markets (an equal number of respondents indicated that the different types of thrust reversers should or should not be regarded as belonging to separate product markets, with a larger number of respondents not providing a definitive view).¹⁹⁰ During its investigation, and in particular through the analysis of the Parties' internal documents, the Commission did not find a reason to deviate from its past practice. As a result, the Commission finds that the market for the supply of thrust reversers includes all types of thrust reversers.
- (92) With respect to a possible distinction of thrust reversers according to the segment of demand (civil or military aircraft), and to the type of aircraft (large commercial aircraft, regional aircraft, etc.), the Commission refers to the analysis of the appropriateness of such potential sub-segmentations made with respect to TRAS in paragraphs (83)-(84) above, as it is applicable *mutatis mutandis*. Consequently, the Commission leaves the market definition open in that respect.
- (93) In summary, for the purposes of the decision, the Commission finds that the supply of thrust reversers belongs to a separate product market. The Commission leaves open whether it is appropriate to consider separate product markets according to the segment of demand (civil or military aircraft), and the type of aircraft in which thrust reversers are incorporated (large commercial aircraft, regional aircraft, etc.). The Commission will therefore carry out the competitive assessment in all plausible alternative market definitions.

6.1.1.3. Pilot Controls

- (94) Pilot controls are equipment directly accessible to the pilot in the cockpit, that provide the man-machine interface for piloting functions (speed up, brake, land, etc.). Pilot controls are equipment and include pilot control sticks (which, in turn, include centre yokes and sidesticks), rudder brake pedals systems ("RBPS"), throttle quadrant assembly ("TQA"). Yokes, sidesticks and RBPS are used to command the different primary flight control surfaces, and the TQA allows the pilot to control the fuel flow in an aircraft, which determines the engines' thrust. Signals from these commands are transferred throughout the aircraft to the relevant actuation system of these flight control surfaces.¹⁹¹
- (95) In its past practice, the Commission found that the supply of pilot control sticks, the supply of RBPS and the supply of TQA belong to separate product markets.¹⁹²

¹⁸⁸ Form CO, paragraph 638.

¹⁸⁹ See Form CO, Annex Ch. II. S.2.4(ii) - Market shares.

¹⁹⁰ See responses to Questionnaire 1, Question D.A.F.2, and responses to Questionnaire 1, Question D.6.

¹⁹¹ Form CO, paragraph 495.

¹⁹² UTC/Collins, paragraph 55.

The Commission found that each type of pilot control performs a different function in an aircraft, that individual pilot controls are priced differently, and that it was unclear whether a supplier of one type of pilot control (e.g., a pilot control stick) would be able to switch production to supply another type (e.g., a RBPS) in a manner that exercises a sufficient and immediate competitive constraint.¹⁹³ The Commission found that it was not appropriate to find distinct product markets according to the type of aircraft (between large commercial aircraft, regional aircraft, business jets and general aviation aircraft).¹⁹⁴ With respect to pilot control sticks, the Commission considered whether sidesticks and centre yokes belong to separate product markets and ultimately left this aspect of the market definition open.¹⁹⁵

- (96) The Notifying Party did not oppose that the product markets in the supply of pilot controls should be segmented according to the Commission's practice.
- (97) The results of the market investigation confirmed that the supply of pilot control sticks, the supply of RBPS and the supply of TQA belong to separate product markets.¹⁹⁶ As regards the possible distinction between centre yokes and sidesticks, most respondents to the market investigation indicated that these products should be regarded as belonging to separate product markets.¹⁹⁷ Further, a majority of respondents to the market investigation indicated that it was appropriate to distinguish the supply of pilot controls according to the segment of demand – i.e., a separate product market should be defined for the supply of the different types of pilot controls to civil aircraft or to military aircraft.¹⁹⁸ Finally, contrary to the Commission's previous practice, a majority of respondents indicated that it is appropriate to consider separate product markets according to the type of aircraft (large commercial aircraft, regional aircraft, etc.) in which the pilot controls are incorporated.¹⁹⁹
- (98) In summary, for the purposes of this decision the Commission finds that the supply of pilot control sticks, the supply of RBPS and the supply of TQA belong to separate product markets. Even though there are indications that it may be appropriate to define separate product markets within pilot control sticks, between centre yokes and sidesticks, and according to the segment of demand (i.e., between the supply of pilot controls to civil and military aircraft) and according to the type of aircraft (i.e., between large commercial aircraft, regional aircraft, etc.), since the outcome of the Commission's assessment would not change under the various alternative plausible market definitions, those possible further segmentations can be left open.

6.1.1.4. Flight control computers

- (99) Flight control computers ("FCC") are a type of flight control electronics which process the pilot's commands and the sensors' measurements, and control

¹⁹³ UTC/Collins, paragraphs 56-57.

¹⁹⁴ UTC/Collins, paragraphs 58.

¹⁹⁵ UTC/Collins, paragraphs 59-64.

¹⁹⁶ See responses to Questionnaire 1, question D.A.G.1 and Questionnaire 2, question E.2.

¹⁹⁷ *Ibid.*

¹⁹⁸ *Ibid.*

¹⁹⁹ *Ibid.*

accordingly the actuators related to control surfaces of the aircraft (ailerons, elevators, slats, flaps, etc.).²⁰⁰

- (100) In its past practice, the Commission has defined a market for FCC. The Commission considered but ultimately left open a possible segmentation between primary FCC, which control safety critical elements such as ailerons and elevators, and secondary FCC, which only command slow moving and less critical control surfaces.²⁰¹
- (101) The Notifying Party does not contest the Commission's past practice and submits that the exact product market definition for FCCs can be left open.²⁰²
- (102) The Commission's market investigation confirmed that FCC constitutes a product market that is distinct from other flight control electronics, namely controllers, sensors and the autopilot.²⁰³
- (103) As regards a potential further segmentation of the market for FCC (i) between primary and secondary FCC, (ii) between the civil and military sectors, and (iii) between the different types of aircraft (i.e. large commercial aircraft, regional aircraft, business jets and general aviation aircraft), the results of the market investigation were inconclusive, as respondents were split on whether such distinctions are warranted.²⁰⁴
- (104) For the purposes of the present case the question whether a further segmentation of the market for FCC is warranted can be left open, as the Transaction does not give rise to serious doubts as to its compatibility with the internal market or the functioning of the EEA agreement as regards the supply of FCC, irrespective of the precise product market definition.

6.1.1.5. Aerospace wiring systems

- (105) Wiring systems consist of assemblies of cables, called harnesses,²⁰⁵ designed to transmit electrical power, data and/or signals between two or more termination points.²⁰⁶ Harnesses vary according to the material employed, weight, size, resistance, flexibility, etc., depending on their position in the aircraft and the final use. A common distinction is made between general harnesses, that are not exposed to specific stresses (as found, e.g., in the fuselage, cockpit, pylons, tailplane, wings or doors), and harnesses for harsh environments, that have to withstand challenging thermal, chemical, mechanical and radiative stresses (as found, e.g., in engines, nacelles - including in E-TRAS -, landing gears and brakes).²⁰⁷
- (106) In its past practice, the Commission has found that the supply of wiring systems used in the aerospace industry belongs to a product market that is separate from

²⁰⁰ Form CO, paragraph 499.

²⁰¹ *Sextant/Diehl*, paragraph 21.

²⁰² Form CO, paragraph 501.

²⁰³ See responses to Questionnaire 1, question D.A.H.1 and Questionnaire 2, question F.2.

²⁰⁴ *Ibid.*

²⁰⁵ The terms "wiring system" and "harness" refer to distinct products/systems: a wiring system (also referred to as Electrical Wiring Interconnection System (EWIS)) covers the network of electrical connections within an aircraft, a harness is a subset within this system designed to group and protect cables. Form CO, fn. 443.

²⁰⁶ Form CO, paragraph 992.

²⁰⁷ *Ibid.*

similar wiring systems used in other industries (such as the rail or automotive industries).²⁰⁸ The Commission found that it is not appropriate to consider separate product markets for the supply of wiring systems according to the function in which they are employed (power vs data), or by type of wire technology used (optical fibre, aluminium, copper).²⁰⁹ The Commission considered, but left open, whether general and harsh environment harnesses belong to separate product markets, and whether harsh environment harnesses should be further segmented by type of aircraft (between large commercial aircraft, regional aircraft, etc.) or application (e.g., wiring systems employed in engines, nacelles or landing gears).²¹⁰

- (107) The Notifying Party submits that the relevant product market is the market for the supply of wiring systems for aerospace applications,²¹¹ that is distinct from wiring systems used in other industries.²¹² The Notifying Party submits that the supply of wiring systems used in flight control actuation does not form part of a distinct product market (and, *a fortiori*, that it is also not appropriate to consider separate product markets for the supply of wiring systems for incorporation specifically in THSA systems, PFCA systems, etc.). In the Notifying Party's view, the use case/function of a wiring system within an aircraft only has a small influence on the type of wiring system needed.²¹³ The Notifying Party submits that it is not appropriate to distinguish (i) the supply of wiring systems according to the aircraft type or size,²¹⁴ and (ii) the supply of general harnesses from the supply of harsh environment harnesses.²¹⁵
- (108) Respondents confirmed during the market investigation that aerospace wiring systems belong to a distinct product market.²¹⁶ This is consistent with the fact that suppliers of products used in the aerospace industry are required to meet different and specific standards, e.g., in terms of product certification, that differ from other industries (e.g., automotive).²¹⁷
- (109) Further, responses received during the market investigation tend to indicate that general harnesses and harsh environment harnesses are distinct products in their use and product characteristics, with a majority of respondents that expressed a view indicating that separate product markets would be appropriate.²¹⁸ However, because the majority of respondents did not express a definitive view on the matter, the overall response was inconclusive.²¹⁹ One respondent, for example, indicated that despite the existence of design differences for harsh environment harnesses,

²⁰⁸ See case M.8425 – *Safran/Zodiac Aerospace*, 203.

²⁰⁹ *Id.*, paragraphs 204-205.

²¹⁰ *Ibid.*

²¹¹ Form CO, paragraph 925.

²¹² Form CO, paragraph 926.

²¹³ Form CO, paragraphs 928-931. Wiring systems used in flight control actuation systems are no different from wiring systems used in other parts of the aircraft.

²¹⁴ Form CO, paragraph 933.

²¹⁵ Form CO, paragraph 936-939.

²¹⁶ See responses to Questionnaire 1, Question D.A.I.1, and responses to Questionnaire 2, Questions G.2 and H.2.

²¹⁷ See paragraph (26) above.

²¹⁸ See responses to Questionnaire 1, Question D.A.I.1, and responses to Questionnaire 2, Questions G.2 and H.2.

²¹⁹ *Ibid.*

most suppliers can provide both general and hot/harsh harnesses, which indicates the existence of supply-side substitutability.²²⁰

- (110) In addition, the responses received during the market investigation tend to confirm that it is appropriate to distinguish the supply of wiring systems by segment of demand (civil or military aircraft). Conversely, responses received during the market investigation indicated that it is not appropriate to distinguish the supply of wiring system by type of aircraft (large commercial aircraft, regional aircraft, etc.). As regards a possible distinction by segment of demand, a narrow majority of respondents indicated that distinguishing the supply of wiring systems to civil and to military aircraft is appropriate.²²¹ As far as a possible distinction by type of aircraft is concerned, a majority of respondents during the market investigation indicated that it is not appropriate to further segment the supply of wiring systems on the basis of aircraft types.
- (111) In summary, for the purpose of this decision, the Commission finds that aerospace wiring systems constitute a distinct product market. The Commission also finds, within aerospace wiring systems, that general harnesses and harsh environment harnesses may belong to separate product markets. As regards a possible segmentation by segment of demand (civil or military aircraft), the response from the market investigation indicates that a distinction in the supply of wiring systems to civil and to military aircraft is appropriate, whereas a distinction by type of aircraft (large commercial aircraft, regional aircraft, etc.) is not appropriate. In line with its past practice, the Commission will consider the supply of wiring systems by application (in particular, the supply of wiring systems for incorporation in actuation products). However, since the outcome of the Commission's assessment would not change under the various alternative plausible market definitions, the existence of separate markets for the supply of wiring systems according to the segment of demand or by type of aircraft or application can be left open. The Commission will therefore carry out the competitive assessment in all plausible alternative market definitions.

6.1.1.6. Valves for ESA space launchers

6.1.1.6.1. The Commission's precedents

- (112) The Commission has previously considered that the space industry could be split into (i) satellites, (ii) space infrastructure (mainly space stations), (iii) launch services, (iv) launchers and (v) ground systems. In all these sectors, the Commission considered that a further distinction must be made between the prime contracting level and the equipment level.²²²
- (113) Space launchers are made up of systems, sub-systems and equipment. Valves are components of an equipment that regulate the passage of fluid between the launcher engine and different stages of the launcher, such as in Ariane 6 the solid propulsion stage (boosters), the fairing (which encapsulates the payload).²²³ Valves

²²⁰ See response of a competitor to Questionnaire 2, Question H.2.

²²¹ See responses to Questionnaire 1, Question D.A.I.1, and responses to Questionnaire 2, Questions G.2 and H.2.

²²² M.7353 – *Airbus/Safran/JV*, para. 74 and M.8425 – *Safran/Zodiac*, para. 238.

²²³ Form CO, paras. 1128-1129.

are the only components of equipment for space launchers that the Parties manufacture.²²⁴

- (114) The Commission has previously defined valves for space launchers as a separate market,²²⁵ and considered a further segmentation between cryogenic valves (used in connection with very low temperature oxygen and hydrogen in cryogenic propulsion systems) and non-cryogenic valves (used in non-cryogenic propulsion systems and in connection with non-oxygen/hydrogen related functions – e.g., in connection with helium – in cryogenic propulsion systems). Such distinction was considered due to the different and specific product characteristics of cryogenic and non-cryogenic valves.²²⁶ The Commission left, however, the market definition open as regards the segmentation between cryogenic and non-cryogenic valves.

6.1.1.6.2. The Notifying Party's view

- (115) The Notifying Party agrees that valves for space launchers is a separate market.²²⁷ However, it argues that a segmentation between cryogenic and non-cryogenic valves is not relevant as there is a high degree of supply substitutability between the two types of valves, with many suppliers within and outside the EU having the technical capacity to supply both types.^{228, 229}

6.1.1.6.3. The Commission's assessment

- (116) Overall, the results of the market investigation are in line with the previous findings of the Commission in its decisions concerning the relevant product market for valves for space launchers.²³⁰
- (117) *First*, from a demand perspective, a distinction between cryogenic and non-cryogenic valves for space launchers appears to be relevant, as switching from one type of valve to the other can pose technical difficulties, since each type of valve uses different technology and serves different applications. Further, the market investigation indicated that customers would incur high costs in case of switching between cryogenic and non-cryogenic valves (and vice-versa) and that switching would take a long period of time.²³¹
- (118) *Second*, from a supply perspective, the market investigation reveals that most valves suppliers are able to supply both cryogenic and non-cryogenic valves for

²²⁴ Form CO, footnote 514.

²²⁵ M.7353 – *Airbus/Safran/JV*, para. 204-209.

²²⁶ M.7353 – *Airbus/Safran/JV*, paras. 91-93, and M.8425 – *Safran/Zodiac*, para. 246.

²²⁷ Form CO, paras. 1156 - 1160.

²²⁸ Form CO, paras. 1163 - 1164.

²²⁹ The Notifying Party argues that further segmentations, such as by valve function and type of programme are not relevant, since the same technologies can be applied to manufacture the different types of valves, irrespective of the specific function or programme for which they will ultimately be used.

²³⁰ The Commission has not previously considered a segmentation based on the function of the valve or on the type of programme. Based on the data provided by the Parties, their activities currently overlap only in respect to one programme (Ariane 6) [...] (Form CO, Table 7.3-2) Thus, for the purposes of the present Transaction, a segmentation based on type of programme and function will not be considered.

²³¹ Questionnaire 4, questions C.A.1 – C.A.3 and Questionnaire 3, question C.1.

space launchers.²³² However, the market investigation elicited mixed results regarding the possibility of producers of cryogenic valves to start producing non-cryogenic valves (and vice-versa) without incurring significant costs and in a relatively short period of time, with half of the relevant market participants expressing their opinion indicating that such switch in supply would be relatively easy and the other half indicating that this would involve high costs and a long period of time.²³³ At the same time, the majority of the relevant market participants expressing their opinion indicated that producers of cryogenic valves would have enough capacity to start producing non-cryogenic valves, and vice-versa.²³⁴

- (119) In conclusion, for the purposes of the decision, the possible further segmentation of the market definition for valves for space launchers can be left open since the Transaction would not raise serious doubts as to its compatibility with the internal market irrespective of the exact delineation considered.

6.1.1.7. Prime contracting for ESA space launchers

6.1.1.7.1. The Commission's precedents

- (120) As regards the market for prime contracting for space launchers, the Commission has previously analysed the prime contracting market for ESA space launchers, but the existence of such market, as well as its scope, was left open.²³⁵

6.1.1.7.2. The Notifying Party's views

- (121) With respect to prime contracting, the Notifying Party submits that there is no open market for prime contracting for space launchers in Europe, as the prime contractors have already been designated based on the *juste retour* principle.²³⁶

6.1.1.7.3. The Commission's assessment

- (122) *First*, as far as space programmes are concerned, ESA has been the only customer of space launchers in Europe (e.g. for the Ariane and Vega launchers). For developed programmes, such as the Ariane and the Vega programmes, ESA has designated the ArianeGroup and Avio as prime contractors based on the *juste retour* principle. The market investigation confirmed that the prime contractors have been already designated based on the *juste retour* principle,²³⁷ and thus without a competitive tender, and any change to such contractors may only be made under stringent conditions and in accordance with the already established rules of each program.²³⁸ Thus, for developed ESA programmes, it appears that the competitive process has been limited by the application of the *juste retour* principle. Further, no new similar programme (e.g. for heavy-lift space launchers) seems to be foreseen to materialise in the upcoming years, where prime contractors can be selected.

²³² Questionnaire 4, question C.A.4.

²³³ Questionnaire 3, question C.2.

²³⁴ Questionnaire 3, question C.3.

²³⁵ M.7353 – *Airbus/Safran/JV*, para.74 and M.8425 – *Safran/Zodiac*, para. 239.

²³⁶ Form CO, para. 1222.

²³⁷ Questionnaire 4, question E2.

²³⁸ Non-confidential minutes from a call with a market participant held on 11.07.2024.

- (123) *Second*, the market investigation indicated that recently ESA decided to have a new approach towards the development of future small launchers, limiting the application of the *juste retour* principle. This is illustrated by the European Launcher Challenge, where ESA will no longer apply the *juste retour* principle, and instead it will organise competitive tenders for the development of space launchers and the launch services around it. As part of this initiative, in the first instance, companies will become launch service providers responsible of both the development and the launch of rockets.²³⁹ Following that, ESA would have a new role, namely that of a launch customer.²⁴⁰
- (124) Thus, considering that the market investigation revealed ESA's new approach towards a more competitive selection process, it is worth noting a possible distinction between ESA's developed programmes (Ariane and Vega programmes) and ESA's prospective programmes (e.g. in the context of the European Launcher Challenge).
- (125) In conclusion, for the purposes of this decision, the existence and scope of the market for prime contracting for developed ESA programmes, as well as a distinction between developed ESA programmes and prospective ESA programmes can be left open since the Transaction would not raise any serious doubts as to its compatibility with the internal market neither on a developed or prospective market for ESA space programmes.

6.1.2. *Relevant geographic markets*

6.1.2.1. Aerospace actuation systems, thrust reversers, pilot controls, flight control computers and wiring systems

6.1.2.1.1. The Commission's precedents

- (126) In its past practice concerning products in the aerospace industry, the Commission has typically found that markets for aerospace actuation systems (namely THSA, PFCA, SFCA and TRAS systems), thrust reversers, pilot controls, flight control computers and wiring systems were worldwide in scope. Specifically, as regards the supply of THSA systems, the Commission noted that the geographic market is worldwide. Also in relation to THSA, the Commission noted the specificities concerning products for military use and indicated that a market limited to the EEA would not alter its assessment.²⁴¹ Similarly, the Commission found that the market was worldwide in scope with respect to PFCA systems²⁴² and SFCA systems,²⁴³ TRAS and thrust reversers,²⁴⁴ pilot controls,²⁴⁵ flight control computers,²⁴⁶ and wiring systems,²⁴⁷ often indicating that with regard to military applications,

²³⁹ It seems that these companies will no longer be referred to as prime contractors (as these were in charge only of the development of the launcher).

²⁴⁰ Questionnaire 4, questions E.4 and E.7.

²⁴¹ See UTC/Collins, paragraphs 206-207. See also case M.6410 – *UTC / Goodrich*, paragraphs 100-101.

²⁴² See e.g., case M.2892 – *Goodrich/TRW Aeronautical Systems Group*, paragraphs 7-8.

²⁴³ *Ibid.*

²⁴⁴ See case M.6410 – *UTC / Goodrich*, paragraphs 118-119; case M.8425 – *Safran / Zodiac*, paragraphs 298-301, case M.10760 – *Airbus / Safran / TAC / Aubert & Duval*, paragraphs 109-111.

²⁴⁵ See case M.8425 – *Safran / Zodiac*, paragraphs 298-301; *UTC/Collins*, paragraphs 206-207.

²⁴⁶ See *UTC/Collins*, paragraphs 206-207.

