ANTICIPATED ACQUISITION BY VIASAT, INC. OF CONNECT TOPCO LIMITED

Decision on relevant merger situation and substantial lessening of competition

ME/6895/22

The CMA's decision on reference under section 33(1) of the Enterprise Act 2002 given on 6 October 2022. Full text of the decision published on 31 October 2022.

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

SUMMARY

Overview of the decision

1. The Competition and Markets Authority (**CMA**) conducted a phase 1 investigation into the anticipated acquisition by Viasat, Inc. (**Viasat**) of Inmarsat Group Holdings Limited (**Inmarsat**) (the **Merger**).

2. After examining a range of evidence, the CMA believes that the Merger meets the threshold for reference to an in-depth phase 2 investigation, giving rise to a realistic prospect of a substantial lessening of competition (**SLC**). The CMA considers that it has jurisdiction to review the Merger because it believes that it is or may be the case that each of Viasat and Inmarsat is an enterprise, that these enterprises will cease to be distinct as a result of the Merger, and that the share of supply test is met. Accordingly, arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

3. The CMA is therefore considering whether to accept undertakings under section 73 of the Enterprise Act 2002 (the **Act**). Viasat and Inmarsat (together, the **Parties**) have until 13 October 2022 to offer an undertaking to the CMA that might be accepted by the CMA. If no such undertaking is offered, then the CMA will refer the Merger pursuant to sections 33(1) and 34ZA(2) of the Act.

About the satellite industry

4. Satellite connectivity is used in many different industry sectors. These include home and office internet, government (including military and non-military applications), maritime, and aviation. Satellite connectivity is often used in circumstances where terrestrial alternatives are not available.

5. Demand for satellite connectivity is increasing rapidly, driven by growing use of the internet and data-intensive applications (such as video streaming, and cloud computing).

6. Satellite connectivity can be served from satellites orbiting at different distances from the Earth's surface. Historically, satellite network operators (**SNOs**) supplied connectivity from geo-stationary satellites (**GEOs**), which are positioned 36,000 kilometres above the Earth's surface, allowing them to travel at the same rotational rate as the Earth and provide connectivity from a fixed point in the sky. Over time, SNOs have launched non-geostationary satellites (**NGSOs**) which orbit closer to the Earth's surface and have different characteristics. The most recently developed NGSOs are low-earth orbit (**LEO**) satellites, which orbit closest to the Earth's surface.

7. The satellite industry is undergoing a period of major change. In particular, a number of players with significant financial backing, such as SpaceX and OneWeb, have launched or have plans to launch NGSO constellations.

The CMA's assessment

8. The Parties supply satellite connectivity to a range of industries but compete most closely in the supply of in-flight connectivity (**IFC**) for aircraft.

9. The CMA has found that demand for IFC is growing and many airlines consider it a 'must-have' to meet passengers' desire to stay connected during flights. The CMA has focused its investigation on the services that are most likely to impact UK consumers, which are IFC services supplied to commercial airlines flying from/to and within Europe.

10. The CMA has gathered a substantial volume of evidence from a range of sources, including from the Parties and from third parties.

11. The evidence shows that the Parties are two of a small number of suppliers that offer IFC. They compete head-to-head in tenders and airlines regard them as close alternatives. In particular, as SNOs, both Parties are vertically integrated IFC providers and control their own satellite capacity, which is considered important by airlines as it enables the Parties to offer lower rates and more service flexibility.

Although Viasat currently offers more limited geographic coverage than Inmarsat, and Inmarsat has limited capacity in certain regions, both Parties are launching additional satellite capacity and will soon offer near-global coverage. The Parties would have therefore become stronger competitors absent the Merger.

12. Of the other IFC providers, the evidence shows that: Panasonic, which was the first-mover in IFC and still has a high share of supply, is in decline, due to its reliance on capacity from third-party SNOs and airlines' perception that it is expensive and offers old technology; Anuvu competes only for short-haul flights and is considered a weak option by airlines; and Intelsat occupies a modest position in the market and it is uncertain how it will develop in the future.

13. In short, the CMA believes that the Parties are currently the strongest IFC providers available to airlines and that the constraint from existing suppliers is insufficient to prevent significant competition concerns from arising.

14. The CMA notes that certain NGSO operators, namely SpaceX and OneWeb, are taking steps towards supplying IFC services. They have operational constellations in orbit, are supplying connectivity to fixed broadband customers, and are marketing their services to airlines. SpaceX has won an IFC contract with Hawaiian Airlines. However, none currently has an IFC service that is proven to work.

15. Based on the evidence available to it, the CMA believes that NGSOs still face many financial, operational, technical, regulatory, and commercial barriers before they can supply IFC services on board aircraft. Although NGSOs have significant financial backing, a number of the barriers to entry are complex technical and regulatory requirements that cannot be overcome through financing alone.

16. Moreover, although NGSOs have strong incentives to overcome these barriers, given the substantial sunk costs they have incurred, the evidence available to the CMA indicates that their incentives to supply IFC are not unlimited. Ultimately, NGSOs need to demonstrate that they can achieve a return on investment in aviation. Evidence available to the CMA suggests that the business case for NGSO constellations is not contingent on offering IFC to airlines (having regard to the many other industry sectors that are served by satellite connectivity).

17. Given the Parties' strong position, even if NGSOs do succeed in launching IFC services, it is likely to be some time before they could compete at the same scale as the Parties. In particular, NGSOs need certifications to be installed on each aircraft model, national licences around the world, and to scale up technology and support networks to cope with increasing volumes of data traffic.

18. The evidence also shows that it is difficult for airlines to switch providers once they have installed an IFC solution. As such, the CMA is concerned that the Parties

could effectively lock in a large part of the customer base before NGSOs might become more credible options.

19. Accordingly, the CMA believes that there is not sufficient evidence available to establish that NGSO entry would be timely, likely, and sufficient to constrain the Parties post-Merger and, given the limited constraints from established suppliers (as described above), therefore considers that the Merger gives rise to a realistic prospect of an SLC in commercial aviation.

20. The CMA notes that the Parties also supply IFC services to business aviation customers. The CMA has considered these services separately to commercial aviation due to the differing requirements of customers and differing sets of IFC providers. Nevertheless, the CMA's assessment largely corresponds to its assessment in commercial aviation and the CMA believes that the Merger also gives rise to a realistic prospect of an SLC in business aviation.

PARTIES

21. **Viasat** is a public company based in the United States listed on NASDAQ that owns and operates GEO satellites. It provides satellite-based connectivity services globally for use in consumer and commercial applications. Viasat also provides communications and cybersecurity products and services to governments, and manufactures and supplies equipment and network technology for satellite connectivity services. Viasat's turnover in the financial year 2021 was approximately £2,013 million worldwide, of which £[✂] million was generated in the UK.[1]

22. **Inmarsat** is a private company incorporated and headquartered in the UK. Its ultimate parent company, Connect TopCo Limited (**Connect TopCo**), is owned by funds affiliated with Apax Partners LLP, Warburg Pincus LLC, Canada Pension Plan Investment Board, and the Ontario Teachers' Pension Plan Board (together, the **Inmarsat Investor Shareholders**), as well as members of Inmarsat's management. Inmarsat owns and operates GEO satellites and provides satellite-based broadband and narrowband connectivity services for government and commercial applications. Inmarsat's turnover in in the financial year 2021 was approximately £983 million worldwide, of which £[✂] million was generated in the UK.[2]

23. The Parties post-Merger are referred to as the **Merged Entity**.

[1] Final Merger Notice dated 8 August 2022 (**FMN**), Table 1.
[2] FMN, Table 1.

TRANSACTION

24. Viasat entered into a share purchase agreement with Inmarsat's shareholders on 8 November 2021 pursuant to which Viasat agreed to acquire 100% of Connect TopCo's issued share capital and therefore, indirectly, 100% of Inmarsat's issued share capital.[3]

25. The Parties informed the CMA that the Merger is also being reviewed by the European Commission and other competition authorities around the world, including in the United States.[4]

PROCEDURE

26. The Merger was considered at a Case Review Meeting.[5]

JURISDICTION

27. Each of Viasat and Inmarsat is an enterprise. As a result of the Merger, these enterprises will cease to be distinct.[6]

28. The Parties overlap in the supply of IFC services to UK-based airlines and have a combined share of supply of approximately [40-50]% (with an increment of approximately [0-5]%) based on the number of committed aircraft.[7] Accordingly, the CMA believes that the share of supply test in section 23 of the Act is met.

29. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

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[3] See Annex 4 to the FMN, Share Purchase Agreement dated 8 November 2021.
[4] FMN, paragraph 100.
[5] Mergers: Guidance on the CMA's jurisdiction and procedure (**CMA2revised**), December 2020, from page 46.
[6] Pursuant to the Merger, a number of Inmarsat's private equity investors (the Inmarsat Investor Shareholders) will together acquire circa [✂]% of Viasat's common stock with each of them holding less than [✂]% (see the Parties' response to RFI7). Pursuant to clause [✂] appoint [✂] board members [✂]. Viasat's board decisions are made by means of a simple majority vote, according to section 7 of Article III of Viasat's by-laws. Clause [✂] Inmarsat Investor Shareholders to vote [✂]. As such, the CMA believes that the Inmarsat Investor Shareholders will not – individually or together – be able to exercise material influence over Viasat post-Merger.
[7] See paragraph 64 below for a definition of 'committed' aircraft. UK-based airlines with committed aircraft with IFC capabilities are currently British Airways and Virgin Atlantic. Shares of supply were calculated by the CMA based on data provided by the Parties in Annex 22.12 to the FMN, Q1 2022 - In-Flight Connectivity Tracker - Viasat (Valour Consultancy) for narrowbody and widebody aircraft.

30. The initial period for consideration of the Merger under section 34ZA(3) of the Act started on 9 August 2022 and the statutory 40 working day deadline for a decision is 6 October 2022.

COUNTERFACTUAL

31. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual). For anticipated mergers the CMA generally adopts the prevailing conditions of competition as the counterfactual against which to assess the impact of the merger. However, the CMA will assess the merger against an alternative counterfactual where, based on the evidence available to it, it believes that, in the absence of the merger, the prospect of these conditions continuing is not realistic, or there is a realistic prospect of a counterfactual that is more competitive than these conditions.[8]

32. In this case, the CMA believes the prevailing conditions of competition to be the relevant counterfactual.

33. As discussed further below, a recent development in the satellite communications (**satcoms**) industry is the emergence of firms planning, funding and building constellations of LEO satellites. As set out in the CMA's guidance, significant changes affecting competition from third parties which would occur with or without the merger (and which therefore form a part of the counterfactual) are unlikely to be assessed in any depth as part of the CMA's counterfactual assessment.[9] This includes entry or expansion by a third party.[10] On this basis, the CMA did not consider it necessary to undertake a detailed assessment of the impact of the emergence of LEOs and other NGSO satellites in its counterfactual assessment. The CMA has considered the effect of LEOs and other NGSOs in its competitive assessment.

BACKGROUND

34. Both Parties are active in the supply of satellite capacity and connectivity services to customers in a range of industry sectors.[11] The supply of satellite connectivity services is complex and involves a wide variety of players operating at different levels of the supply chain, with different satellites, in different frequency bands, and in different industry sectors.

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[8] Merger Assessment Guidelines (**CMA129**), March 2021, from paragraph 3.12.
[9] CMA129, paragraph 3.10.
[10] Ibid.
[11] Satellite connectivity refers to two-way satellite communications as opposed to one-way communications, such as satellite broadcasting for TV and radio.

Supply of satellite connectivity

Industry verticals

35. Satellite connectivity is used in a range of different industry sectors (or 'verticals'). The main verticals supplied by one or both of the Parties are:[12]

    (a) *Fixed broadband*: connectivity for residential and commercial internet, particularly in areas without good access to terrestrial internet services;

    (b) *Government*: connectivity for Government customers, including for military and non-military applications;

    (c) *Maritime*: connectivity for maritime customers, including for use on merchant, fishing, passenger, and leisure vessels;

    (d) *Off-shore energy*: connectivity for off-shore energy customers, including for use on off-shore support vessels (**OSVs**), platforms, and rigs;[13] and

    (e) *Aviation*: IFC for commercial airlines and business aircraft owners and operators, which is discussed in more detail in the frame of reference and competitive assessment sections below.[14]

Satellite connectivity supply chain

36. The satellite connectivity supply chain comprises three main levels:

    (a) SNOs: own and manage their own satellite fleets. They lease satellite capacity at the wholesale level to satellite service providers (**SSPs**) and resellers, for on-sale to downstream customers, and/or use their capacity captively to sell satellite connectivity services directly to end customers (ie by acting as an SSP). The extent to which SNOs operate at both the wholesale and/or retail level varies between SNOs. The Parties are active at both levels of the supply chain (and sell through resellers as well as directly to end-customers).

    (b) *SSPs*: assemble packages of satellite connectivity solutions consisting of satellite capacity – either purchased from third-party SNOs or sourced internally (ie for vertically-integrated SNOs/SSPs like the Parties) – and related services

[12] FMN, paragraphs 31-36 and 106.
[13] Off-shore energy is sometimes included within the maritime vertical (eg, Annex 19.27 – Euroconsult - Prospects for maritime Satellite Connectivity, April 2021, page 20; Annex VA00012545 to Viasat's response to the CMA's first section 109 notice (**first Notice**), [✂] May 2021, slide 65; and Annex 3.6 to Inmarsat's response to the CMA's second section 109 notice (**second Notice**), [✂], slide 11).
[14] The Parties refer to the aviation, maritime, and off-shore energy verticals together as 'mobility' verticals, as customers typically require connectivity on the move (see, for instance, FMN, paragraph 177).

(eg invoicing tools, customer support, and traffic monitoring) and equipment (eg terminals), which they sell to resellers or end-customers.[15]

(c) *Resellers*: purchase satellite connectivity packages from SSPs (including vertically integrated SSPs) and distribute them to end-customers. Some resellers provide additional value-added services to end-customers (eg installation and maintenance of equipment) and are known as value-added resellers (**VARs**).

Satellite connectivity can be supplied from a variety of satellites in different orbits

37. Satellite connectivity can be served from satellites orbiting at different distances from the Earth's surface. Satellites are separated into four categories, which have different characteristics and therefore different strengths and weaknesses (which are addressed in more detail in the competitive assessment):

(a) *GEOs*: are positioned at c. 36,000 kilometres above the Earth's surface, allowing them to travel at the same rotational rate as the Earth and provide a stationary platform for continuous signal relay (ie they appear at a fixed point in the sky from a given user's perspective).[16] As a result, GEOs have consistent line of sight to user and gateway terminals[17] and provide more reliable signal to customers than LEOs.[18]

(b) *Medium-earth orbit* satellites (**MEOs**): are positioned c. 2,000-36,000 kilometres above the Earth's surface. MEOs' lower orbit compared to GEOs means that they do not provide a stationary platform but do provide lower-latency satellite connectivity (ie there is less delay in signal travelling between the satellite and user terminal).

(c) *LEOs*: are positioned c. 500-2,000 kilometres above the Earth's surface and orbit more quickly around the Earth than MEOs, handing off their signal to another LEO or gateway terminal. Since LEOs are smaller than GEOs and closer to the Earth, many more LEOs are required in a constellation to provide global coverage, which means that LEO constellations are also more expensive to build.[19] The lower lifespan of LEOs compared to GEOs (around 5 years in

[15] FMN, paragraph 181(ii).
[16] FMN, paragraph 461.
[17] A gateway terminal is a ground station (ie, a physical site with antennas and other equipment) that transmits data to/from satellites and connects them with the terrestrial internet.
[18] A third party told the CMA that LEOs provide less reliable signal than GEOs because they form part of a constellation of hundreds of satellites rapidly moving around the Earth (note of call with competitor).
[19] FMN, paragraph 297. The Parties noted that it is more costly for LEO constellations to achieve global coverage due to the number of satellites required; and LEO capacity is evenly spread across the globe, which means a large number of satellites is necessary to provide sufficient bandwidth at a given time.

theory compared to 15 or more years) also contributes to the increased cost.[20] Since LEOs orbit closer to the Earth's surface than MEOs and GEOs, latency is lower. In principle, LEOs can also provide full global coverage, whereas GEOs cannot provide coverage over the polar regions.[21]

(d) *Highly-elliptical orbit satellites* (**HEO**): move more slowly in high-altitude parts of their orbit than in low-altitude parts, which maximises viewing times and coverage over the polar regions.[22]

Regulation of SNOs

38. Operating as an SNO is highly regulated. Before satellites can be launched into space, applications must be submitted to the International Telecommunication Union for allocation of orbital slots and spectrum,[23] which are approved subject to complex rules, including to avoid interference with other satellites.

39. SNOs also require domestic licences from countries around the world in order to locate ground stations and to serve users in those countries (by transmitting data to/from them). For instance, SNOs require a licence from Ofcom to locate gateway stations and/or terminals in the UK or on UK-flagged vessels (including aircraft), which enables Ofcom to manage interference with other spectrum rights.[24]

Satellite connectivity is supplied over a variety of frequency bands

40. Satellite connectivity can be served over different sections of the electromagnetic spectrum, known as frequency bands. In the satcoms industry, frequency bands are separated into two main categories:

(a) *Narrowband*: connectivity served at lower frequencies (eg in L-band or S-band), which has less bandwidth and is, therefore, less suitable for data-intensive applications (eg video streaming). Narrowband is, however, considered to be

[20] FMN, paragraph 297.
[21] FMN, paragraph 463.
[22] FMN, paragraph 147(iv).
[23] Note of call with Ofcom and note of call with competitor. For GEOs, an orbital slot is a fixed location above the earth measured in degrees of longitude (see Annex 22.1, GEO orbital slots, August 2022). A competitor told the CMA that there can only be one satellite per frequency band in each orbital slot pointing at a given location on earth; other satellites must be separated by two to three degrees on either side to avoid radio waves conflicting with each other (note of call with competitor). The geographic coverage of the slot is the portion of the Earth's surface that is visible from this location, which can cover multiple regions (for instance, North and South America or EMEA and South America) Annex 22.1, GEO orbital slots, August 2022.
[24] Note of call with Ofcom. It can take three months or more to apply for NGSO licences, which are subject to public consultation, including to assess whether licences may raise competition concerns. GEO licenses are more straightforward and are typically issued within 42 days.

more reliable and, correspondingly, more suitable for critical applications, such as for aviation and/or maritime safety.[25]

(b) *Broadband*: connectivity served at higher frequencies (eg in Ku-band or Ka-band), which has more bandwidth and therefore offers more throughput and capacity and is, as a result, more suitable for data-intensive applications. However, broadband is more susceptible to signal interference and is generally considered less suitable for applications for which signal reliability is critical.[26]

Industry developments

Launch of new GEO satellites

41. Both Parties have substantial expansions plans, such that, by the end of [✂], they are together expected to supply approximately [50-60]% of GEO capacity:

(a) Viasat plans to launch its vHTS[27] GEO constellation (**Viasat-3**) consisting of three satellites from [✂] to [✂],[28] which will allow Viasat to provide global coverage by [✂][29] and to supply approximately eight times the capacity of Viasat's current fleet.[30]

(b) Inmarsat plans to launch two GEO satellites with both L-band and Ka-band capabilities and three more Ka-band satellites, which are all expected to be in operation by [✂]. Together, the Ka-band payloads are expected to add more than [✂] times Inmarsat's current Ka-band capacity.[31] Inmarsat also plans to launch two HEO satellites to provide coverage over the Arctic Circle.

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[25] FMN, paragraph 150. See also Annex 16.25, The Future of Maritime Connectivity (2022 Edition) (report), July 2022, pages 21-24, and Annex 16.3, Prospects for In-Flight Entertainment and Connectivity, 9th edition, July 2021, page 28.
[26] FMN, paragraphs 150 and 594.
[27] A significant development in the satellite industry has been the design and introduction of high-throughput GEO satellites (**HTS**) and, now, very-high-throughput GEO satellites (**vHTS**), with capacity per-satellite increasing continuously as technology has improved.
[28] FMN, footnote 264.
[29] FMN, paragraph 424. At present, Viasat relies on leasing capacity from other operators to provide global coverage.
[30] The first Viasat-3 launch will be over North America followed by Europe [✂] and the Asia-Pacific region [✂]. Each launch will lead to 1,000 Gbps of additional capacity. Viasat is expected to have commercially operational global coverage in [✂] (FMN, paragraphs 59 and 1495, and footnote 264). Viasat's current Ka-band fleet comprises four GEO satellites located over North America and Europe (FMN paragraph 421).
[31] Inmarsat's current Ka-band fleet comprises five GEO satellites that supply global coverage (except over the poles). FMN, paragraph 432.