²⁴⁷ See case M.8425 – *Safran / Zodiac*, paragraphs 298-301.

restrictions on trade (such as governmental export controls) limited geographically the range of suppliers available to customers.²⁴⁸

6.1.2.1.2. The Notifying Party's views

- (127) The Notifying Party submits that competition for the supply of aerospace components, including flight control actuation products (THSA systems, PFCA systems, SFCA systems),²⁴⁹ TRAS and thrust reversers (both H-TRAS and E-TRAS),²⁵⁰ pilot controls,²⁵¹ flight control computers²⁵² and wiring systems,²⁵³ takes place at worldwide level. With respect to a possible distinction regarding products that are used in military aircraft, the Notifying Party indicates that it is not appropriate to adopt a narrower geographic market definition.²⁵⁴

6.1.2.1.3. The Commission's assessment

- (128) Consistent with its past practice, the Commission finds that the markets for the supply of aerospace actuation systems (namely THSA systems, PFCA systems, SFCA systems and TRAS), thrust reversers, pilot controls (including its relevant sub-segmentations), flight control computers and wiring systems are worldwide in scope. The Commission finds that aerospace companies are active,²⁵⁵ and procurement takes place, globally.²⁵⁶ The Commission also finds that there are significant trade flows across countries around the globe.²⁵⁷ Finally, the Commission finds that prices do not vary significantly between different regions of the world. Therefore, the Commission finds that, generally, in the supply of these aerospace products, conditions of competition are sufficiently homogeneous for competition to take place within a world-wide geographic market.
- (129) With respect to products incorporated in military aircraft, responses in the market investigation regarding the existence of trade barriers – such as export controls – were mixed since, in relation to a variety of products, a similar number of respondents indicated that certain barriers could or could not constitute a hurdle to procurement worldwide, despite the fact that several respondents did not take a definitive position.²⁵⁸ In relation to this issue, one respondent indicated that tariffs could become an increasing concern.²⁵⁹ Several respondents indicated that military programs are more likely to source equipment from suppliers in-country or in-region.²⁶⁰ A rival supplier, for example, indicated that the purchasing patterns on the military market follow a stronger national preference, for reasons of autonomy (e.g., to secure military infrastructure in case of a trade embargo).²⁶¹ This is also reflected in certain of the Parties' internal documents, mentioning that the ability to

²⁴⁸ E.g. *UTC/Collins*, paragraph 206.

²⁴⁹ Form CO, paragraphs 280, 283.

²⁵⁰ Form CO, paragraph 668.

²⁵¹ Form CO, paragraph 498.

²⁵² Form CO, paragraph 500.

²⁵³ Form Com paragraph 940.

²⁵⁴ Form CO, paragraphs 283, 669.

²⁵⁵ See Questionnaire 1, Question D.B.1 ; Questionnaire 2, Questions C.22, D.10, E.3 and F3.

²⁵⁶ *Ibid.*

²⁵⁷ *Ibid.*

²⁵⁸ *Ibid.*

²⁵⁹ See response of a competitor to Questionnaire 2, Question C.22.

²⁶⁰ See response from a competitor to Questionnaire 2, Question C.23. See also responses from two other competitors to Questionnaire 2, Question C.23.

²⁶¹ See minutes of the conference call with [a competitor], paragraph 19.

offer products without export restrictions is an important criterion in the selection of the supplier of an actuator,²⁶² namely where sovereignty is in question (which is particularly the case for military equipment).²⁶³ Conversely, the Commission notes that there is considerable trade globally in the military segment. For example, the (Europe-based) Target is an active supplier of products to the aircraft military segment to companies in [...].²⁶⁴ Further, for aircraft that are originally designed for use in civil aviation and subsequently transformed for military – as often happens with those that use THSA systems or TRAS (tankers or transport aircraft) –, airframers rely often on the procurement made for the original aircraft.²⁶⁵ It follows that trade barriers are not an insurmountable obstacle to trade, although regional preferences (or requirements) may skew demand in the military segment.

- (130) Therefore, the Commission finds that the supply of THSA systems, PFCA systems, SFCA systems, TRAS and thrust reversers, pilot controls (including its relevant sub-segmentations), flight control computers and wiring systems, including their plausible sub-segmentations, is worldwide in scope. With respect to the appropriateness of finding narrower EEA-wide markets for the supply of these products to the military segment, because the outcome of the Commission's assessment would not change under the various plausible alternative market definitions, the Commission leaves open whether it is appropriate to find that competition for the supply to military aircraft takes place in a market limited to the EEA and will carry out the competitive assessment in all plausible alternative market definitions.

6.1.2.2. Valves for space launchers and prime contracting for ESA launchers

6.1.2.2.1. Commission's precedents

- (131) The Commission has previously noted that competition for prime contracting, systems, subsystems and equipment (including valves) for ESA launchers took place at European level due to the selection of suppliers based on the *juste retour* principle and on ESA's Best Practices. Thus, the Commission considered that the relevant geographic markets for valves for space launchers and prime contracting for ESA space launchers can be regarded as EEA-wide.²⁶⁶

6.1.2.2.2. The Notifying Party's views

- (132) The Notifying Party agrees with the Commission's past precedents, that competition for prime contracting, systems, sub-systems and equipment (including valves) for developed ESA space launchers took place at EEA level, due to the application of the *juste retour* principle and ESA's Best Practices.
- (133) However, the Notifying Party argues that the competitive dynamics will change, leading to a market wider than the EEA. This is based on the assumption that competition for the development of space launchers and accompanying services will be open to new players. The Notifying Party further argues that it is expected

²⁶² See Form CO, Annex 5.4(xxiv) – [...] actionnement (October 2021), p. 3.

²⁶³ See Form CO, Annex 5.4(xxiii) - Etude actionnement groupe (October 2021), p. 4.

²⁶⁴ See Form CO, Annex 5.4(xvii) - Kearney - Collins Actuation System preliminary study (April 2022), p. 20.

²⁶⁵ E.g., [...]. See Form Co, Annex Ch. II. S.2.6(iv) - THSA bidding data.

²⁶⁶ M.7353 – Airbus/Safran/JV, paras. 94 – 97; and M.8425 – Safran/Zodiac, para. 301.

that the market for the supply of components, such as valves, in future small launcher ESA projects, will be open to competition from international suppliers. Thus, according to the Notifying Party, the market for prospective ESA launcher programmes (e.g. such as in the context of the European Launcher Challenge) could be broader than the EEA, even global.

6.1.2.2.3. The Commission's assessment

- (134) Overall, the results of the market investigation are in line with the previous findings of the Commission in its past decisions concerning the relevant geographic market for valves for space launchers and prime contracting for developed ESA programmes.
- (135) The results of the market investigation indicated that competition relating to already developed ESA launcher programmes (Ariane and Vega space launcher programmes) took place at EEA level,²⁶⁷ due to the application of the *juste retour* principle which was relevant not only for the designation of prime contractors, but also for the selection of suppliers of components such as valves for space launchers. As market participants explained, for ESA programmes, there was a geographical limitation, based on the *juste retour* principle.²⁶⁸
- (136) The results of the market investigation also indicated that a change in the competitive dynamics is expected to take place in the near future,²⁶⁹ as ESA intends to restrict the use of the *juste retour* principle and organise competitive tenders where launch service providers based in ESA or EU Member States²⁷⁰ can compete (irrespective of the *juste retour* principle). Additionally, it is foreseen that these European launch service providers will be able to independently (without ESA's intervention) select their suppliers of components for space launchers, such as valves.²⁷¹
- (137) Following ESA's implementation of its new approach towards ensuring increased competition for space launch service providers (and thus, limiting the application of the *juste retour* principle), there are indications, also confirmed by the market investigation that tenders will be limited to European launch service providers. Thus, competition between these European launch service providers for ESA projects will still be expected to take place at EEA level.
- (138) The market investigation also indicated that these European launch service providers will be able to freely choose (without ESA's intervention) their components' suppliers,²⁷² irrespective of whether these components suppliers are European or not. As one market participant explained, valves suppliers from outside EEA Member States can be contracted for the development of ESA space

²⁶⁷ The contracts for the Ariane and Vega space launcher programmes have been awarded before 31 January 2020. Thus, at that time, United Kingdom was still part of the EU. For instance, the selection of equipment suppliers was conducted in [...] and the chosen suppliers will remain in place until the end of the launcher programme (Form CO, para. 1142).

²⁶⁸ Questionnaire 4, question C.B.2.

²⁶⁹ See 'Prepare for the European Launcher Challenge, dated 4 June 2024 on ESA's website: [ESA - Prepare for the European Launcher Challenge](#).

²⁷⁰ It is foreseen that these launch service providers will not only develop the space launcher (similar to the development phase described in Section 5) but also provide accompanying launch services (similar to the exploitation phase described in Section 5).

²⁷¹ Non-confidential minutes from a call with a market participant held on 11.07.2024.

²⁷² Non-confidential minutes from a call with a market participant held on 11.07.2024.

launchers, in particular when European suppliers are unable to fulfil the delivery requirements in the stipulated time frame.²⁷³

- (139) The market investigation also indicated that these new European launch service providers are able and some of them already source valves for space launcher from non-European companies, such as Marotta and Moog.²⁷⁴ Further, the market investigation revealed that transportation costs for valves for space launchers are relatively low and there is no significant price difference between the EEA and other countries outside the EEA.²⁷⁵
- (140) Thus, for developed ESA space programmes (Ariane and Vega programmes), competition for prime contracting and valves for space launchers took place at EEA level (due to the application of the *juste retour* principle). For prospective ESA programmes, (e.g. such as in the context of the European Launcher Challenge), as the development and provision of launch services seem to be limited to companies based in ESA or EU Member States, competition for the provision of launch services²⁷⁶ is expected to take place at EEA level, plus the United Kingdom. In respect of valves for space launchers, it is expected that competition will take place at EEA level, plus the United Kingdom or even at a wider than EEA level, possible global, as both European and non-European components (such as valves) suppliers could be contracted for ESA future projects.
- (141) However, for the purpose of this decision, the geographic scope of the relevant markets can be left open as no serious doubts would arise as to its compatibility with the internal market in relation to prime contracting and valves for space launchers irrespective of the geographic market definition applied.

7. COMPETITIVE ASSESSMENT

- (142) In this section, the Commission will assess the possible effects of the Transaction on the affected markets, and in particular:
- (a) The horizontally affected markets²⁷⁷ for:
- The supply of THSA systems;
 - The supply of valves for space launchers;

²⁷³ Non-confidential minutes from a call with a market participant held on 31.07.2024.

²⁷⁴ Questionnaire 4, question C.B.1.

²⁷⁵ Questionnaire 3, questions D.1-D.5 ; and Questionnaire 4, questions C.B.1 - C.B.4.

²⁷⁶ It is expected that these launch services will take the place of prime contracting.

²⁷⁷ The Commission notes that Safran has *de minimis* activities in the supply of SFCA components to manufacturers of SFCA systems (i.e. as a Tier-2 supplier). Safran does not itself supply SFCA systems to airframers. As the Commission is considering a market for the supply of THSA systems (i.e. Tier-1 supplies to airframers), Safran is currently not considered active in this market. The Commission does therefore not consider that Safran's supplies of SFCA components give rise to a horizontal overlap with the Target's activities in the supply of SFCA systems. For the avoidance of doubt, the Commission notes that even if it were considered that the Parties' activities in SFCA give rise to a horizontal overlap, such overlap would in any case be unproblematic. The only horizontally affected market in this case would be in the potential narrower market for the supply of SFCA systems to regional aircraft, where the overlap would be insignificant with an increment of [0-5]%, due to Safran's *de minimis* activity in this field (see relevant market shares in Table 9 below). The Commission's market investigation gave no indications that the Parties should be considered as competitors in SFCA.

- (b) The vertically affected markets for:
 - The supply of TRAS in the upstream, and the supply of thrust reversers in the downstream;
 - The supply of wiring systems in the upstream, and the supply of aerospace actuation products in the downstream;
- (c) The conglomerate effects between any of the markets for the supply of PFCA, SFCA and THSA systems, the supply of pilot controls and the supply of flight control computers.

7.1. Horizontal effects

7.1.1. Analytical framework

- (143) Under Article 2(2) and (3) of the Merger Regulation, the Commission must assess whether a proposed concentration would significantly impede effective competition in the internal market or in a substantial part of it, in particular as a result of the creation or strengthening of a dominant position. When assessing concentrations between actual or potential competitors, the Commission investigates whether such concentrations result in adverse “non-coordinated effects” and/or in “coordinated effects”, as described in the Guidelines on the assessment of horizontal mergers under the Merger Regulation (the “Horizontal Merger Guidelines”).²⁷⁸
- (144) Non-coordinated effects occur due to the removal of an important competitive constraint to the parties to a concentration, typically the loss of competition between the firms in the concentration. To assess the competitive constraints faced by the merging parties, the Horizontal Merger Guidelines include certain factors that the Commission uses to measure the likelihood and magnitude of non-coordinated effects. Such factors include: (i) the market shares of the parties; (ii) whether the merging firms are close competitors; (iii) whether there are limited possibilities for customers to switch to the parties’ competitors; (iv) whether the parties’ competitors could increase supply if prices increase; (v) whether the merged entity would be able to hinder its competitors’ expansion; and (vi) whether the merger removes a competitor that is stronger than its market shares suggest. By considering these and other factors, the Commission assesses whether a potential increase in market power is likely to lead to a significant impediment of effective competition, namely as a result of the creation or the strengthening of a dominant position.

7.1.2. The supply of THSA systems

7.1.2.1. Market shares

- (145) As indicated in the Horizontal Merger Guidelines, market shares and concentration levels provide useful first indications of the market structure and of the competitive importance of both the merging parties and their competitors.²⁷⁹ Typically, the

²⁷⁸ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 05.02.2004.

²⁷⁹ Horizontal Merger Guidelines, paragraph 14.

Commission considers sales revenues and sales volumes of each competitor to calculate market shares.²⁸⁰

- (146) The Notifying Party submits that in the markets for flight control actuation systems, value-based market shares better reflect the suppliers' respective positions in these markets, due to price variations observed across aircraft programmes.²⁸¹ Moreover, according to the Notifying Party, third-party market reports do not list market shares based on volumes.²⁸²
- (147) The Commission notes that the Parties' market shares in the supply of THSA systems do not vary significantly when considering volumes and value of supplies.²⁸³ Since the Commission's assessment would not change, regardless of the type of market shares considered (i.e. value-, or volume-based), and since value-based market shares are the industry standard²⁸⁴, the Commission will refer in the remainder of this decision to value-based market shares in relation to the supply of THSA systems.
- (148) Table 1 to Table 4 below provide the Parties' and their competitors' market shares in the supply of THSA systems, both in the potential overall market, and in the narrower potential markets for (i) THSA systems for civil aircraft, (ii) THSA systems for large commercial aircraft, and (iii) THSA systems for military aircraft, all of them at world-wide level.²⁸⁵

²⁸⁰ E.g., as requested in Section 7.2 of Annex I to the Commission Implementing Regulation (EU) 2023/914 of 20 April 2023 implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings, OJ L 119, 05.05.2023.

²⁸¹ Form CO, paragraph 305. For instance, the Target supplies THSA to the A320neo family for a unit price of USD [...]. By contrast, RTX retained supplies THSA for the [...] for a unit price of USD [...].

²⁸² Form CO, footnote 139.

²⁸³ Form CO, Annex Ch. II. S.2.4(ii) – Market shares. The Parties' combined market shares are between [0-5]% and [10-20]% higher (depending on the aircraft segment) when considering volume-based market shares, compared to their respective value-based market shares. The exceptions are the segments for military and regional aircraft, where the Parties' volume-, and value-based market shares do not differ.

²⁸⁴ Form CO, footnote 139.

²⁸⁵ Market shares are not provided for the potential markets for the supply of THSA systems for regional aircraft, THSA systems for military aircraft in the EEA and THSA systems for business aircraft, as in these cases the Parties' activities do not overlap. For the sake of clarity, the Parties had overlapping sales of THSA systems to business aircraft until 2022, with a combined market share of [30-40]% (Safran [30-40]%, Target [0-5]%). As of 2023, the Target has no sales of THSA systems to business aircraft. The Commission's assessment on the market for the supply of THSA systems would in any case not change if the Parties were considered to also overlap on the narrower potential market for the supply of THSA systems to business aircraft. This is because the Transaction does in any case raise serious doubts as to its compatibility with the internal market in relation to several potential markets for the supply of THSA systems (see paragraph (192) below), regardless of the Commission's assessment on the potential market for the supply of THSA systems to business aircraft. Even if the Commission were to find that the Transaction raises serious doubts as to its compatibility with the internal market in relation also to the supply of THSA systems to business aircraft, the proposed remedy described in Section 8 below would address such serious doubts.

Table 1 – Market shares in the supply of THSA systems – overall market (worldwide)

Supplier	2021	2022	2023	2024
Safran	[20-30]%	[20-30]%	[20-30]%	[20-30]%
Target	[40-50]%	[40-50]%	[40-50]%	[40-50]%
Combined	[60-70]%	[60-70]%	[60-70]%	[60-70]%
Parker	[20-30]%	[20-30]%	[20-30]%	[20-30]%
Moog	[0-5]%	[5-10]%	[5-10]%	[5-10]%
RTX (retained activities)	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Eaton	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Liebherr	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Woodward	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Nabtesco	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Total	100%	100%	100%	100%

Source: Form CO, Annex Ch. II. S.2.4(ii).

Table 2 – Market shares in the supply of THSA systems – civil aircraft (worldwide)

Supplier	2021	2022	2023	2024
Safran	[20-30]%	[20-30]%	[20-30]%	[20-30]%
Target	[40-50]%	[40-50]%	[40-50]%	[40-50]%
Combined	[60-70]%	[60-70]%	[60-70]%	[60-70]%
Parker	[20-30]%	[20-30]%	[20-30]%	[20-30]%
Moog	[0-5]%	[5-10]%	[5-10]%	[5-10]%
Eaton	[0-5]%	[0-5]%	[0-5]%	[0-5]%
RTX (retained activities)	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Liebherr	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Woodward	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Total	100%	100%	100%	100%

Source: Form CO, Annex Ch. II. S.2.4(ii)

Table 3 – Market shares in the supply of THSA systems – large commercial aircraft (worldwide)

Supplier	2021	2022	2023	2024
Safran	[10-20]%	[10-20]%	[10-20]%	[10-20]%
Target	[70-80]%	[70-80]%	[70-80]%	[70-80]%
Combined	[90-100]%	[90-100]%	[90-100]%	[80-90]%
Moog	[0-5]%	[0-5]%	[5-10]%	[5-10]%
Parker	[0-5]%	[0-5]%	[0-5]%	[0-5]%
RTX (retained activities)	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Liebherr	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Total	100%	100%	100%	100%

Source: Form CO, Annex Ch. II. S.2.4(ii).

Table 4 – Market shares in the supply of THSA systems – military aircraft (worldwide)

Supplier	2021	2022	2023	2024
Safran	[0-5]%	[0-5]%	[10-20]%	[10-20]%
Target	[20-30]%	[30-40]%	[10-20]%	[10-20]%
Combined	[20-30]%	[30-40]%	[30-40]%	[30-40]%
RTX (retained activities)	[50-60]%	[50-60]%	[50-60]%	[50-60]%
Nabtesco	[10-20]%	[10-20]%	[10-20]%	[10-20]%
Total	100%	100%	100%	100%

Source: Form CO, Annex Ch. II. S.2.4(ii).

7.1.2.2. The Notifying Party's views

- (149) As mentioned in paragraph (56) above, the Notifying Party submits that it is appropriate to segment the supply of THSA systems by type of technology (i.e., between hydraulic or electric THSA systems). Since the Target is active exclusively in the supply of hydraulic THSA systems, while Safran is active in the supply of electric THSA systems, the Notifying Party submits that the Parties do not overlap in the supply of THSA systems.²⁸⁶
- (150) As regards the wider overall market for the supply of THSA systems, the Notifying Party submits that the Transaction does not give rise to serious doubts as to its compatibility with the internal market, for the reasons set out below.²⁸⁷
- (151) *First*, the Notifying Party submits that the Parties are not close competitors, as they supply THSA systems of different technologies (i.e. hydraulic for the Target and electric for Safran).²⁸⁸ According to the Notifying Party, the fact that the Parties do not compete closely is also evidenced by the submitted bidding data.²⁸⁹
- (152) *Second*, the Notifying Party submits that the market for the supply of THSA systems will remain highly competitive after the Transaction. According to the Notifying Party, a number of well-established suppliers will remain active in the market, including Parker, Moog, Woodward, Liebherr, Shimadzu Corporation, Nabtesco and the retained RTX business.²⁹⁰
- (153) *Third*, the Notifying Party submits that the aerospace actuation markets, including the market for the supply of THSA systems, have the characteristics of buyers' markets. According to the Notifying Party, airframers are sophisticated international groups with competitive sourcing policies and high buyer power.²⁹¹ If faced with increased prices, the Notifying Party submits that airframers would sponsor entry or expansion of competitors, or would even produce their THSA systems in-house.²⁹²

7.1.2.3. The Commission's assessment

- (154) With regard to the Notifying Party's position that the Parties do not overlap in the supply of THSA systems, due to the fact that they supply THSA systems of different technologies, the Commission refers to its findings set out in paragraphs (66) to (68) above.
- (155) As regards the impact of the Transaction on the overall market for the supply of THSA systems, as set out below, the Commission's assessment does not confirm the Notifying Party's views. The Commission notes that its assessment does not differ, even when considering the potential subsegments of the market based on the sector (i.e. civil vs. military) or the potential subsegment for large commercial aircraft.

²⁸⁶ Form CO, paragraph 377.

²⁸⁷ Form CO, paragraph 400.

²⁸⁸ Form CO, paragraph 401 *et seq.*

²⁸⁹ Form CO, paragraph 411 *et seq.*

²⁹⁰ Form CO, paragraph 418 *et seq.*

²⁹¹ Form CO, paragraph 422 *et seq.*

²⁹² Form CO, paragraph 425 *et seq.*

High combined market shares

- (156) As shown in Table 1 above, the Safran and the Target are two out of the three largest suppliers in the overall market for the supply of THSA systems, with market shares in 2024 of [20-30]% and [40-50]% respectively, and a combined market share of [60-70]%. Apart from Parker, which is of a comparable size to Safran with a market share of [20-30]%, the remaining competitors, namely Moog, RTX and Eaton have considerably lower market shares.
- (157) The situation in the potential narrower market for the supply of THSA systems for civil aircraft is almost identical, as indicated in Table 2. This can be explained by the fact that out of the total value of USD [...] of the overall market for THSA systems in 2024, USD [...] referred to the segment for civil aircraft, with the military segment accounting for only USD [...].²⁹³
- (158) In the potential narrower market for the supply of THSA systems for large commercial aircraft, the Parties' position is significantly stronger, with a combined market share of over [90-100]% from 2021 to 2023, and [80-90]% in 2024, as shown in Table 3. All the remaining suppliers in this segment, namely Moog, Parker and RTX, represented collectively [10-20]% of the market in 2024. Notably, Parker, the Parties' main competitor in the overall market for the supply of THSA systems, has a market share of only [0-5]% in the supply for large commercial aircraft, indicating a focus on the supply of THSA systems for smaller types of aircraft.
- (159) In the potential market for the supply of THSA systems to military aircraft, the Parties' position is considerably lower compared to the civil sector, with a combined market share of [30-40]% in 2024, following the market leader, RTX, with a market share of [50-60]%, as shown in Table 4.
- (160) The above shows that the merged entity would become the dominant player in the overall market for the supply of THSA systems, as well as in the potential narrower markets for civil aircraft, and for large commercial aircraft.
- (161) Contrary to the Notifying Party's argument,²⁹⁴ the fact that the markets for the supply of THSA systems are bidding markets does not detract in the present case from the fact that market share data can provide good indications on the competitive dynamics in those markets. As shown in Table 1 to Table 4 above, the market shares of all competitors have been particularly stable throughout the last 4 years across all potential markets for the supply of THSA systems. This can be attributed to the fact that, as explained in paragraph (15), tenders for aerospace programmes are infrequent and, if won, they lead to the securing of supply contracts and the associated cash generation potential in the long term.
- (162) Indeed, in case *M.8658 – UTC / Collins*, the Commission noted that market shares in the market for the supply of THSA systems also reflect the cash generating potential of a supplier, which is vital in maintaining and further developing the business, since it requires funds.²⁹⁵ In the present case, the market investigation confirmed that addressing new THSA programmes requires significant capital

²⁹³ Form CO, Annex Ch. II S.2.4(ii).

²⁹⁴ Form CO, paragraph 304.

²⁹⁵ Case *M.8658 – UTC / Collins*, paragraph 227.

investments, which not all suppliers are able to make.²⁹⁶ One supplier noted in this regard that “[o]nly few suppliers have the capability and capacity to focus the amount [of] money and [resources] necessary to make a new THSA”,²⁹⁷ while another supplier submitted that “[l]arger volume programs may require industrialization and investment that some suppliers have not made or are not able to make”.²⁹⁸

- (163) It follows from the above that the Parties’ high combined market shares over the past 4 years are indeed reflective of their competitive strength in the market.
- (164) The Commission therefore considers that the Parties’ combined market shares are a first indicator that the Transaction would raise serious doubts as to its compatibility with the internal market, as regards (i) the overall market for the supply of THSA systems, (ii) the potential narrower market for the supply of THSA systems for civil aircraft, and (iii) within the civil segment, the potential narrower market for the supply of THSA systems for large commercial aircraft.

Closeness of competition

- (165) The Commission could not confirm the Notifying Party’s claim that the Parties are not close competitors in the supply of THSA systems.
- (166) *First*, as explained in more detail in paragraphs (66) to (68) above, contrary to the Notifying Party’s contentions, there is competition between suppliers of H-THSA and E-THSA systems at the stage where the aircraft is being designed. At this stage, in the context of technical discussions and joint research projects with airframers, THSA suppliers compete through the solutions they propose to airframers and seek to influence the aircraft design to favour their own products.
- (167) This competition takes place at the design stage and therefore precedes the stage of the tender of a THSA programme (by which stage the airframer has already decided whether to use E-THSA or H-THSA in their aircraft). As a result, a low meeting rate of the Parties in formal tenders would not be reflective of low competition intensity between them.
- (168) *Second*, although from the above it would have been expected that the Parties would generally not meet as competitors in formal tenders for THSA programmes, this is not the case. In the [...] THSA programmes²⁹⁹ that have been tendered since 2013, the Parties have competed in [...], namely in the tenders for [...].³⁰⁰ Notably, [...] related to an E-THSA system³⁰¹, which evidences [...], as is further detailed below.
- (169) *Third*, the fact that Safran and the Target currently have sales of exclusively E-THSA and H-THSA systems respectively is not reflective of the future competitive dynamics between them.

²⁹⁶ Questionnaire Q2, question C.30.

²⁹⁷ Questionnaire Q2, question C.30.1.

²⁹⁸ *Idem*.

²⁹⁹ Another [...] THSA projects were awarded in the same period through bilateral negotiations.

³⁰⁰ Form CO, Annex Ch.II S.2.6(iv).

³⁰¹ The type of THSA system [...] is not specified in Annex Ch.II S.2.6(iv). No supply contract has been awarded for this programme.

- (170) Given the general trend towards more electric aircraft,³⁰² the Target has [...] E-THSA systems. Accordingly, in the past 20 years, the Target has bid for [...] electric THSA programmes and has won [...].³⁰³ Although this programme was cancelled before it entered into production, the Target maintains ownership of the intellectual property for the E-THSA system it has developed.³⁰⁴
- (171) The clear majority of respondents to the Commission's market investigation confirmed the general trend towards more use of E-THSA systems in future generations of aircraft.³⁰⁵ When asked which THSA suppliers they would contact when developing a new aircraft, several airframers mentioned the Parties within their top 3 replies.³⁰⁶ Furthermore, a slight majority of competing suppliers replied that not all of their competitors would have the capacity, or the ability to develop the capacity, necessary to develop future THSA programmes.³⁰⁷ As explained in paragraph (162) above, this capacity is among others dependent on a supplier's financial strength, which is in turn reflected by its market shares.
- (172) It follows that the market is transitioning towards more electric THSA. As the largest supplier of THSA systems currently, the Target is well-positioned to continue playing a significant role in the future THSA systems market, which will be increasingly electric. In fact, as explained above, the Target has [...] in winning an E-THSA programme. Based on the foregoing, the Commission considers it likely that, absent the Transaction, the Target would have [...] expand into the E-THSA systems segment with good chances of succeeding, and thus compete even more closely with Safran's E-THSA systems business.
- (173) *Fourth*, Safran and the Target are the two main suppliers of THSA systems for large commercial aircraft, with a combined market share of [80-90]% in 2024, as shown in Table 3 above. While the Target is the clear leader with a share of [70-80]%, Safran is the only credible challenger with a market share of [10-20]%, while all remaining competitors account collectively for [10-20]%.
- (174) Importantly, Parker, which is one of the three larger THSA systems suppliers besides the Parties, has little activity in the supply of THSA systems to large commercial aircraft, focusing mainly on supplies to regional aircraft and business jets.³⁰⁸ The Commission does therefore not consider Parker a close competitor to the Parties.
- (175) The fact that Safran and the Target are the two main suppliers of THSA systems for large commercial aircraft is moreover not likely to change in the future, with the introduction of new large commercial aircraft. A clear majority of both airframers and competing suppliers indicated during the Commission's market investigation that incumbent suppliers of the THSA system for a given aircraft are not easily replaceable by the airframer when the next generation of that aircraft is introduced.³⁰⁹

³⁰² Form CO, paragraph 383.

³⁰³ *Idem*.

³⁰⁴ Form CO, paragraph 384.

³⁰⁵ Questionnaire 1, question D.A.A.B.4.

³⁰⁶ Questionnaire Q1, question E.A.A.1.

³⁰⁷ Questionnaire Q2, question C.30.

³⁰⁸ See Table 1 to Table 3 above. See also Form CO, Annex Ch. II. S.2.4.(ii).

³⁰⁹ Questionnaire Q1, question E.A.A.13.

- (176) THSA systems for large commercial aircraft, in turn, accounted for [...] % of the value of all THSA systems in 2024, and [...] % of the value of THSA systems in civil aviation,³¹⁰ the remainder within civil aviation being attributed to regional aircraft and business jets, where the Parties do not overlap. It follows that, even if the supply of THSA systems to large commercial aircraft were not considered a separate market, it is in any case the main driver of the overall market for THSA systems and of the market for THSA systems for civil aviation.
- (177) The Commission therefore considers that the Parties are close competitors in the supply of THSA systems, regardless of whether the relevant market in question is the overall market for the supply of THSA systems, the market for the supply of THSA systems to civil aircraft, or the supply of THSA systems to large commercial aircraft.
- (178) *Lastly*, as explained in paragraph (66) above, evidence from the Notifying Party's internal documents confirms that Safran considers itself as a close competitor of the Target, identifying the Parties as #1 and #2 suppliers of THSA systems, with the Target leading the market and Safran being the "[...]".³¹¹

Airframers' in-house capabilities

- (179) The Commission could further not confirm the Notifying Party's claim that the capabilities of certain airframers to produce their THSA systems in-house would pose a credible competitive constraint to the merged entity.
- (180) The Notifying Party submits in particular that Dassault and Boeing produce the THSA for some³¹² of their aircraft in-house.³¹³ The Notifying Party further submits that, when including in-house production in the market for the supply of THSA systems, Boeing would be the largest player in the overall market for the supply of THSA systems, with a "market share" of [30-40] %.
- (181) The Commission considers that, while some airframers have the technical capability to source in-house part of their demand for THSA systems, this is not reflective of the general situation among airframers.
- (182) A clear majority of airframers replied in the Commission's market investigation that they do not have the technical capacity to source in-house the manufacturing of THSA systems.³¹⁴ Airframers mentioned that constraints to starting or expanding in-house THSA systems manufacturing included the availability of specific engineering and manufacturing know-how, investments in specific precision machinery and testing equipment, as well as the availability of specialised personnel.³¹⁵ Responses from THSA systems suppliers were overall in line with

³¹⁰ Form CO, Annex Ch. II. S.2.4.(ii). The total value of THSA systems supplies to large commercial aircraft in 2024 was USD [...]. That same year, the value of THSA systems supplies to all civil aircraft was USD [...], while the value of all THSA systems (i.e. including the civil and military sectors) was USD [...].

³¹¹ Form CO, Annex 5.4(xxvi) - Actuation [...] – NSA, p. 28.

³¹² Dassault manufactures its THSA systems in-house for all its aircraft, with the exception of the Falcon 7X and 8X. Boeing manufactures its THSA systems in-house for its B737NG, B737MAX, B747, B767 and B777 platforms.

³¹³ Form CO, paragraph 425.

³¹⁴ Questionnaire 1, question E.A.A.9.

³¹⁵ Questionnaire 1, question E.A.A.9.2.

those of the airframers.³¹⁶ One THSA systems supplier explained that “[a]s THSA is a product that is typically sourced, airframers usually do not aim to have the detailed technical knowledge to develop and produce such components. They have enough knowledge to understand and integrate the component but the specific experience and knowledge is in the supply chain.”³¹⁷

- (183) The Commission therefore considers that, while a limited number of airframers could possibly be shielded to some extent from an increased market power of the merged entity due to their in-house THSA system capabilities, this would not represent a sufficient competitive constraint for the merged entity post-Transaction. This is because even those airframers with in-house THSA system capabilities still rely on third party suppliers for part of their demand. Moreover, such airframers cannot be considered as active (let alone leading) in the market for the supply of THSA systems, since their production is intended for captive use and is not accessible to the majority of airframers not possessing in-house THSA system capabilities. Accordingly, the in-house capabilities of certain airframers (i.e. Boeing and Dassault) should not be taken into account to assess the market power of the merged entity, since those in-house capabilities do not exercise a competitive constraint over the merged entity when supplying THSA systems to other airframers. Considering the constraints in starting or expanding airframers’ in-house THSA system capacity mentioned in paragraph (182) above, the Commission does not expect this to change as a result of the Transaction.

Entry or expansion of competitors

- (184) As mentioned in paragraph (153) above, the Notifying Party submits that, if faced with increased prices, airframers could sponsor entry of THSA systems suppliers. The Notifying Party further refers to a third-party study, indicating that with the general trend towards more electric aircraft, in the aerospace actuation sector there is “*opportunity for new entrants from other sectors, especially automotive where [they] currently supply many electrical actuators at very low cost*”.³¹⁸ This said, the Notifying Party submits that there has been no significant entry in the market for the supply of THSA systems in the past 5 years³¹⁹, nor is it aware of any undertaking likely to enter in the near future.³²⁰
- (185) The Commission’s market investigation confirmed that timely and sufficient entry of THSA systems suppliers is not likely, in case there were increased customer demand.
- (186) None of the respondents to the Commission’s market investigation submitted that they expected a new entrant.³²¹ As one airframer explained, “[...] *it is currently not the strategy of potential challengers to enter this market, which could be explained by the investments required*”.³²² Apart from the cost of the investments necessary, respondents mentioned as barriers to entry the complexity of THSA systems and the need to possess the appropriate technical capabilities, requirements relating to certification and compliance with regulations pertinent to the aerospace sector, the

³¹⁶ Questionnaire 2, question C.32.

³¹⁷ Questionnaire 2, question C.32.1.

³¹⁸ Counterpoint Report 2024, p. 130; see Form CO, paragraph 562.

³¹⁹ Form CO, paragraph 561.

³²⁰ Form CO, paragraph 562.

³²¹ Questionnaire 1, question E.A.A.14; Questionnaire 2, question C.37.

³²² Questionnaire 1, question E.A.A.14.1.

airframers' preference for incumbent firms with a strong track record and the increased liability risk.³²³ One respondent further submitted that “[t]he level of [resources] from [S]afran and the cumulated experience will make them unique on the market increasing the barrier for new comers”.³²⁴

- (187) On the basis of the foregoing, the Commission considers that sufficient and timely entry, as a means to offset the negative effects of the Transaction on competition in the market for the supply of THSA systems, is not likely.

Impact

- (188) The Commission's market investigation revealed that several market participants expect that the Transaction will have negative effects on at least some of the parameters of competition in the market for the supply of THSA systems.
- (189) With regard to airframers, although a slight majority expects the intensity of competition in the market for the supply of THSA systems to remain the same after the Transaction, a sizeable minority expects it to decrease.³²⁵ A clear majority of airframers, however, expects that as a result of the Transaction prices for the supply of THSA systems will increase.³²⁶ One airframer explained that this will be due to a “[l]ower competition environment”.³²⁷ Airframers do generally not expect any impact of the Transaction on quality or innovation in this market.³²⁸
- (190) As regards competitors, a majority expects that intensity of competition on the market for the supply of THSA systems will decrease as a result of the Transaction.³²⁹ One competitor commented that “*Safran would be dominating the market and with its commercial power could outbid other competitors*”.³³⁰ Their responses were inconclusive in relation to the Transaction's impact on prices, innovation and quality.³³¹
- (191) Moreover, a considerable number of both airframers and competitors submitted that the Transaction would have a negative impact on their company directly.³³²

Conclusion

- (192) In light of the above considerations, the Commission concludes that the Transaction raises serious doubts as to its compatibility with the internal market (i) in the overall market for the supply of THSA systems, as well as (ii) in the narrower potential market for the supply of THSA systems to civil aircraft, and (iii) the narrower potential market for the supply of THSA systems to large commercial aircraft.³³³ This is due to the horizontal non-coordinated effects of the

³²³ Questionnaire 1, question E.A.A.12; Questionnaire 2, question C.35.

³²⁴ Questionnaire 2, question C.31.1.

³²⁵ Questionnaire 1, question F.B.1-1.

³²⁶ *Ibid.*

³²⁷ Questionnaire 1, question F.B.2.

³²⁸ Questionnaire 1, question F.B.1.

³²⁹ Questionnaire 2, question C.38.-1

³³⁰ Questionnaire 2, question C.38-2.

³³¹ Questionnaire 2, question C.38.-1

³³² Questionnaire 1, question F.A.1; Questionnaire 2, question J1.

³³³ As regards the potential worldwide market for the supply of THSA systems in the military segment, the Commission has no indications that the Transaction would raise serious doubts as to its

Transaction on these markets, and in particular because (i) the Parties' high combined market shares; (ii) the fact that the Parties are 2 out of the 3 large THSA system suppliers and would thus face limited competition in the foreseeable future; (iii) the closeness of competition between the Parties; and (iv) the existence of significant barriers to entry.

7.1.3. *Valves for space launchers*

7.1.3.1. Market shares

- (193) Safran supplied valves for ESA's already developed Ariane and Vega space launcher programmes. The Target only supplies valves for the Ariane space launcher programme, with no other activities in valves for space launchers.³³⁴ Further, [...], Safran has been also supplying valves to commercial customers, such as [...].³³⁵
- (194) During the past three years, [...]. This is the consequence of the fact that Ariane 5 was retired as a European heavy-lift launcher in 2023 and has been replaced by Ariane 6.³³⁶
- (195) For the Vega programme, Safran is [...].³³⁷ For the Vega-C launcher, currently in exploitation, [...].³³⁸ The Target does not supply valves for any the Vega programmes.³³⁹ Safran accounts for [...], there being several other valves suppliers providing valves for the Vega launchers, some of which have been designated through direct negotiation and not through a competitive tender, such as APR.³⁴⁰ Other suppliers are [...].³⁴¹
- (196) Thus, the Parties' activities overlap only in respect to Ariane 6 and its predecessor Ariane 5, leading to affected markets on the overall market for valves for space launchers for ESA programmes and on its plausible segmentation into cryogenic and non-cryogenic valves.

On the overall market for valves for space launchers for ESA developed programmes, at EEA level, the Parties have a combined market share below [30-40]%. Considering a narrower segment, the Parties' combined market share is estimated to be below [20-30]% for cryogenic valves and below [60-70]% for non-cryogenic valves.³⁴²

compatibility with the internal market. In any case, even if the Commission were to find such serious doubts, the proposed remedy described in Section 8 would remove them.

³³⁴ Form CO, para. 1185.

³³⁵ Safran is also supplying other types of valves, such as low-cost valves – electric regulation valve and electro valve box as part of [...] and propellant assisted electro valve as part of [...] (Form CO, para. 1180).

³³⁶ Form CO, para. 1175.

³³⁷ Form CO, para. 1179. Safran's sale of valves for [...] (e.g. reaching EUR [...] in 2023).

³³⁸ Form CO, para. 1211.

³³⁹ Form CO, para. 1185.

³⁴⁰ Non-confidential minutes for a call held with a market participant on 18.07.2024 and Questionnaire 3, question D.1.

³⁴² Form CO, Section 7.5., summary of the affected markets.

- (197) On a market for valves for space launchers wider than EEA, the Parties' combined market share is estimated to be below [10-20]% worldwide, considering both an overall market and also possible further segmentations (i.e. cryogenic vs non-cryogenic valves).³⁴³
- (198) In general, and as further detailed below, there is a significant number of valves suppliers able to supply European customers. Such suppliers include the ones mentioned above, as well as established players such as Cicor, Eaton, L3Harris, Lee Aerospace, RAM Aviation Space & Defence, Vacco, Valcor, and Valve Tech and new entrants, such as deltaVision and Demaco.³⁴⁴

7.1.3.2. The Notifying Party's views

- (199) The Notifying Party submits that the Transaction does not raise competition concerns on the market for valves for developed ESA launcher programmes nor for prospective ESA launcher programmes. For developed ESA launcher programmes, the Notifying Party argues that suppliers have already been selected and, thus, the Transaction will not have an impact of these programmes.³⁴⁵ For prospective ESA launcher programmes, there are sufficient number of alternative suppliers both European and non-European, long established as well as new entrants.³⁴⁶

7.1.3.3. The Commission's assessment

- (200) *First*, in respect of developed ESA launcher programmes (Ariane and Vega programmes), the Commission observed that valves suppliers for such programmes have already been selected, based on the *juste retour* principle and on ESA's Best Practices and can only be changed based on very strict conditions. Additionally, it appears that there is no new ESA space programme similar to the developed programmes (e.g. for heavy-lift launchers) that will materialise in the upcoming years where suppliers of valves can be selected.³⁴⁷
- (201) *Second*, in respect of prospective ESA launcher programmes, the market investigation indicated that European launch service companies will have access to a sufficient base of valves suppliers, both European and non-European, such as Omnidea, Nammo, Test Fuchs, Frentech, OMB Salery, Marotta, Valcor, Moog, Precision Fluid Controls, Kepner, The Lee Co, Stohr, Siera, Shiphram, and Vacco.³⁴⁸ This was also illustrated during the European Launcher Challenge industrial day in November 2024, when seven components' suppliers, including of valves presented their products. These include Test Fuchs, Sabca, Almatech, Invent, Beyond Gravity, Sener, and SoftinWay.³⁴⁹

³⁴³ Form CO, Section 7.5., summary of the affected markets.

³⁴⁴ Form CO, paras. 1213 and 1214.

³⁴⁵ Form CO, para. 1204.

³⁴⁶ Form CO, paras. 1199 and 1210.

³⁴⁷ Questionnaire 3, question E.3. ESA has recently commissioned a study on the development of a very heavy lift reusable launcher capable of delivering up to 60 tonnes of payload into low Earth orbit. More details, available on ESA's website:

<https://esastar-publication-ext.sso.esa.int/ESATenderActions/details/139595>.

This is still at an early stage, as currently only a study has been commissioned.

³⁴⁸ Questionnaire 4, question F.6-1.

³⁴⁹ See "The scene is set for the European Launcher Challenge" dated 13 November 2024 on ESA's website, available at: [ESA - The scene is set for the European Launcher Challenge](#). It is not clear whether all of these supply valves for space launchers.