42. Table 1 sets out shares of supply of GEO capacity at the end of 2021 and 2025:

Table 1: GEO capacity at the end of 2021 and 2025

SNO	End 2021		End 2025	
	Gbps	Shares (%)	Gbps	Shares (%)
Inmarsat	[✂]	[0-5]	[✂]	[5-10]
Viasat	[✂]	[10-20]	[✂]	[40-50]
Combined	**[✂]**	**[20-30]**	**[✂]**	**[50-60]**
EchoStar	[✂]	[10-20]	[✂]	[10-20]
SES	[✂]	[10-20]	[✂]	[0-5]
Eutelsat	[✂]	[5-10]	[✂]	[5-10]
Intelsat	[✂]	[0-5]	[✂]	[5-10]
Other GEO	[✂]	[40-50]	[✂]	[10-20]
Total	**[✂]**	**100**	**[✂]**	**100**

Source: FMN, Table 7; FMN, Table 10.

Development and launch of NGSO satellites

43. In addition to the launch of additional GEO satellites, the satellite industry has been experiencing a period of change, which has been described by Valour Consultancy, an independent industry reporter, as 'a once-in-a-generation period of disruption' caused by the emergence of 'numerous LEO constellations.'[32]

44. The LEO constellations are as follows:

(a) Starlink – owned by Elon Musk's SpaceX – is the most advanced LEO constellation, with approximately 2,700 satellites in orbit as of July 2022[33] and currently serving over 400,000 fixed broadband customers.[34] It plans to have [✂] satellites in orbit by the end of 2025 at an altitude of approximately 550 kilometres above the Earth's surface.[35] Starlink is [✂] focused on serving fixed broadband customers. Its [✂] serving government, maritime, and aviation customers. As of June 2022, Starlink had [✂] government customers and [✂] aviation [✂] maritime customers.[36]

(b) OneWeb – partly owned by the UK Government – is the second most advanced LEO constellation, with 428 satellites in orbit.[37] It plans to have [✂] satellites in orbit by the end of 2023 at an altitude of 1,200 kilometres above the Earth's surface and to deploy its ground infrastructure before completion of the constellation.[38] OneWeb [✂] plans to sell capacity to SSPs at the wholesale

[32] FMN, paragraph 201.
[33] FMN, paragraph 527(i).
[34] See SpaceX's Starlink satellite internet surpasses 400,000 subscribers globally, 25 May 2022.
[35] Third party response to questionnaire. See the Parties' response to the Issues Letter, dated 15 September 2022 (**Issues Letter Response**), paragraph 81.
[36] Third party response to questionnaire.
[37] FMN, paragraph 527(ii).
[38] Note of call with competitor. See Issues Letter Response, paragraph 81.

level rather than directly to consumers and has recently announced a merger with Eutelsat, which is also active at the wholesale level.[39] It is targeting the commercial fixed broadband, government, maritime, and aviation verticals. [✂] of these four target verticals, aviation will come last in time [✂].[40] OneWeb is actively supplying capacity for fixed broadband and government applications in areas of the world [✂].[41]

(c) Telesat, which currently operates a GEO network, has announced that it will launch its Lightspeed LEO constellation of 188 satellites at an altitude of 1,000 kilometres above the Earth's surface.[42] However, Telesat's constellation is not fully funded and [✂] a constellation in orbit before 2026.[43] Telesat is currently active at the wholesale level supplying satellite capacity to SSPs active in the fixed broadband, government, maritime, and aviation sectors.

(d) Amazon Kuiper – owned by Jeff Bezos' Amazon – has obtained approval to launch a LEO constellation and has indicated that it will spend over $10 billion to build its LEO constellation.[44] It has not started to launch satellites yet and there is substantial uncertainty regarding whether and when its satellites will be in orbit and the industry verticals in which it plans to compete.[45]

45. Accordingly, LEOs are at different stages of development, plan to adopt different business models, and can serve certain industry verticals more easily (and therefore more quickly) than others. In particular, it is most straightforward for LEOs to supply connectivity to fixed broadband customers (which are typically located in fixed positions on land and not close together) and most challenging for them to supply connectivity to aviation customers (which can travel around the world over oceans with hundreds of passengers on board).[46] Government and maritime customers fall in between fixed broadband and aviation on the ease-of-entry spectrum.

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[39] See paragraph 48(d) below.
[40] Note of call with competitor.
[41] Third party response to questionnaire.
[42] FMN, paragraph 359. See FMN, footnote 396.
[43] Third party response to questionnaire.
[44] FMN, paragraph 527(iv).
[45] See, for instance, Annex 158 to Inmarsat's response to the third Notice, [✂], 30 November 2020, pages 10, 15, 20 and 21: [✂]. See Annex VA00023890 to Viasat's response to the CMA's first Notice, [✂], 15 December 2021, page 5; and Annex 8.19 to Inmarsat's response to the second Notice, [✂], 27 May 2020, page 27: [✂].
[46] For instance, Starlink and OneWeb have already started serving fixed broadband customers whereas they are several years off serving aviation customers (as discussed in the competitive assessment below).

Increasing demand for satellite capacity

46. Demand for satellite capacity is expected to increase substantially, driven by a range of factors including growing use of internet services, increasing data requirements for end-use applications (eg higher-quality video streaming, video conferences, cloud computing), and wider availability and accessibility of satellite broadband services.[47]

47. Euroconsult, an independent industry reporter, estimates that total demand globally for HTS capacity will increase from approximately 2,500 Gbps in 2022 to more than 7,000 Gbps in 2025 and to approximately 14,500 Gbps in 2030.[48] While the increase in demand is expected to be driven largely by fixed consumer broadband (ie home internet), demand for satellite connectivity is growing significantly in other verticals, including in aviation. Indeed, Euroconsult estimates that demand for satellite capacity for IFC will increase more than seven times between 2021 and 2028.[49] This growth is supported by the Parties' internal documents and third-party evidence.[50]

Multi-orbit and multi-network offerings

48. Many operators that were historically specialised in one type of satellite connectivity (eg GEO broadband) are now planning to provide multi-orbit and/or multi-network offerings, either alone or in partnership with other SNOs or SSPs, aiming to leverage the strengths of different orbits and networks to provide better connectivity to end-users.[51] For instance, of the main GEO SNOs:[52]

    (a) Viasat [✂] MEO and HEO [✂].[53] [✂] LEO [✂];[54]

    (b) Inmarsat is 'attempting to improve its services to customers by combining GEO, HEO, LEO and other orbits and technologies (including terrestrial)' in its multi-

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[47] FMN, paragraph 192. Parties' analysis of the Euroconsult and Northern Sky Research reports.
[48] FMN, Figures 12 and 13 combined (CMA's analysis of data Annex RFI2.037 to the FMN).
[49] From 96 Gbps in 2021 to 765 Gbps in 2028 (see Annex 6 to Viasat's response to the CMA's first Notice, Euroconsult High Throughput Satellites Reports, March 2020).
[50] Annex 5.19 to Inmarsat's response to the CMA's second Notice, [✂], 7 December 2021: [✂] aircraft with active IFC will increase from [✂] to [✂] between [✂] and [✂]. Viasat notes in Annex 21 to Viasat's response to the CMA's third section 109 notice (**third Notice**) [✂], 3 November 2021, page 25, [✂]. In addition, most commercial airlines and all business aviation customers and VARs that responded to the CMA's questionnaire indicated that demand for IFC is expected to increase, driven by passengers' growing expectation for similar connectivity in the air as on the ground – often for free – including for internet browsing, social media, and more data-intensive applications like video streaming.
[51] FMN, paragraph 363. The Parties noted that 'from the perspective of users, multi-orbit networks can allow for higher (and/or more consistent) speeds at a lower price, while still maintaining low latency for applications that are latency-sensitive such as VPNs, gaming and video calling by using the NGSO satellites'.
[52] Many SSPs also have plans to adopt multi-orbit and/or multi-network strategies, including Anuvu, Gogo, Hughes, Marlink, and Speedcast (FMN, paragraphs 361 and 373).
[53] FMN, paragraph 347.
[54] FMN, paragraph 326.

network strategy, known as ORCHESTRA.[55] Inmarsat plans to launch two HEO satellites to provide coverage over the Arctic region in [✂]. And it currently implements a hybrid satellite/terrestrial network for flights within Europe, known as the European Aviation Network (**EAN**), which is discussed further below in the competitive assessment;

(c) SES has launched 20 MEO satellites and plans to launch an additional 11 MEO satellites, known as the O3b mPOWER constellation;[56]

(d) Eutelsat has announced a proposed merger with OneWeb to benefit from a multi-orbit constellation. Eutelsat and OneWeb have stated that the merger will combine the 'Capacity density', 'High throughput at unparalleled cost' and 'Important installed base' of GEOs with the 'Global coverage', 'Low latency' and 'Uninterrupted service' of LEOs.[57]

(e) Intelsat has announced it will launch a MEO constellation with the aim of supporting its aviation strategy[58] and has also announced a global distribution partnership with OneWeb focused on providing multi-orbit IFC to airlines;[59]

(f) Telesat plans to launch its Lightspeed LEO constellation, as noted above. It has partnered with Anuvu, an SSP, to combine Telesat's LEO capacity with Anuvu's leased GEO capacity for IFC.[60]

The Parties' activities in the supply of satellite connectivity services

49. As noted in paragraphs 21 and 22 above, each of the Parties supplies satellite capacity and satellite connectivity services to customers in a range of industry sectors. The Parties' activities overlap mainly in the supply of broadband connectivity services to commercial and business aviation customers. As such, the sections that follow are focused on these overlaps.

50. The Parties' activities also overlap to a more limited extent in the supply of broadband connectivity services to maritime customers and to the UK Government.

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[55] FMN, paragraph 330.
[56] FMN, paragraph 359, notes SES's CEO as stating: 'There's a lot of talk in the industry about whether you should deploy services in GEO or in MEO or in LEO. The answer is all of the above.'
[57] FMN, Figure 47. See also Eutelsat and OneWeb to combine: a leap forward in satellite connectivity and Press Releases | Eutelsat
[58] Intelsat eyes small MEO constellation for hybrid aero service, Runway Girl Network, 4 April 2022. The article also describes Intelsat's plans to partner with LEOs, which an Intelsat executive describes as 'complementary' due to LEOs' ability to cover the poles and GEOs' ability to deliver adequate capacity to support big airport hubs.
[59] Intelsat and OneWeb partnership brings multi-orbit connectivity to airlines worldwide ('by harnessing the power of multi-orbit capabilities, Intelsat will ensure airlines and their passengers are able to enjoy the best IFC, without compromise. Airlines and their passengers will no longer have to accept significant gaps in IFC coverage or capacity – even at busy hubs, across oceans and over polar routes').
[60] FMN, paragraph 380.

The CMA considers, however, that there is no realistic prospect of an SLC in relation to the supply of services to these customers:

(a) *Maritime*. Although Inmarsat is well-established in providing satellite connectivity services to maritime customers, its strength is in the supply of services to merchant ships (eg container ships and oil tankers). It is much less strong in the supply of services to passenger and leisure vessels.[61] Viasat, on the other hand, only recently started supplying services to maritime customers and its main focus is on supplying connectivity services to passenger and leisure vessels.[62] While the CMA found evidence in internal documents that each of the Parties planned [✂] in the maritime sector,[63] it has not identified evidence to suggest that the Parties would become close competitors in the foreseeable future. The Parties' activities also overlap in the supply of connectivity services to off-shore energy customers, but Inmarsat focuses on supplying services to OSVs whereas Viasat focuses on supplying services to off-shore platforms and rigs (via its subsidiary Rignet).[64]

(b) *UK Government.* The Parties' activities overlap to a minimal extent in the supply of satellite connectivity services to the UK Government, which sources most of its satellite capacity from its own Skynet satellite constellation, which is currently managed by Airbus.[65] As such, the UK Government has less demand for capacity from third-party SNOs (such as the Parties) and the UK Ministry of Defence [✂].[66]

Nature of the CMA's evidence base

51. The CMA has gathered a substantial volume of evidence from a range of sources during its investigation, including from the Parties (shares of supply, tender data, industry reports, and internal documents) and from third parties on calls and in response to questionnaires (including on their future plans, their views on the Parties and their rivals, and data on sales/purchases, tenders, and certifications).[67]

52. In relation to third parties, the CMA has gathered evidence from a wide range of industry participants, including: (i) original equipment manufacturers (**OEMs**) of

[61] FMN, paragraph 33, 1010 and 1018. See, for instance, Annex 3.6 to Inmarsat's response to the CMA's second Notice, [✂], slide 11.
[62] FMN, paragraphs 1032 – 1038. See, for instance, Annexes 44 - 45 to Viasat's response to the CMA's third Notice; and Annex 19.28, [✂], 4 June 2021.
[63] See, for instance, Annexes 1 – 3 and 7 to Viasat's response to the CMA's second Notice; and Inmarsat's Annex 3.6 to the CMA's second Notice, [✂], slide 11.
[64] FMN, paragraphs 1063 - 1064.
[65] [✂]. Third-party evidence collected by the CMA during its investigation confirmed this to be the case. See note of call with customer.
[66] Note of call with customer.
[67] The role and relevance of certifications is explained at paragraph 95 below.

commercial and business aircraft; (ii) competitors (including GEO SNOs, NGSO SNOs, commercial aviation SSPs, and business aviation SSPs); (iii) resellers (including commercial aviation VARs and business aviation VARs); (iv) actual and potential customers (including traditional commercial airlines from North America, Europe, the Middle East, and Asia Pacific, low-cost carriers (**LCCs**) from Europe, and business aviation customers from North America and Europe); and (v) regulators, including Ofcom.

53. The CMA has collected a substantial number of internal documents and industry reports from Viasat and Inmarsat to understand how IFC providers compete, what factors influence aviation customers when choosing their IFC supplier, the relative strengths and weaknesses of different suppliers, and the future prospects of NGSOs.

54. The Parties submitted that the CMA's assessment reflects a scepticism about the likelihood of the success of NGSOs that was present in the Parties' earlier internal documents when NGSOs first appeared, but that 'such scepticism has long since disappeared.'[68] The CMA has relied on the most recent internal documents supplied by the Parties setting out their plans and market analysis.[69] The CMA has not seen any evidence in the internal documents of a recent shift in the Parties' assessment of NGSOs. The CMA has also assessed the competitive impact of NGSOs having regard to all the evidence gathered in its investigation, as described above. As set out in more detail in the competitive assessment, this evidence is consistent in showing that there are significant challenges that NGSOs must overcome to compete effectively with the Parties in aviation, and that NGSOs' future prospects are uncertain.

FRAME OF REFERENCE

55. Market definition provides a framework for assessing the competitive effects of a merger and involves an element of judgement. The boundaries of the market do not determine the outcome of the analysis of the competitive effects of the merger, as it is recognised that there can be constraints on merging parties from outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others. The CMA will take these factors into account in its competitive assessment.[70]

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[68] Issues Letter Response, paragraph 46.
[69] These include forward-looking documents from FY2021, including Viasat's commercial aviation strategy brief (Annex [✂] to the FMN) and executive presentations (eg, Annex [✂] to the FMN and Annex [✂] to Viasat's response to the CMA's first Notice) and Inmarsat's IFC strategy documents (eg, Annex [✂] to Inmarsat's response to the CMA's second Notice) and long-range business plan (Annex [✂] to the FMN).
[70] CMA129, March 2021, paragraph 9.4.

56. As noted above, the Parties' activities overlap mainly in the provision of satellite broadband connectivity services to customers in the commercial and business aviation sectors.

European Commission and CMA precedent

57. The European Commission and the CMA have considered several possible segmentations of the satellite connectivity supply chain in previous decisions.[71] They have considered segmenting based on (i) the level of the supply chain (ie distinguishing between SNOs, SSPs and resellers), (ii) whether the end-users' satellite terminal is fixed (eg in a consumer residence) or mobile (eg on an aircraft), and (iii) the area of use (ie whether connectivity is used for land-based, maritime, or aeronautical applications).[72]

Parties' submissions

58. The Parties adopted the above segmentations and submitted that satellite connectivity for aeronautical applications should be further segmented between (i) commercial and business aviation, and (ii) between broadband and narrowband.

Commercial vs business aviation

59. The Parties submitted that commercial and business aviation should be distinguished on the basis that (i) the European Commission has considered distinguishing commercial and business aviation in the context of in-flight entertainment (**IFE**) services,[73] (ii) the nature and identity of customers is different, (iii) the IFC providers to each type of customer are different, (iv) the relationship between IFC providers and commercial airlines is more direct,[74] (v) industry reports distinguish commercial and business aviation, (vi) flight routes and expected coverage differ, (vii) aircraft types differ, and (viii) the services requested by customers in each sector vary.

Broadband vs narrowband

[71] FMN, paragraph 386. The Parties submitted that the EC has thus far always left open the precise definition of the market as it has not been necessary to define the market to reach a conclusion in prior cases.
[72] In Connect Bidco / Inmarsat decision, the CMA considered it appropriate to distinguish between the supply of two-way satellite communications for fixed and mobile applications and between each level of the supply chain (ie, SNO, SSP, and VAR). It considered any differences between land-based, aeronautical, and maritime applications when assessing closeness of competition (paragraph 8.7).
[73] LG Electronic / Lufthansa, paragraph 27. While the segmentation was confirmed by the investigation, the precise scope of the market was left open. FMN, paragraph 627.
[74] FMN, paragraph 628. The Parties noted that in business aviation suppliers negotiate more with OEMs, maintenance, repair and operations providers (**MROs**) and VARs than with end customers.

60. The Parties submitted that narrowband and broadband connectivity should be considered separately. They submitted that there is limited demand-side substitutability between them as each serves different customer needs and is used for different purposes,[75] and that, on the supply side, narrowband suppliers are largely different to broadband suppliers.[76]

Satellite vs other technology

61. The Parties submitted that satellite-based broadband services compete with non-satellite based broadband services, including air-to-ground (**ATG**) and hybrid services, and therefore that satellite-based and non-satellite-based solutions should be considered in the same frame of reference.[77]

The CMA's assessment

62. The CMA agrees with the Parties' submissions, which are supported by third-party evidence and internal documents.[78] The CMA notes, however, that there are certain material differences between ATG and satellite-based broadband IFC services, including in relation to their coverage and performance (as discussed below), but considers that it is appropriate to take these differences into account in its competitive assessment. Accordingly, the CMA considers separately (a) broadband IFC services to commercial aviation customers, and (b) broadband IFC services to business aviation customers.

63. The CMA assesses the overlap between the Parties' activities at the SSP level of the supply chain since, although the Parties are vertically integrated and therefore also overlap at the SNO level, each Party uses its capacity captively for commercial and business aviation.[79] The CMA has taken account of the impact of the Parties' vertical integration on their competitiveness in its competitive assessment.

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[75] FMN, paragraphs 631 to 633. Narrowband is used for tasks that are less data intensive and for which resilience is critical (as narrowband is less susceptible to signal degradation).
[76] FMN, paragraph 633. Nevertheless, the Parties submitted that narrowband IFC 'remains relevant as an "out-of-market" constraint' in business aviation (FMN, paragraph 886). The CMA has considered the extent of this constraint in its competitive assessment.
[77] FMN, paragraphs 642 to 644.
[78] The Parties' internal documents show that they each consider commercial and business aviation separately [✂]. For instance, for Viasat see Annex 14.2, [✂], 2021 and Annex VA00011123 to Viasat's response to the CMA's first Notice, [✂], October 2021, and for Inmarsat see Annex 8.12 to Inmarsat's response to the CMA's second Notice, [✂], May 2021 and Annex 9.5 to Inmarsat's response to the CMA's second Notice, [✂] 2020 [✂]. Moreover, these documents show that [✂]. Similarly, commercial and business aviation customers that responded to the CMA's questionnaire considered ATG/hybrid networks to be competitors to satellite-based broadband solutions, whereas no airlines regarded narrowband solutions as an alternative for their cabin IFC services and all business aviation customers and VARs identified large bandwidth and speed as key for their IFC services, with passengers wanting an equivalent connection to on-the-ground (see responses to commercial and business aviation questionnaires).
[79] FMN, paragraph 514. [✂].