- (202) *Third*, the market investigation indicated that most suppliers provide a large variety of valves for space launchers, including cryogenic and non-cryogenic valves, similar in characteristics to those supplied by the Parties.³⁵⁰ Further, most of the suppliers that expressed their opinion clarified that they have sufficient capacity to increase their production of valves in case of an increase in demand.³⁵¹
- (203) *Finally*, the market investigation confirmed that there has been new entry on the market for valves in the past five years, by European start-ups, such as deltaVision, and by non-European companies, such as Crane.³⁵² In addition, new entrants are expected in the next years at global level.³⁵³
- (204) As a result, the Commission concludes that it is unlikely that the Transaction would result in significant negative impact in any of the plausible markets for valves for space launchers.

7.2. Non-horizontal effects

7.2.1. Analytical framework

- (205) The legal test for the assessment of non-horizontal mergers is set out in the Merger Regulation and the Commission's Guidelines on the assessment of non-horizontal mergers ("Non-horizontal Merger Guidelines").³⁵⁴ There are two broad types of non-horizontal mergers: vertical and conglomerate mergers.³⁵⁵ There are also two main ways in which a non-horizontal merger may significantly impede effective competition: through non-coordinated effects and through coordinated effects.³⁵⁶ Non-coordinated effects principally may arise when non-horizontal mergers give rise to foreclosure – i.e., where actual or potential rivals' access to supplies or markets is hampered or eliminated as a result of the merger.³⁵⁷ Coordinated effects arise where the merger changes the nature of competition in such a way that firms that previously were not coordinating their behaviour, are now significantly more likely to coordinate to raise prices or otherwise harm effective competition.³⁵⁸
- (206) Specifically with respect to vertical relationships, in its assessment of non-coordinated effects, the Commission analyses whether a merger leads to anti-competitive input foreclosure. Two forms of vertical foreclosure can be distinguished: (i) where the merger is likely to raise the costs of downstream rivals by restricting their access to an important input (input foreclosure), and (ii) where the merger is likely to foreclose upstream rivals by restricting their access to a sufficient customer base (customer foreclosure).³⁵⁹ On both types of vertical foreclosure, the Commission examines whether the merged entity would have, as a result of the merger, the ability to foreclose substantially access to inputs or to a sufficient customer base, and whether it would have the incentive to engage into

³⁵⁰ Questionnaire 3, questions B.2 and F.5; and Questionnaire 4, question F.6.

³⁵¹ Questionnaire 3, questions C3 and F.6.

³⁵² Questionnaire 3, question F.7. and Questionnaire 4, question F.1.

³⁵³ Questionnaire 4, question F.1 and F.2.

³⁵⁴ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18.10.2008, p. 6.

³⁵⁵ Non-horizontal Merger Guidelines, Sections IV. and V.

³⁵⁶ Non-horizontal Merger Guidelines, paragraph 17.

³⁵⁷ Non-horizontal Merger Guidelines, paragraph 18.

³⁵⁸ Non-horizontal Merger Guidelines, paragraph 19.

³⁵⁹ Non-horizontal Merger Guidelines, paragraph 30.

these inputs foreclosure or customer(s) (i.e., whether this would be a profitable behaviour). The Commission then examines whether a foreclosure strategy would have a significant detrimental effect on competition downstream.³⁶⁰ These conditions are cumulative.³⁶¹

7.2.2. *Vertical effects*

- (207) Certain vertical relationships resulting from the Transaction, i.e., between products that are at different levels of the supply chain,³⁶² give rise to vertically affected markets. The decision will address these vertical relationships in turn: the supply of TRAS and the supply of thrust reversers (in Section 7.2.2.1), the supply of wiring systems and the supply of actuation products, i.e., of THSA systems, PFCA systems, SFCA systems, and TRAS (in Section 7.2.2.2), and (iii) the supply of valves for space launchers and prime contracting for ESA space launchers (in Section 7.2.2.3).

7.2.2.1. TRAS (upstream) and thrust reversers (downstream)

7.2.2.1.1. Market shares

- (208) As noted in paragraph (145) above, market shares provide a useful first indication of the market structure and of the competitive importance of the merging parties and their competitors. Table 5 below reflects competition in all plausible markets for the supply of TRAS, and Table 6 below reflects competition in all plausible markets for the supply of thrust reversers.³⁶³

³⁶⁰ Non-horizontal Merger Guidelines, paragraph 32.

³⁶¹ See Judgement of the General Court in case T-370/17 – KPN v Commission, paragraph 119.

³⁶² Non-horizontal Merger Guidelines, paragraph 4.

³⁶³ The market shares included refer to the Parties' merchant sales only. The Commission did not take into account the Parties' shares considering both merchant and captive/in-house sales as in-house sales do not impose a sufficient competitive constraint on the Parties, or their rivals, in the merchant market (consistent with the Commission's findings, for example, in paragraphs (179)-(183) above). The Transaction results in a previously vertically integrated supplier (the Target, a supplier of H-TRAS) to cede part of its activity to a rival and customer (Safran). As a result, existing sales that currently are considered captive will, following the Transaction, become sales in the merchant market (i.e., sales from Safran to Collins). In any event, the impact of this change is captured in the substantive assessment of the Transaction, as the sales from the Target to RTX that currently are captive, with the Transaction, could be used to foreclose RTX (the seller).

Table 5 - Market shares for the supply of TRAS in 2024 (in volume)

	Safran	Target	Combined	Woodward	Honeywell	Nordam	OMA	Liebherr
TRAS (overall market) (Worldwide)	[0-5]%	[0-5]%	[0-5]%	[90-100]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
By segment of demand								
TRAS Civil (Worldwide)	[0-5]%	[0-5]%	[0-5]%	[90-100]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
TRAS Military (Worldwide)	[0-5]%	[10-20]%	[10-20]%	[50-60]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
TRAS Military (EEA)	[0-5]%	[90-100]%	[90-100]%	N.A.	[0-5]%	[0-5]%	[0-5]%	[0-5]%
By type of aircraft								
Large Commercial Aircraft (Worldwide)	[0-5]%	[0-5]%	[0-5]%	[90-100]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Regional Aircraft (Worldwide)	[0-5]%	[0-5]%	[0-5]%	[90-100]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Business jets (Worldwide)	[0-5]%	[0-5]%	[0-5]%	[70-80]%	[0-5]%	[10-20]%	[0-5]%	[0-5]%
By technology								
H-TRAS (Worldwide)	N.A.	[0-5]%	[0-5]%	[90-100]%	[0-5]%	[5-10]%	N.A.	[0-5]%
E-TRAS (Worldwide)	[90-100]%	N.A.	[90-100]%	N.A.	[0-5]%	N.A.	N.A.	N.A.

Source: Form CO, Annex Ch. II. S.2.4(ii) – Market shares

Table 6 - Market shares for the supply of thrust reversers in 2024 (in volume)

	Safran	Target	Combined	Spirit	Mras	Nordam
Thrust reversers (overall market) (Worldwide)	[20-30]%	N.A.	[20-30]%	[50-60]%	[5-10]%	[0-5]%
By segment of demand						
Civil (Worldwide)	[30-40]%	N.A.	[30-40]%	[50-60]%	[5-10]%	[0-5]%
Military (Worldwide)	[10-20]%	N.A.	[10-20]%	[50-60]%	[10-20]%	N.A.
<i>Military (EEA)</i>	[90-100]%	N.A.	[90-100]%	[0-5]%	[0-5]%	[0-5]%
By type of aircraft						
Large Commercial Aircraft (Worldwide)	[0-5]%	N.A.	[0-5]%	[90-100]%	[5-10]%	N.A.
Regional Aircraft (Worldwide)	[30-40]%	N.A.	[30-40]%	[0-5]%	[60-70]%	N.A.
Business jets (Worldwide)	[80-90]%	N.A.	[80-90]%	[5-10]%	N.A.	[5-10]%

Source: Form CO, Annex Ch. II. S.2.4(ii) – Market shares

7.2.2.1.2. The Notifying Party's views

- (209) The Notifying Party submits that the Transaction does not give rise to any vertical concerns in relation to TRAS and thrust reversers³⁶⁴ for the following reasons: (i) because market shares in certain plausible narrower markets do not capture fully the competitive dynamics of these markets, that are characterised by large and infrequent tenders;³⁶⁵ (ii) because Safran's market shares in the supply of thrust reversers will decline from [30-40]% in 2020 to [10-20]% in 2027;³⁶⁶ (iii) with regard to potential input foreclosure concerns, because the Target's H-TRAS are only supplied in-house (to RTX) and to Safran for incorporation in their respective thrust reversers and, therefore, no third-party thrust reverser supplier could be affected by the Transaction, and because existing customer programmes serviced by RTX are contractually protected;³⁶⁷ (iv) with regard to potential concerns on customer foreclosure of rival TRAS suppliers, because existing contracts prevent Safran from making any changes in the TRAS supplier for the duration of those

³⁶⁴ Form CO, paragraph 746.

³⁶⁵ Form CO, paragraph 748.

³⁶⁶ Form CO, paragraph 749.

³⁶⁷ Form CO, paragraphs 758-762.

contracts (i.e., Safran that is mainly supplied by Woodward for H-TRAS would not be able to start using H-TRAS from the Target for those contracts),³⁶⁸ and, for future contracts, because the Transaction replicates the existing market structure (i.e., where a rival TRAS supplier such as Woodward could be foreclosed by the Target by supplying almost entirely to its in-house division, this would now occur with Safran being supplied by the Target, leaving RTX in the same position that Safran was before the Transaction);³⁶⁹ and (v) with respect to markets for military applications, because the competitive dynamics for the supply of TRAS and thrust reversers to military are the same as for civil aircraft,³⁷⁰ and there are sufficient actual or potential rivals on either markets to prevent any foreclosure concerns.³⁷¹

7.2.2.1.3. The Commission's assessment

- (210) As discussed in Sections 6.1.1.1.4 and 6.1.1.2, TRAS is a product that is incorporated into thrust reversers and that is necessary to set in motion the cascades, doors or target thrust reversers that enable an aircraft to decelerate more quickly during landing.
- (211) The Commission first notes that, when considering competition in the wider market that includes all TRAS suppliers, and a downstream market that includes all thrust reversers, with a [0-5]% combined market share in TRAS (i.e., Safran's [0-5]% market share and the Target below [0-5]% market share) and [20-30]% in the thrust reverser market (sales from Safran), the Transaction is eligible for treatment under the Notice on Simplified Procedure.³⁷²
- (212) However, when considering narrower markets, the acquisition of the Target's H-TRAS activities leads to the creation of certain affected markets. These are (i) the (upstream) supply of TRAS to EEA military aircraft, where the Parties had [90-100]% market share in 2024 (despite a [10-20]% market share worldwide), and the (downstream) supply of thrust reversers to military aircraft, where the Parties had a [90-100]% in the EEA market in 2024 (despite a market share of [10-20]% in the worldwide market), and (ii) the (upstream) supply of TRAS in the overall market, or in the sub-segments of civil aircraft, or in TRAS for regional aircraft and for business jets, in H-TRAS (all of which the Parties have a market share below [0-5]% in 2024), and the (downstream) supply of thrust reversers for regional aircraft (where, in 2021, the Parties had a market share of [50-60]%, and in 2024 the Parties had a market share of [30-40]%) and of business jets (where, the Parties had a share of [80-90]% in 2024).
- (213) On the one hand, with respect to the vertical relationship arising from the supply of TRAS for incorporation in thrust reversers used in military aircraft, the

³⁶⁸ Form CO, paragraphs 765-767.

³⁶⁹ Form CO, paragraphs 768-769.

³⁷⁰ Form CO, paragraph 773.

³⁷¹ Form CO, paragraph 774.

³⁷² Commission Notice on a simplified procedure for treatment of certain concentrations under Council Regulation (EC) No 139/2004, OJ C 160, 5.5.2023, point 5(d)(ii)(aa). The business Safran is acquiring consists of the Target's H-TRAS activities – RTX is not selling its E-TRAS business, nor its thrust reverser business, and RTX [...] supplies these two products in-house to its nacelle business. Safran sells approximately [...] of the E-TRAS it produces to the merchant market (the remainder is supplied to its internal divisions of thrust reversers and for incorporation in Safran's own nacelle business). RTX in-house E-TRAS volumes are [...] than Safran's own E-TRAS volumes. Form CO, paragraph 688 and fn. 307. See also Form CO, Annex Ch. II. S.2.4(ii) – Market shares

Commission finds that it is unlikely that the merged entity will be able to either foreclose inputs or to engage into customer foreclosure as a result of the Transaction for the following reasons.

- (214) *First*, whilst in this narrower possible segment the Parties' market shares in the upstream and downstream markets are both [90-100]%, this represents a single aircraft programme for which supply has been awarded, namely the Airbus 330MRTT.³⁷³ The Commission finds that these market shares represent previous competition *for* the market, rather than competition *in* the market. The Commission also notes that the Airbus 330MRTT will [...],³⁷⁴ and that Airbus has announced publicly that it intends to develop a major evolution of the A330 MRTT (the MRTT+) that will involve changes in the engines (and, as a result, may involve changes in the TRAS and thrust reversers included in the new design).³⁷⁵ Therefore, the Commission considers that the indicative value of such market shares needs to be considered under that context.
- (215) *Second*, the Commission therefore investigated whether these shares reflect the merged entity's future ability to exercise market power in future supply contracts. The Commission investigated whether the merged entity could exercise such market power by ensuring that the TRAS manufactured by the Target are not made available to rival thrust reverser suppliers (which would then hinder their success in selling to military airframers). The Commission finds that, as confirmed by the market investigation, suppliers of TRAS with a presence in other segments of demand (namely in the supply of civil aircraft) are well suited to compete against the merged entity in future military programmes, irrespective of the concrete product market definition.³⁷⁶ Therefore, even on the assumption of insufficient demand-side and supply-side substitutability between the civil and military segments for the purposes of market definition, at least there is a credible threat of potential entry into the supply of TRAS to military aircraft by operators active in the civil aircraft segments. It should be noted that the results of the market investigation indicated that rival TRAS suppliers would not be limited in their ability to expand their capacity to meet new demand.³⁷⁷ Finally, the market investigation also confirmed that, following the Transaction, thrust reverser suppliers will have a sufficient number of alternative suppliers of TRAS to purchase from should Safran internalise all of its purchases of TRAS from the Target.³⁷⁸ These factors indicate that the merged entity is strongly limited in its ability to decide not to deal with its competitors in the thrust reverser market (and this would include RTX's retained thrust reverser business) or to increase prices for TRAS used by rival thrust reverser suppliers in military aircraft. It follows that

³⁷³ Form CO, fn. 310. As indicated in paragraph (83) above, most military aircraft do not incorporate TRAS and thrust reversers.

³⁷⁴ See Form CO, Annex Ch. II. S.2.4(ii) – Market shares.

³⁷⁵ See <https://www.airbus.com/en/newsroom/stories/2024-09-a330-mr-tt-the-evolution-of-the-worlds-leading-air-to-air-refuelling-tanker>. [...] (Form CO, Annex Ch. III. S.3.1 - TRAS bidding data). It is currently uncertain whether changes to the design of the MRTT+ will require new TRAS and thrust reversers, or whether these products will once more be derived from the civil counterpart of this aircraft (as in the previous generation A330 MRTT with the A330 neo).

³⁷⁶ See responses to Questionnaire 1, Question E.B.A.3, and responses to Questionnaire 2, Question D.13.

³⁷⁷ See responses to Questionnaire 1, Question E.B.A.6, and responses to Questionnaire 2, Question D.16.

³⁷⁸ See responses to Questionnaire 1, Question E.B.A.7, and responses to Questionnaire 2, Question D.17.

Safran's capability to pursue an input foreclosure strategy with respect to TRAS used in military aircraft is unlikely to result in any anti-competitive foreclosure.

- (216) *Third*, with respect to the potential customer foreclosure strategy arising from Safran's large market share in the supply of thrust reversers for military aircraft in the EEA, based on the results of the market investigation, the Commission notes that the Target already supplies TRAS to Safran for the thrust reversers the latter supplies for use in EEA military aircraft. Further, a majority of respondents to the market investigation indicated that, in the context of future contracts relating to military aircraft, rival TRAS suppliers would have sufficient alternative manufacturers of thrust reversers to sell their products to if Safran were to internalise all of its purchases of TRAS from the Target for EEA military.³⁷⁹ In the conservative scenario in which the product market is limited to the sale of TRAS and thrust reversers to EEA military, this indicates that TRAS rivals potentially foreclosed from the EEA military market will be able to remain active in other segments of the market (such as in the sale to civil aircraft) and (re)enter the EEA military market, or compete in future tenders for EEA military. This further suggests, as indicated above, that competition in the supply of TRAS and thrust reversers in the military segment was *for* the market, rather than *in* the market. As a result, the Commission finds that it is unlikely that Safran would be able to pursue a customer foreclosure strategy following the Transaction.
- (217) In sum, the Commission finds that, following the Transaction, Safran will lack the ability to pursue input or customer foreclosure strategies with respect to the supply of TRAS and thrust reversers to EEA military aircraft. In the absence of the ability to engage in foreclosure, it is not necessary to examine whether Safran would have an incentive, and whether any such strategy would have ultimately a detrimental effect on competition.
- (218) On the other hand, with respect to the supply of TRAS (in the overall market or in any sub-segments thereof) and the supply of thrust reversers for regional aircraft and for business jets, the Commission also finds that it is unlikely that Safran could pursue any input or customer foreclosure strategies. On a potential input foreclosure strategy, as indicated in Table 5 above, the Parties' combined market shares for the supply of TRAS for civil aircraft in the merchant market are very small (below [0-5]%), as most of their sales are internalised. This indicates that third party thrust reverser suppliers do not rely to an appreciable extent on the Parties' TRAS for incorporation in their thrust reversers. As a result, Safran will lack the ability to engage in an input foreclosure strategy and will face, instead, strong competitive pressure from Woodward. Further, the factors identified in paragraph (215) are also applicable to this hypothetical foreclosure strategy: rival suppliers of TRAS will have the ability to expand to meet new demand, and thrust reverser suppliers will have sufficient alternatives.
- (219) Similarly, on a potential customer foreclosure strategy, for the reasons set out in paragraph (216), the Commission finds that, despite the merged entity's important market shares in certain segments of demand (in thrust reversers for regional aircraft and business jets), TRAS suppliers have sufficient alternative manufacturers of thrust reversers to sell their products if the merged entity internalises all of its purchases of TRAS. This indicates that suppliers such as

³⁷⁹ See responses to Questionnaire 1, Question E.B.A.9, and responses to Questionnaire 2, Question D.18.

Woodward, Liebherr or Nordam could find alternative manufacturers of thrust reversers – either for these specific types of aircraft, or in large commercial aircraft – to prevent a customer foreclosure strategy. Therefore, the Commission finds that the merged entity does not have the ability to pursue a customer foreclosure strategy that would ultimately result in anti-competitive foreclosure.

- (220) As a result, the Commission finds that, following the Transaction, Safran will lack the ability to pursue input or customer foreclosure strategies with respect to the supply of TRAS (in any of its potential sub-segmentations) and thrust reversers for use namely in regional aircraft and business jets. In the absence of the ability to engage in foreclosure, it is not necessary to examine whether Safran would have an incentive, and whether any such strategy would have ultimately a detrimental effect on competition.
- (221) The Commission's finding of the merged entity not having the ability to engage in vertical foreclosure strategies with respect to the supply of TRAS and thrust reversers is confirmed by the responses received in the market investigation on the impact of the Transaction. Respondents generally indicated that the intensity of competition, prices, quality and innovation would remain the same following the Transaction.³⁸⁰ As a result, the Commission concludes that it is unlikely that the Transaction would result in a significant negative impact in any of the plausible alternative relevant markets for the supply of TRAS and for the supply of thrust reversers.

7.2.2.2. Aerospace wiring systems (upstream) and actuation products (downstream)

7.2.2.2.1. Market shares

- (222) Safran supplies general wiring harnesses for the fuselage, the pylons, the tailplane and the wings. Safran sells limited quantities of harnesses for use in flight control actuation. Safran is active in the supply of the aircraft wiring systems to airframers. Safran is also active, to a more limited extent, in the supply of harsh environment wiring systems.³⁸¹ The Target does not supply wiring systems.
- (223) Wiring systems are input of actuation products: THSA systems, PFCA systems, SFCA systems, TRAS, etc., to a lesser or greater extent, use specific wiring to establish electrical connections for data or power within the products, and to connect with other devices in an aircraft.
- (224) As a result, the Transaction gives rise to vertically affected markets due to Safran's position in wiring systems (the upstream products), and as a result of the combined market shares of the Parties in actuation products (the downstream products).
- (225) Safran and its rivals' market shares in the wider markets for the supply of wiring systems are represented in Table 7 below.³⁸²

³⁸⁰ See responses to Questionnaire 1, Question F.E.1, and responses to Questionnaire 2, Question D.20.

³⁸¹ Form CO, paragraph 941. Harsh environment wiring systems are not relevant to the assessment of the Transaction because only general environment harnesses are used in flight control actuation systems.

³⁸² Safran had negligible sales of general environment harnesses for integration in flight control actuation systems. Safran sold USD [...] in general environment harnesses to the Target, and USD [...] to RTX. [...]. These sales constitute a very low share of demand in the aerospace wiring systems market (below [0-5]%) Safran itself relies on third-party suppliers for its actuation products. The

Table 7 – Aerospace wiring systems market shares in 2024 (in value)³⁸³

	Wiring Systems (overall worldwide market)	General Environment Wiring Systems (worldwide)
Safran	[30-40]%	[30-40]%
Latecoere	[10-20]%	[10-20]%
GKN	[5-10]%	[5-10]%
Amphenol	[5-10]%	[5-10]%
RTX	[0-5]%	[0-5]%
Ducommun	[0-5]%	[0-5]%
Others	[30-40]%	[30-40]%

Source: Form CO, Annex Ch. II. S.2.4(ii) – Market shares (as revised in the response to RFI 11).

- (226) Further, when considering the relevant markets in wiring systems (i) by segment of demand, Safran has a market share of [30-40]% in the supply of wiring systems to civil aircraft, and of [10-20]% in the supply of military aircraft, (ii) with respect to Safran’s market shares according to the type of aircraft, Safran has a [50-60]% market share in large commercial aircraft, a [5-10]% share in regional aircraft, a [5-10]% share in business jets, and a [10-20]% share in EEA military aircraft; and (iii) with respect to the end-application, Safran has a market share below [0-5]% in the sale of wiring systems to flight control actuation systems (THSA, PFCA and SFCA).
- (227) With respect to the downstream actuation products that could be affected by the Transaction, the Commission refers to Tables 1 to 6 above concerning the supply of THSA systems and TRAS, as well as the market share data in Section 7.2.3 below concerning the supply of PFCA systems and SFCA systems.

7.2.2.2.2. The Notifying Party’s views

- (228) The Notifying Party submits that Safran will not be able to engage in an input foreclosure strategy because (i) wiring systems represent a negligible share of the total cost of an actuation product, (ii) existing programmes are safeguarded by contracts and future programmes will be subject to competitive tenders, and (iii) the selection of the wiring system supplier takes place after the selection of the actuation system, making a foreclosure strategy ineffective.³⁸⁴ Particularly with respect to flight control actuation systems, the Notifying Party submits that (i) wiring systems are not an important input,³⁸⁵ (ii) Safran does not have market power in the upstream market with a [30-40]% share of supply,³⁸⁶ (iii) Safran

Commission therefore finds that it is not necessary to address the possible sub-segmentations of the wiring market – by segment of demand or by type of aircraft – as potential shares in a narrower segment of the market would not translate into sales of the actuation products that go into that segment of demand.

³⁸³ The Notifying Party submits that volume market shares are not relevant to the assessment of competition in the supply of wiring systems, as prices of harnesses differ significantly according to the length of a given wiring system. See Form CO, paragraph 954.

³⁸⁴ Form CO, paragraph 957.

³⁸⁵ Form CO, paragraph 962.

³⁸⁶ *Ibid.*

would have no incentive to pursue input foreclosure as evidenced by its behaviour prior to the Transaction (where Safran also had a presence in flight actuation systems),³⁸⁷ and (iv) that any putative foreclosure would not impact effective competition due to the negligible share of cost that wiring systems represent in a flight actuation product.³⁸⁸

- (229) With respect to customer foreclosure, the Notifying Party submits that actuation systems combined represent less than [5-10]% of the total demand for wiring systems (the Parties' combined flight actuation systems represent a share of demand of wiring systems significantly below [0-5]%).³⁸⁹ Specifically with respect to flight control actuation systems, the Notifying Party submits that (i) the Target is not an important customer,³⁹⁰ (ii) Safran's own actuation products rely heavily in third-party harness suppliers, and (iii) a putative customer foreclosure strategy would not have anti-competitive effects.³⁹¹ Finally, the Notifying Party submits that these factors are present to a greater extent when individual actuation products are considered (THSA systems, PFCAs systems, etc.).³⁹²

7.2.2.2.3. The Commission's assessment

- (230) The Commission finds it unlikely that the vertical relationship between the supply of aerospace wiring systems, and the supply of any actuation product, will result in any type of input or customer foreclosure as a result of the Transaction.
- (231) With regard to input foreclosure, aerospace wiring systems are a necessary input for any of the actuation products supplied by the Parties and their rivals. However, the Commission finds that, for the following reasons, Safran does not have a significant degree of market power in the supply of aerospace wiring systems, such that it would be able to pursue an input foreclosure strategy.
- (232) *First*, Safran's market share in the supply of aerospace wiring systems ([30-40]% in the overall market for aerospace wiring systems and [30-40]% in general wiring harnesses in 2024) is below the level that would typically indicate the existence of market power, unless other factors are present (such as the existence of weak competitors, or capacity constraints, or a differentiating element of Safran's products).³⁹³ The Commission therefore assessed whether factors exist that would enable Safran to act to an appreciable extent independently of its customers and rivals. The market investigation confirmed that, despite having a higher share relative to its rivals, Safran faces significant competition in the supply of aerospace wiring systems: customers of wiring systems (both suppliers of actuation products and airframers) confirmed the existence of a large number and diverse set of companies that would be relevant for future supply relationships in addition to Safran.³⁹⁴ Rival suppliers of aerospace wiring systems indicated that the existing

³⁸⁷ Form CO, paragraph 963.

³⁸⁸ Form CO, paragraph 964.

³⁸⁹ Form CO, paragraph 958.

³⁹⁰ Form CO, paragraph 965. The Target purchased USD [...] of wiring systems in 2023, representing [...]% of the overall wiring systems market, and [...]% of the general environment wiring systems segment.

³⁹¹ Form CO, paragraph 965.

³⁹² Form CO, paragraph 966.

³⁹³ See Horizontal Merger Guidelines, paragraph 17.

³⁹⁴ See responses to Questionnaire 1, Question E.B.2, and responses to Questionnaire 2, Question G.6.

level of competition is very high,³⁹⁵ and that supplier selection is very cost-sensitive.³⁹⁶ Respondents in the market investigation also confirmed that manufacturers of THSA systems, PFCA systems, SFCA systems, and TRAS would have a sufficient number of aerospace wiring system suppliers available if Safran were to decide to foreclose access to its own wiring systems following the Transaction.³⁹⁷

- (233) *Second*, respondents in the market investigation indicated that there are no significant constraints preventing a supplier of aerospace wiring systems to expand its capacity to meet new demand.³⁹⁸
- (234) These factors indicate that Safran will not have the ability to negatively affect the overall availability of aerospace wiring systems for use in actuation products. As a result, the Commission finds that Safran will not be able to pursue an input foreclosure strategy that could result in anti-competitive foreclosure.
- (235) With respect to customer foreclosure, for the following reasons, the Commission finds that the high market shares in certain segments of aerospace wiring systems demand – for example, the Parties’ combined market shares of [60-70]% in the overall supply of THSA systems, [60-70]% in the supply of THSA systems to civil aircraft, [80-90]% in the supply of THSA systems for large commercial aircraft, and [90-100]% in TRAS for EEA military aircraft, – are not sufficient to enable Safran to pursue a customer foreclosure strategy foreclosing rival aerospace wiring system suppliers.
- (236) *First*, as indicated by the Notifying Party, the share of aerospace wiring system demand represented by actuation products – i.e., of all the wiring systems going into actuation products (THSA, PFCA, SFCA, TRAS and utility actuation), of all suppliers active in the field – is very limited. Actuation products represent a small fraction of the business of wiring systems suppliers. As a result, a customer foreclosure strategy pursued by Safran in one the market segments where the Parties have a higher combined market share (e.g., THSA) would have minimal impact in the revenues of rival wiring system suppliers. As a result, even in combination, all suppliers of actuation products do not constitute a sufficiently important “customer base” to pursue a customer foreclosure strategy.
- (237) *Second*, the Commission confirmed through the market investigation that, irrespective of the product market definition retained, suppliers of aerospace wiring systems for certain actuation products are well positioned to supply other actuation products.³⁹⁹ As a result, even if Safran were to internalise all its purchases of aerospace wiring systems, rival aerospace wiring system suppliers would keep other sources of business within actuation – e.g., they could sell to suppliers of PFCA systems or SFCA systems – that would prevent their foreclosure from the upstream market.

³⁹⁵ See response from a competitor to Questionnaire 2, Question H.8.

³⁹⁶ See response from a competitor to Questionnaire 2, Question H.8.

³⁹⁷ See responses to Questionnaire 2, Questions G.10 and H.10.

³⁹⁸ See responses to Questionnaire 1, Question E.B.B.7, and responses to Questionnaire 2, Question G.12 and H.12.

³⁹⁹ See responses to Questionnaire 1, Question E.B.B.6, and responses to Questionnaire 2, Question G.11 and H.11.

- (238) *Third*, Safran itself uses wiring system from rival suppliers in its own actuation products.⁴⁰⁰ Safran's share of supply of wiring systems for actuation systems by end-application – as reflected in paragraph (226) above – is below [0-5]%, which indicates Safran's wiring systems are not differentiated or particularly suited to supply to actuation products and, therefore, that Safran is unlikely to pursue a customer foreclosure strategy.
- (239) These factors indicate that Safran will not have the ability to engage in a customer foreclosure strategy that could result in the anti-competitive foreclosure of rival aerospace wiring system suppliers. In the absence of the ability to engage in foreclosure, it is not necessary to examine whether Safran would have an incentive, and whether any such strategy would have ultimately a detrimental effect on competition.
- (240) The Commission's assessment of the absence of Safran's ability to engage in vertical foreclosure strategies with respect to wiring systems and (flight) actuation products is confirmed by the responses received in the market investigation on the impact of the Transaction. Rival aerospace wiring system and actuation suppliers generally indicated that the intensity of competition, prices, quality and innovation would remain the same following the Transaction.⁴⁰¹
- (241) As a result, the Commission concludes that it is unlikely that the Transaction would result in a significant negative impact in any of the plausible relevant markets for the supply of aerospace wiring systems (upstream) and of actuation products (downstream).

7.2.2.3. Valves for space launchers (upstream) and prime contracting for ESA space launchers (downstream)

7.2.2.3.1. Market shares

- (242) Both Parties are active on the (upstream) market for valves for space launchers and Safran (through ArianeGroup – its joint venture with Airbus) is active as prime contractor for space launchers for ESA's launcher programmes.⁴⁰² There is thus a vertical relationship between the activities of the Parties upstream on the market for valves for space launchers and Safran's activity downstream as prime contractor for ESA's space programmes, through the ArianeGroup.
- (243) On the overall market for valves for ESA's developed space launchers, the Parties' combined market shares are below [30-40]%, and below [60-70]% on the plausible narrow segment of non-cryogenic valves, at EEA level.⁴⁰³ Other main suppliers for ESA programmes are Test Fuchs, Thompson Valves, APR, Nammo, Meggitt, Sobriety.⁴⁰⁴
- (244) When considering a wider than EEA market, even worldwide for prospective ESA space programmes (e.g. in the context of the European Launcher Challenge), the Parties' combined market shares are below [10-20]%, also considering a further

⁴⁰⁰ Form CO, paragraph 965.

⁴⁰¹ See responses to Questionnaire 2, Question G.16 and H.14.

⁴⁰² The ArianeGroup has been designated as prime contractor for the Ariane programme, while Avio has been designated as prime contractor for the Vega programme.

⁴⁰³ Form CO, Section 7.5.

⁴⁰⁴ Some of these suppliers, such as APR supplies only AVIO for the Vega programme.

segmentation into cryogenic and non-cryogenic valves for space launchers. Other main suppliers active worldwide are Marotta, Moog, Meggitt, Valcor, ValveTech, Circor, Eaton, LeHarris, Lee Aerospace, RAM Aviation Space & Defence.⁴⁰⁵

- (245) On the potential downstream market for prime contracting for developed ESA launcher programmes, the ArianeGroup is the sole prime contractor for the Ariane programme, while Avio is the sole contractor for the Vega programme. The Target does not supply valves for space launchers to Avio.

7.2.2.3.2. The Notifying Party's views

- (246) The Notifying Party submits that the Transaction does not entail any risk of input foreclosure. *First*, Safran and the ArianeGroup already supply valves for [...]. *Second*, the addition of the Target is not of such a scale to generate the ability and incentive to foreclose competitors downstream, considering that the Target does currently supply valves to [...]. *Third*, there would be no economic rationale for the merged entity to have a foreclosure strategy, as the space launcher sector is expanding, offering more opportunities to supply. *Finally*, there are several other credible alternative suppliers of all types of valves.⁴⁰⁶
- (247) Further, the Notifying Party submits that the Transaction does not entail any risk of customer foreclosure. *First*, for the Ariane programme, the ArianeGroup has relied on other valves suppliers beyond Safran, such as [...]. *Second*, the addition of the Target does not alter this dynamic, not only in respect to ESA developed space launcher programmes (for which the *juste retour* principle was applied), but also for prospective non-ESA -programmes (for which Airbus, the other controlling shareholder in the ArianeGroup, would have no interest in favouring the merged entity over other suppliers, if the merged entity would be less competitive). *Finally*, given the evolution of the space launcher sector, there are many prime contractors, including the new launch service providers that can be an alternative to the ArianeGroup as a customer.⁴⁰⁷

7.2.2.3.3. The Commission's assessment

- (248) With respect to the vertical relationship relating to valves for space launchers and prime contracting, the Commission finds that it is unlikely that Safran will be able to engage in either input foreclosure or customer foreclosure as a result of the Transaction for the following reasons.
- (249) *First*, as regards a potential input foreclosure strategy, the Commission notes that prime contractors and valves suppliers for ESA's already developed space launcher programmes have already been selected based on the *juste retour* principle and on ESA's Best Practices. Further, as mentioned above, it appears that there is no new similar ESA programme (e.g. for heavy-lift launchers) to be materialised in the upcoming years, for which prime contractors or valves supplier need to be selected.⁴⁰⁸

⁴⁰⁵ Form CO, para. 1213.

⁴⁰⁶ Form CO, para. 1999.

⁴⁰⁷ Form CO, para. 1999.

⁴⁰⁸ ESA has recently commissioned a study on the development of a very heavy lift reusable launcher capable of delivering up to 60 tonnes of payload into low Earth orbit. More details, available on ESA's website: <https://esastar-publication-ext.sso.esa.int/ESATenderActions/details/139595>.

- (250) *Second*, the market investigation indicated that there are other credible alternative valves providers capable of supplying ESA's developed space programmes, such as Test-Fuchs, Thompson Valves, APR, Tech Space Aro, Omnidea, Frenctech, Nammo.⁴⁰⁹
- (251) *Third*, in respect of a prospective market for ESA space programmes (e.g. in the context of the European Space Challenge), the market investigation confirmed the existence a sufficient base of alternative valve suppliers able to supply new European launch service providers, in addition to the ones listed above, such as Marotta, Valcor, OMB Salery, Moog, Precision Fluid Controls, Kepner, The Lee Co, Stohr, Siera, Vacco, and Shipham.⁴¹⁰ In addition, during the European Launcher Challenge industrial day in November 2024, seven components' suppliers, including of valves already presented their offerings, such as Sabca, Almatech, Invent, Beyond Gravity, Sener, SoftinWay and TestFuchs.⁴¹¹
- (252) *Fourth*, the market investigation indicated that suppliers of valves for space launchers would be able to increase their overall production of valves for space launcher in case of need to cover an increase in demand.⁴¹² Additionally, the market investigation indicated that there has been new entry in the past five years, by startups, such as deltaVision, Orbex, The Exploration Company. New entry is also expected in the next three years.⁴¹³
- (253) The above factors indicate that the merged entity will not be able to implement an input foreclosure strategy against its downstream competitors concerning developed ESA programs. For these programmes, both prime contractors and valves suppliers have been selected, and new heavy lift launcher programmes do not appear to be in development in the upcoming years where prime contractors and valve suppliers can participate. In respect to prospective ESA programmes (e.g. in the context of the European Launcher Challenge), space launcher manufacturers will have a sufficient number of alternative valves suppliers, in case Safran would decide to withhold or worsen in another way the condition of supply of valves to its downstream rivals.
- (254) The Commission also notes that the ArianeGroup (the sole prime contractor for the current Ariane 6 launcher), is a joint venture between Airbus and Safran. Thus, Safran would not be the only one deciding on a hypothetical input foreclosure strategy. Airbus would also have to decide on whether to favour sourcing from the merged entity over possible competitive alternatives.
- (255) *Fifth*, with respect to a potential customer foreclosure strategy arising from Safran's activities in prime contracting,⁴¹⁴ for the already developed ESA programmes both prime contractors and valves suppliers have already been

However, to date and as indicated by publicly available information, this is at a very early stage, with only a study currently being commissioned.

⁴⁰⁹ Non-confidential minutes from a call held with a market participant on 11.07.2024.

⁴¹⁰ Questionnaire 4, question F. 6-1.

⁴¹¹ See 'The scene is set for the European Launcher Challenge' dated 13 November 2024, available on ESA's website, here: [ESA - The scene is set for the European Launcher Challenge](#).

⁴¹² Questionnaire 3, question F.6.

⁴¹³ Questionnaire 3, questions F.7 and F.8; and Questionnaire 4, questions F.7 and F.8.

⁴¹⁴ Through the ArianeGroup, including Maia Space, a subsidiary of ArianeGroup that develops small launchers.

selected and no similar programme (e.g. for heavy lift launchers) is foreseen to materialise in the upcoming years.

- (256) *Sixth*, in respect of the prospective market for ESA programmes (e.g. in the context of the European Launcher Challenge), the results of the market investigation indicated that valves suppliers will have access to a sufficient customer base.⁴¹⁵ Such customers would be companies such as Rocket Factory Augsburg, Rocket Lab, PLD Space, Relativity, Firefly, Isar Aerospace, Latitutde, Orbex, and HyImpuse. Additionally, the market investigation indicated the that the percentage of the valves suppliers' total revenue generated from the supply of valves for space launchers to the ArianeGroup is limited (between 0-10%).⁴¹⁶
- (257) To further illustrate, in the context of the European Launcher Challenge, twenty-six companies responded to an RFI in June 2024, and nine companies presented their launch system developments on 8 November 2024, during the European Launcher Challenge industry day. These European companies are HyImpulse, HyPrSpace, Isar Aerospace, MaiaSpace, Orbex, PLD Space, Rocket Factory Augsburg, Skyrora, and The Exploration Company.
- (258) Based on the above, the Commission finds that Safran would not be able to engage in a customer foreclosure strategy reusing in anti-competitive foreclosure.
- (259) As a result, the Commission concludes that it is unlikely that the Transaction would result in significant negative impact in any of the plausible markets for of valves for space launchers and prime contracting.

7.2.3. *Conglomerate effects*

- (260) The Transaction involves certain relationships that are neither horizontal, nor vertical,⁴¹⁷ but relate to the sale by companies of products that are in closely related markets – e.g., products that are generally purchased by the same set of customers for the same end use.⁴¹⁸ This is the case for the bundled supply of actuation products, such as complete sets of THSA, PFCA and SFCA systems, or including as well other products such as pilot controls and flight control computers.
- (261) Safran is active in the supply of THSA systems and has marginal activities in the supply of SFCA components.⁴¹⁹ Safran further supplies pilot controls and has marginal activities in the supply of flight control computers.⁴²⁰ The Target is active in the supply of THSA, PFCA and SFCA systems and has no activities in the supply of pilot controls or flight control computers.⁴²¹
- (262) In *M.8658 UTC / Collins* the Commission has assessed the potential conglomerate effects ensuing from the supply of flight control actuation systems, pilot controls and flight control computers.⁴²² The Notifying Party confirms that, on rare

⁴¹⁵ Questionnaire 3, question G.4.

⁴¹⁶ Questionnaire 3, question G.1. This includes also sales to MaiaSpace.

⁴¹⁷ Non-horizontal Merger Guidelines, paragraphs 5 and 91.

⁴¹⁸ Non-horizontal Merger Guidelines, paragraph 91.

⁴¹⁹ Form CO, paragraph 487.

⁴²⁰ Form CO, paragraphs 497 and 507.

⁴²¹ Form CO, paragraphs 487 and 506.

⁴²² Case *M.8658 – UTC / Collins*, Section 8.3.6.

occasions, flight control actuation systems, pilot controls and flight control computers may be tendered together by airframers.⁴²³

- (263) The Commission will, therefore, assess in this section whether the Transaction could give rise to serious doubts as to its compatibility with the internal market, in relation to conglomerate effects between any of the markets for (i) the supply of PFCA systems, (ii) the supply of SFCA systems, (iii) the supply of THSA systems, (iv) the supply of pilot controls and (iv) the supply of flight control computers, including the potential narrower markets within such markets.

7.2.3.1. Market Shares

- (264) The Parties' and their competitors' market shares in the supply of THSA systems are provided in Table 1 to Table 4 above.
- (265) The Parties' and their competitors' shares in the markets for the supply of PFCA and SFCA systems, as well as the supply of pilot controls are presented in Table 8 to Table 10.
- (266) As regards the market for flight control computers, Safran's activities are *de minimis*, with a market share of below [0-5]%, regardless of the exact product market definition.⁴²⁴

Table 8 – PFCA market shares in 2024 (in value, worldwide)⁴²⁵

Supplier	Overall	LCA ⁴²⁶	Regional	Business	General aviation	Military ⁴²⁷	Helicopters
Safran	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Target	[10-20]%	[30-40]%	[5-10]%	[0-5]%	[0-5]%	[5-10]%	[10-20]%
Combined Entity	[10-20]%	[30-40]%	[5-10]%	[0-5]%	[0-5]%	[5-10]%	[10-20]%
Parker	[10-20]%	[10-20]%	[70-80]%	[30-40]%	[0-5]%	[30-40]%	[30-40]%
Moog	[20-30]%	[30-40]%	[5-10]%	[10-20]%	[0-5]%	[20-30]%	[5-10]%
Nabtesco	[0-5]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Liebherr	[0-5]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[5-10]%	[5-10]%
Woodward	[5-10]%	[0-5]%	[0-5]%	[10-20]%	[0-5]%	[5-10]%	[30-40]%
Others	[20-30]%	[5-10]%	[5-10]%	[30-40]%	[90-100]%	[20-30]%	[0-5]%
Total	100%	100%	100%	100%	100%	100%	100%

Source: Response to RFI 11.

⁴²³ Form CO, paragraph 494.

⁴²⁴ Form CO, paragraph 507.

⁴²⁵ See paragraph (147) *et seq.* above on the appropriateness of value-based market shares in the markets for flight control actuation systems. The same considerations as in THSA also apply to PFCA and SFCA.