Broadband IFC services to commercial aviation customers

Parties' submissions

64. In terms of product scope, the Parties noted that IFC services are provided on aircraft with different cabin sizes that operate different flight lengths. They submitted that widebody (twin-aisle) aircraft are primarily used for long-haul flights, whereas narrowbody (single-aisle) aircraft are typically used for short-haul flights.[80]

65. The Parties initially noted that in the competitive assessment they had presented separate analyses for IFC for long-haul and short-haul aircraft respectively due to the following considerations: (i) satellite coverage requirements differ for aircraft used for short and long-haul flights, as long-haul flights tend to operate across continents and oceans / globally (and hence require global coverage), whereas short-haul flights tend to operate regionally (and hence require regional coverage); (ii) IFC pricing for long and short-haul flights varies; (iii) take-up rates for IFC are greater on long-haul flights; (iv) IFC services are more commonly bundled with seatback IFE offerings for long-haul flights and (v) shares of supply of various players often vary significantly as between the short-haul and long-haul segments.[81]

66. However, the Parties noted that the competitive effects analysis should be the same regardless of whether the supply of IFC for aircraft used on short-haul and long-haul flights is regarded as two separate markets or as two segments within an overall IFC market encompassing all aircraft types.[82]

67. As to the geographic scope, the Parties initially submitted that in relation to aircraft intended to be used for short-haul flights – which in Europe corresponds to intra-European flights, including from/to or within the UK – it is meaningful to consider the relevant market to be Europe-wide.[83] This is because customers will realistically choose from suppliers that offer European coverage regardless of their coverage elsewhere, and the presence and penetration of IFC suppliers varies between regions.[84]

68. The Parties also initially submitted that the position is different in relation to the provision of IFC services for aircraft used on long-haul lights, which in the European context predominantly means intercontinental flights from/to Europe. The Parties submitted that, for long-haul flights, competition predominantly occurs at a multi-

[80] FMN, paragraphs 635 to 636.
[81] FMN, paragraph 637.
[82] FMN, paragraph 638.
[83] FMN, paragraph 654.
[84] FMN, paragraphs 655 to 656.

regional and global level and the Parties' and competitors' coverage over other continents and /or oceans impacts their competitiveness.[85]

69. At an advanced stage of the CMA's investigation (in the Issues Letter Response), however, the Parties submitted that the CMA would be wrong to draw a distinction between intra-European flights and intercontinental flights from/to Europe. Instead, the Parties submitted that the CMA should distinguish between (i) European intracontinental and European intercontinental (short-haul) flights on the one hand and (ii) European intercontinental (long-haul) flights on the other.[86] The Parties submitted that the market dynamics in these two segments are fundamentally different, given differences in coverage requirements, aircraft types, scope to bundle IFE, and the shares of supply of the Parties and their rivals.[87]

The CMA's assessment

70. The CMA notes that the product and geographic scope of IFC broadband services for commercial aviation are linked because the type of aircraft on which IFC services are installed (ie widebody or narrowbody) and the length of flights operated by that aircraft (ie short, medium, or long-haul) will often affect the geographic area that an IFC service must cover in order to compete.

71. In terms of product scope, airlines operate different models of aircraft depending on their commercial operations and the routes they cover. As submitted by the Parties, airlines typically use narrowbody aircraft to fly short to medium-haul routes and widebody aircraft to fly long-haul routes.[88]

72. From a demand-side perspective, as discussed further below, commercial airlines typically tender for IFC on a model-by-model basis (eg Boeing 777 or Airbus A320) and choose from IFC solutions that are certified as safe to install on a particular aircraft model. For installation on new aircraft, IFC equipment must be certified for 'line-fit' by the relevant aircraft OEM. For installation on post-production and in-service aircraft, IFC equipment must be certified for 'retro-fit' by a national aviation authority. Accordingly, for commercial airlines that want to install IFC on a particular

[85] FMN, paragraphs 654 to 660.
[86] Issues Letter Response, paragraphs 99-100, 102, and Figures 11 and 12.
[87] Issues Letter Response, paragraph 98.
[88] Based on data from FlightAware for April 2022, 99% of intracontinental European short-haul flights and 98% of European intercontinental short-haul flights were operated by narrowbody aircraft, whereas 99% of European intercontinental long-haul flights were operated by widebody aircraft (see Issues Letter Response, paragraph 98(ii)).

aircraft model, there is limited demand-side substitutability between certified and uncertified solutions.[89]

73. From a supply-side perspective, different IFC providers are certified on different aircraft models. However, due to the emerging nature of IFC, each IFC supplier's certification status is evolving as it becomes certified on additional models. The CMA considers that this evolving picture can be taken into account in its assessment of closeness of competition between the Parties and their competitors and, accordingly, the CMA did not treat different aircraft types as separate frames of reference.

74. In terms of geographic scope, the IFC coverage required by a commercial airline will depend on the specific routes it flies. Airlines' demand for IFC is heterogenous reflecting differences between their commercial operations. For instance, some airlines may fly only short and medium-haul within Europe and may, therefore, require European coverage only.[90] Other airlines may require multi-regional coverage (eg covering Europe and Africa, or Europe and North America).[91] And other airlines may require global coverage (eg if they operate long-haul flights globally). Coverage requirements also vary within an airline's fleet, which is reflected in airlines' responses to the CMA's questionnaire which show different geographic coverage being required by airlines for different aircraft depending on the routes they plan to fly (eg Europe only and global;[92] Europe and North America, and global;[93] or APAC and global[94]).

75. From a supply-side perspective, different IFC providers offer different coverage (with some only offering coverage in certain regions) and have different strengths in different regions. For instance, ATG solutions compete in areas where aircraft can receive signal from their ground infrastructure (so cannot offer coverage over large expanses of water),[95] and some providers are stronger competitors in areas where they have more capacity.[96] In addition, lack of certification on certain aircraft models

[89] As explained below, exceptionally airlines may select an uncertified option if they are confident that the provider will obtain certification within an acceptable timeframe and therefore does not present too much of a risk.
[90] For instance, Inmarsat's EAN is only available in Europe (see FMN, paragraph 649). The CMA is not aware of any IFC contracts where the coverage is narrower than Europe-wide (eg, the UK only).
[91] Inmarsat submitted that [✂] (see the [✂] submitted to the CMA by Inmarsat on 15 September 2022 ([✂]), page 1).
[92] Responses to commercial aviation customer questionnaire.
[93] Responses to commercial aviation customer questionnaire.
[94] Response to commercial aviation customer questionnaire.
[95] For instance, the EAN supplies ATG services to aircraft in Europe only. See FMN, paragraphs 373 and 649.
[96] Third party evidence indicates that Inmarsat is weaker in the US where it has less capacity and similarly Viasat is weaker in the Asia-Pacific region where it currently has less coverage (see responses to commercial aviation customer questionnaire).

can restrict IFC solutions' ability to compete on routes where those aircraft models are frequently used.[97]

76. Rather than seeking to draw bright lines between geographic areas, given airlines' heterogenous demand, the CMA considered differences between the Parties' and their rivals' strengths in different regions in its competitive assessment.[98] The CMA focused its competitive assessment on those services that are most likely to affect UK customers and therefore focused on the potential effects of the Merger on the supply of IFC to aircraft flying (a) short and medium-haul from/to and within Europe (including the UK), and (b) long-haul from/to Europe (including the UK).

Broadband IFC services to business aviation customers

Parties' submissions

77. The Parties submitted that broadband IFC services for business aviation customers can be sub-segmented between IFC for **large business jets** (which includes bizliner jets,[99] large cabin jets,[100] and super midsize cabin jets[101]) and for small business jets (which includes midsize and small cabin jets, very light jets, and turboprops), because the antennas compatible with the Parties' broadband IFC solutions are currently too large to fit on small business jets.[102]

78. The Parties submitted that the appropriate geographic frame of reference is global because the flexibility to deploy large business jets on long-haul routes is an important part of their value proposition, the Parties do not deal with aircraft operators or end users according to geography, and they do not flex pricing regionally.[103]

The CMA's assessment

79. The CMA believes that internal documents support the Parties' submission that they overlap only in the supply of broadband IFC services to large business jets.[104] As in

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[97] For instance, an IFC service provider that lacks line-fit certification on certain in-demand widebody aircraft may be restricted in its ability to compete for intercontinental flights globally (as discussed in the competitive assessment below).
[98] In many cases, especially those involving differentiated products, there is often no 'bright line' that can or should be drawn (see CMA129, paragraph 9.4).
[99] Bizliner jets refer to aircraft initially designed for commercial aviation but used as business jets with cabin length ranging from 65 to over 100 feet.
[100] Large cabin jets refer to business jets with cabin lengths ranging from 40-50 feet, typically suitable for 10-18 passengers.
[101] Super midsize cabin jets refer to business jets ranging from 25-30 feet suitable for up to 10 passengers.
[102] FMN, paragraph 641.
[103] FMN, paragraphs 661 and 664.
[104] Inmarsat [✂] large cabin jets [✂] and [✂] super midsize cabin jets (see Annex 9.5 to Inmarsat's response to the CMA's second Notice, [✂] 2020 [✂]). Viasat also supplies IFC services to both super

commercial aviation, the CMA notes that the product and geographic scope of IFC broadband services for business aviation is linked because the size of aircraft and the routes they can fly in turn affects the geographic area that an IFC service must cover in order to compete.

80. In terms of product scope, IFC equipment must be certified before it can be installed on a large business jet, which is required on an OEM-by-OEM and model-by-model basis.[105] Accordingly, from a demand-side perspective, for business aviation customers that want to install IFC on a particular aircraft model, there is limited substitutability between certified and uncertified solutions.

81. From the supply side, as with commercial aviation, IFC suppliers' certification status is evolving as suppliers become certified on additional models. The CMA considers that this evolving picture can be taken into account in its assessment of closeness of competition between the Parties and their competitors and, accordingly, the CMA does not treat different types of large business jet as separate frames of reference.

82. In terms of geographic scope, the IFC coverage required by a business aviation customer will depend on the routes they intend to fly. Evidence from third parties suggests that global coverage is becoming increasingly important.[106] As such, the CMA notes that some IFC providers may be better positioned to supply some large business jets than others.[107] Nevertheless, the CMA believes that it is appropriate to treat broadband IFC services to large business jets as a single global frame of reference and to consider differences in the coverage and services offered by the Parties and their rivals in its competitive assessment.

83. The CMA focused its competitive assessment on those services that are most likely to affect UK customers and therefore focused on the potential effects of the Merger on IFC services supplied to large business jets that are used by UK consumers and businesses.[108]

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midsize cabin and large cabin jets (see Annex VA00011123 to Viasat's response to the first Notice, [✂], October 2021, page 1).

[105] See paragraph 197 below.

[106] See paragraph 198(b) below. See also Annex 9.5 to Inmarsat's response to the CMA's second Notice, [✂] 2020 [✂], page 5.

[107] See, for instance, Annex 10.13, [✂], 16 September 2021, [✂] (as discussed further below in the competitive assessment).

[108] FMN, paragraph 864. The Parties submitted that the UK portion of global demand for the Parties' IFC services in business aviation is negligible, as together they supply only [✂] jets registered in the UK and generated less than US$[✂] in 2021 from these jets (FMN, paragraph 864). The CMA considers that the evidence available supports the Parties' submission that there is limited UK demand for IFC for business aviation. However, the CMA has not received any submissions from the Parties on the application of the *de minimis* exception to the duty to refer in section 33(2)(a) of the Enterprise Act 2002.

Conclusion on frames of reference

84. For the reasons set out above, the CMA has considered the impact of the Merger in the following frames of reference:

(a) the global supply of broadband IFC services to commercial aviation customers; and

(b) the global supply of broadband IFC services to large business jets.

COMPETITIVE ASSESSMENT

85. Horizontal unilateral effects may arise when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged firm profitably to raise prices or to degrade quality on its own and without needing to coordinate with its rivals.[109] Horizontal unilateral effects are more likely when the merging parties are close competitors. The CMA assessed whether it is or may be the case that the Merger may be expected to result in an SLC in relation to horizontal unilateral effects in: (a) the global supply of broadband IFC services to commercial aviation customers, and (b) the global supply of broadband IFC services to large business jets.

Horizontal unilateral effects in the supply of broadband IFC to commercial aviation customers

Background to IFC for commercial aviation

IFC demand trends

86. Broadband IFC allows passengers to access the internet while flying (eg for work and recreational purposes, such as for social media and video streaming).

87. Demand for IFC in commercial aviation is expected to grow over the next few years.[110] While this is a worldwide trend, IFC demand may be growing at different rates for different types of aircraft and geographic regions, which are at different stages of development.

88. In this regard, the Parties submitted that IFC penetration for narrowbody aircraft globally is significantly lower than for widebody aircraft (ie 30% compared to

[109] CMA129, March 2021, paragraph 4.1.
[110] For instance, Euroconsult forecasts that the number of active broadband IFC terminals globally will grow from approximately 9,000-9,500 in 2022 to approximately 16,000-19,700 in 2030, corresponding to growth of 7-10% per year on average. CMA analysis of Euroconsult data provided in Annex RFI5.009, Euroconsult "Prospects for In-Flight Entertainment and Connectivity – 9th Edition" - Data Annex, 23 August 2021.

approximately 63% in 2021). Similarly, the IFC penetration for narrowbody aircraft in the US is approximately 60% whereas it is below 20% among Europe-based airlines.[111] Given the low penetration and growing demand, the Parties submitted that IFC remains a nascent and dynamic market with a large number of uncommitted aircraft (especially in relation to narrowbody aircraft in Europe) which provide significant opportunities for current competitors and new entrants.[112]

89. Evidence from each of the Parties' most recent strategy documents indicates that this period of growing demand is for both [✂] (in particular given high switching costs for customers once they have an IFC solution installed).[113] In particular, Inmarsat identifies [✂],[114] and Viasat refers to the importance of [✂].[115]

90. Airlines generally consider the availability of IFC to be an important aspect of their current offering. This is because passengers have increasing service expectations and can easily score them on IFC against competitors, to the point that unlimited free wifi on board is seen as the natural next step by many airlines.[116]

91. In contrast to other airlines, however, the available evidence indicates that, currently, European LCCs are not interested in offering IFC as they tend to consider fast internet access of limited appeal to passengers on their short-haul economy flights.[117] The CMA notes that, although some LCCs have recently run tenders for IFC solutions, they have typically chosen not to award contracts for IFC services and have instead opted to install alternative solutions (such as wireless IFE or bluetooth messaging).[118]

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[111] FMN, paragraphs 694 and 695.
[112] Issues Letter Response, paragraphs 8, 10, and 106.
[113] See further paragraphs 178 to 181 below.
[114]Inmarsat's response to the CMA's second Notice, [✂], May 2020, page 3.
[115] FMN, Annex 14.2, [✂], 2021, page 4.
[116] Responses to the commercial aviation customer questionnaire. The market trend towards offering free wifi onboard was also confirmed by internal documents and industry reports. See, for instance, Annex 14.2, [✂], 2021; Annex 16.3, Prospect for In-Flight Entertainment and Connectivity, 9th edition, July 2021, page 99; and Annex 16.4, The Future of In Flight Connectivity – 2020 Edition, 21 December 2021.
[117] Responses to commercial aviation customer questionnaire and note of call with customer. The Parties identified a number of LCCs in Europe tendering for IFC solutions which are either in the process of completing or will complete in the near future (see Issues Letter Response, Table 1). The CMA notes that three of these airlines confirmed to the CMA that they are not currently interested in offering IFC on their flights due to a lack of business case. These airlines account for [✂] of the aircraft for which an IFC solution is currently being sought by LCCs in Europe, according to Table 1 of the Issues Letter Response.
[118] FMN, para 767. The Parties submitted in paragraph 13 of the Issues Letter Response that low-cost operator WizzAir has recently installed a simplistic form of IFC, which could impose competitive pressure on other LCCs to provide similar (low-cost) solutions. However, the CMA notes that WizzAir opted for a bluetooth-based solution which is limited to messaging, rather than providing broadband IFC services as the Parties' solutions do (for instance, see Wizz Air gets online – without wifi! | PaxEx.Aero).

IFC network technologies

92. The broadband IFC network technologies currently available are (i) satellite-based connectivity in Ka- and/or Ku-band; (ii) ATG connectivity such as 4G/5G/LTE; and (iii) hybrid systems that use both satellite and ATG connectivity (eg the EAN).

93. A key difference between satellite-based and ATG solutions is the coverage that each can offer. GEO satellite solutions can in principle provide connectivity across the globe (including over oceans and remote areas, although not at the poles) whilst ATG only functions over land and near the coast, as it needs to be in proximity of a ground station.[119] As explained below, evidence received by the CMA also suggests that ATG may offer lower performance than satellite-based broadband.

94. Hybrid solutions essentially seek to overcome the coverage limitation of ATG by filling gaps in coverage with satellite-based systems while still offering a single solution.[120]

Nature of competition in the supply of IFC services to commercial aviation customers

Certifications

95. For safety reasons, IFC equipment must be certified before being installed on an aircraft. Because of the structural and engineering differences between aircraft models, certification is required for each model.[121] Due to the (monetary and non-monetary) resources involved in gaining certification, only a limited number of IFC solutions are typically certified for each model.[122]

96. There are two types of certifications: 'Type Certificates' (**TCs**) for line-fit installations (on new aircraft) and 'Supplemental Type Certificates' (**STCs**) for retro-fit installations (on post-production or in-service aircraft that either have the IFC solution of another provider installed or are not yet connected).[123]

97. Line-fit certifications are driven by aircraft OEMs which, based on market demand and other criteria, including meeting aircraft safety and operational requirements, select IFC solutions to feature in the relevant aircraft models' catalogue (ie the IFC solution becomes 'line-fit offerable' and can be chosen by airlines submitting an aircraft order). The Parties submitted that line-fit certification takes between 18 and 24 months on average.[124] However, OEMs told the CMA that the process takes

[119] FMN, paragraph 646.
[120] FMN, paragraph 647.
[121] Note of call with OEM.
[122] Note of call with VAR.
[123] FMN, paragraph 798.
[124] FMN, paragraph 811. The Parties noted that they have less visibility over the process for line-fit than retro-fit because OEMs handle the line-fit process.

between 18 months and three years, with the timeline varying depending on the complexity of the technology involved. OEMs also explained that once an IFC solution is certified on an aircraft family, it is *de facto* 'offerable' across the various models of the aircraft family.[125]

98. Retro-fit certifications involve authorisation by a national aviation authority to modify the structure of an existing aircraft. IFC providers can apply directly for retro-fit certifications, either on their own or in partnership with MROs, to make their solutions an option for an airline that may consider switching IFC provider or installing IFC services for the first time on the aircraft in question.[126] The Parties submitted that the retro-fit certification process typically takes one year for the first national aviation authority (plus three additional months for each additional authority).[127] However, third-party evidence indicates that obtaining an STC may take between 6 months and 2 years (plus up to six months for additional national aviation authorities).[128]

99. OEMs are responsible for delivering line-fit certifications for IFC equipment and act as gatekeepers between IFC providers and airlines.

100. The CMA notes that [✂] commercial opportunities in which the Parties have recently participated have been line-fit opportunities.[129] In relation to retro-fit opportunities, the Parties identified [✂] where an airline had sought bids to replace their connectivity hardware (ie switch supplier), as opposed to installing IFC on the aircraft for the first time.[130] This is consistent with information on recent tenders received from commercial airlines which suggests that most opportunities involve the installation of IFC on new aircraft (line-fit), followed by retro-fit installations on uncommitted aircraft and finally retro-fit installations on aircraft where an IFC solution is already installed and the airline is considering whether to switch

[125] For instance, once a new IFC solution becomes certified on the Boeing 777, it will generally also be declared as 'offerable' on each Boeing 777 variant, such as the Boeing 777/8 or 777/9.
[126] Although in the FMN the Parties submitted that, once an STC is obtained for a given model of aircraft, it can be used to install IFC equipment on that model for any airline registered in the country where the STC was granted (see paragraph 806 of the FMN), during the Issues Meeting, Viasat explained that STCs are specific not only to the aircraft model but also to the airline due to the aircraft configuration chosen when ordering the aircraft from an OEM at the line-fit stage. This suggests that STCs involve a degree of investment by the IFC provider that is airline specific, and that a large number of STCs are required to be able to serve multiple airlines, which is consistent with what one competitor submitted to the CMA (see response to SNO questionnaire).
[127] FMN, paragraphs 802 and 806.
[128] Responses to SNO and OEM questionnaires.
[129] FMN, paragraph 793 and Table 17, which provided the number of commercial aviation opportunities in which each of Viasat and Inmarsat participated during the period from January 2019 to June 2022.
[130] FMN, paragraph 790 to 792.

provider.[131] As discussed further below, switching provider via a retro-fit is slow, costly and rarely occurs in practice.[132]

101. The Parties submitted that the CMA has underestimated the importance of retro-fit opportunities because it does not properly distinguish between (i) opportunities involving switching (ie 'rip and replace' installations) that are less frequent and (ii) installations on uncommitted aircraft (either after a period of activity or post-delivery), which represent a significant source of potential demand.[133] The Parties submitted that the CMA consequently failed to acknowledge that retro-fit opportunities provide a quick and effective way to enter the market.[134]

102. The CMA agrees that retro-fit of uncommitted aircraft can provide a route to market (especially for new entrants trying to prove their IFC solutions to airlines) and is an important source of demand more generally.

103. However, the CMA considers that the Parties' recent internal documents clearly and consistently indicate that [✂] is critical for IFC providers.[135] For example:

(a) Viasat [✂].[136]

(b) Similarly, Inmarsat notes that [✂].[137]

104. Based on this evidence, the CMA considers that line-fit certification is a significant barrier for effective entry in commercial aviation.