⁴²⁶ Refers to "large commercial aircraft".

⁴²⁷ The Target's market share in the supply of PFCA systems to the military sector would not differ, regardless of whether a worldwide or EEA-wide market were considered. See response to RFI 13. The following assessment is therefore applicable, regardless of the exact geographic scope of this potential market.

Table 9 – SFCA market shares in 2024 (in value, worldwide)⁴²⁸

Supplier	Overall	LCA	Regional	Business	General aviation	Military ⁴²⁹
Safran ⁴³⁰	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Target	[10-20]%	[20-30]%	[70-80]%	[5-10]%	[0-5]%	[10-20]%
Combined Entity	[10-20]%	[20-30]%	[70-80]%	[10-20]%	[5-10]%	[10-20]%
Moog	[10-20]%	[10-20]%	[0-5]%	[20-30]%	[0-5]%	[20-30]%
Liebherr	[10-20]%	[20-30]%	[5-10]%	[5-10]%	[0-5]%	[0-5]%
Parker	[5-10]%	[0-5]%	[0-5]%	[10-20]%	[0-5]%	[10-20]%
Curtiss Wright	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%
Triumph	[0-5]%	[0-5]%	[10-20]%	[30-40]%	[0-5]%	[5-10]%
Others	[30-40]%	[30-40]%	[10-20]%	[30-40]%	[90-100]%	[20-30]%
Total	100%	100%	100%	100%	100%	100%

Source: Response to RFI 11.

Table 10 – Pilot controls market shares in 2024 (in value, worldwide)^{431 432}

Supplier	Overall	Sticks	Sidesticks	Centre yokes	RBPS	TQA
Safran	[10-20]%	[10-20]%	[0-5]%	[60-70]%	[5-10]%	[30-40]%
Target	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Combined Entity	[10-20]%	[10-20]%	[0-5]%	[60-70]%	[5-10]%	[30-40]%
BAE	[20-30]%	[50-60]%	[60-70]%	[0-5]%	[0-5]%	[0-5]%
Collins ⁴³³	[20-30]%	[20-30]%	[20-30]%	[0-5]%	[40-50]%	[20-30]%
Woodward	[10-20]%	[0-5]%	[0-5]%	[0-5]%	[10-20]%	[20-30]%
Parker	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[10-20]%	[0-5]%
Crouzet	[5-10]%	[5-10]%	[5-10]%	[10-20]%	[5-10]%	[0-5]%
Moog	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%	[0-5]%
Transdigm	[0-5]%	[0-5]%	[0-5]%	[10-20]%	[0-5]%	[5-10]%
Sensata	[0-5]%	[0-5]%	[0-5]%	[5-10]%	[0-5]%	[0-5]%
Total	100%	100%	100%	100%	100%	100%

Source: Response to RFI 11.

⁴²⁸ See paragraph (147) *et seq.* above on the appropriateness of value-based market shares in the markets for flight control actuation systems. The same considerations as in THSA also apply to PFCA and SFCA.

⁴²⁹ The Target's market share in the supply of SFCA systems to the military sector would not differ, regardless of whether a worldwide or EEA-wide market were considered. See response to RFI 13. The following assessment is therefore applicable, regardless of the exact geographic scope of this potential market.

⁴³⁰ See footnote 279 above on Safran's activities in SFCA.

⁴³¹ Value-based market shares are presented on a cautious basis, as Safran's value-based market shares are overall higher than its volume-based market shares. For completeness, Safran's volume-based market shares in 2024 were [10-20]% in the overall market, [5-10]% for sticks, [0-5]% for sidesticks, [40-50]% for centre yokes, [5-10]% for RBPS and [10-20]% for TQA. See Response to RFI 11.

⁴³² Safran's market shares for the supply of pilot controls would not differ materially if considered by segment of demand (i.e. civil vs. military aircraft) or by type of aircraft in the civil sector. The following assessment therefore is applicable regardless of the exact product market definition of the supply of pilot controls. [...]. See response to RFI 13.

⁴³³ Refers to Collins' activities that are not within the perimeter of the Target.

7.2.3.2. The Notifying Party's views

- (267) The Notifying Party submits that the Transaction does not give rise to conglomerate effects between the various markets for flight control actuation systems, pilot controls and flight control computers. This is because (i) airframers control the procurement process, which makes successful bundling or tying strategies unlikely; (ii) Safran will continue to face competition from numerous players after the Transaction; and (iii) competitors could combine their offers to match Safran's breadth of offering.

7.2.3.3. The Commission's assessment

- (268) The Commission notes that Safran is currently already active in the supply of THSA systems, pilot controls, and has marginal activities in SFCA and flight control computers. Through the proposed acquisition of the Target, Safran will enter the market for PFCA and will expand its currently limited presence in SFCA. As regards THSA, taking into consideration the remedy proposed by the Notifying Party as described in detail in Section 8 below, Safran will in essence replace its current activities with those of the Target.
- (269) It follows that the potential merger-specific changes in Safran's ability and incentives to engage in a foreclosure strategy through bundling or tying could arise either (i) from its acquisition of the Target's activities in PFCA, and in particular in the potential market for the large commercial aircraft segment where the merged entity will post-Transaction have a [30-40]% market share, (ii) from the acquisition of the Target's activities in SFCA, and in particular in the potential market for the regional aircraft segment, where the Parties' combined market share is [70-80]%, or (iii) from the increase of its presence in the market for the supply of THSA systems, where the merged entity's market share post-Transaction will be between [10-20]% and [70-80]%⁴³⁴, depending on the exact market definition.
- (270) Moreover, the Commission notes that any potential bundling or tying strategy could materialise only in relation to future tenders of airframers. As regards the already awarded contracts, the market investigation confirmed that contractual provisions in place sufficiently safeguard the continuity of supply under agreed prices and quality levels.⁴³⁵
- (271) The Commission sets out below why it is of the view that the Transaction will not afford merged entity the ability or incentive to engage in a foreclosure strategy through bundling or tying practices.

Ability

- (272) The Commission does not consider that the Transaction will afford the merged entity the ability to foreclose its rivals in the markets for the supply of PFCA, SFCA or THSA systems, pilot controls or flight control computers, through bundling or tying some or all of the above products.

⁴³⁴ See Tables 1-4 above.

⁴³⁵ See responses to Questionnaire 1, Questions E.A.A.4 and E.C.6., and responses to Questionnaire 2, Question C.27.

- (273) *First*, although, as explained in paragraph (269), the merged entity's post-Transaction market shares in some potential subsegments of the PFCA, SFCA and THSA markets might suggest at first sight the existence of market power, the results of the Commission's market investigation confirm that none of the merged entity's offerings will be indispensable for airframers. A majority of airframers replied that they do not currently source from any of the Parties a product that they could not to source from another supplier.⁴³⁶
- (274) *Second*, feedback from the market investigation indicates that commercial bundles (i.e. where the purchase of several products is made more attractive than the purchase of separate products) between flight control actuation systems, pilot controls and flight control computers are only occasional.⁴³⁷
- (275) As one competitor explained, "[t]hese products are very rarely offered as a package and would require a 'mega' deal which is likely to include greater package than THSA. It is more typical to offer in distinct product groups"⁴³⁸, while another competitor confirmed that "[...] historically, customers were not in demand for such bundled offers"⁴³⁹.
- (276) As regards tied bundles (i.e. when the supplier only offers certain products in conjunction with other products for technical or commercial reasons), a clear majority of airframers submitted that in the last 10 years they have not been offered a particular product on the condition that they would also acquire another product from the same supplier.⁴⁴⁰
- (277) *Third*, feedback from the market investigation indicates that airframers are generally in control of the procurement process, which would make successful bundling or tying strategies unlikely. Respondents indicated that, when suppliers submit bundled offers, it is typically on the invitation of the airframer, by including multiple products in the same tender.⁴⁴¹ Unsolicited bundled offers, on the other hand, are unusual.⁴⁴²
- (278) Moreover, responses from airframers indicate that they would in general prioritise a supplier that would meet their technical requirements at the highest level, instead of the most economically attractive offer.⁴⁴³ As one airframer explained, suppliers would "[s]till have to compete for each individual product and win on merit, if they win multiple products on merit - package deals could be considered at that point".⁴⁴⁴
- (279) Airframers' responses on whether they would expect the merged entity to leverage its position in some of the markets in which it is present, in order to boost sales of another of its products, were inconclusive. However, the overall feedback indicates that airframers would have sufficient countervailing buyer power and alternatives to resist such a strategy. As one airframer explained, "[this airframer] cannot

⁴³⁶ See responses to Questionnaire 1, question E.C.4.

⁴³⁷ See responses to Questionnaire 1, question E.C.1, and Questionnaire 2, question I.1.

⁴³⁸ See responses to Questionnaire 2, question I.1.

⁴³⁹ *Ibid.*

⁴⁴⁰ See responses to Questionnaire 1, question E.C.2.

⁴⁴¹ See responses to Questionnaire 1, question E.C.1.

⁴⁴² *Ibid.*

⁴⁴³ *Ibid.*

⁴⁴⁴ See responses to Questionnaire 1, question E.C.7.

*exclude that such strategies could be potentially implemented. However, [this airframer] estimates that in such a case it would have countervailing measures and alternatives from other suppliers”.*⁴⁴⁵

- (280) The Commission notes that customers buying the aerospace products in question are aircraft manufacturers such as Airbus, Boeing, Dassault, Embraer, Gulfstream, i.e., sophisticated international groups with significant financial strength.⁴⁴⁶ Furthermore, as mentioned in paragraph (15), tenders in the aerospace industry are infrequent and lead to long term supply relationships, which provides airframers with a leverage to instigate competition among suppliers, when there are sufficient suppliers.
- (281) Indeed, when asked what their most likely reaction would be if, post-Transaction, the merged entity attempted to make the supply of some products conditional on them increasing their purchases of other products of the merged entity, airframers generally indicated that they would not accept this and turn to alternative suppliers,⁴⁴⁷ which is indicative of both the airframers’ countervailing power and the availability of alternative suppliers.⁴⁴⁸
- (282) *Fourth*, the market investigation confirmed that post-Transaction there will continue to be a number of suppliers who, either individually or by teaming up with other suppliers, could match the merged entity’s offering of products.⁴⁴⁹
- (283) Finally, the majority of airframers confirmed that the Transaction will not have an impact on their procurement strategy or processes.⁴⁵⁰
- (284) As one airframer explained, “[...] *there are enough alternative suppliers that can provide the same combination of components as the combined entity post-transaction, alternatively, suppliers could team up for a potential commercial bundle*”⁴⁵¹, while another airframer indicated that “[...] *companies like, Moog, Parker, Liebherr and other could offer comparable proposal*”⁴⁵².
- (285) Responses from competitors were similar to those of airframers. One competitor indicated that “[...] *today there is a few other (3-4) suppliers that can offer a product combination comparable to Safran*”⁴⁵³, while another competitor mentioned that “[...] *companies such as Honeywell, Liebherr, Woodward, Parker could offer combination of products or companies could team up to offer combinations*”⁴⁵⁴.
- (286) The Commission notes that one competitor expressed concerns in its responses to the Commission’s market investigation in relation to Safran’s expansion in

⁴⁴⁵ See responses to Questionnaire 1, question E.C.5.1.

⁴⁴⁶ See Form CO, paragraph 423.

⁴⁴⁷ See responses to Questionnaire 1, question E.C.6.

⁴⁴⁸ This is without prejudice to the Commission’s assessment on the Parties’ overlap in the supply of THSA systems, as provided in Section 7.1.2. The assessment on the Transaction’s conglomerate effects takes into consideration the proposed remedy in relation to the supply of THSA systems, as provided in Section 8.

⁴⁴⁹ See responses to Questionnaire 1, question E.C.8, and Questionnaire 2, question I.5.

⁴⁵⁰ See responses to Questionnaire 1, question E.C.9.

⁴⁵¹ See responses to Questionnaire 1, question E.C.8.

⁴⁵² *Ibid.*

⁴⁵³ See responses to Questionnaire 2, question I.5.

⁴⁵⁴ *Ibid.*

additional markets in the aerospace sector through the Transaction. This competitor submitted that it also has the capability to offer bundles of several products. However, since it is a smaller company with comparably lower engineering and manufacturing capacity, airframers would be cautious in involving this supplier in the supply of multiple products, due to considerations relating to the supplier's potential capacity constraints and the ensuing risks for the customer's security of supply. This competitor further argues that the same considerations would not apply to the merged entity post-Transaction, which would have an increased risk-mitigation potential due to its increased size, which in turn would afford it better chances of winning a combination of supply contracts for the same airframer.⁴⁵⁵

- (287) The Commission notes, however, that this competitor's concerns are not confirmed by the results of the market investigation, as described in this Section of the decision. Moreover, the Commission notes that Safran is already currently present in several markets within the aerospace industry and has a higher engineering and manufacturing capacity compared to its smaller competitors. In addition, as the market investigation has confirmed, smaller competitors would post-Transaction have options to join efforts with each other and submit joint offers to tenders, as a means to match the merged entity's range of product portfolio⁴⁵⁶. This competitor indicated that it does itself have the capability to offer bundles including PFCA, SFCA and flight control computers. In any case, as discussed in Section 8 below, Safran has offered to divest most of its THSA business, which will eliminate part of the extra capacity the Transaction would bring about for the merged entity.

Incentives

- (288) Absent the ability of the merged entity to foreclose its rivals in the markets for flight control actuation systems, pilot controls or flight control computers through bundling or tying practices, an assessment of its incentives to do so is not necessary.
- (289) In any case, the Commission considers that the airframers' control over the procurement process, as explained in paragraph (277) *et seq.*, would significantly limit the merged entity's incentives to engage in a foreclosure strategy through bundling or tying.
- (290) As explained in paragraph (15) above, tenders in the aerospace industry are infrequent and lead to long-term supply relationships between the supplier and the airframer. Moreover, as explained in paragraph (175) above, winning a supply contract for a specific aerospace system to an aircraft programme would generally give the supplier an advantage in supplying the same system also for the next generation of that aircraft programme. In addition, as explained in paragraph (280) above, airframers submitted in the Commission's market investigation that they would not hesitate to look for alternative suppliers if a supplier tried to impose unfavourable supply conditions.⁴⁵⁷
- (291) It follows from the above that the aerospace industry is an industry characterised by long-term supply relationships between airframers and suppliers that span several

⁴⁵⁵ See responses to Questionnaire 2, question I.1.

⁴⁵⁶ See paragraph (282) above.

⁴⁵⁷ See also responses to Questionnaire 1, questions E.C.6 and E.C.7.

products. In such scenario, a breach of the airframers' trust could risk business opportunities for a supplier in the long term. The merged entity would likely not have the incentive to risk its relationships with airframers and a potential source of long-term income by engaging in bundling or tying strategies, unless the airframer is specifically tendering a bundle of products.

7.2.3.4. Conclusion on conglomerate effects

- (292) Based on the foregoing, the Commission considers that the Transaction does not give rise to serious doubts as to its compatibility with the internal market, in relation to conglomerate effects between any of the markets for (i) the supply of PFC systems, (ii) the supply of SFCA systems, (iii) the supply of THSA systems, (iv) the supply of pilot controls, and (v) the supply of flight control computers, including the potential narrower markets within such markets.

8. PROPOSED REMEDIES

8.1. Analytical framework

- (293) Where, as in this case, a notified concentration raises serious doubts as to its compatibility with the internal market, the parties may modify the notified concentration so as to remove the grounds for the serious doubts identified by the Commission with a view to having it declared compatible with the internal market pursuant to Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation.
- (294) As set out in the Commission Notice on Remedies, (the "Remedies Notice")⁴⁵⁸ commitments have to eliminate the Commission's competition concerns entirely and they have to be comprehensive and effective from all points of view.⁴⁵⁹ In Phase I, commitments offered by the parties 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.⁴⁶⁰
- (295) In assessing whether the proposed commitments will maintain effective competition, the Commission considers all relevant factors, including the type, scale and scope of the proposed commitments with reference to the structure and the particular characteristics of the market in which the competition concerns arise, including the position of the parties and other participants on the market.⁴⁶¹ In order for the proposed commitments to comply with those principles, they must be capable of being implemented effectively within a short period of time.⁴⁶²
- (296) Concerning the type of acceptable commitments, the Merger Regulation gives discretion to the Commission as long as the commitments meet the required

⁴⁵⁸ Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004, OJ C 267, 22.10.2008, p.1.

⁴⁵⁹ Remedies Notice, paragraphs 9 and 61.

⁴⁶⁰ Remedies Notice, paragraph 81.

⁴⁶¹ Remedies Notice, paragraph 12.

⁴⁶² Remedies Notice, paragraph 9.

standards. Structural commitments will meet the conditions set out above only in so far as the Commission is able to conclude with the requisite degree of certainty, at the time of its decision, that it will be possible to implement them and that it will be likely that the new commercial structures resulting from them will be sufficiently workable and lasting to ensure that effective competition will be maintained.⁴⁶³ Divestiture commitments are normally the best way to eliminate competition concerns resulting from horizontal overlaps.

- (297) The divested activities must consist of a viable business that, if operated by a suitable purchaser, can compete effectively with the merged entity on a lasting basis and that is divested as a going concern. The divested business must include all the assets which contribute to its current operation, or which are necessary to ensure its viability and competitiveness and all personnel which is currently employed or which is necessary to ensure the business' viability and competitiveness.⁴⁶⁴
- (298) The intended effect of the divestiture will only be achieved if and once the divested business is transferred to a suitable purchaser in whose hands it will become an active competitive force in the market. The potential of a business to attract a suitable purchaser is an important element of the Commission's assessment of the appropriateness of the proposed commitments.⁴⁶⁵
- (299) There are cases where only the proposal of an up-front buyer will allow the Commission to conclude with the requisite degree of certainty that the business will be effectively divested to a suitable purchaser. In such case, the parties have to undertake in the commitments that they are not going to complete the notified operation before having entered into a binding agreement with a purchaser for the divested business, approved by the Commission.⁴⁶⁶

8.2. Commitments submitted by the Parties

- (300) In order to render the concentration compatible with the internal market and the functioning of the EEA Agreement, the Notifying Party offered to modify the Transaction by entering into commitments. On 14 March 2025, the Notifying Party submitted a first set of remedies (the "Initial Commitments").
- (301) On 17 March 2025, the Commission subjected the Initial Commitments to a market test. On 25 March 2025, the Commission provided feedback to the Notifying Party from the market test.
- (302) In order to address the issues raised in the market test, the Notifying Party submitted a final set of commitments on 27 March 2025 (the "Final Commitments").

8.2.1. The Initial Commitments

- (303) The commitments offered by Safran consist of the divestiture of Safran's North American actuation business, composed of Safran's electric THSA activity, SFCA activity and nose-wheel steering gearbox activity located in Mexicali, Mexico and

⁴⁶³ Remedies Notice, paragraph 10.

⁴⁶⁴ Remedies Notice, paragraphs 23-25.

⁴⁶⁵ Remedies Notice, paragraph 47.

⁴⁶⁶ Remedies Notice, paragraph 53.

Irvine, California; and the entirety of Safran Electronics & Defense Canada Inc. located in Peterborough, Ontario which houses Safran's Canada-based electronic control unit ("ECU") components activities (together: the 'Divestment Business') to an independent third party.

- (304) The assets of the Divestment Business include (but are not limited to):
- (a) all tangible assets (including two long-term leased facilities in Peterborough and, if required by the purchaser, a short-term sublease agreement for a facility for the Irvine employees and assets; and the engineering, manufacturing, testing and servicing equipment for the ECU activities located in the Peterborough facilities and for the actuation activities located in Mexicali and Irvine facilities (these facilities will be retained by Safran) and its related documentation);
 - (b) all intangible assets (including products under development and related rights, patents, software, intellectual property rights, and know-how);
 - (c) all licenses, permits and authorizations issued by any governmental organization for the benefit of the Divestment Business, to the extent transferable under applicable legal requirements;
 - (d) all customer contracts, commitments and customer orders of the Divestment Business, all customer credit and other records of the Divestment Business, all cooperation agreements with third parties; and
 - (e) all personnel (*circa* [...] people) currently employed by the Divestment Business – at the discretion of the potential purchaser. This includes [...] employees identified as key personnel across three locations (i.e. Mexicali, Mexico; Irvine, California; Peterborough, Canada), with functions such as management, engineering (R&T, systems and components design, etc.) programme management, manufacturing (production control, testing, etc.), quality assurance, sales (procurement and purchasing policy, customer services, business analysis, etc.), supply chain, human resources, finance and IT.
- (305) Concerning licenses, since the Divestment Business uses trademarks and domain names that include the Safran brand, Safran will offer a license to use the relevant Safran brands for a transitional period of up to [...] years after Closing (to be negotiated between Safran and the purchaser). The license enables the purchaser to continue selling products with Safran trademarks, manufactured by Safran pursuant to a supply agreement between Safran and the potential purchaser to be entered into at Closing. Safran will offer a license ensuring that the potential purchaser has access to all and any IP owned by Safran that is used to operate the Divestment Business (other than brands and the IP rights mentioned above), if needed.
- (306) The Divestment Business includes arrangements for the supply of the following products and services for a transitional period of up to [...] years after Closing (Transitional Service Agreements ('TSAs')), on terms and conditions equivalent to those currently afforded to the Divestment Business by Safran:
- (a) at the purchaser's discretion and on industry standard terms, a supply agreement whereby Safran commits to continue operating the premises that produce actuation products (including THSA systems) in Mexicali; and
 - (b) service agreements covering IT, back office, technical and other support functions.

- (307) Safran commits to discuss with the purchaser an extension of the TSAs closer to their final term if such extension is needed.
- (308) In addition, the Notifying Party has entered into related commitments, *inter alia* regarding the separation of the divested businesses from their retained businesses, the preservation of the viability, marketability and competitiveness of the divested businesses, including the appointment of a monitoring trustee and, if necessary, a divestiture trustee.
- (309) An upfront buyer clause is also included in the Initial Commitments.