Competitive parameters

105. The CMA asked airlines to identify the most important factors influencing their choice of IFC provider for (a) intercontinental flights and (b) European flights. All

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[131] As discussed below in paragraph 154, the CMA collected tender data from airlines. Of the 22 tenders held recently (from 2019 onwards), only five involved retro-fit opportunities and of these only two involved aircraft with an existing solution installed.
[132] Note of call with customer and customers' responses to the CMA questionnaires.
[133] Issues Letter Response, section 3.3, paragraphs 32 and 34. For instance, the Parties submitted that 80% of European short-haul aircraft are uncommitted. However, a large proportion of these aircraft (35%) are owned and operated by LCCs (see Issues Letter Response, paragraph 13), a number of which, as noted, are not currently interested in offering IFC. Moreover, the CMA notes that a proportion of uncommitted aircraft will also be approaching retirement and would not, therefore, justify the investment to install IFC.
[134] Issues Letter Response, section 3.3, paragraphs 6(i) and 37. Indeed, the Parties noted that almost [✂]% of Viasat's [✂] installations to date have been retro-fit.
[135] The evidence in internal documents is also consistent with evidence from third parties (see paragraph 108 below) as well as the Parties' submissions (eg paragraphs 129-130 of the Issues Letter Response, which states that pursuing a TC on a Boeing 747 would 'unlock the largest widebody market').
[136] Annex VA00006242 to Viasat's response to the CMA's first Notice, [✂], 22 July 2021.
[137] Annex 73 to Inmarsat's response to the CMA third notice, [✂], July 2021. As opposed to the Parties' submission that 'Linefit logically follows retro-fit capabilities for prospective IFC market entrants' (Issues Letter Response, paragraph 6(i)), this suggests that current line-fit offerability directly affects airlines' retro-fit choices.

airlines submitted that they consider largely the same factors when selecting their IFC provider, irrespective of the flight types concerned.

106. Most airlines identified the following as key factors: (i) coverage over the relevant routes, (ii) the capability of the network technology (in particular, enough bandwidth and speed to offer passengers a high-quality internet experience), (iii) aftermarket services (eg technical support and maintenance), (iv) reliability of service, and (v) price.

107. Airlines and competitors also highlighted that being vertically integrated, and therefore having access and direct control over satellite capacity, is a key competitive parameter as it enables IFC providers to offer lower rates and more service flexibility.[138] One third party submitted that, as IFC demand increases, non-vertically integrated competitors may find it difficult to source the capacity needed to supply high-quality connectivity to customers.[139] The importance of vertical integration, and the competitive advantage it provides, is also widely supported by the Parties' internal documents.[140]

108. Most airlines also indicated that certifications are crucial (especially for line-fit opportunities), which is consistent with the Parties' internal documents.[141] Several airlines submitted that they would exceptionally consider selecting an uncertified IFC solution but in these circumstances would typically want the solution already to be on a clear path towards certification to assess whether the solution would be worth the risk.[142] Only a few airlines said that they had awarded business to an uncertified provider.[143]

109. In terms of preferences between different IFC network technologies, several airlines noted that ATG technology, including Inmarsat's EAN, has material limitations and therefore that they would not consider it as an option.[144] This is because they consider ATG to be a lower quality solution: it offers limited coverage – in particular, no coverage over oceans – and lower bandwidth, which in turn results in service interruptions and restricted internet use (eg lack of streaming capabilities). [✂].[145] Satellite-based broadband technology, either in Ka-band or Ku-band, is thus generally preferred to ATG.

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[138] Responses to competitor and commercial aviation customer questionnaires.
[139] Response to competitor questionnaire.
[140] For instance, Annex 8.12 to Inmarsat's response to the second Notice, [✂], May 2021, pages 1 and 14, and Annex 14.2, [✂], 2021, page 16.
[141] For instance, Annex VA00006242 to Viasat's response to the CMA's first Notice, [✂], 22 July 2021, states that [✂]. Similarly, Annex 14.2, [✂], 2021, page 25: [✂].
[142] Responses to commercial aviation customer questionnaire.
[143] Responses to commercial aviation customer questionnaire.
[144] Responses to commercial aviation customer questionnaire.
[145] See Annex 73 to Inmarsat's response to the third Notice, [✂], 28 July 2021: [✂].

110. Although, according to a number of market participants, Ka-band offers better performance (particularly in terms of higher speeds and increased data capability/bandwidth) and lower costs per MB than IFC services based on Ku-band, the evidence overall suggests that network technologies based on Ka-band and Ku-band are likely to provide a comparable IFC service from the customer's perspective.[146]

Customer behaviour: procurement process, contract length and switching

111. Airlines typically award contracts for IFC services via competitive tenders, usually for a period of five to ten years.[147] As certifications are awarded at the aircraft model level, airlines invite and evaluate bids from IFC providers for each aircraft model (eg B737 MAX, or A350). Contracts for both new and refurbished aircraft (ie line-fit and retro-fit) are typically put out to tender.

112. As the contract expiration date approaches, contracts can be either terminated or extended. Due to the lack of interoperability between IFC equipment used by different IFC service providers, if an airline chooses to terminate its contract with a provider, the IFC equipment must be removed and replaced with the new provider's equipment.[148]

113. All airlines that replied to the CMA's questionnaire submitted that switching is difficult and involves significant (if not prohibitive) monetary and non-monetary costs (approximately $500,000-$700,000 per aircraft), including the purchase of new IFC equipment, considerable labour and engineering costs, complex aircraft modifications, and the substantial opportunity cost of having to ground aircraft. Airlines told the CMA that they therefore often find it difficult to make a business case for switching providers and that contracts are typically renewed.[149]

114. Given low IFC penetration rates, retro-fit opportunities do not necessarily involve switching IFC provider (and therefore IFC equipment). Indeed, airlines may decide to install IFC services on aircraft in their fleet that are currently uncommitted (ie existing aircraft that do not have any IFC solution installed). However, third-party

[146] Customer and competitor responses to the CMA questionnaire. Annex VA00026649 to Viasat's response to the CMA's first Notice, Quilty Analytics, Satellite Communications Quarterly Briefing, 3Q 2020, slides 20-22.
[147] FMN, paragraph 777.
[148] Third-party evidence collected during the investigation indicates that the market may be moving towards increased interoperability in the future. One OEM told the CMA that it has plans to develop an agnostic connectivity platform to offer IFC services on its aircraft and that this new initiative will allow airlines to switch IFC provider without changing the equipment installed on the aircraft. The CMA notes that, while potentially changing the process and costs of switching for IFC providers, there is still significant uncertainty around how this solution may work in practice and that it may not enter into service before the end of 2025. Inmarsat is currently the only provider that has been selected to provide IFC services through this solution.
[149] Responses to commercial aviation customer questionnaire.

evidence indicates that airlines do not typically consider retro-fitting to be a straightforward solution.[150]

Competitive assessment of horizontal unilateral effects in the supply of broadband IFC to commercial aviation customers

115. The CMA has assessed whether the Merger may be expected to result in an SLC as a result of horizontal unilateral effects in the supply of broadband IFC to commercial aviation customers. In its assessment, the CMA has considered:

(a) the current market structure, especially shares of supply;

(b) the closeness of competition between the Parties and the competitive constraints from other (GEO) competitors;

(c) the competitive constraints from NGSO entrants; and

(d) third-party views on the Merger.

Shares of supply

116. As set out in the Frame of Reference section above, airlines typically use different aircraft types to fly short to medium haul and long-haul routes and require different IFC coverage depending on the specific routes they operate. The CMA has focused its competitive assessment on services that are most likely to be relevant to UK customers, which are IFC services supplied to aircraft for (a) long-haul intercontinental flights from/to Europe (including the UK) and (b) short to medium-haul flights from/to and within Europe (including the UK).

117. The Parties submitted share of supply estimates based on Valour Consultancy data for: (i) IFC to widebody aircraft for all airlines (globally),[151] and (ii) IFC to narrowbody aircraft for airlines headquartered in Europe.[152] Valour Consultancy

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[150] In particular, several airlines have highlighted that retro-fitting an aircraft to equip it with an IFC system involves undertaking major and complex modifications to the structure of the aircraft and is costly, and, hence, putting together a business case for it is difficult.
[151] In Table 5 of the Issues Letter Response, the Parties provided an additional set of estimates for long-haul intercontinental flights based on the supply of IFC to widebody aircraft operated by European airlines only. According to the Parties, these estimates provide a better representation of their position in the supply of IFC services on intercontinental flights relevant to UK customers. While the CMA notes that – based on these estimates – the Parties' combined share appears smaller than when considering all airlines globally, the CMA considers that these estimates disregard flights that are relevant to UK customers (eg trans-Atlantic flights flying out of London and back operated by US-based airlines). For these reasons, the CMA does not consider the estimates suggested by the Parties to represent a methodological improvement and has therefore relied on the estimates initially provided in the FMN (presented below) as the main share of supply estimates. The CMA notes that this choice is, nevertheless, inconsequential, given the limited weight it attaches to shares of supply in its overall competitive assessment.
[152] FMN, Tables 15 and 16,

does not provide data split by short, medium, and long-haul flights, but the Parties submitted that the split into widebody and narrowbody aircraft provides a good proxy to estimate the Parties' and their competitors' positions in the supply of IFC services on long-haul intercontinental flights from/to Europe and short to medium-haul flights from/to and within Europe, respectively.[153]

118. The Parties' share of supply estimates are based on two metrics: (i) in-service aircraft (ie 'installed base' aircraft in which IFC equipment has been installed and IFC services are currently active), and (ii) committed aircraft (which includes both in-service aircraft and aircraft in backlog, ie aircraft for which an IFC provider has been contractually appointed but no solution is yet installed and active).

119. The CMA considers that 'committed aircraft' as a metric is likely to provide a more accurate view of the market than 'in-service aircraft' because it includes the outcome of more recent competition for business opportunities. To focus even more on the most recent competitive dynamics, the CMA has supplemented the Parties' analysis by also computing shares based on aircraft backlogs only. The Parties submitted that backlogs are not an accurate measure of current competition because they include the outcome of (old as well as recent) tenders that have not yet and might never materialise due to the risk of cancellation.[154] The CMA considers, however, that despite this uncertainty, backlogs are still more likely to capture recent market dynamics than in-service aircraft (which may be the result of contracts awarded many years ago). Moreover, even if backlogs may be subject to cancellations, to the extent they reflect the outcome of actual competition, they are nevertheless relevant to understanding the relative strengths of suppliers.

120. The CMA's and the Parties' shares of supply estimates are presented in tables 2 and 3 below.[155]

[153] Issues Letter Response, paragraph 98(ii).
[154] The Parties submitted that this may be due to several reasons, including because the tenders were not awarded recently (but rather before the COVID pandemic which had a strong negative impact on the commercial aviation sector) or, although awarded recently, the airline may run into financial difficulties and proceed to cancel backlog orders. See Issues Letter Response, Annex A and paragraph 102(i).
[155] The estimates presented below may differ slightly from the estimates submitted in the FMN as six data entries which should have been included in the code provided by the Parties were not included.

Table 2: Global shares for broadband IFC services to widebody aircraft (Q1 2022)

Service provider	Q1 2022		
	In-service aircraft (%)	**Committed aircraft** (%)	**Aircraft backlogs (%)**
Inmarsat	[10-20]	[10-20]	[30-40]
Viasat	[0-5]	[0-5]	[0-5]
Combined	**[10-20]**	**[10-20]**	**[40-50]**
Intelsat	[20-30]	[10-20]	[10-20]
Panasonic	[60-70]	[50-60]	[30-40]
Taqnia Space	[0-5]	[0-5]	[5-10]
Others (eg Aircom Pacific, Thales, Starlink)	[0-5]	[0-5]	[5-10]
Total %	**100**	**100**	**100**
Total # of Aircraft	**[✂]**	**[✂]**	**[✂]**

Source: FMN, Table 15, complemented with CMA's shares of supply estimates of aircraft backlogs provided in the Valour Consultancy Report (ie Annex 22.12).

121. As shown in table 2 above, the Parties have a combined global share of supply of IFC to widebody aircraft of approximately [10-20]% based on committed aircraft, with a [0-5]% increment from Viasat. Panasonic has the highest share ([50-60]%), followed by Intelsat ([10-20]%). However, when looking at backlog contracts, the Parties have a higher share ([40-50]%). Inmarsat is the leading provider ([30-40]%) and the increment from Viasat is [0-5]%. With a [30-40]% share of backlog, Panasonic's position appears to have declined recently, as has Intelsat's position (with [10-20]%).

Table 3: European shares for broadband IFC services to narrowbody aircraft (Q1 2022)

Service provider	Q1 2022		
	In-service aircraft (%)	**Committed aircraft** (%)	**Aircraft backlogs (%)**
Inmarsat	[50-60]	[50-60]	[60-70]
Viasat	[10-20]	[10-20]	[20-30]
Combined	**[70-80]**	**[70-80]**	**[80-90]**
Anuvu	[20-30]	[10-20]	[0-5]
Intelsat	[0-5]	[0-5]	[10-20]
Panasonic	[0-5]	[0-5]	[0-5]
Unknown	[0-5]	[0-5]	[0-5]
Total (%)	**100**	**100**	**100**
Total # of aircraft	**[✂]**	**[✂]**	**[✂]**

Source: Table 16, complemented with CMA's shares of supply estimates of aircraft backlogs provided in the Valour Consultancy Report (i.e., Annex 22.12).

122. In terms of European shares of supply for IFC services to narrowbody aircraft, the Parties have a combined share of [70-80]% of committed aircraft, with a [10-20]% increment from Viasat. Other players in the market include Anuvu, with a [10-20]% share, and Intelsat, with a [0-5]% share. Based on backlog aircraft, the Parties hold a combined share of [80-90]%, followed by Intelsat, with [10-20]%, and then Panasonic and Anuvu, both with shares of less than [0-5]%.

123. Overall, the CMA considers that these estimates should be interpreted with caution. First, it is difficult to map precisely the market segments of interest (ie IFC to long-

haul intercontinental flights from/to Europe and IFC to short and medium-haul flights from/to and within Europe) to the data available.[156] More significantly, by providing a snapshot of the outcome of competition at a particular point in time, the CMA considers that share of supply estimates are unlikely to capture the full extent of competition between suppliers, given that commercial aviation is a bidding market characterised by growing demand and potential entrants.[157]

124. For these reasons, the CMA has therefore assigned limited evidentiary weight to the share of supply data and has relied on it alongside other sources of evidence collected during its investigation.

Closeness of competition between the Parties and competitive constraints from other (GEO) competitors

Parties' submissions

125. The Parties submitted that Viasat and Inmarsat are not close competitors in the supply of IFC services to intercontinental flights due to their differences in satellite coverage and, specifically, Viasat's current lack of global coverage, which limits its ability to compete.[158] In relation to the supply of IFC to European flights, the Parties submitted that, despite their combined shares being significant, the Parties' positions are based on a limited number of tenders won in the past and which do not accurately reflect current market dynamics.[159]

126. In relation to the other established (GEO-based) IFC providers, the Parties submitted that they exert a strong competitive constraint on Viasat and Inmarsat for both European and intercontinental flights and will continue to do so post-Merger by expanding in the various market segments as more business opportunities become available.[160]

The CMA's assessment

127. To assess the strength of the competitive constraints that current (GEO) providers, including the Parties, exert on each other, the CMA considered the following, which are dealt with in turn below:

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[156] Selecting the airlines and aircraft providing flights that are relevant to (i) long-haul intercontinental routes from/to Europe (including the UK) and (ii) short to medium-haul routes from/to Europe and within Europe is not straightforward and the inclusion or exclusion of some may lead to different estimates.
[157] FMN, paragraphs 687 and 690. Issues Letter Response, paragraph 106(i). The Parties made this submission in the context of shares of supply for narrowbody aircraft, but the CMA considers that it applies equally to shares of supply for widebody aircraft.
[158] FMN, paragraphs 679 and 684.
[159] FMN, paragraphs 687 to 689.
[160] FMN, paragraph 757.

(a) The IFC offerings of each provider;

(b) The line-fit and retro-fit 'offerability' of each of the IFC solutions;

(c) Internal documents and industry reports;

(d) The Parties' bidding data analysis and data gathered by the CMA from airlines on recent tenders; and

(e) Third-party feedback.

The Parties' and competitors' IFC offerings

128. As set out above, coverage, vertical integration (ie direct access to satellite capacity) and network technology are all factors that are important to customers when choosing an IFC provider and are therefore competitively significant.[161]

129. Both Parties are vertically integrated providers of satellite IFC services in Ka-band. In addition to its Ka-band IFC solution (**GX**), Inmarsat offers its EAN product, which is a hybrid IFC solution combining satellite and ATG connectivity that is only available in Europe [✂].[162]

130. As noted above, the Parties currently have different satellite coverage, with Inmarsat's satellites covering the whole globe (except the poles) but with thin coverage over North America whereas Viasat has satellite coverage over North America, the Atlantic Ocean, Europe, and parts of the Middle East and North Africa, and leases capacity from third-party SNOs to provide coverage elsewhere.

131. Nevertheless, these differences seem to have only a limited impact on the Parties' ability to compete closely today and in the future. First, some customers require coverage only in the areas where the Parties overlap and therefore Viasat's current lack of its own satellite coverage in Asia is competitively insignificant.[163] Second,

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[161] In response to the Issues Letter, the Parties submitted that being vertically integrated (ie having direct access to satellite capacity) does not represent a distinct competitive advantage because IFC providers can compete effectively on the basis of leased capacity, as Viasat itself did and still currently does to provide IFC to airlines over areas where it does not have coverage today (see Issues Letter Response, paragraphs 6(i), 19 and 20). The CMA notes, however, that this is inconsistent not only with the Parties' previous submissions but also with evidence from the Parties' internal documents. Indeed, in the FMN (paragraphs 679 and 680) the Parties submitted that Viasat's and Inmarsat's limited ability to compete in long-haul flights and in the US, respectively, is a by-product of their lack of coverage and satellite capacity over the relevant areas (notwithstanding, by implication, their ability to lease capacity from third parties to increase coverage / capacity in those areas). Moreover, as further discussed below, the Parties' internal documents strongly support that vertical integration provides a significant competitive advantage.

[162] [✂] (FMN, paragraph 649). Based on an internal analysis of the Valour Consultancy data, the CMA notes that [✂]. The proportion of [✂] appears to be decreasing overtime. This evidence indicates that [✂]. [✂].

[163] Responses to the commercial aviation customer questionnaire. This applies to both long-haul intercontinental flights from/to Europe and short to medium-haul flights from/to and within Europe.

both Parties have plans to expand their GEO fleets and will have global and enhanced coverage by [✂] (resulting in a combined share of HTS GEO capacity of over [50-60]% in [✂], see paragraph 42 above), with coverage and capacity increasing incrementally over [✂]. In this regard, evidence from internal documents and third parties shows that Viasat is already marketing its future global coverage to airlines in tenders to secure business today.[164]

132. The Parties submitted that the CMA has underestimated the timing and technical risks in relation to Viasat's future satellites (Viasat-3) becoming commercially operational.[165] [✂],[166] such risks are inherent in all satellite launches and the CMA is not aware of any evidence to indicate that the risks for Viasat-3 are seen as material.[167] As such, the CMA considers that Viasat-3 is likely to become commercially operational globally within the next [✂] years.[168]

133. Panasonic, Intelsat and Anuvu are currently the Parties' main competitors in the supply of IFC services to long-haul intercontinental flights from/to Europe and short to medium-haul flights from/to and within Europe. These providers all offer satellite-based IFC in Ku-band. At present, Anuvu focuses on narrowbody aircraft only.

134. Panasonic is a non-vertically integrated IFC provider which sources capacity from multiple GEO SNOs to provide global IFC services to airlines. The Parties' share of supply estimates indicate that Panasonic is the market leader in IFC to widebody aircraft (with [50-60]% of committed aircraft in 2022). However, its leading position appears to be largely driven by its historic role in providing IFE, which was leveraged into IFC and which resulted in Panasonic's IFC terminals being chosen by OEMs for line fit ahead of other solutions.[169] While the ability to bundle IFE and IFC has largely lost traction in today's market,[170] Panasonic's first-mover advantage

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[164] Customer response to the CMA questionnaire and Annex RFI3.005, [✂], October 2019.
[165] Issues Letter Response, paragraph 47(ii). The Parties submitted that there is greater timeliness risk in respect of Viasat-3 satellites, which have not yet been launched, than in respect of NGSOs' satellites (particularly Starlink and OneWeb) which have launched, and that the technical performance of Viasat-3 is yet to be verified (in contrast to NGSOs). The timing and technical (and other) barriers for NGSOs are discussed further below. Given that GEO satellites and Viasat more generally have overcome these technical (and other) barriers, the CMA does not consider that its assessment of timeliness risk for NGSOs and Viasat-3 are inconsistent.
[166] See footnote 987 to the FMN.
[167] On the contrary, as discussed elsewhere, the Parties' internal documents and third parties contemplate a future in which Viasat-3 has enhanced Viasat's IFC offering.
[168] [✂] (see FMN, paragraph 1495) but they have not identified any evidence to indicate that delays are likely to occur.
[169] FMN, paragraphs 763 and 764, and note of call with customer. See also Annex VIA-2R-003904209 to Viasat's response to the CMA's fourth Notice, Q1 2021 [✂], page 17. The same document, page 20, states that [✂]; and Annex 16.4, The Future of In-Flight Connectivity - 2020 Edition, 21 December 2021, pages 157,158 and 181. This report, prepared by Valour Consultancy Ltd, states that 'Panasonic Avionics' strategy is to leverage the widespread line-fit status it has for its IFE systems in order to also gain line-fit status for its IFC systems'.
[170] Note of a call with customer, response to OEM questionnaire.

is particularly relevant in a market characterised by stickiness and long-term contracts and has given Panasonic the opportunity to develop a long lasting relationship with its customers.