8.2.2. *Results of the market test of the Initial Commitments*

- (310) The market test focused on (i) whether the Initial Commitments were sufficient to remove the serious doubts regarding the horizontal overlap in THSAs; (ii) whether the Divestment Business constituted a viable business able to compete effectively with the merged entity on a lasting basis; (iii) whether there were specific conditions that a potential purchaser should fulfil and (iv) whether the Divestment Business was sufficiently attractive to find a suitable purchaser.
- (311) The results of the market test indicated that, overall, the sale of the Divestment Business to a suitable purchaser would in principle be sufficient to address the serious doubts raised by the Transaction. Indeed, the majority of the respondents indicated that the Initial Commitments were suitable and adequate to address the serious doubts in THSA, as, due to the proposed remedy, almost the entirety of the overlap⁴⁶⁷ between the Parties' THSA activities will be divested to an independent third party.⁴⁶⁸
- (312) Respondents also considered that the necessary tangible and intangible assets are included in the Initial Commitments.⁴⁶⁹ In this respect however, some respondents mentioned that it is important that the purchaser has relevant experience in the industry and should be an industry player with existing production capacities, it being a decisive factor as to the necessity and suitability of the tangible and intangible assets, and the personnel to be divested.⁴⁷⁰
- (313) This leads to the question of viability and competitiveness of the Divestment Business. Concerning the immediate and also the future results of the proposed remedy on viability and competitiveness⁴⁷¹, market respondents considered that the Initial Commitments were sufficient to ensure this, provided that the purchaser had the relevant expertise and depending also on the purchaser's future strategy which it plans to follow after taking over the Divestment Business.⁴⁷²
- (314) Respondents indicated that the key personnel appeared to cover the main functions in order to assure the viability and effectiveness of the Divestment Business.⁴⁷³

⁴⁶⁷ Safran is to retain a small legacy E-THSA activity located in France, which was owned by Safran before its acquisition of Rockwell Collins' THSA business in 2019 and has [...]. Besides these, Safran does not have any other THSA activity in any of its subsidiaries.

⁴⁶⁸ Responses to Questionnaire 5, question E.1.

⁴⁶⁹ Responses to Questionnaire 5, question E.3 and E.4.

⁴⁷⁰ Responses to Questionnaire 5, question E.3.2., E.4.2. and E.5.1.

⁴⁷¹ Responses to Questionnaire 5, question E.6. and E.7.

⁴⁷² Responses to Questionnaire 5, question E.6.2. and E.7.2.

⁴⁷³ Responses to Questionnaire 5, question E.5

Some respondents indicated that it was important to ensure that key personnel covered the functions of R&D and after-market repair, maintenance and testing.

- (315) However, some risks in the implementation process of the proposed remedy were identified.⁴⁷⁴ Respondents mentioned risks inherent to any transfer of a business. For example, when considering site consolidation and transfer of production and contracts, transitions may give rise to loss of key personnel. Loss of site certification may create some production slow down or disruption as well.
- (316) As regards the support coming from Safran (i.e. the TSAs), according to the majority of the respondents the maximum duration of the TSAs should be [...] years⁴⁷⁵ with respondents noting that transitions usually took longer than expected. For this reason, one respondent⁴⁷⁶ mentioned that it would be reasonable to include the possibility of extension. Respondents were positive about the scope of the TSAs.⁴⁷⁷
- (317) Concerning the purchaser criteria, respondents mentioned that the buyer should have relevant experience and know-how in flight control actuation,⁴⁷⁸ in all steps of the manufacturing and purchasing process.⁴⁷⁹ The majority of the respondents marked the importance of experience in the THSA business to be a useful but not a decisive factor in deciding on the identity of the potential purchaser.⁴⁸⁰ All respondents to the market test expressing a view also considered that the Divestment Business was sufficiently attractive⁴⁸¹ to attract potential purchasers. However, when it came to express their own interest in purchasing the Divestment Business, interest was lower, with [...] companies expressing their interest, other than Woodward.⁴⁸² The Commission notes that in this respect that an agreement has already been announced on 20 December 2024 between Safran and Woodward, Inc. (“Woodward”) regarding the possible sale and purchase of the Divestment Business.

8.2.3. *Final Commitments*

- (318) The Final Commitments address the comments arising from the market test by inserting the following:
- (a) Safran is prepared to extend the duration of the TSAs by a maximum of [...] months at the same conditions if the purchaser of the Divestment Business asks for this extension;
 - (b) the criterion of proven expertise in aerospace actuation to the purchaser criteria.

⁴⁷⁴ Responses to Questionnaire 5, question E.8.

⁴⁷⁵ Responses to Questionnaire 5, question E.9.

⁴⁷⁶ Response to question E.9.1., Questionnaire 5.

⁴⁷⁷ Responses to Questionnaire 5, question E.10.

⁴⁷⁸ Responses to question F.2.1. in Questionnaire 5.

⁴⁷⁹ Responses to question F.2.1. in Questionnaire 5.

⁴⁸⁰ Responses to Questionnaire 5, question F.3.

⁴⁸¹ Responses to Questionnaire 5, question F.1.

⁴⁸² Responses to Questionnaire 5, question F.5.

8.3. Assessment of the proposed remedies

8.3.1. Suitability of the Final Commitments to remove serious doubts

- (319) The Parties propose to divest Safran's entire North American THSA business together with its Canada-based ECU components activities (Safran will only retain its French legacy THSA Activities).
- (320) Regarding the possible effects of the retention of Safran's French legacy THSA activity (i.e. [...] in France), the Commission notes that there is no relationship between the French legacy THSA activity and the Divestment Business' THSA activities. Moreover, [...].⁴⁸³
- (321) The Commission therefore considers the proposed structural remedy to be straightforward and clear-cut, which is in principle suitable to remove any serious doubts regarding the THSA market, as described further below.

8.3.2. Viability and competitiveness of the Divestment Business

- (322) Based on the results of the market test, the Commission considers that the Divestment Business includes all the necessary tangible and intangible assets. It also includes all the key personnel having the essential expertise from the perspective of development, production, testing, marketing and sales, and relations with suppliers and customers. The key personnel also cover functions regarding R&D, and after-market repair, maintenance and testing across the three different locations of the Divestment Business.
- (323) The market test has also confirmed that that the Divestment Business would be viable and competitive both immediately as well as in the next five years, especially with the pre-determined scale and scope of the TSAs which will last for [...] years after Closing (with a possible extension of [...] months if requested by the purchaser – amended by the Notifying Party after the feedback of the Commission). This is to ensure that there is a smooth transition in case of any unexpected delays. The Commission considers that with this amendment the TSAs will be suitable to promote the purchaser to become an effective competitor to Safran after the transitional period.
- (324) Any TSAs should be limited in time and the Commission notes that the TSAs consist of transitional links between Safran and the purchaser and which will be of limited scope consisting primarily of IT, IP, back office, technical and other support functions. The duration of these agreements can be extended once by additional [...] months after the explicit request of the purchaser – having the exact same conditions as before. The Commission considers that these agreements will be purely transitory in nature and will not affect the standalone basis, independence and competitiveness of the Divestment Business.
- (325) Finally, the Commission notes that the risks highlighted by respondents in the transfer of the Divestment Business, are inherent in any sale of a business. The Commission considers that taken together as a whole, the Final Commitments, including for example TSAs, the key personnel and having a suitable purchaser meeting the specialised purchaser criteria are sufficient to manage these risks.

⁴⁸³

Form RM, paragraphs 25 – 35.

8.3.3. *Purchaser criteria and buyers*

- (326) The Commission has conducted its assessment of the Final Commitments, independently of the agreement between Safran and Woodward for the purchase of the Divestment Business.
- (327) The Commission considers that the Divestment Business is sufficiently attractive to attract potential purchasers. As noted above, all respondents to the market test expressing a view considered that the Divestment Business was sufficiently attractive⁴⁸⁴ to attract potential purchasers and concluded that it would be a good candidate for those who have experience in the aerospace industry.⁴⁸⁵ However, [...]. For this reason and to reduce the risk of delayed implementation of the Final Commitments and provide the requisite degree of certainty that the Divestment Business will be divested effectively and in a timely manner to a suitable purchaser, an upfront buyer clause is maintained in the Final Commitments.
- (328) The Initial Commitments contained the standard requirements that the purchaser (i) be independent from the Notifying Party, (ii) has the financial resources, proven expertise (qualified as “proven expertise in the field”) and incentive to maintain and develop the divestment business as a viable and active competitive force, and (iii) be unlikely to create competition concerns. As described at paragraph (317) above, the Commission’s market test indicated that criterion (ii) was insufficient. In order to address these concerns, the Notifying Party amended the Initial Commitments to specify the purchaser criteria, requesting proven expertise in aerospace actuation.
- (329) Consequently, the Commission considers that, as provided in the Final Commitments, the suitable purchaser will have the expertise to ensure the viability and competitiveness of the Divestment Business.

8.3.4. *Conclusion*

- (330) The Commission considers that the Final Commitments fully address the issues identified in the market test with respect to the Initial Commitments. For the reasons outlined above, the commitments entered into by the undertakings concerned are sufficient to eliminate the serious doubts as to the compatibility of the Transaction with the internal market and the EEA Agreement.

9. **CONDITIONS AND OBLIGATIONS**

- (331) The commitments in Section B of the Annex (including the Schedule of the Final Commitments) constitute a condition attached to this decision, as only through their full compliance can the structural changes in the relevant markets be achieved. The other commitments set out in Section C, E and F of the Annex constitute obligations, as they concern the implementing steps which are necessary to achieve the modifications sought in a manner compatible with the internal market. The full text of the Commitments is attached as an annex to this Decision and forms an integral part thereof.

⁴⁸⁴ Responses to Questionnaire 5, question F.1.

⁴⁸⁵ Response from one market player to question F.1.1. of Questionnaire 5.

10. CONCLUSION

- (332) For the above reasons, the Commission has decided not to oppose the notified operation as modified by the commitments and to declare it compatible with the internal market and with the functioning of the EEA Agreement, subject to full compliance with the conditions in Section B of the commitments annexed to the present decision and with the obligations contained in the other sections of the said commitments. 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)

Teresa RIBERA

Executive Vice-President

**CASE COMP/M.11253 – SAFRAN / PART OF COLLINS AEROSPACE’S ACTUATION AND
FLIGHT CONTROL ACTIVITIES**

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 6(2) of Council Regulation (EC) No 139/2004 (the “*Merger Regulation*”), Safran S.A. (together with its subsidiaries, “*Safran*” or the “*Committing Party*”) hereby enters into the following commitments (the “*Commitments*”) vis-à-vis the European Commission (the “*Commission*”) with a view to rendering Safran’s acquisition of sole control over part of the actuation business (the “*Target*”) of Collins Aerospace, a business unit of RTX Corporation (“*RTX*”) (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*”)¹.

Section A. Definitions

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

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, 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*”).

Assets: the assets that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business as indicated in Section B, paragraph 6 and described more in detail in the Schedule.

Closing: the transfer of the legal title to the Divestment Business to the Purchaser.

¹ For completeness it is noted that Commission Regulation (EC) No 802/2004 has been replaced by Commission Regulation (EC) 914/2023.

Closing Period: the period of [...] months from the approval of the Purchaser and the terms of sale by the Commission.

Committing Party: The notifying party. This includes also any legal successors of the Committing Party (notably the merged entity).

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

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

Divestment Business: the business as defined in Section B and in the Schedule which the Committing Party commits to divest.

Divestiture Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by the Committing Party and who has/have received from the Committing Party the exclusive Trustee Mandate to sell the Divestment Business to a Purchaser at no minimum price.

ECU: electronic control unit.

Effective Date: the date of adoption of the Decision.

First Divestiture Period: the period of [...] months from the Effective Date.

Hold Separate Manager: the person appointed by the Committing Party for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.

Key Personnel: all personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in the Schedule, including the Hold Separate Manager.

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

Parties: the Notifying Party and the Target.

Personnel: all staff currently employed by the Divestment Business, including staff seconded to the Divestment Business, shared personnel as well as the additional personnel listed in the Schedule.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.

Purchaser Criteria: the criteria laid down in paragraph 20 of these Commitments that the Purchaser must fulfil in order to be approved by the Commission.

Safran: Safran S.A., incorporated under the laws of France, with its registered office at 2 Boulevard du Général Martial Valin, 75015 Paris (France), registered with the French *Registre du Commerce et des Sociétés* under number 562 082 909.

Schedule: the schedule to these Commitments describing the Divestment Business in more detail.

Seller in the Concentration: the legal or natural person currently controlling the undertaking that is the target of the Concentration, *i.e.* RTX.

SEDC: Safran Electronics & Defense, Canada Inc., a wholly owned subsidiary of Safran Electronics & Defense S.A.S.

SFCA: secondary flight control actuation.

THSA: trimmable horizontal stabilizer actuation.

Trustee(s): the Monitoring Trustee and/or the Divestiture Trustee as the case may be.

Trustee Divestiture Period: the period of [...] months from the end of the First Divestiture Period.

2. Should issues arise relating to the interpretation of terms listed in paragraph 1 of these Commitments or terms not defined, the Commission will retain the interpretation that is the most favourable for an effective implementation of the Commitments.

Section B. The commitment to divest and the Divestment Business

Commitment to divest

3. In order to maintain effective competition, the Committing Party commits to divest, or procure the divestiture of the Divestment Business as a going concern to a purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 21 of these Commitments. To carry out the divestiture, the Committing Party commits to find a purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Business within the First Divestiture Period. If the Committing Party has not entered into such an agreement at the end of the First Divestiture Period, the Committing Party shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in accordance with the procedure described in paragraph 34.
4. The Concentration shall not be implemented before the Committing Party, or the Divestiture Trustee has/have entered into a final binding sale and purchase agreement for the sale of the Divestment Business and the Commission has approved the Purchaser and the terms of sale in accordance with paragraph 21.
5. The Committing Party shall be deemed to have complied with this commitment if they fulfil the following conditions:
 - (a) a final binding sale and purchase agreement has been entered into by the Committing Party by the end of the First Divestiture Period or by the Divestiture Trustee by the end of the Trustee Divestiture Period, and the Commission approves the Purchaser and the terms of sale as being consistent with the Commitments in accordance with the procedure described in paragraph 21; and
 - (b) the Closing of the sale of the Divestment Business to the Purchaser takes place within the Closing Period on the basis of the transaction documents approved by the Commission without any modification, unless explicitly approved by the Commission.

Structure and definition of the Divestment Business

6. The Divestment Business consists of:

- Safran's North American actuation business, composed of Safran's THSA activity, SFCA activity and nose-wheel steering gearbox activity;
- the entirety of SEDC, the entity that houses Safran's Canada-based ECU activities.

The legal and functional structure of the Divestment Business as operated to date is described in the Schedule.

The Divestment Business, described in more detail in the Schedule, includes the transfer of all assets and staff that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business, in particular:

- (a) all tangible and intangible assets (including products under development and related rights, intellectual property rights, and know how);
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business, to the extent transferable under applicable legal requirements;
 - (c) all contracts, leases, commitments and customer orders of the Divestment Business; all customer, credit and other records of the Divestment Business; all cooperation agreements with third parties; and
 - (d) all personnel.
7. In addition, the Divestment Business includes the benefit, for a transitional period of up to [...] years after Closing and on terms and conditions equivalent to those at present afforded to the Divestment Business, of all current arrangements under which Safran or its Affiliated Undertakings supply products or services to the Divestment Business or of any other current or new arrangements which are necessary for the viability of the Divestment Business, as detailed in the Schedule, unless otherwise agreed with the Purchaser and with the approval of the Commission. Should an extension of the transition period be needed – not foreseen at this stage –, the Purchaser may request an extension for up to [...] months at the same conditions. Strict firewall procedures shall be adopted so as to ensure that any competitively sensitive information related to, or arising from such supply arrangements (for example, product roadmaps) will not be shared with, or passed on to, anyone outside the relevant business unit/division of the corresponding Safran entity.

Section C. Related commitments

Preservation of viability, marketability and competitiveness

8. From the Effective Date until Closing, the Committing Party shall preserve or procure the preservation of the economic viability, marketability and competitiveness of the Divestment Business, in accordance with good business practice, and shall minimise as far as possible any

risk of loss of the competitive potential of the Divestment Business. In particular the Committing Party undertakes:

- (a) not to carry out any action that might have a significant adverse impact on the value, management, viability or competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;
- (b) to make available, or procure to make available, sufficient financial and other resources needed for the development of the Divestment Business, including the development of pipeline products or services where relevant, on the basis of the continuation of the existing business plans;
- (c) to take all reasonable steps, or procure that all reasonable steps are being taken, to assist the Divestment Business in the process of IT migration and/or IT separation until the full process is completed;
- (d) to the extent the Divestment Business includes any licences, permits and authorisations issued by any governmental organisation or any other third party/parties for the benefit of the Divestment Business, to take all reasonable steps, or procure that all reasonable steps are being taken, to obtain consent from any governmental organisation or any other third party/parties for all required licences, permits and authorisations;
- (e) to take all reasonable steps, or procure that all reasonable steps are being taken, including appropriate incentive schemes, to encourage all Key Personnel to remain with the Divestment Business, and not to solicit or move any Personnel to Safran's remaining business. Incentives schemes should not be linked to the sale of the Divestment Business within a certain period or to the sale price of the Divestment Business. Where, nevertheless, individual members of the Key Personnel exceptionally leave the Divestment Business, the Committing Party shall provide a reasoned proposal to replace the person or persons concerned to the Commission and the Monitoring Trustee. The Committing Party must be able to demonstrate to the Commission that the replacement is well suited to carry out the functions exercised by those individual members of the Key Personnel. The replacement shall take place under the supervision of the Monitoring Trustee, who shall report to the Commission.

Hold-separate obligations

9. The Committing Party commits, from the Effective Date until Closing, to keep, or procure to keep, the Divestment Business separate from the business the Parties are retaining and to ensure that unless explicitly permitted under these Commitments: (i) management and staff of the business retained by the Parties have no involvement in the Divestment Business; (ii) the Key Personnel and Personnel of the Divestment Business have no involvement in any business retained by the Parties and do not report to any individual outside the Divestment Business.
10. Until Closing, the Committing Party shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable entity separate from the business which Safran is retaining. Immediately after the adoption of the Decision, the Committing Party shall

appoint a Hold Separate Manager. The Hold Separate Manager shall be the current head of the Divestment Business and shall be part of the Key Personnel. If the Hold Separate Manager is not the head of the Divestment Business at the time of the submission of the Commitments, the appointment should occur in agreement with the Commission. The Hold Separate Manager shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the business retained by Safran. The Hold Separate Manager shall closely cooperate with and report to the Monitoring Trustee and, if applicable, the Divestiture Trustee. The Committing Party/Committing Parties shall ensure that the Hold Separate Manager is available for an initial call with the Monitoring Trustee and the Commission, as well as to discuss any significant matter at the request of the Monitoring Trustee or the Commission during his/her mandate. The Monitoring Trustee or the Commission can discuss any matter relevant for the implementation of the Commitments with the Hold Separate Manager without the presence or explicit agreement of representatives of the Committing Party/Committing Parties. The Hold Separate Manager should provide all information requested by the Commission, including confidential information.

11. Any replacement of the Hold Separate Manager shall be subject to the procedure laid down in paragraph 8(e) of these Commitments. The Commission may, after having heard the Committing Party, require the Committing Party to replace the Hold Separate Manager. The Hold Separate Manager shall not be employed by the Committing Party/Committing Parties or their affiliated undertakings for a period of two years after Closing.
12. To ensure that the Divestment Business is held and managed as a separate entity the Monitoring Trustee shall exercise Safran's rights as shareholder in the legal entity or entities that constitute the Divestment Business (except for its rights in respect of dividends that are due before Closing), with the aim of acting in the best interest of the business, which shall be determined on a stand-alone basis, as an independent financial investor, and with a view to fulfilling the Committing Party's obligations under the Commitments. Furthermore, the Monitoring Trustee shall have the power to replace members of the supervisory board or non-executive directors of the board of directors, who have been appointed on behalf of Safran. Upon request of the Monitoring Trustee, Safran shall resign as a member of the boards or shall cause such members of the boards to resign.

Ring-fencing obligations

13. Safran shall implement, or procure to implement, all necessary measures to ensure that it does not, after the Effective Date, obtain any Confidential Information relating to the Divestment Business and that any such Confidential Information obtained by Safran before the Effective Date will be eliminated and not be used by Safran. This includes measures vis-à-vis Safran's appointees on the supervisory board and/or board of directors of the Divestment Business. In particular, the participation of the Divestment Business in any central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Business. All personnel in Safran's remaining business who have had access to Confidential Information relating to the Divestment Business shall sign non-disclosure agreements preventing them from using or disclosing any such information. To that effect, within two weeks of the Effective Date, Safran shall provide a detailed work plan on the implementation of the ring-fencing measures to

the Monitoring Trustee for its review. Safran may obtain or keep information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business or the disclosure or the retention of which to/by Safran is required by law.

Transitional obligations

14. Until the end of the term of the relevant obligations, the Committing Party shall fulfil and respect its obligations under any and all of the agreements between Safran and the Purchaser, as detailed in the Schedule.

Non-solicitation obligation

15. The Parties undertake, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit the Key Personnel transferred with the Divestment Business for a period of 3 years after Closing.

Non-reacquisition obligation

16. In order to maintain the structural effect of the Commitments, the Committing Party shall, for a period of 10 years after Closing, not acquire, whether directly or indirectly, the possibility of exercising influence (as defined in paragraph 43 of the Remedies Notice, footnote 3) over the whole or part of the Divestment Business, unless, following the submission of a reasoned request from the Committing Party showing good cause and accompanied by a report from the Monitoring Trustee (as provided in paragraph 48 of these Commitments), the Commission finds that the structure of the market has changed to such an extent that the absence of influence over the whole or part of Divestment Business is no longer necessary to render the Concentration compatible with the internal market.