135. Like Panasonic, Anuvu does not currently own satellites and therefore leases capacity from third-party SNOs to provide IFC to its customers. Anuvu does not today offer global coverage. Its operations are currently focused on Europe and North America, which is consistent with its lack of presence in the widebody aircraft segment.[171] Moreover, Anuvu is not expected to offer global coverage in the near future.[172]

136. Intelsat is a vertically integrated IFC provider offering global coverage, with a significant presence in IFC services to widebody aircraft but a limited presence in the European narrowbody segment. Intelsat has recently become vertically integrated downstream by acquiring the commercial aviation branch of Gogo in December 2020.[173]

Line-fit and retro-fit 'offerability' of the Parties' and competitors' IFC solutions

137. Given the importance of certifications and OEMs' role as gatekeepers (see paragraphs 95 and 99 above), the CMA has considered to what extent the Parties' and their competitors' IFC solutions are line-fit offerable – ie whether they are actual alternatives for an airline seeking to equip its new aircraft with IFC services – and to what extent they hold certifications for installation via retro-fit – ie on already active or post-production aircraft.

138. The CMA has collected information on the IFC solutions that hold or will soon hold line-fit and retro-fit certification for each of Boeing's and Airbus's in-demand aircraft.[174] This information has been provided by both commercial aircraft OEMs and competitors at the level of the aircraft family.[175]

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[171] Note of call with competitor and response to competitor questionnaire.
[172] Note of call with third party.
[173] Gogo Commercial Aviation is Now Intelsat | Intelsat.
[174] Given the strong position of Boeing and Airbus in the commercial aircraft manufacturing market (for instance, Why the Airbus-Boeing duopoly dominate 99% of the large plane market and Airbus and Boeing Dominate the Sky - Aero Corner), the CMA considers information on line-fit certifications for these two OEMs to provide a near exhaustive overview of the line-fit IFC options that are or will be available in the foreseeable future to airlines ordering new aircraft.
[175] In relation to line-fit, OEMs have explained that when an IFC system obtains certification for one aircraft model it in practice becomes line-fit 'offerable' on all the aircraft models within the same aircraft family as the structure of the aircraft is the same and certification can be achieved for the specific model – if needed – during the order lead time. Information on retro-fit certifications has been provided at the level of the aircraft model by some providers and at the level of aircraft family by others. For consistency, it is therefore presented at the level of the aircraft family.

139. The Parties are both line fit 'offerable' on [✂].[176]

140. In relation to line-fit offerability for Airbus's in-demand models, [✂]. In particular:

(a) [✂]; and

(b) [✂].

141. Thus, by [✂] the Parties' IFC solutions will both be available on the catalogue of [✂] in-demand aircraft families globally and, [✂].

142. Third-party evidence indicates that, given Viasat's clear path towards certification on in-demand Airbus models and its strong track record, the Parties are already competing head-to-head for line-fit opportunities involving Airbus's aircraft and airlines have already selected Viasat's IFC solution for installation on their new Airbus aircraft.

143. The Parties also hold, or will soon hold, retro-fit certifications for a significant number of Airbus and Boeing aircraft with a material overlap between them. Viasat is retro-fit certified for [✂] aircraft families and Inmarsat's GX solution is retro-fit certified for [✂].

144. In relation to the other IFC providers:

(a) Panasonic is line-fit 'offerable' on the vast majority of Boeing's and Airbus's in-demand aircraft, the only provider that is line-fit 'offerable' on a larger number of aircraft than the Parties. Panasonic also holds retro-fit certification for most aircraft families.

(b) Intelsat is currently line-fit 'offerable' on only a limited number of aircraft but is expected to obtain TCs for several other aircraft models. By becoming a line-fit alternative on most in-demand aircraft families, Intelsat is reducing the certification gap with the Parties and may be able to compete more closely with them, including in the narrow body segment (where, based on shares of supply data, it has been historically weaker). In terms of retro-fit certifications, Intelsat appears well equipped to compete across opportunities involving both narrowbody and widebody aircraft as it holds STCs for most of the aircraft families identified.

(c) Anuvu is line-fit 'offerable' on [✂] aircraft family and [✂] in the near future. In terms of retro-fit, Anuvu holds certification for a limited number of aircraft.

[176] Inmarsat's EAN IFC solution [✂]. The discussion therefore focuses only on the offerability of the Parties' and competitors' satellite-based IFC services.

Accordingly, the CMA considers that Anuvu's ability to compete against the Parties is likely to be limited.

Internal documents and industry reports

145. The Parties' internal documents indicate that they view each other as one of their closest competitors. For instance, Inmarsat's 2021 [✂] document states that Viasat [✂].[177] Inmarsat also names Viasat as [✂], which notes that [✂].[178] Inmarsat also identifies Viasat [✂].[179] Inmarsat's documents also indicate that Viasat will [✂].[180]

146. While Viasat's internal documents tend not to discuss the competitive landscape [✂], Viasat's 2021 [✂] nevertheless identifies Inmarsat as [✂].[181]

147. Third-party industry reports also identify Viasat and Inmarsat as close competitors. For instance, Quilty Analytics comments that 'Viasat likely represents Inmarsat's most direct peer competition' in the IFC sector.[182] Similarly, a profile on Inmarsat by TMF Associates states that 'Viasat is perhaps the most important long-term competitor for Inmarsat in the inflight connectivity market, because Viasat is following the same strategy of leveraging its own capacity to sell direct to airlines.'[183]

148. The Parties' internal documents also indicate that other IFC providers [✂] may exert a weaker constraint on the Parties than the Parties exert on each other. In particular, several internal documents identify [✂] as important for supplying IFC for commercial aviation:

(a) Inmarsat identifies [✂] and notes that Panasonic and Anuvu [✂].[184] Inmarsat's 2021 [✂] document notes that Panasonic and Anuvu are [✂].[185] An Inmarsat strategic planning document indicates that [✂].[186] Its May 2021 [✂] describes

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[177] Annex 8.12 to Inmarsat's response to the CMA's second Notice, [✂], May 2021, page 5.]
[178] Annex 9.1, [✂], December 2021, page 13.
[179] Annex 8.28 to Inmarsat's response to the CMA's second Notice, [✂], 23 July 2020, page 18.
[180] Annex 160 to Inmarsat's response to the CMA's third Notice, [✂], 2 July 2021, page 5, notes that Viasat is [✂]. See too Valour's report on the Future of In Flight Connectivity – 2020 Edition, page 24, which states that "ViaSat-3, announced in November 2015, will expand coverage globally (except for the poles) with throughput capacity of one Terabit per second (Tbps) for each of the three constituent satellites". See also Annex 10 to Inmarsat's response to the CMA's third Notice, [✂], 12 February 2020, page 63, where Inmarsat describes Viasat as [✂].
[181] Annex 14.2, [✂], 2021, page 1.
[182] Annex 10.4 to Inmarsat's response to the CMA's second Notice, Quilty Analytics, Viasat Doubles Down on Vertical Strategy, 11 January 2021, page 4.
[183] Annex 8.20 to Inmarsat's response to the CMA's second Notice, TMF Associates, Profile of Inmarsat, 31 March 2020, page 71.
[184] Annex 8.12 to Inmarsat's response to the CMA's second Notice, [✂], May 2021, pages 1 and 5.
[185] Annex 8.12 to Inmarsat's response to the CMA's second Notice, [✂], May 2021, page 1.
[186] Annex 3.160 to Inmarsat's response to the CMA's third Notice, [✂], 2 July 2021, page 5. Inmarsat notes that [✂] and that Viasat is [✂].

[✂].[187] Inmarsat also describes [✂].[188] And Inmarsat's 2021 [✂] notes that Panasonic's [✂] for IFC.[189]

(b) Viasat's 2021 [✂] states that [✂].[190] And Viasat indicated in its 2020 [✂].[191]

149. The Parties submitted that the above statements are 'mostly rear-guard attempts to highlight the [Parties'] continued relevance and perceived strengths in the face of the existential threat' posed by NGSOs, and that they should not be taken 'as evidence of a competitive dynamic that is not borne out by reality.'[192] However, the above statements are mostly made in internal strategy documents in the context of assessing the Parties' competitiveness in relation to GEO competitors. As such, the CMA does not accept that the statements were intended to strengthen the perception of the Parties' offerings with third parties. Moreover, the CMA considers that the dynamics identified in the statements are borne out by the other evidence available in relation to market dynamics, including both industry reports,[193] and the evidence that the CMA has received from airlines and competitors (as discussed further below).

150. In addition to highlighting the importance of vertical integration, [✂] also allude to potential challenges for competitors operating in Ku-band (ie Intelsat/Gogo, Panasonic and Anuvu), referring to Ku-band IFC providers as 'struggling' and facing 'challenges'. When discussing Viasat's win of Delta airline's business from Gogo,

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[187] Annex 68 to Inmarsat's response to the CMA's third Notice, [✂], 14 May 2021, page 7.
[188] Annex 8.28 to Inmarsat's response to the CMA's second Notice, [✂], 23 July 2020, page 18.
[189] Annex 2.79 to Inmarsat's response to the CMA's second Notice, [✂], March 2021, page 70.
[190] Annex 14.2, [✂], 2021, page 16.
[191] Annex VA00022950 to Viasat's response to the first Notice, [✂] 2020, [✂], page 2. The Parties submitted in paragraph 23 of the Issues Letter Response that the CMA has misinterpreted certain statements from the Parties' internal documents. However, of the 10 statements relied on above by the CMA in relation to vertical integration, the Parties identify only one – from [✂] 2020 [✂] – as an example of a statement that has been misinterpreted. The Parties submitted that the [✂] referred to in the document is between [✂]. The CMA considers, however, that this distinction is inconsequential. The full statement reads as follows: [✂]. In other words, Viasat's [✂] is competitively advantageous vis-à-vis [✂] SSPs because Viasat can offer customers IFC solutions with [✂]. This advantage [✂] would be in addition to the advantage of [✂].
[192] Issues Letter Response, paragraph 23.
[193] For instance, TMF Associates notes that competitors, such as Anuvu, which are reliant on third party capacity, particularly in Ku-band, are likely to experience more challenges in the next few years' (Annex 8.20 to Inmarsat's response to the CMA's second Notice, TMF Associates, Profile of Inmarsat, 31 March 2020, page 71); and Valour Consultancy indicates that 'Intelsat has correctly been quick to emphasise the cost benefits of streamlining the provision of IFC, noting the ability to remove a layer from the ecosystem and prioritise use of its own network of satellites rather than lease capacity from three of four vendors', and that Panasonic may 'opt to fall back from IFC' due to the 'growing threat posed by Inmarsat, Viasat, and now Intelsat' (ie the vertically-integrated providers)(see Annex 16.4, The Future of In-Flight Connectivity – 2020 Edition, 21 December 2021, pages 48 and 55).

Quilty Analytics identifies lingering concerns that there is insufficient global Ku-band capacity to support the move to a 'free' IFC service model.[194]

151. In relation to Intelsat's acquisition of Gogo, Inmarsat notes that [✂].[195] Valour Consultancy indicates that it is unlikely Intelsat will 'shift the business model enough to allow all airlines to offer free streaming to all passengers, at least within the next 5 years.'[196]

Parties' bidding data analysis and airlines' information on recent tenders

152. The Parties provided data on the IFC tender opportunities in which each of Viasat and Inmarsat participated from January 2018 to June 2022. Despite significant limitations with the data,[197] the analysis shows that Inmarsat and Viasat compete, alongside Panasonic, Intelsat/Gogo and [✂] Anuvu, to provide IFC services to commercial airlines worldwide as well as in Europe. [✂].

153. The CMA notes that, by covering a period of over four years, this analysis may not accurately capture the most recent competitive dynamics in the market and the competitive strength of [✂] providers (like Panasonic) is likely to be overstated compared to more recent entrants, including the Parties.[198] Despite its concerns in relation to the overall robustness of the Parties' analysis, the CMA notes that the results are broadly consistent with other sources of evidence on closeness of competition.

154. The CMA also collected information directly from 16 major airlines on 44 tenders held for their intercontinental and European flights. Overall, the period covered by these opportunities spans from 2014 to 2022.[199] To focus on the most recent

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[194] Annex 10.4 to Inmarsat's response to the CMA's second Notice, Quilty Analytics, Viasat Doubles Down on Vertical Strategy, January 11, 2021, page 3.
[195] Annex 8.12 to Inmarsat's response to the CMA's second Notice, [✂], May 2021, page 5.
[196] Annex 16.4, The Future of In-Flight Connectivity – 2020 Edition, 21 December 2021, page 55. The Parties indicated in paragraph 22 of the Issues Letter Response that SSPs operating in Ku-band (including Gogo) do offer free-to-all passenger IFC services. However, the question raised in the Valour Consultancy report was not whether SSPs can offer free services to some airlines, but to 'all airlines' within the next 5 years. As explained above, unlimited free wifi on board is seen as the natural next step by many airlines.
[197] The Parties submitted that it is not possible to draw robust conclusions from the tender data, as it is affected by significant limitations, including the limited information available on competitors bidding in the tenders and the impossibility of distinguishing between opportunities for narrowbody and widebody aircraft (FMN, paragraph 827, points (i) to (vii)).
[198] Evidence from Inmarsat's [✂] is consistent with this. In particular, the CMA notes that the list of recent IFC tenders won by Panasonic that the Parties presented during the Issues Meeting (Annex 2 of the slide deck provided on 14 September 2022) concerns [✂] consistent with Panasonic [✂] and hence its competitive strength being [✂] when assessing competition on a longer backward-looking timeframe.
[199] In its questionnaire the CMA asked the airlines to provide information on the two most recent tenders for the supply of IFC services for (i) line fit and (ii) retro fit opportunities involving aircraft used for intercontinental flights and intra-European flights. Airlines providing data for both intercontinental and intra-European flights were therefore asked to provide information for up to 8 tenders (if available), whereas airlines providing only intercontinental flights or only intra-European flights were asked to provide information for up to four tenders.

market dynamics, the CMA looked more closely at the tenders that occurred from 2019 onwards, which included 22 tenders held by 11 airlines.[200]

155. Of these tenders, Viasat won the most (11 tenders out of 22), followed by Inmarsat (5 tenders), Panasonic (4 tenders), Intelsat (1 tender) and Anuvu (1 tender). The identity of the runners-up was only provided for 14 tenders, but when available this evidence suggests that the Parties are close competitors as, out of the 9 tenders won by Viasat for which the information on the runner-up is available, Inmarsat was ranked as the second-best provider most of the time (5), followed by Intelsat (2) and Panasonic (2). Runner-up information is only available in 2 out of 3 tenders won by Inmarsat: Viasat was the runner-up in one of these tenders and Panasonic was the runner-up in the other.

Third-party feedback

156. The CMA has collected views on the closeness of competition between the Parties and other providers from customers, competitors, VARs, and OEMs.

157. The vast majority of the airlines that replied to the CMA's questionnaire submitted that the Parties compete closely in the supply of IFC on both intercontinental and European flights. More than half of these airlines noted that Viasat and Inmarsat offer similar IFC services providing a widespread coverage in Ka-band.

158. When asked to identify and score alternative IFC providers available to them, airlines' responses overall indicate that Viasat and Inmarsat are regarded as the best alternatives, followed at a distance by Intelsat and Panasonic. Around half of the airlines that included Panasonic in the list of available providers described it as expensive and/or offering an old technology. Anuvu was identified to be an alternative by only a few airlines, which often commented on its offering being restricted (technologically and due to lack of certifications).

159. All GEO competitors and VARs that replied to the CMA's questionnaire said that the Parties compete closely, often noting their strengths relative to their competitors due to direct access to satellites providing (soon if not yet) global coverage in Ka-band.

160. In relation to the competitive strengths of the other IFC providers, the responses of competitors and VARs indicate that vertical integration is an important trend and that non-vertically integrated providers are unlikely to remain competitive going

[200] Of these 22 tenders only five involved retrofit opportunities, of which only two involved aircraft with an installed solution (ie a switching opportunity). The CMA notes that, although this is a relatively small number of tenders, this information allows for observations to be made, and that the trends set out below are consistent with other evidence received by the CMA.

forward.[201] Thus, despite having a significant customer base, Panasonic's position was described as in decline ([✂]) and Anuvu was generally considered a weak competitor.[202] Intelsat's recent acquisition of Gogo was noted as a potential advancement for its competitive position, although it was noted that Intelsat is not established in the supply of IFC to narrowbody aircraft.[203]

161. Finally, one of the main OEMs submitted that, based on the latest narrowbody demand trends, the Parties currently are and are expected to continue to be [✂]. With respect to other competitors, the same OEM noted that [✂] Panasonic's IFC solution [✂],[204] while orders of aircraft equipped with Intelsat's IFC solution [✂].

Conclusion on closeness of competition between the Parties and competitive constraints from current (GEO) rivals

162. Based on the above, the CMA considers that the Parties are close competitors in the supply of IFC to commercial aviation customers, both for long-haul intercontinental flights from/to Europe and for short to medium-haul flights from/to and within Europe. They are the only two vertically integrated providers operating in Ka-band and, although Viasat currently lacks global coverage, it will have it soon and already markets it to airlines. Given the Parties' ongoing expansion plans – which will provide both with enhanced satellite capacity – and Viasat's progress towards obtaining line-fit certifications, the CMA considers that the Parties are likely to compete even more closely in the near future.

163. Moreover, taking the evidence above in the round, the CMA considers that the Parties' three main competitors already active in commercial aviation exert, and will exert in the future, a materially weaker constraint on the Parties than the Parties exert on each other. In particular:

(a) Panasonic does not have direct access to satellite capacity but provides IFC services by leasing Ku-band from third parties. Despite having a significant customer base, especially in widebody aircraft, its position appears to be in decline due to the reduced relevance of offering IFE and IFC as a bundle and offering an older and/or more expensive solution which has resulted in limited success in recent tenders.

(b) Anuvu is a non-vertically integrated IFC provider with a small customer base. As of today, it only offers regional coverage and holds a limited number of certifications. All these aspects indicate that Anuvu is a weak alternative to the

[201] Responses to commercial aviation customer and competitor questionnaires.
[202] Responses to competitor questionnaire.
[203] Responses to competitor questionnaire.
[204] This is consistent with third-party evidence that Panasonic [✂]. See responses to commercial aviation questionnaire.

Parties which is also largely borne out by evidence from third parties and internal documents.

(c) Intelsat has recently become a vertically integrated IFC provider by acquiring Gogo and, through its own satellites, it provides global coverage in Ku-band. Evidence from internal documents and third parties, including information on tenders, however, indicates that currently Intelsat only provides a moderate constraint on the Parties.

164. The CMA therefore considers that competition from existing (GEO) competitors will not be sufficient to offset the loss of competition arising from the Merger.

Competitive constraints from NGSO entrants

Parties' submissions

165. The Parties submitted that the aviation IFC segment is being severely disrupted by entry and expansion by NGSO players (including Starlink, OneWeb, Telesat, SES, and Amazon). The Parties submitted that NGSOs will significantly constrain the Merged Entity and in particular that:

(a) LEO constellations have certain key competitive advantages over GEO-based IFC solutions, including lower latency, 'truly' global coverage, network resilience, smaller and lighter terminals (which reduce the weight on aircraft), and lower costs and prices from both a manufacturing and a launch perspective.[205]

(b) NGSOs are actively targeting the aviation segment and have announced the development of technology specifically for the IFC segment.[206] Starlink has won contracts with Hawaiian Airlines and JSX and the Parties understand that other NGSOs have started bidding for IFC contracts.[207]

(c) Although there is some uncertainty around the precise dates in confidential NGSO rival timelines for operational launch, NGSO entry is (i) certainly coming, (ii) definitely at scale and with quality advantages, and (iii) definitely very soon. In short, disrupter entry squarely meets the three relevant requirements of the CMA's guidelines that entry and expansion is timely, likely and sufficient to dispel any initial SLC concerns.[208]

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[205] FMN, paragraph 706.
[206] FMN, paragraph 708.
[207] FMN, paragraphs 709 to 726. The Parties also submitted that Delta is carrying out evaluations with Starlink; FMN, paragraph 22.
[208] FMN, paragraph 849. Issues Letter Response, paragraph 45.