Due diligence-related obligations

17. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, Safran shall provide them with the confidential version (or a meaningful non-confidential version) of the Commitments. Subject to customary confidentiality assurances and dependent on the stage of the divestiture process Safran shall also provide potential purchasers with:
 - (a) sufficient information as regards the Divestment Business;
 - (b) sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting obligations

18. The Committing Party shall submit written reports in English on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Monitoring Trustee no later than 10 days after the end of every month following the Effective

Date (or otherwise at the Monitoring Trustee's request). The Committing Party shall submit a list of all potential purchasers having expressed interest in acquiring the Divestment Business to the Commission and the Monitoring Trustee at each and every stage of the divestiture process, as well as a copy of all the offers made by potential purchasers within five days of their receipt.

19. The Committing Party shall inform the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of any information memorandum to the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section D. The Purchaser

20. In order to be approved by the Commission, the Purchaser must fulfil the following criteria:
 - (a) The Purchaser shall be independent of and unconnected to the Committing Party and its Affiliated Undertakings (this being assessed having regard to the situation following the divestiture). In addition, the Purchaser should not be the Seller in the Concentration nor any of its Affiliated Undertakings.
 - (b) The Purchaser shall have the financial resources to maintain and develop the Divestment Business as a viable and active competitive force in competition with the Parties and other competitors. In particular, the Purchaser shall not be excessively leveraged, shall have sufficient equity and profitability, shall have a turnover significantly larger than the turnover of the Divestment Business, shall have sufficient means to finance the acquisition of the Divestment Business and the execution of its business plan, including investments.
 - (c) The Purchaser shall also have proven expertise in aerospace actuation and the ability and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with the Parties and other competitors.
 - (d) The acquisition of the Divestment Business by the Purchaser must neither be likely to create, in light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed. In particular, the Purchaser must reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Business.
21. The final binding sale and purchase agreement (as well as ancillary agreements) relating to the divestment of the Divestment Business shall be conditional on the Commission's approval. When Safran has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), within one week to the Commission and the Monitoring Trustee. For the approval, Safran must be able to demonstrate – and the Commission shall verify – that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commission's Decision and the Commitments including their objective to bring about a lasting structural change in the market. The Commission may approve the sale of the Divestment Business without one or more of the Assets or parts of the Personnel, or by substituting one or more Assets or parts of the Personnel

with one or more different assets or different personnel, if this does not affect the implementation of the Commitments and the viability and competitiveness of the Divestment Business after the sale, taking account of the Purchaser.

22. Any change to the final binding sale and purchase agreement (as well as ancillary agreements) taking place after the Commission's approval referred to in the previous paragraph shall be approved by the Commission, following consultation of the Monitoring Trustee.

Section E. Trustee

I. Appointment procedure

23. The Committing Party shall appoint a Monitoring Trustee to carry out the functions specified in these Commitments for a Monitoring Trustee. The Committing Party commits not to close the Concentration before the appointment of a Monitoring Trustee.
24. If Safran has not entered into a binding sale and purchase agreement regarding the Divestment Business one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by Safran at that time or thereafter, the Committing Party shall appoint a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.
25. The Trustee shall:
 - (a) at the time of appointment, be independent of the Parties, the Seller in the Concentration, and their Affiliated Undertakings;
 - (b) possess the necessary qualifications to carry out its mandate, for example have sufficient relevant experience as an investment banker or consultant or auditor;
 - (c) neither have nor become exposed to a Conflict of Interest;
 - (d) demonstrate sufficient capacity and resources to take on the Trustee role with all the obligations that the role entails, including to report regularly to the Commission;
 - (e) have a sufficient presence in the EU/EEA, and sufficient expertise in the relevant EU/EEA countries covered by the Commitments.
26. The Trustee shall be remunerated by the Committing Party in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Business, such success premium may only be earned if the divestiture takes place within the Trustee Divestiture Period.

Proposal by the Committing Party

27. No later than one week after the Effective Date, the Committing Party shall submit the names of at least two natural or legal persons whom the Committing Party proposes to appoint as the Monitoring Trustee to the Commission for approval and a list of two or more persons, who can

be the same as the persons proposed as Monitoring Trustee, whom the Committing Party proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the persons proposed as Trustee fulfil the requirements set out in paragraph 25 and shall include:

- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments; and
- (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks.

Approval or rejection by the Commission

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

New proposal by the Committing Party

29. If all the proposed Trustees are rejected, the Committing Party 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 paragraphs 23 and 28 of these Commitments.

Trustee nominated by the Commission

30. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom the Committing Party shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

II. Functions of the Trustee

31. The Trustee shall assume its specified duties and obligations in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or the Committing Party, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

32. The Monitoring Trustee shall:

- (a) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision;
- (b) oversee, in close co-operation with the Hold Separate Manager, the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by the Committing Party with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:
 - (i) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business from the business retained by the Parties, in accordance with paragraphs 8, 9 and 10 of these Commitments;
 - (ii) monitor that the Committing Party makes available sufficient resources for the Divestment Business to develop, including for the development of pipeline products or services where relevant (including to reach completion, approval or registration of pipeline products or services), based on the continuation of existing business plans and relevant milestones or of any other future or ongoing projects that are important for the viability of the Divestment Business to the extent that there are any support obligations from the Committing Party;
 - (iii) to the extent that the Commitments include transitional agreements or the obligation to supply certain inputs, products or services, the Trustee shall monitor the strict compliance with the terms approved and inform the Commission promptly of any changes or compliance problems during the term of such agreements;
 - (iv) supervise the management of the Divestment Business as a distinct and saleable entity, in accordance with paragraphs 9 to 10 of these Commitments;
 - (v) with respect to Confidential Information:
 - determine all necessary measures to ensure that the Committing Party does not after the Effective Date obtain any Confidential Information relating to the Divestment Business,
 - in particular strive for the severing of the Divestment Business' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business,

- make sure that any Confidential Information relating to the Divestment Business obtained by the Committing Party before the Effective Date is eliminated and will not be used by the Committing Party, and
 - decide whether such information may be disclosed to or kept by the Committing Party as the disclosure or the retention is reasonably necessary to allow the Committing Party to carry out the divestiture or as the disclosure or the retention is required by law;
- (c) monitor the splitting of assets and the allocation of Personnel between the Divestment Business and the Committing Party or Affiliated Undertakings;
- (d) propose to the Committing Party such measures as the Monitoring Trustee considers necessary to ensure the Committing Party's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business and the non-disclosure of competitively sensitive information;
- (e) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process:
- (i) potential purchasers receive sufficient and correct information relating to the Divestment Business and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and by ensuring their access to a confidential version (or a meaningful non-confidential) version of the Commitments, and
 - (ii) potential purchasers are granted reasonable access to the Personnel and Key Personnel;
- (f) act as a contact point for any requests by third parties, in particular potential purchasers, in relation to the Commitments;
- (g) provide to the Commission, sending the Committing Party a non-confidential copy at the same time, a written report within 15 days after the end of every month that shall cover the operation and management of the Divestment Business as well as the splitting of assets and the allocation of Personnel so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers. The Committing Party shall neither receive nor comment on draft reports that the Monitoring Trustee prepares for the purposes of reporting to the Commission;
- (h) promptly report in writing to the Commission, sending Safran a non-confidential copy at the same time, if it concludes on reasonable grounds that Safran is failing to comply with these Commitments. Safran shall neither receive nor comment on draft reports that the Monitoring Trustee prepares for the purposes of reporting to the Commission;
- (i) promptly report in writing to the Commission as soon as it becomes aware of potential exposure to a Conflict of Interest appearing after its appointment, including if it

becomes aware of any potential lack of independence or Conflict of Interest with any purchaser participating in the sale process;

- (j) to the extent that the Commitments include transitional services agreements, support for projects under development, or the obligation to supply certain inputs, products or services, assess that these obligations are satisfactorily reflected in the sale and purchase agreement and other transaction documents, and inform the Commission promptly of any deviation from the terms included in the Commitments or approved by the Commission or any dispute as to the compliance with such terms during the full duration of the agreement;
 - (k) promptly report in writing to the Commission risks of degradation of the value or operation of the Divestment Business, or risks that the Purchaser does not or is not able to carry out or maintain investments that are essential for the viability of the Divestment Business;
 - (l) within two weeks after receipt of the documented proposal referred to in paragraph 21 of these Commitments, submit to the Commission, sending Safran a non-confidential copy at the same time, a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the sale and as to whether the Divestment Business is sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the Sale of the Divestment Business without one or more Assets or not all of the Personnel affects the viability of the Divestment Business after the sale, taking account of the proposed purchaser;
 - (m) remain throughout the term of the Commitments a point of contact for the Committing Party, potential purchasers, the Purchaser, the Commission and any other interested third party, in case of issues arising from the implementation and monitoring of the Commitments, including by producing ad hoc reports upon request of the Commission;
 - (n) contact potential purchasers that submitted a bid for the Divestment Business and ask for relevant information;
 - (o) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision.
33. If the Monitoring and Divestiture Trustee are not the same persons, the Monitoring Trustee and the Divestiture Trustee shall cooperate closely with each other during and for the purpose of the preparation of the Trustee Divestiture Period in order to facilitate each other's tasks.

Duties and obligations of the Divestiture Trustee

34. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Business to a purchaser, provided that the Commission has approved both the purchaser and the final binding sale and purchase agreement (and ancillary agreements) as in line with the Commission's Decision and the Commitments in accordance with paragraphs 20 to 21 of these Commitments. The Divestiture Trustee shall include in the sale and purchase agreement (as well as in any ancillary agreements) such terms and conditions as it considers appropriate for

an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of Safran, subject to the Committing Party unconditional obligation to divest at no minimum price (including at a negative price if considered appropriate and reasonably required) in the Trustee Divestiture Period.

35. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Committing Party.

III. Duties and obligations of the Committing Party

36. The Committing Party shall provide and shall cause its advisors to provide the Trustee with all such co-operation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of Safran's or the Divestment Business' books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and Safran and the Divestment Business shall provide the Trustee upon request with copies of any document. Safran and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.
37. The Committing Party shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. The Committing Party shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. The Committing Party shall inform the Monitoring Trustee on possible purchasers, submit lists of potential purchasers at each stage of the selection process, including the offers made by potential purchasers at those stages, and keep the Monitoring Trustee informed of all developments in the divestiture process.
38. The Committing Party shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale (including ancillary agreements), the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, the Committing Party shall cause the documents required for effecting the sale and the Closing to be duly executed.
39. The Committing Party shall indemnify the 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 the Committing Party 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.

40. At the expense of the Committing Party, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to the Committing Party'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 in line with business practice. Should the Committing Party refuse to approve the advisors proposed by the Monitoring Trustee the Commission may approve the appointment of such advisors instead, at the expense of the Committing Party after having heard the Committing Party. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 39 of these Commitments shall apply *mutatis mutandis*. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served the Committing Party during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale. At the expense of the Committing Party, the Divestiture Trustee may appoint advisors (in particular for corporate finance or legal advice), without the Committing Party's approval if the Divestiture 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 Divestiture Trustee are in line with business practice.
41. The Committing Party agrees that the Commission may share Confidential Information proprietary to the Committing Party with the Trustee. The Trustee shall not disclose such information and the principles contained in Article 17 (1) and (2) of the Merger Regulation apply *mutatis mutandis*.
42. The Committing Party agrees that the contact details of the Monitoring Trustee are published on the website of the Commission's Directorate-General for Competition, and they shall inform interested third parties, in particular any potential purchasers, of the identity and the tasks of the Monitoring Trustee. The Committing Party agrees that the contact details of the Divestiture Trustee are published on the website of the Commission's Directorate-General for Competition upon the commencement of the Trustee Divestiture Period begins.
43. For a period of 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 Trustee

44. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including for failure to comply with the requirements in paragraph 25:
 - (a) the Commission may, after hearing the Trustee and the Committing Party, require the Committing Party to replace the Trustee; or

- (b) the Committing Party may, with the prior approval of the Commission, replace the Trustee.
- 45. If the Trustee is removed according to paragraph 44 of these Commitments, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 23-30 of these Commitments.
- 46. Unless removed according to paragraph 44 of these Commitments, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section F. Interpretation of the Commitments

- 47. In case of a conflict between the wording of the text of the present Commitments and the contractual instruments executed by the Committing Party, the Purchaser or any other party for the purposes of implementing the Commitments, the wording of the Commitments shall prevail, without prejudice to the fact that the interpretation of the Commitments shall take into account the solution that is more favourable to the Divestment Business. Deviations from the Commitments in such contractual instruments are only valid if they have been expressly approved by the Commission.

Section G. The review clause

- 48. The Commission may extend the time periods foreseen in the Commitments in response to a request from the Committing Party or, in appropriate cases, on its own initiative. Where the Committing Party requests an extension of a time period, it shall submit a reasoned request to the Commission no later than one month before the expiry of that period, showing good cause. 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 Committing Party. Only in exceptional circumstances shall the Committing Party be entitled to request an extension within the last month of any period.
- 49. The Commission may further, in response to a reasoned request from the Committing 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 Committing Party. The request shall not have the effect of suspending the application of the undertaking and, in particular, of suspending the expiry of any time period in which the undertaking has to be complied with.

Section H. Entry into force

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

[...], duly authorised for and on behalf of Safran

[Signed]

SCHEDULE

1. The proposed Commitments offered by Safran consist of the divestiture to the Purchaser of Safran's North American electric THSA ("**E-THSA**") activities, secondary flight control actuation ("**SFCA**") activities and nose-wheel steering gearbox activities located in Mexicali, Mexico, and Irvine, California (together, the "**Actuation Activities**"); as well as the entirety of Safran Electronics & Defense Canada Inc. ("**SEDC**") – an entity based in Peterborough, Ontario – which provides electronic control unit ("**ECU**") components (the "**ECU Activities**").
2. This business, as defined in this Schedule, is hereinafter referred to as the "**Divestment Business**".
3. An organigram explaining the perimeter of the Divestment Business and the transaction structure is provided as Annex 1.
4. In accordance with paragraph 6 of these Commitments, the Divestment Business includes, but is not limited to, all assets and staff that contribute to its current operation or are necessary to ensure its viability and competitiveness.
5. The Divestment Business is comprised of the following tangible assets:
 - (a) Two leased facilities, in Peterborough, dedicated to ECUs production, engineering, support, and MRO, for the ECU Activities.
 - (b) The engineering, manufacturing, testing and servicing equipment (including machinery, test making and other equipment, test stands, tooling) for (i) the ECU Activities, located in the Peterborough facilities, and for (ii) the Actuation Activities, located in the Mexicali and Irvine facilities (these facilities will be retained by Safran). This includes the related documentation (for example, inventory records, scientific or technical information, research and development records, engineering records, drawings). A list of the main tangible assets included in the Divestment Business is provided as Annex 2 to the Commitments.
 - (c) All financial and accounting records primarily related to the Divestment Business and all tax records exclusively related to the Divestment Business; and other information, including customer lists, supplier lists, business plans, cost and pricing information, sales and promotional data, account histories primarily related to the Divestment Business.

For the avoidance of doubt, the Divestment Business will not include any tangible assets that are used either exclusively or predominantly for activities other than those related to, and that are not necessary for the viability and competitiveness of, the Divestment Business.

6. The Divestment Business includes the following personnel:

Subject to the applicable local employment legislation, Safran commits to transfer to the Purchaser, at the discretion of the Purchaser, the following personnel, for the Peterborough, Irvine and Mexicali sites:

- (a) The Key Personnel; and

(b) The Personnel.

7. The lists of Key Personnel and Personnel are enclosed as Annexes 3 and 4; at the reasonable request of the Monitoring Trustee, the Committing Party shall consider the appointment of additional Key Personnel without delaying or withholding the appointment unreasonably.
8. The Divestment Business includes any and all intellectual property that is primarily or exclusively used in the operation of the Divestment Business, and more specifically:
 - (a) **Patents.** Safran will transfer the [...] patents related to the products within the scope of the Divestment Business to the Purchaser.
 - (b) **Know-how.** Safran will transfer all know-how which is owned by Safran, including trade secrets and designs, and (i) exclusively related to the Divestment Business or (ii) necessary for the operation of the Divestment Business to the Purchaser. The licences to know-how which are owned by customers will transfer to the Divestment Business with the relevant customer contracts.
 - (c) **Software.** Safran will transfer an inventory of the software necessary for the functioning of the Divestment Business (including software data files, protocols, specifications, and other documentation) as well as two software licenses to the Purchaser.

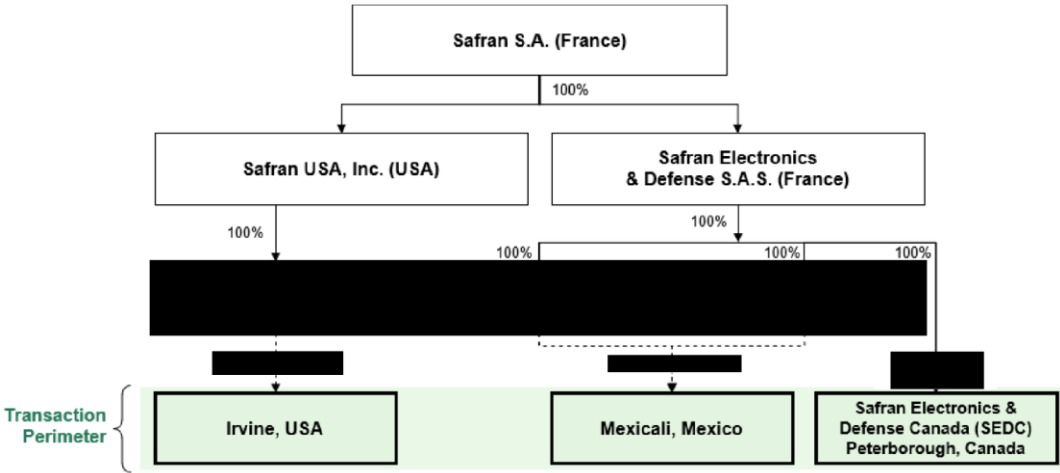
A list of the intellectual property rights included in the Divestment Business is provided as Annex 5 to the Commitments.

Since the Divestment Business uses trademarks and domain names that include the Safran brand, Safran will offer a licence to use the relevant Safran brands for a transitional period of up to [...] years after Closing to be negotiated between Safran and the Purchaser. It is envisioned that the duration of this transitional period would permit the Purchaser to continue to sell products that include trademarks that were manufactured by Safran during the term of the supply agreement to be entered into between Safran and the Purchaser at Closing. Should an extension of the licence be needed – not foreseen at this stage –, the Purchaser may request an extension for up to [...] months at the same conditions. Safran will also offer a licence which will ensure that the Purchaser has access to all and any IP owned by Safran (other than brands and the intellectual property rights mentioned above) that is used to operate the Divestment Business, if needed.

9. The Divestment Business includes the following contracts:
 - (a) **Customer contracts.** All customer contracts related to the Actuation Activities and the ECU Activities, [...]. A list of the Original Equipment customers of the Divestment Business is provided as Annex 6.
 - (b) **Supplier contracts.** All supplier contracts related to the Actuation Activities and the ECU Activities. A list of the principal suppliers of the Divestment Business is provided as Annex 7.

- (c) **Leases.** The long-term leases of the Peterborough facilities will transfer to the Purchaser with its acquisition of the shares of SEDC. The Divestment Business will also include, at the Purchaser's discretion, a short-term sublease agreement for a facility to which the Irvine employees and assets could be transferred.
- 10. The Divestment Business will also include arrangements for the supply of the following products or services on terms and conditions equivalent to those at present afforded to the Divestment Business by Safran for a transitional period of up to [...] years after Closing (should an extension be needed – not foreseen at this stage –, the Purchaser may request an extension for up to [...] months at the same conditions):
 - (a) transitional service agreements covering IT, back office, technical and other support functions;
 - (b) at the Purchaser's discretion and as per industry's standards, a supply agreement providing for Safran to continue operating the Actuation Activities at Mexicali, at the Purchaser's direction, following closing of the divestment, to maintain the continuity of the Actuation Activities during the transition.
- 11. Safran will also transfer to the Purchaser all licenses, permits and authorisations issued by any governmental organisation to the extent transferable under applicable legal requirements.
- 12. For the avoidance of doubt, the Divestment Business will not include any intangible assets that are used exclusively or predominantly for activities other than those related to, and that are not necessary for the viability and competitiveness of, the Divestment Business.
- 13. If there is any asset or personnel which is not covered by paragraphs 5 to 9 of this Schedule but which contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business, that asset, personnel or adequate substitute will be offered to potential purchasers.

Annex 1 to commitments - perimeter of the Divestment Business and transaction structure



Annex 2 to commitments - main tangible personal property included in the Divestment Business

[...]

Annex 3 to commitments - key personnel of the Divestment Business

[The Divestment Business includes ca. 50 key employees across the three locations (i.e. Mexicali, Mexico; Irvine, California; Peterborough, Canada), who will transfer at the discretion of the Purchaser. These persons cover various functions within the Divestment Business, including Management, engineering (R&T, systems and components design, etc.), program management, manufacturing (production control, testing, etc.), quality assurance, sales (procurement and purchasing policy, customer services, business analysis, etc.), supply chain, human resources, finance, IT.]

Annex 4 to commitments - personnel of the Divestment Business

[...]

Annex 5 to commitments - intellectual property rights included in the Divestment Business

[...]

Annex 6 to commitments - OE sales by customer of the Divestment Business

[...]

Annex 7 to commitments - principal Suppliers of the Divestment Business

[...]