(d) Irrespective of the precise entry timelines, the aggregate impact of NGSOs is already in the present because the prospect of their entry poses a dynamic constraint on established IFC providers.[209]

The CMA's assessment

166. In order to assess the competitive constraint exerted by NGSO entrants, the CMA considered first, whether entry by these prospective providers would constrain the Merged Entity in the future, and second, whether these providers already exert a competitive constraint on the Parties as a result of dynamic competition.

Future constraint from NGSO entry

167. Entry or expansion by existing firms can mitigate the effect of a merger on competition, and in some cases may mean that there is no SLC. In assessing whether entry or expansion might prevent an SLC, the CMA considered whether such entry or expansion would be timely, likely and sufficient.[210] In terms of timeliness, the CMA's guidelines indicate that this is case specific but that the CMA will generally look for effective entry to occur within two years of an SLC arising.[211]

168. In assessing whether entry from NGSOs will be timely, likely, and sufficient,[212] the CMA has considered:

(a) NGSOs' incentives to supply IFC to commercial aviation customers;

(b) The barriers that NGSO providers must overcome in order to be able to serve commercial aviation customers;

(c) NGSO providers' ability to overcome the barriers; and

(d) Whether NGSO providers would compete closely with the Parties if they were to overcome the barriers.

NGSOs' incentives to supply IFC to commercial aviation customers

169. The Parties submitted that LEOs have strong incentives to enter and succeed in the aviation vertical given that, alongside maritime, it is the only way for them to monetise the c.80% of their satellites that are located over oceans at any one

[209] FMN, paragraphs 850 to 851.
[210] CMA129, paragraph 8.31.
[211] CMA129, paragraph 8.33.
[212] CMA129, paragraphs 3.19 and 8.30 to 8.31: the CMA will seek to ensure that the evidence is robust when confronted with claims of entry or expansion being timely, likely and sufficient.

time.[213] Aviation also offers a higher yield than other verticals.[214] The Parties also submitted that LEOs are incentivised to enter aviation quickly because their satellites only have a five-year lifespan.[215]

170. Evidence [✂] does not support the Parties' position that IFC is critical to LEOs' business models. On the contrary, Starlink [✂] is focused on fixed consumer broadband and OneWeb [✂] plans to enter fixed broadband, government, and maritime before aviation.[216] Moreover, [✂] would not build a business case around supplying IFC services, due to the risks surrounding certification.[217] The CMA notes in this regard that third parties have estimated that LEO-based IFC solutions may not be line-fit certified for three to six years, which is longer than a LEO satellite's five-year lifespan.

171. Furthermore, the Parties' internal documents indicate that Starlink's and OneWeb's first-generation constellations were not designed for [✂].[218] This is not consistent with IFC being critical for LEOs' businesses. For instance, a February 2021 Inmarsat Board update noted that: [✂].[219] On this basis, LEOs may have incurred the substantial sunk costs of launching first-generation constellations in the knowledge that they would not be suitable for serving verticals (including maritime and aviation) that require widespread coverage over oceans.

172. Although the CMA accepts that LEOs have incentives to enter the aviation vertical, as is evident in their active targeting of airline customers,[220] LEOs' incentives to continue to invest in IFC are not unlimited and will depend on whether they can overcome the barriers to entry (see below) and ultimately make a return on investment in supplying IFC.[221]

173. There is also evidence that LEOs are trying to penetrate in many (if not most) verticals, and that other verticals have lower barriers to entry.[222] Accordingly, if they are unable to compete profitably in aviation, LEOs could focus their efforts on

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[213] Issues Letter Response, paragraph 6(iii).
[214] Issues Letter Response, paragraph 50.
[215] Issues Letter Response, paragraphs 6(iii), 45 and 50 (the Parties estimated that the straight-line depreciation of Starlink's satellites over water is circa USD 47 million per month).
[216] Third party responses to questionnaire.
[217] Note of call with third party.
[218] See paragraphs 174(c) and 183(b) below.
[219] Annex 9.8 to Inmarsat's response to the CMA's second Notice, [✂], February 2021, page 6. See also Annex 9.1 to the FMN, [✂], December 2021, pages 17 and 23; and Annex 14.5 to the FMN, [✂], June 2020, page 2. See also paragraph 174(c) and footnote 232 below.
[220] Responses to SNO questionnaire.
[221] Responses to SNO questionnaire.
[222] Responses to SNO questionnaire. See too paragraph 44 above.

supplying connectivity to other industry verticals, since their competitiveness in other verticals is not tied to their success in aviation.[223]

NGSOs' barriers to supplying IFC to commercial aviation customers

174. Based on evidence from third parties (including NGSOs themselves), and the Parties' internal documents, the CMA understands that NGSO providers must overcome a series of financial, operational, technical, regulatory, and commercial barriers in order to be able to compete effectively in the supply of IFC to commercial aviation customers.

(a) *Financial barriers*: NGSOs must build, deploy, and maintain their satellite constellations and ground infrastructure, which requires significant upfront funding in the scale of billions of dollars.[224] They must also demonstrate a business case for supplying IFC (ie launching and operating satellite constellations and supplying services to customers at cost/price points that enable a return on investment).[225]

(b) *Operational barriers*: in order to serve customers directly (rather than indirectly through the wholesale supply of capacity to SSPs), NGSOs must build large operational networks capable of supporting commercial aviation customers. This requires a large amount of capital and resource, including to develop engineering, network management, customer experience, and service delivery capabilities, which are often required 24 hours a day, seven days a week around the world.[226] This requires hundreds of staff to be deployed in customer facing roles and could take from two to five years to develop.[227]

(c) *Technical barriers*: NGSOs must develop electronically-steered antennas (**ESAs**) for use in aviation.[228] The technology enabling ESAs for commercial aviation is still being developed and is technically challenging to optimise because both user terminals and satellites are moving independently of each

[223] An NGSO told the CMA explicitly that its business model is not based on successfully supplying IFC services (note of call with competitor).
[224] Note of call with SNO, note of call with airline, and note of call with aviation SSP. See also Annex 16.1 European Satellites LEO disruption: A Starlink in the making, 24 January 2022, a report prepared by Credit Suisse that states that 'it is significantly more costly than GEO/MEO to achieve global coverage due to the number of launches and satellites required', page 24 and figure 9; Annex 8.19 to Inmarsat's response to the second Notice, [✂], May 2020, slide 3.
[225] Annex 8.19 to Inmarsat's response to the CMA's second Notice, [✂], May 2020: [✂]. See also response to CMA's SNO questionnaire. Notes of calls with airline, competitor, and SNO.
[226] Responses to SNO, competitor, and commercial aviation customer questionnaires. Based on this evidence, the CMA understands that a global support network is important to large enterprises which require confidence that their portfolio of assets can be quickly brought back online in the event of network outages.
[227] Responses to SNO questionnaire. In their response to RFI5, the Parties submitted that Viasat's [✂] is a factor impacting its ability to meet its growth aspirations [✂] (see paragraph 181(i) of the Parties' response to RFI5).
[228] Annex 8.19 to Inmarsat's response to the second Notice, [✂], May 2020: [✂].

other and ESAs must be designed for constant hand-overs between satellites while maintaining communication with objects moving and rotating at high speeds.[229] In addition, ESAs comprise thousands of antennas working together, which must fit inside an aerodynamic package.[230] Other technical challenges to overcome include issues relating to scanning angles, heat dissipation, power consumption, and efficiency.[231]

Moreover, in order to provide IFC services globally, LEOs must equip their satellites with optical inter-satellite links (**ISLs**).[232] This is because LEOs cannot supply IFC to areas where their satellites have no sight of ground stations (eg over oceans) until they have a sufficient number of inter-connected satellites.[233] ISL technology is not commercially operational for IFC and is challenging to develop given difficulties aligning lasers between satellites orbiting the Earth.[234] Moreover, because ISLs are not necessary to serve non-mobility segments such as consumer broadband, some LEO constellations have been launched without the necessary ISL hardware.

The CMA notes that ISLs are not necessary for LEOs to serve IFC to aircraft routes which are in line of sight of ground stations.[235] As such, the CMA considers that ISLs could be less competitively important for short to medium-haul flights within and from/to Europe. Nevertheless, some short to medium-haul flights from/to Europe fly intercontinentally over water (for example, routes to North Africa and the Middle East) and therefore LEOs could still be at a competitive disadvantage if they are unable to serve those routes (eg due to lack of ISLs and necessary ground stations).[236]

(d) Regulatory barriers: NGSOs must acquire a range of regulatory approvals from multiple international regulators, including in each country where they want to

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[229] Third party responses to questionnaire.
[230] Third party response to questionnaire.
[231] Response to SNO and competitor questionnaires.
[232] Note of call with competitor and response to competitor questionnaires. See also Annex 9.8 to Inmarsat's response to the second Notice, [✂], February 2021, pages 6-7 [✂].
[233] Note of call with competitor. Annex 9.1 – [✂], December 2021, page 17 and Annex 43 to Inmarsat's response to the CMA's third Notice, [✂], 12 February 2021, page 38.
[234] The Parties submitted in paragraph 76 of the Issues Letter Response that Iridium has been using ISL technology for decades. However, a third party told the CMA that Iridium's ISLs use radio frequencies rather than optical laser links and are not suitable for high throughput LEO constellations (note of call with competitor).
[235] Issues Letter Response, paragraph 79.
[236] For instance, [✂]. This is inconsistent with the Parties' suggestion in paragraph 80 of the Issues Letter Response that LEOs could enter effectively without a high level of coverage (like Viasat did in the past with JetBlue). It is also inconsistent with airlines' responses to the CMA's questionnaire, which indicated that coverage is important (as discussed at paragraphs 67 and 120 above).

locate gateway stations (as discussed in paragraph 38) and to serve commercial aviation customers.[237]

In addition, as discussed at paragraphs 95 to 99 above, IFC equipment must be certified before it can be installed on commercial aircraft. As a result, even after ESAs are commercially available, it may be several additional years before NGSOs' hardware can be selected by airlines. The CMA has received a range of estimates from SNOs in relation to when ESAs compatible with their satellites may be line-fit certified, which range from three to six years, assuming technical challenges can be overcome.[238] Third parties indicated that ESAs may be certified earlier for retro-fit, estimating that this could take between 6 months and 2 years from the time that ESAs are commercially available.[239] However, one third party noted that it can take up to six months to cross-certify an STC with international regulators and that 50-100 STCs may be required to address the broader IFC market, due to the number of aircraft models in operation.[240]

(e) *Commercial barriers*: even when technically able to serve aviation customers, NGSOs will face challenges in building sector knowledge,[241] developing customer relationships,[242] persuading airlines to choose an unproven NGSO solution for line-fit,[243] and securing retro-fit installations (for the reasons discussed above).[244]

175. Moreover, the challenges for NGSOs are likely to be exacerbated by strategic efforts from existing providers, including the Parties, to get airlines to sign long term contracts and create 'stickiness' over the next few years before NGSO services might become commercially available, including by trying [✂].[245]

176. In this connection, the CMA notes that the successful installation and operation of IFC on an aircraft by an NGSO would not be sufficient to prevent an SLC. An NGSO's entry would need to impact market outcomes and be successful over a

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[237] Note of call with competitor, response to SNO questionnaire, and note of call with Ofcom. For instance, SSPs serving UK-registered aircraft require a licence from Ofcom irrespective of where the aircraft travel. See too paragraph 39 above.
[238] The Parties submitted in paragraph 73 of the Issues Letter Response that third-party estimates for when ESAs would be line-fit certified 'must relate solely to GEO satellites.' This is incorrect; the estimates relate to NGSO-compatible ESAs (see responses to SNO questionnaire).
[239] Competitor and SNO responses to questionnaire.
[240] Response to SNO questionnaire.
[241] Response to SNO questionnaire.
[242] Response to SNO questionnaire.
[243] For instance, Annex 73 to Inmarsat's response to the third Notice, [✂], 28 July 2021, states that [✂]. See too responses to commercial aviation customer and competitor questionnaires. See paragraph 88 and following above.
[244] See paragraphs 111 to 114 above.
[245] Annex 14.2, [✂], 2021, pages 25 and 32. Annex 9.8 to Inmarsat's response to the second Notice, [✂], February 2021, pages 2 and 9.

sustained period of time.[246] Given the strong position of the Parties, the CMA considers that an NGSO would need to be able to contest the broad range of airline opportunities that the Parties currently compete for in a timely manner in order to be able to offset the loss of competition arising from the Merger.

NGSO providers' ability to overcome the barriers

177. Of the prospective NGSO providers, the CMA considers that Starlink and OneWeb are the potential entrants most likely to supply IFC to commercial aviation customers in the shortest time frame, and accordingly is focusing its assessment on the entry of these providers. In relation to the other NGSOs:

(a) The available evidence suggests that neither Telesat nor Amazon has started launching LEO satellites, and that they are unlikely to have operational constellations in orbit before 2026 at the earliest.[247] The evidence also indicates that Telesat's proposed constellation is not yet fully funded[248] and significant uncertainty surrounds Amazon's constellation, including if and when it will be launched and, if so, how it plans to compete (if at all) in aviation.[249] Accordingly, the CMA considers that it is unlikely that either Telesat or Amazon would be able to constrain the Merged Entity in a timely manner.

(b) With respect to SES, the CMA understands that it supplies GEO capacity to aviation SSPs, which it intends to complement with its MEO capacity when its mPOWER constellation becomes commercially operational. As an NGSO constellation, SES will require commercially operational ESAs to serve commercial aviation customers, which may not be available for line-fit for three to six years (as discussed above). SES also [✂] may not be retro-fit certified for [✂] years.[250] Accordingly, the CMA considers that SES would be unlikely to be able to constrain the Merged Entity in a timely manner.

178. In relation to Starlink and OneWeb, the CMA notes that substantial uncertainty remains as to whether either will be able to overcome the various barriers necessary to compete effectively in commercial aviation in a timely manner. The

[246] CMA129, paragraphs 8.33 and 8.37.
[247] Responses to SNO, competitor, and commercial aviation customer questionnaires. As per Table 2 above, Valour Consultancy does not project Amazon to supply any capacity by the end of 2025.
[248] Note of call with maritime SSP. See also Annex VA00023890 to Viasat's response to the first Notice, [✂], 15 December 2021], page 5: [✂]; and Annex 8.19 to Inmarsat's response to the CMA's second Notice, [✂], 27 May 2020, page 27: [✂].
[249] Note of call with competitor and response to SNO questionnaire. See, for instance, Annex 158 to Inmarsat's response to the CMA's third Notice, [✂], 30 November 2020, pages 10, 15, 20 and 21: [✂]. See Annex VA00023890 to Viasat's response to the CMA's first Notice, [✂], 15 December 2021, page 5; and Annex 8.19 to Inmarsat's response to the CMA's second Notice, [✂], 27 May 2020, page 27: [✂].
[250] Third party response to questionnaire.

CMA has considered each of Starlink's and OneWeb's progress in seeking to do so in turn.

Starlink

179. The Parties submitted that Starlink has '*already* overcome all significant barriers to entry' and that its 'unprecedented financial backing' allows it to 'overcome any remaining barriers to entry or expansion.'[251] They submitted that Starlink's contract wins with Hawaiian Airlines and JSX in the US are evidence that it will impose a real competitive constraint well within two years and, indeed, that 'competition is here today'.[252]

180. The CMA considers, however, that the Parties' submissions are not supported by the available evidence:

(a) Financial barriers. Although Starlink has substantial financial backing, it remains uncertain whether it will be able to grow capacity and maintain its constellation in space at a cost that enables commercial success (and therefore justifies ongoing investment). The Parties submitted that Starlink's 'future commercial success is now well accepted in the industry.'[253] But based on evidence from third parties and the Parties themselves, the CMA considers that SpaceX's success in IFC is far from accepted:

(i) [✂].[254]

(ii) The Parties' internal documents recognise [✂]. For instance, Inmarsat recognises that it [✂].[255] Viasat notes that SpaceX is [✂].[256]

(b) Operational barriers. IFC providers, including Starlink, must develop a variety of commercial and customer-service functions to service the specific needs of airlines globally.[257] [✂] Starlink does not currently have the capabilities required to meet airlines' needs and it could take from three to five years to

[251] Issues Letter Response, paragraphs 45 and 6(iii). See also Issues Letter Response, paragraph 58 ('Once NGSOs have obtained the funding required to launch the satellites, it is accepted that many of the barriers [can be] overcome by access to finance').
[252] Issues Letter Response, paragraph 47(ii).
[253] Issues Letter Response, paragraph 57.
[254] Third party response to questionnaire.
[255] See Annex 8.19 to Inmarsat's response to the CMA's second Notice, [✂], 27 May 2020.
[256] See Annex 2.114 to Viasat's response to the CMA's second Notice, [✂], 24 September 2021. [✂].
[257] As discussed in the nature of competition section above (see paragraph 106), airlines consider the provision of aftermarket services to be a key factor when selecting their IFC provider.
[257] Response to SNO questionnaire and responses to airlines questionnaire. In particular, of the few airlines that identified Starlink to be an alternative for their IFC services, most highlighted that its service offering is either weak, underdeveloped or unproven. See paragraph 168 below.

develop them.[258] The Parties submitted that such operational barriers could be overcome by outsourcing, that Starlink's business model does not require an operations network and that, even if it did, Starlink could build out its network after contracts have been won.[259] However, the CMA considers that the Parties submissions are not supported by the available evidence:

(i) [✂] outsourcing [✂];[260]

(ii) More than half of the airlines that responded to the CMA's questionnaire said that an IFC provider's ability to offer global maintenance services and engineering support (including technical expertise, digital support, and spare parts) is an important factor for them when selecting an IFC provider.[261]

(iii) The Parties' internal documents highlight the importance of an operations network. Viasat recognises that [✂].[262] Likewise, Inmarsat notes that [✂].[263]

(iv) The Parties cited Starlink's contract win with Royal Caribbean and Inmarsat's outsourcing of services to Lufthansa in 2015 as examples of successful outsourcing. However, it is unclear what the scope of these outsourcing arrangements was, and whether arrangements of this nature could be used at scale to serve the aviation vertical.[264]

(c) Technical barriers. With respect to both ESAs and ISLs, the CMA considers that technical challenges remain which make it hard to predict when (if at all) Starlink will be able to compete effectively in commercial aviation:

(i) With respect to ESAs, [✂].[265] While the Parties submitted that ESAs have been used for the last 20 years and that there have been successful trials,[266] it remains the case that ESAs are not commercially operational in commercial aviation. Indeed, despite the successful trial of its ESA in June

[258] Third party response to questionnaire. One third party noted that existing global networks have typically been established via acquisition and consolidation, rather than organic growth, and considered it unlikely that such opportunities remain to build out a network today (see third party response to questionnaire).
[259] Issues Letter Response, paragraphs 60-61, and 63.
[260] Third party response to questionnaire.
[261] Responses to commercial aviation customer questionnaire.
[262] Annex 14.2, [✂], 2021.
[263] Annex 3.157 to Inmarsat's response to the CMA's third Notice, [✂], 19 May 2021.
[264] See paragraph 180(b)(ii).
[265] Third party response to questionnaire. This is consistent with Inmarsat's commentary in a May 2021 LEO presentation that [✂]. Inmarsat notes that ESAs [✂] (see Annex 3.157 to Inmarsat's response to the third Notice, [✂], 19 May 2021).
[266] Issues Letter Response, paragraphs 68-69.

2021, Viasat does not expect its ESAs to be available for retro-fit or line-fit for [✂].[267]

(ii) With respect to ISLs, Starlink's first-generation LEO satellites were launched without the necessary hardware to transmit data between satellites. Evidence from the Parties and third parties indicates that the absence of ISLs renders the constellation 'unsuitable for mobility' applications, such as commercial aviation.[268] The Parties submitted that Starlink's ISLs are already operational and that it will have a network covering many/most/all routes in the next two years.[269]

The CMA notes, however, that the available evidence does not support the Parties' submissions. [✂].[270] At the end of June 2022, [✂] of Starlink's constellation had ISL hardware and [✂] will have it by the end of 2025.[271] [✂].[272] This is consistent with the Parties' internal documents, which note that Starlink [✂].[273]

(d) Regulatory barriers. The CMA considers that the barriers Starlink faces to obtain regulatory licences and certifications may prevent it from competing effectively in a timely manner. In particular:

(i) Starlink still requires licences from authorities around the world to deploy ground infrastructure and to serve customers, including earth station in motion licences from countries where its prospective airline customers take off and land.[274] Moreover, the CMA understands that incumbent satellite providers are currently engaged in efforts to raise legal and regulatory barriers against Starlink's entry and expansion.[275] The Parties submitted that Starlink has been authorised by the FCC to supply connectivity to

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[267] FMN, paragraph 221.
[268] Annex 9.1, [✂], December 2021, page 17; Annex 14.5, [✂], June 2020, page 2; Annex 9.8 to Inmarsat's response to the CMA's second Notice, [✂], February 2021; Annex 17 to Inmarsat's response to the CMA's third Notice, [✂], 22 April 2022, page 4; and Annex 146 to Inmarsat's response to the CMA's third Notice, [✂], May 2022, page 5 and Annex 43 to Inmarsat's response to the CMA's third Notice, [✂], 12 February 2021, page 38. See also responses to SNO questionnaire.
[269] Issues Letter Response, paragraphs 75 and 77-78. See also emails from Linklaters to CMA dated 16 September 2022 and 2 October 2022.
[270] Third party response to questionnaire.
[271] Third party response questionnaire.
[272] Third party response questionnaire.
[273] See Annex 9.1 to the FMN, [✂], December 2021 [✂]; and Annex 3.157 to Inmarsat's response to the CMA's third Notice, [✂], 19 May 2021.
[274] Third party response to questionnaire. See to note of call with Ofcom.
[275] Viasat has lodged an appeal in the United States, contesting the US FCC's order authorising Starlink to start deploying its LEO satellites, response to RFI 5, paragraphs 399 and 40. In addition, the CMA understands that Dish is opposing Starlink's use of spectrum in the US, and that Starlink's authorisation to use spectrum in France was successfully challenged before the French Council of State in April 2021, resulting in a several month disruption to its ability to provide services until reauthorisation was received in June 2022. See also response to SNO questionnaire.

aircraft, which other 'regulators tend to follow' and that regulatory challenges in Europe and the US 'have been largely unsuccessful.'[276] In contrast, [✂] in a highly regulated industry losing a challenge on the regulatory front could represent an existential threat.[277] Consistent with this, a 2020 Inmarsat presentation [✂] notes that [✂].[278]

(ii) With respect to certification, as discussed at paragraphs 102 to 104 above, evidence from internal documents and third parties indicates that line-fit certification is critical for NGSOs to compete effectively in commercial aviation.[279] In other words, Starlink would have to become offerable and line-fit certified on a sufficient number of narrowbody and widebody aircraft models to compete effectively against the Merged Entity for airlines wishing to supply IFC to passengers flying short-haul from/to and within Europe and long-haul from/to Europe. Based on observations received from OEMs and SNOs, the CMA considers that line-fit certification for Starlink-compatible equipment may not be available for between three to six years.[280] While the CMA accepts that Starlink may receive a limited number of retro-fit certifications in a timely fashion, it does not consider that this would amount to effective entry.[281]

(e) Commercial barriers. Even if Starlink can overcome the financial, operational, technical, and regulatory barriers to entry in a timely manner, the CMA considers that substantial uncertainty remains as to whether Starlink would sufficiently constrain the Merged Entity so as to prevent an SLC.[282] In particular, it would still need to:

(i) demonstrate that its technology (including operational ESAs and ISLs) allows its IFC services to perform to the required level (eg in terms of speed, throughput, and coverage), including at airports and in other densely

[276] Issues Letter Response, paragraph 83.
[277] Note of call with competitor.
[278] Annex 3.157 to Inmarsat's response to the CMA's third Notice, [✂], 19 May 2021.
[279] CMA129, paragraph 8.33 ('It is not just a case of entry or expansion occurring in a timely manner but the effectiveness of that entry or expansion on market outcomes must be timely').
[280] Note of call with OEM and response to OEM questionnaire. Responses to SNO questionnaire.
[281] As noted above, LEOs may need 50-100 STCs to address the broader IFC market (see paragraph 174(d). Starlink would also have to prove that its service is line-fit certifiable and does not present too much of a risk for airlines (see paragraph 180(e)(i)). The CMA considers that it does not have sufficiently robust evidence available to show that Starlink could compete effectively in commercial aviation with retro-fit opportunities alone. For instance, as footnoted in paragraph 101 above, uncommitted aircraft do not equate to potential demand for LEO-based IFC solutions.
[282] CMA129, paragraph 8.32.

populated areas, and at price points that allow airlines to provide internet connectivity to passengers for free;[283]

(ii) develop sector expertise necessary to operate and maintain IFC services to the required standard (eg in terms of network management and customer support);[284] and

(iii) overcome the Parties' strategic efforts to raise barriers to entry by increasing stickiness and creating a competitive moat.[285]

181. The Parties' submission that Starlink has '*already* overcome all significant barriers to entry' mainly relies on the fact that Starlink has won IFC contracts with Hawaiian Airlines and JSX.[286] However, [✂] Starlink's services may not be viable. Specifically, [✂]:

(a) [✂];

(b) [✂]; and

(c) [✂].[287]

182. Given the above, the CMA considers that entry by Starlink would not be timely, likely, or sufficient to prevent an SLC in commercial aviation.

OneWeb

183. Unlike Starlink, OneWeb is not expected to supply IFC to commercial aviation customers directly. Instead, it is expected to supply its capacity at the wholesale level to aviation SSPs.[288] In other words, OneWeb will not compete directly with the Merged Entity in commercial aviation, but instead may strengthen other aviation SSPs by leasing capacity to them to boost the capacity available for their IFC

[283] The Parties submitted in paragraph 92 of the Issues Letter Response that NGSOs can make attractive offers to airlines because they can offer 'more bandwidth for the same price'. However, the Parties internal documents indicate that airlines [✂]. For instance, Viasat notes [✂] (see Annex 14.5, [✂], June 2020). Likewise, Inmarsat notes in a 2021 [✂] that NGSOs are [✂] (see Annex 3.157 to Inmarsat's response to the CMA's third Notice, [✂], 19 May 2021). This is consistent with evidence from airlines themselves: most airlines that responded to the CMA's questionnaire did not see NGSOs as an alternative for their IFC (as discussed at paragraph 168 above); and one airline told the CMA that change is not expected to occur until NGSOs are 'certified, marketable, and available to scale up' which may take up to seven years.
[284] In this connection, a Viasat document notes that Starlink is [✂] (Annex 14.5, [✂], June 2020). As discussed at paragraph 98 above, airlines indicated that operational support is an important factor when selecting an IFC provider.
[285] See paragraph 165(e) above.
[286] Issues Letter Response, paragraphs 47, 71, 77, and 87.
[287] Third party responses to CMA's questionnaires.
[288] Responses to competitor and SNO questionnaires.

solutions. In any event, the CMA considers that it is uncertain whether OneWeb could supply capacity competitively to the aviation sector in a timely manner:

(a) OneWeb is developing ESAs for commercial aviation in partnership with third-party developers. While OneWeb may receive a limited number of STCs in a timely fashion, based on observations received from OEMs and SNOs, the CMA considers that certification for a significant proportion of aircraft may not be available for between three to six years.[289] In addition, there are still a number of technical considerations that OneWeb must resolve before it can offer its satellite services to aircraft.[290]

(b) OneWeb's first generation constellation will be launched without ISLs, meaning that it is 'unsuitable for mobility applications.'[291] The Parties submitted that OneWeb can cover major aviation routes without ISLs, including over the North Atlantic.[292] However, in assessing the threat from OneWeb, a 2021 Inmarsat presentation noted that OneWeb [✂].[293] The CMA considers that it is not sufficient that OneWeb has coverage, it must also be able to perform effectively within its area of coverage. OneWeb's second generation constellation is expected to have ISLs but it has not yet received funding.[294]

Whether NGSO providers would compete closely with the Parties if they overcome the barriers

184. The CMA considers that the available evidence shows that in many instances LEO capacity may be more complementary to than substitutable for GEO capacity for the purposes of IFC:

(a) Since LEOs orbit closer to the Earth's surface, they have lower latency than GEOs and are therefore more suitable for latency-sensitive applications, such as gaming and cloud computing.[295] In principle, they can also offer coverage over the poles. In contrast, GEOs provide reliable speed and capacity over the

[289] Note of call with OEM and response to OEM questionnaire. Responses to SNO questionnaire.
[290] Responses to SNO questionnaire.
[291] See paragraph 174(c) above. See also Annex 3.157 to Inmarsat's response to the third Notice, [✂], 19 May 2021: [✂].
[292] Issues Letter Response, paragraph 81.
[293] Annex 3.157 to Inmarsat's response to the third Notice, [✂], 19 May 2021.
[294] Note of call with competitor and third party response to questionnaire.
[295] Annex 13.3, [✂], January 2021, page 20. The Parties submitted in paragraph 47(iii) of the Issues Letter Response that lower latency gives NGSOs an [✂] in commercial aviation. However, this is not consistent with evidence in internal documents that suggests [✂] (see Annex VA00024863 to Viasat's response to the first Notice, [✂], November 2021). See also Annex VA00009873 to Viasat's response to the first Notice, [✂], December 2021.

areas of the Earth they cover and provide better connectivity in densely populated areas (ie capacity density), such as at airports.[296]

(b) Viasat has recognised that these differing capabilities [✂]. [297]

(c) As noted in paragraph 48 above, Inmarsat's ORCHESTRA project intends to leverage the differing strengths of GEOs and LEOs to provide better connectivity solutions to customers. Indeed, Inmarsat's CEO has stated that 'the most cost effective and most superior way of building […] satellite networks is a combination of GEO and LEO, and 5G where needed.'[298]

(d) Many other SNOs are also planning to combine NGSO and GEO technology in hybrid networks, including SES, Intelsat, Telesat, and Eutelsat, as discussed above.[299]

(e) OneWeb is expected to supply capacity at the wholesale level, which will be supplied to customers by SSPs in hybrid networks (including in partnership with Intelsat for commercial aviation).[300]

185. The Parties submitted that NGSO capacity is not complementary to GEO capacity because NGSOs have already won IFC contracts on the basis of their capacity being used as the only solution.[301] However, Starlink is the only NGSOs provider that has won such contracts and, indeed, the evidence available to the CMA suggests that Starlink is the only NGSO provider that is planning to supply a standalone IFC solution designed to compete with the Parties' IFC solutions in the near future. Accordingly, the CMA considers that Starlink could in principle compete closely with the Parties if it were to overcome the various barriers to entry whereas other NGSO providers (eg OneWeb, Telesat, and SES) would not.

Conclusion on competitive constraints from NGSO entry

186. The CMA considers that there is not sufficiently robust evidence available to show that NGSOs' entry in commercial aviation would be timely, likely, or sufficient. On the contrary, the CMA considers that the available evidence shows that substantial uncertainty remains as to if and when NGSO providers will be able to overcome the

[296] Annex VA00009873 to Viasat's response to the first Notice, [✂], 22 December 2021: [✂]; Annex VA00020293 to Viasat's response to the first Notice, [✂], August 2020, slide 31; and Annex VA00011331 to Viasat's response to the first Notice, [✂], August 2021: [✂]. See FMN, Figure 47. This also supported by third-party evidence (note of calls with aviation SSP and SNO).
[297] Annex VA00011331 to Viasat's response to the first Notice, [✂], August 2021. See also Annex VA00024863 to Viasat's response to the first Notice, [✂], November 2021: [✂].
[298] Inmarsat CEO Rajeev Suri Shares Thoughts on Viasat IFC, Cybersecurity, and the Supply Chain, 2 June 2022.
[299] See paragraph 48 above.
[300] For instance, Intelsat and OneWeb partnership brings multi-orbit connectivity to airlines worldwide.
[301] Issues Letter Response, paragraph 47(iii).

financial, operational, technical, regulatory, and commercial barriers necessary to compete effectively in the supply of IFC services to commercial aviation customers and – if they do – whether they will exert a sufficient constraint on the Merged Entity to prevent an SLC.

Existing constraint from NGSOs

187. Incumbent firms that are making efforts to improve their own competitive offering may do so to mitigate the risk of losing future profits to potential entrants. In this sense, potential entrants can be thought of as dynamic competitors, even before they effectively enter and begin supplying customers.[302]

188. The Parties submitted that steps being taken by NGSOs to enter commercial aviation, and the threat of their entry, exert an effective constraint on the Parties 'in the present'.[303] More specifically, the Parties submitted that competition is here today on the basis of Starlink's contract wins and the manner in which airlines refer to NGSO providers' participation in tenders and offers.[304] The threat from NGSOs is also being used by customers [✂].[305]

189. The CMA recognises that the Parties are [✂]. Nevertheless, the CMA considers that the available evidence shows that competition from NGSOs does not constrain the Parties effectively in the present and nor would it constrain the Merged Entity in the short term. In particular:

(a) Each of the Parties' internal documents identifies [✂]:

(i) Viasat's most recent [✂] identified the importance of [✂].[306] Viasat also identified the importance of [✂]. It projected that it could [✂].[307] Viasat's strategy and projected [✂] is not consistent with NGSOs *currently* exerting a significant constraint on the Parties.

(ii) Similarly, Inmarsat identifies [✂]. And it indicates that [✂].[308] In May 2021, Inmarsat noted that LEOs [✂], but considered that it was unlikely that airlines [✂].[309]

(b) The CMA notes that this period of opportunity is consistent with evidence from third parties. Most airlines that responded to the CMA's market outreach either

[302] CMA129, paragraph 5.3
[303] FMN, paragraphs 850 to 852.
[304] Issues Letter Response, paragraph 47(ii).
[305] Issues Letter Response, paragraphs 134-135.
[306] Annex 14.2, [✂], 2021, pages 4 and 19.
[307] Annex 12.1, [✂], March 2021, pages 6 and 13.
[308] Annex 8.19 to Inmarsat's response to the second Notice, [✂], May 2020, page 3.
[309] Annex 3.157 to Inmarsat's response to the third Notice, [✂], 19 May 2021

did not mention Starlink as an alternative for their IFC services for European or intercontinental flights, or identified them as a weak alternative.[310] Of the few that identified Starlink as a moderate alternative, this was qualified by comments that it has not yet been tested in aviation, that it is not a mature service offering, or that the airline is still in the process of understanding Starlink's product offering and capabilities. Two airlines identified Starlink as a strong alternative, but only on the basis that Starlink has existing services, global coverage and line-fit and retro-fit certification. As noted above, the available evidence indicates that Starlink does not have existing IFC services nor global coverage, and that while certification is underway, line-fit certification for Starlink-compatible equipment may not be available for up to six years.

(c) The CMA asked the Parties to provide evidence of the dynamic constraint that NGSOs have allegedly exerted on the prices offered by the Parties to customers, including to airlines.[311] The Parties provided a list of [✂] tenders in which they submitted that NGSO providers were used by airlines to extract lower prices and better terms from the Parties.[312] However, the Parties provided only [✂] to support the alleged impact [✂]. The Parties submitted that this document showed [✂].[313] However, the document does not show that Viasat [✂].[314] On the contrary, given Viasat 's observations [✂], the CMA considers it more likely that Viasat [✂].[315] The CMA notes that the Parties have not provided any other evidence to substantiate their submissions that LEOs have influenced the Parties' prices or other terms in the highlighted tenders.

190. The CMA notes that firms may use different levers to respond to dynamic competition than to actual competition. For instance, firms may respond to dynamic competition by using investment and innovation to protect their profits in the long-run from potential threats whereas they may be more likely to flex pricing in response to competition from existing competitors.[316] As a result, competition concerns may arise in relation to losses of existing competition despite the presence of dynamic constraints from potential entrants.

191. On the basis of the available evidence, the CMA considers that the constraint exerted by NGSO providers on the Parties at present is minimal and much weaker

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[310] Responses to commercial aviation customer questionnaire.
[311] Question 10 of RFI2 requested 'evidence that […] the ongoing capacity expansion led by LEOs has had or is having an impact on prices of satellite capacity' in each of the industry verticals and particularly for mobility applications, like commercial aviation. The Parties' response focused exclusively on the aviation vertical (see Parties' response to RFI2, question 10).
[312] Issues Letter Response, paragraph 134 and Figure 14. In response to RFI2, the Parties provided [✂] examples of tenders in which NGSOs allegedly had an impact.
[313] Issues Letter Response, paragraph 135.
[314] In fact, Viasat [✂]. Annex RFI2.009, [✂], October 2021.
[315] Response to airline questionnaire.
[316] CMA129, paragraph 5.24.

than the constraint exerted on the Parties' by their existing (GEO) competitors, which as noted at paragraph 163 above, the CMA considers represents a materially weaker constraint on the Parties than the Parties exert on each other.

192. Moreover, if it transpires that LEOs are unlikely to be commercially successful in the future (for the reasons discussed in paragraphs 169 to 186 above), the CMA considers that the dynamic constraint from LEOs would further weaken, as the Merged Entity would have less incentive to improve its offering in order to mitigate the risk of losing future profits to them.

Conclusion on competitive constraints exerted by NGSO entrants

193. Based on the above, the CMA considers that there is not sufficiently robust evidence that entry by NGSOs will be timely, likely, or sufficient to constrain the Merged Entity and thereby prevent an SLC. The CMA also considers that any dynamic constraint currently exerted by NGSOs is minimal and much weaker than the constraint imposed by existing (GEO) competitors. The CMA therefore considers that LEOs will be unable to offset the loss of competition resulting from the Merger.

Third-party views

194. A large number of third parties expressed concerns that the Merger will harm competition in the supply of IFC to commercial aviation customers. These concerns apply equally to the supply of IFC for (i) long-haul intercontinental flights from/to Europe and (ii) short and medium-haul flights from/to and within Europe.[317]

(a) Around half of the airlines that replied to the CMA's questionnaire submitted that the Merger would reduce competition in an already-concentrated market, leading to increased prices and worse contract terms. Airlines also explained that the Parties are the two leading IFC providers, often competing head-to-head for business, and the Merger would reduce their negotiating leverage in tenders. Two airlines submitted that the Merger would create a monopoly, with one specifying that the monopoly would be in the supply of IFC in Ka-band.[318]

(b) Half of GEO competitors told the CMA that the Merger would create a dominant, almost monopolistic, position in global Ka-band-based IFC, which would result in reduced competition, higher prices, higher barriers to entry and expansion, and reduced incentives to develop interoperable equipment. Two of

[317] In fact, when providing their views on the impact of the Merger on competition, third parties operating long-haul intercontinental flights from/to Europe as well as short to medium-haul flights from/to and within Europe submitted that they did not have different views across the two segments.
[318] Responses to commercial aviation customer questionnaire.

them also said that the Merger would remove the enhanced competition that had recently been triggered by the Parties' ongoing expansion plans, which would have instead further increased absent the Merger.[319]

(c) A competitor active in an adjacent market submitted that the Merger would have a negative impact on competition in commercial aviation as the Parties are the two dominant IFC providers for airlines.[320]

(d) One OEM told the CMA that the Ka-band IFC segment requires attention because the Parties are the only line-fit options in Ka-band available to airlines and post-Merger choice will be restricted.[321]

(e) One potential entrant submitted that the Parties are already two powerful vertically integrated providers with a strong position in aviation. Their combination would give them increased market and pricing power which may be used strategically to prevent future entry in the sector.[322]

195. These concerns are consistent with the evidence set out above.

Conclusion on horizontal unilateral effects in the supply of IFC to commercial aviation customers

196. For the above reasons, the CMA considers that the Merger gives rise to competition concerns and that there is a realistic prospect that the Merger will result in an SLC in the global supply of broadband IFC to commercial aviation customers.

Horizontal unilateral effects in the global supply of broadband IFC for large business jets

Background to IFC for business aviation

197. The nature of competition in the supply of IFC services to business aviation customers is largely similar to commercial aviation, with price, coverage, network capabilities and reliability the main factors influencing choice. Since IFC equipment needs to be certified before being installed on a business jet, certifications are also key,[323] and switching IFC provider is costly and happens infrequently.

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[319] Responses to competitor questionnaire.
[320] Response to competitor questionnaire.
[321] Response to commercial aviation OEM questionnaire.
[322] Response to SNO questionnaire.
[323] The Parties' submissions and third-party evidence indicates that the process for obtaining line-fit certification takes between 9 to 24 months and the one for retro-fit certification between 6 to 24 months (timing depending on the complexity of the technology being certified).

198. There are two main features of competition that are unique to business aviation:

(a) *The role of VARs* – IFC providers, including the Parties,[324] rely on VARs to supply IFC to business aviation customers, rather than supplying customers directly (although Viasat has recently started selling directly to customers). VARs act as a one-stop-shop and distribute IFC services from multiple providers. The market is characterised by a small number of VARs, with the Parties and their competitors using the same three for the vast majority of their sales, ie Honeywell, Satcom Direct and Collins Aerospace;[325] and

(b) *The importance of global coverage* - Large business jets can travel anywhere in the world and business aviation operators and end-users typically want the flexibility to use their IFC everywhere.[326] This is supported by the Parties' own submissions.[327]

Competitive assessment of horizontal unilateral effects in the supply of broadband IFC to large business jets

199. The CMA has assessed whether the Merger may be expected to result in an SLC in relation to horizontal unilateral effects in the supply of broadband IFC to large business jets. In its assessment the CMA has considered:

(a) shares of supply;

(b) the closeness of competition between the Parties and the competitive constraints from (GEO) competitors;

(c) the competitive constraints from NGSO entrants; and

(d) third-party views on the Merger.

Shares of supply

200. The Parties provided shares of supply estimates for the provision of broadband IFC services to large business jets based on the number of IFC terminals installed

[324] Viasat submitted that in FY2021 VARs accounted for [✂] of its sales of IFC services to business aviation customers. For Inmarsat, VARs account for [✂] of its sales of IFC services to business aviation customers. See FMN, paragraphs 939 to 940; Annexes RFI2.018, [✂], April 2022 and RFI2.017, [✂], May 2022.
[325] FMN, paragraph 939, and responses to business aviation customer and VAR questionnaires.
[326] Responses to the business aviation customer questionnaire, the business aviation VARs questionnaire, and the competitor questionnaire.
[327] FMN, paragraphs 661 and 858.

globally.[328] However, as it was not possible to validate the Parties' methodology,[329] the CMA calculated its own shares of supply by collecting data on the number of connected aircraft from VARs and competitors.[330]

201. The CMA has computed shares of supply estimates separately for all broadband solutions (ie ATG and satellite-based IFC) and for broadband satellite IFC technology only (to avoid potential double-counting issues given that satellite-based and ATG technologies may be simultaneously installed on the same aircraft).[331] These estimates are set out in table 4 below and provide a snapshot of the market as at June 2022.

Table 4: Global shares of supply estimates of broadband IFC to large business jets based on number of connected aircrafts for all technologies and for satellite-based technology only (2022)

SNO	All broadband IFC solutions (ATG and satellite-based)	Satellite-based IFC solutions only
Inmarsat	30-40%	70-80%
Viasat	5-10%	10-20%
Combined	**40-50%**	**90-100%**
Gogo Business (ATG and satellite)	50-60%	0-5%
Panasonic	0-5%	0-5%
Collins Aerospace/SES	0-5%	0-5%
Intelsat	0-5%	0-5%
Total	**100%**	**100%**

Source: CMA's share of supply estimates based on third-party data collected from VARs and competitors during the CMA's investigation.

202. When considering all broadband IFC technologies, Viasat and Inmarsat have a combined share of [40-50]%, with an increment from Viasat of [5-10]%. Gogo

[328] FMN, table 24 and Issues Letter response, Table 8.
[329] FMN, Annex 18, Market shares methodology annex, February 2022. The Parties' estimates were based on a combination of data from Valour Consultancy, information from other publicly available sources, and Viasat's and Inmarsat's industry knowledge.
[330] The CMA has collected data on the number of large business jets connected to broadband IFC solutions (including ATG) from Gogo Business, Honeywell, Satcom Direct and Collins Aerospace. VARs and competitors provided the information split by provider (where relevant) and by type of network technology (ie satellite-based or ATG). In response to the CMA's Issues Letter, the Parties submitted that the CMA's market reconstruction overstates the Parties' position in the supply of broadband IFC to large business jets (Issues Letter Response, paragraph 170). Given that they are based on data collected directly from the main market participants, the CMA considers that its estimates are likely to be more reliable than the Parties' estimates which are based on a mix of data from industry reports, unspecified publicly available sources, and untestable assumptions based on the Parties' industry knowledge (as explained in FMN, Annex 18, Market shares methodology annex, February 2022).
[331] Different IFC technologies are likely to fulfil distinct functions. During its investigation, the CMA has not been able to quantify the extent to which large business jets tend to have more than one broadband IFC solution installed onboard. However, evidence from the Parties' submissions and third parties confirmed that having a main satellite based IFC solution alongside a secondary ATG solution (for backup) occurs in practice and its impact on the market size may be material. See the Parties' response to the CMA's fifth request for information, Q28, paragraph 154, and the Parties' response to the CMA's follow-up questions dated 26 July 2022; as well as responses to the business aviation customer questionnaire, business aviation VARs questionnaire and OEM questionnaire.

Business (**Gogo**), the [✂] ATG provider, is the largest provider with a share of [50-60]%. The other competitors - Panasonic, Collins Aerospace/SES and Intelsat - have minimal shares (ie [0-5%]% or less).

203. Based on satellite-based IFC only, the Parties have a significantly higher combined share – [90-100]%, with an increment from Viasat of [10-20]%. All other providers have a much smaller share (ie below 5%).[332]

204. The CMA agrees with the Parties' submission that share of supply estimates in a market characterised by growing demand should be interpreted with caution,[333] and has considered shares alongside the other evidence available.

Closeness of competition between the Parties and competitive constraints from current (GEO) competitors

Parties' submissions

205. The Parties submitted that they do not compete closely within the large business jets segment because Viasat and Inmarsat have a different customer focus, due to differences in their coverage and terminal type. In particular, Inmarsat focuses on supplying IFC to large cabin jets whereas Viasat mainly targets the super midsize cabin jets segment.[334]

206. In relation to the other providers currently active in the market, the Parties submitted that Gogo exerts a constraint on the Parties through its strong presence in the US (where most demand is located)[335] and that Collins Aerospace/SES has significant growth potential.[336]

207. Finally, the Parties submitted that, although not a close substitute, narrowband IFC acts as an out-of-market constraint on broadband IFC providers, including the Parties, as it provides a point of price comparison and a cheaper alternative that business customers can use if broadband IFC services are too expensive, or until NGSO alternatives become commercially available.[337]

[332] The CMA notes that its estimates are largely in line with the Parties' satellite-only estimates provided in FMN, Annex 22.34 – Business aviation alternative share of supply estimates, Table 1.
[333] FMN, paragraphs 897 to 902.
[334] FMN, paragraphs 606 and 639.
[335] FMN, paragraph 663.
[336] FMN, paragraph 911(ii).
[337] FMN, paragraph 927-929.

The CMA's assessment

208. The CMA assessed the closeness of competition between the Parties and the strength of the competitive constraints from current providers by considering the following evidence:

(a) The characteristics of the IFC offerings of the Parties and their competitors;

(b) Internal documents;

(c) Third-party feedback; and

(d) Evidence on the extent to which narrowband solutions exert a constraint on broadband solutions.

The Parties' and current competitors' broadband IFC offerings

209. As set out above, global coverage, continuity of service, and network speed are key factors for large business jet operators (and end-users) when selecting their IFC provider.

Viasat's and Inmarsat's IFC solutions

210. The Parties are the only providers offering broadband IFC solutions in Ka-band:

(a) Inmarsat's IFC solution, JetConnex (**JX**), provides global coverage in Ka-band.[338]

(b) Viasat offers three Ka-only plans providing either regional or semi-global coverage.[339] To provide truly global coverage, Viasat currently offers a dual-band plan, involving a mix of its own Ka-band and Ku-band leased from third-party providers.

211. Given the Parties' significant ongoing satellite expansion plans, these differences in Viasat's and Inmarsat's coverage are, however, expected to disappear soon.

[338] FMN, paragraph 662. See also the Parties' response to the CMA's third request for information, Q2 and Annex RFI3.007, [✂], April 2022. In addition to the JX product, Inmarsat offers SwiftBroadband (SBB) a narrowband IFC solution that can be used both for cockpit and cabin connectivity. FMN, paragraph 975. Due to the limited bandwidth of the SBB product (based on L-band), it can only support limited internet usage, like email, voice and texting. Viasat does not offer any narrowband IFC solution to business aviation customers.
[339] The two 'regional' plans cover either North America only or Europe and part of the Middle East. The 'semi-global' plan covers North and Central America, the Caribbean, Brazil, North Atlantic, Europe and parts of the Middle East.

212. Although the Parties have historically focused on different business jet segments (with Inmarsat having a greater focus on large cabin jets and Viasat targeting mainly super midsize cabin jets), the CMA notes that:

(a) information on the Parties' line-fit and retro-fit certifications indicates that Viasat's and Inmarsat's IFC solutions can both be installed (and therefore are likely to compete for opportunities) on a number of popular large business jet families;[340]

(b) [✂];[341] and

(c) shares of supply estimates (for satellite connectivity only) provided by the Parties shows that the Parties are the only two IFC providers of a meaningful size even when considering the two segments separately.[342]

213. The CMA does not therefore consider that the differences in the Parties' respective customer focus means that they are not close competitors. To the contrary, the available evidence on certifications and shares of supply is consistent with the Parties competing closely in the supply of IFC to large business jets.

Competitors' IFC solutions

214. Gogo, Collins Aerospace/SES and Intelsat are the other main providers of broadband IFC services to business aviation customers. Panasonic no longer competes in the market and is therefore not discussed further.[343]

Gogo Business

215. Gogo offers broadband IFC services to business jets through its ATG network which covers continental US as well as parts of Canada and Mexico. Gogo's ATG service was one of the first IFC solutions available to business jets,[344] which partly explains its currently large share of supply of [50-60]%.

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[340] For instance, the Parties are both [✂]. Additionally, Viasat has [✂] and therefore can compete with Inmarsat for [✂] opportunities. Response to the business aviation OEMs questionnaire, Annexes RFI2.021, [✂], August 2021, and RFI2.022, [✂], May 2022.
[341] For instance, Inmarsat sees [✂] jets as [✂]. Annex 9.5 to Inmarsat's response to the second Notice, [✂], pages 18-19. Viasat's 2021 [✂] explains that [✂] large and ultra-long-range jets [✂] and that Viasat has [✂]. Annex VA00011123 to Viasat's response to the first Notice, [✂], October 2021, pages 4 to 8.
[342] In particular, in the large cabin jet segment Inmarsat has a share of supply of [80-90]% and Viasat has [10-20]% (leading to a combined share of [90-100]%), whereas in the super midsize cabin jet segment, Viasat has a share of supply of [80-90]% and Inmarsat has [10-20]% (leading to a combined share of [90-100]%). See FMN, Annex 22.36, Additional IFC and Business Aviation Shares of Supply, Tables 6 and 7.
[343] See, for instance, FMN, Annex 19.24, IFEC and CMS on VVIP and Business Aircraft – 2020 Edition, 18 August 2020, page 9. [✂]
[344] Gogo has been offering broadband IFC services since the late 2000s. See Gogo's webpage, History of Innovation.

216. For customers that are looking for coverage outside of North America, Gogo's ATG solution is not an option. Given the importance that operators and end-users of large business jets attach to global coverage (see paragraph 198(b) above), Gogo's ATG solution and satellite-based solutions – like those offered by the Parties – are likely to be used by different customers and are unlikely to compete closely.[345] Evidence from industry reports also suggests that ATG and satellite-based systems may be complements rather than alternatives.[346]

217. Gogo also provides Ku-band IFC services in partnership with Intelsat, but its market position in satellite IFC is negligible ([0-5%]) and unlikely to grow significantly.[347] Gogo has recently announced plans to partner with LEO satellite provider OneWeb to launch a global broadband service.[348] Although this new product may allow Gogo to expand its reach and compete more closely with satellite-based IFC providers, the CMA notes that OneWeb's service is not currently available and, as discussed, there is significant uncertainty regarding if and when it will become commercially operational.[349]

Intelsat and Collins Aerospace/SES

218. Both Intelsat and SES have partnered with VARs to offer broadband satellite IFC globally in GEO Ku-band. Intelsat's solution, 'FlexExec', was launched in partnership with Satcom Direct in February 2022. It has therefore just entered the market and is currently very small.[350]

219. SES supplies capacity at the wholesale level to Collins Aerospace for its 'Luxstream' solution.[351] Like Viasat's business aviation IFC offering, 'Luxstream'

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[345] The Parties submitted that although unable to provide coverage outside North America, Gogo exerts a significant competitive constraint on the Parties' satellite-based offerings because the Parties do not price discriminate across regions and the demand for IFC is driven by aircraft resident in the US, where Gogo is the market leader (FMN, paragraph 884, and Parties' response to the Issues Letter, paragraph 168). The CMA, however, considers it unlikely that Gogo could act as an effective competitive constraint on providers offering a different service that allows for a wider (potentially global) reach that – as the evidence suggests – is largely seen as key by large business jet operators and end-users. [✂] ([✂]). The prices charged by the Parties also appear to be significantly higher than the prices charged by Gogo (see eg Annex VIA-2R-001180766 to Viasat's response to the CMA's fourth Notice, [✂] June 2020, pages 40 and 42). Rather than Gogo acting as a constraint on the Parties' global prices, this suggests that customers are willing to pay a premium for the Parties' solutions in order to get global coverage.
[346] 'It is worth remembering that ATG and satellite antennas do not compete for space on the fuselage, so it makes perfect sense to install the two and use the former […] over land and the latter when travelling over oceans and in regions of the world where there is no ATG network to connect to'. See FMN, Annex 19.24, IFEC and CMS on VVIP and business aircraft, Valour Consultancy, August 2020, Section 3.1.1.10, pages 66-67.
[347] Parties' response to RFI6, Q4, paragraph 8 and response to competitor questionnaire. As discussed below, Intelsat has indeed recently launched its own solution targeted at the business aviation segment.
[348] Gogo Business Aviation to Launch LEO Global Broadband Service.
[349] See paragraph 183 above.
[350] FMN, paragraphs 897 and 942, and response to the competitor questionnaire.
[351] FMN, paragraphs 897 and 942; note of call with competitor and response to competitor questionnaire.

was launched in 2019, however it does not appear to have gained material traction with customers. The Parties submitted that Luxstream is likely to benefit from SES's new mPOWER constellation and will soon be able to offer low-latency IFC to customers.[352] However, the CMA has found no evidence that Luxstream is likely to become a materially stronger competitive constraint on the Parties in the foreseeable future.[353]

220. Evidence from a number of business aviation OEMs indicates that the satellite-based solutions offered by these competitors are generally not line-fit 'offerable' and it is unclear whether they will be in the coming years.[354]

221. In summary, the Parties are the only two satellite-based IFC providers offering a global or near-global service based on satellite connectivity in Ka-band. They are also the only providers with a significant market presence in the market and an established position in terms of OEMs' line-fit certifications. Based on this evidence, the CMA considers that the Parties' broadband IFC solutions are likely to compete more closely with each other than with the products offered by other competitors.

Internal documents

222. The Parties' internal documents indicate that, [✂] – the Parties view each other as their closest competitor amongst a small competitor set, [✂]. For example:

(a) Inmarsat's 2020 [✂] identifies broadband IFC providers as [✂].[355] Of the [✂] competing broadband solutions, Viasat is [✂], whereas SES and Intelsat are [✂]. Inmarsat also notes that Viasat [✂].[356] The same document notes that the competitive threat from Viasat [✂].[357]

(b) With respect to Viasat's internal documents, in a 2020 [✂], Viasat identifies Inmarsat as [✂].[358] The same document identifies Inmarsat as [✂],[359] whereas in another document Inmarsat is described as [✂].[360]

[352] FMN, Table 25.
[353] Responses to business aviation questionnaires.
[354] Responses to business aviation OEM questionnaire.
[355] Annex 9.5 to Inmarsat's response to the second Notice, [✂], pages 12-13.
[356] Annex 9.5 to Inmarsat's response to the second Notice, [✂], page 9.
[357] Annex 9.5 to Inmarsat's response to the second Notice, [✂], page 13.
[358] See Annex VIA-2R-001181420 to Viasat's response to the CMA's fourth Notice, [✂] July 2020, page 2. Viasat also identified Intelsat and SES as [✂].
[359] Annex VIA-2R-001181420 to Viasat's response to the CMA's fourth Notice, [✂] July 2020, page 3.
[360] Annex 10.13, [✂], 16 September 2021, pages 4 and 5.

223. The Parties' documents also indicate that other IFC providers for business aviation exert a weaker constraint on the Parties than the Parties exert on each other. In relation to Gogo:[361]

(a) Inmarsat considers ATG providers, like Gogo and Smart Sky as [✂]. And [✂], Inmarsat notes that Gogo is [✂]. Inmarsat does not consider Gogo [✂].[362]

(b) Viasat notes in a [✂] document that it competes with Gogo [✂] but it has the advantage of [✂].[363] Viasat's 2021 [✂] notes that Gogo [✂].[364] Another document also identifies Gogo as [✂].[365]

Third-party feedback

224. The CMA has collected views on the closeness of competition between the Parties and other providers from customers (eg large business jet operators), VARs and competitors.

225. Most customers submitted that the Parties are close competitors, offering similar solutions and plans for similar aircraft. Whereas Viasat and Inmarsat were generally described as 'strong' competitors, all customers described Gogo as a 'moderate' alternative due to the limited geographic coverage of its service. Collins Aerospace's solution Luxstream was mentioned as an alternative by only one customer. Intelsat's FlexExec solution did not feature in any customers' responses.[366]

226. [✂] VARs submitted that the Parties closely compete for the same business, with strong and similar offerings. One also noted that, although their coverage differs to some extent today, they both have similar satellite roadmaps. The same VAR told the CMA that when it comes to broadband IFC services to large business jets the only real choice is between Viasat and Inmarsat.[367]

227. VARs' feedback on the Parties' competitors suggests that none of them poses a material constraint on the Parties:

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[361] The Parties submitted in paragraph 162 of the Issues Letter Response that statements in 'several-year-old documents' do not account for the recent Gogo and SmartSky improvements and should not be read as an accurate assessment of current competitive constraints.' The CMA notes, however, that these documents come from the most recent business planning documents available and that there is no evidence of these alleged changes in competitive conditions.
[362] Annex 9.5 to Inmarsat's response to the CMA's second Notice, [✂], pages 9, 13 and 18.
[363] Annex VIA-2R-001181420 to Viasat's response to the CMA's fourth Notice, [✂] July 2020, pages 22 and 35. Viasat also indicates that Smart Sky has [✂].
[364] Annex VA00011123 to Viasat's response to the CMA's first Notice, [✂], October 2021, page 1.
[365] Annex 10.13, [✂], 16 September 2021, page 5.
[366] Responses to business aviation customer questionnaire.
[367] Responses to business aviation VAR questionnaire.

(a) Gogo was mentioned as a potential alternative only by one VAR which described it as an increasingly weaker solution due to offering a 'spotty' service with limited coverage. No other VAR considered Gogo to be an alternative for their end-customers.

(b) Collins Aerospace's solution Luxstream was listed as an alternative by all VARs, but it was described as a 'moderate to weak' alternative.

(c) Intelsat's new IFC solution FlexExec was not mentioned by any VAR, suggesting that it is not (yet) seen to be an alternative nor to pose a constraint on the established providers.[368]

228. Competitors submitted that the Parties are strong competitors which closely compete to supply Ka-band based IFC services to large business jets. In relation to the other broadband IFC solutions available:

(a) [✂] described its own solution as 'weak' while noting that Viasat and Inmarsat are in a significantly stronger position.[369]

(b) [✂] explained that ATG products are not in direct competition with the Parties. For example, it noted that Gogo ATG only competes for aircraft exclusively operating in North America and that aircraft travelling outside North America (even occasionally) typically have both an ATG solution and a broadband satellite-based solution, which is provided by either Viasat or Inmarsat.[370]

(c) [✂] also noted that neither Intelsat's nor Collins Aerospace's solutions pose a material competitive threat in business aviation, the former because it is new whilst the latter due to performance issues.[371]

Out-of-market constraint from narrowband IFC

229. The CMA found no evidence that narrowband IFC poses a competitive constraint on broadband IFC.

230. All respondents to the CMA's questionnaire indicated that passengers of large business jets expect their IFC solution to provide performance equivalent to internet in the office, such that bandwidth and speed are key when choosing cabin IFC services.[372]

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[368] Ibid.
[369] Third party response to questionnaire.
[370] Response to competitor questionnaire.
[371] Response to competitor questionnaire.
[372] Responses to the business aviation customer questionnaire, business aviation VARs questionnaire and competitor questionnaire.

231. Third-party evidence overall suggests that narrowband IFC is not a standalone alternative to broadband IFC on large business jets and is more likely to be a complement or a back-up.[373] One competitor, which is also a distributor of major narrowband solutions in the market, submitted that narrowband and broadband IFC offerings do not compete.[374] This is also supported by the Parties' internal documents [✂].[375]

Conclusion on closeness of competition between the Parties and competitive constraints exerted by current rivals

232. Based on the evidence above, the CMA considers that the Parties are the strongest providers of satellite-based broadband IFC to large business jets, compete closely today and will compete even more closely with their future expansion plans. Although they have focused on different sized jets historically, the Parties are nevertheless each other's key rivals for all types of large business jets and have been targeting each other's core areas.

233. Evidence from internal documents, third parties and shares of supply suggests that the supply of IFC to large business jets is a concentrated market and that the limited number of other providers that are active would not exert a sufficient constraint on the Merged Entity. In particular:

(a) Gogo's ATG solution, despite its large share of supply, only provides a weak alternative to the satellite-based IFC services provided by the Parties. Simply put, it cannot compete for aircraft that intend to fly outside the US, even occasionally; and

(b) Collins Aerospace and Intelsat are materially smaller IFC providers than the Parties, are likely to be behind the Parties in obtaining certifications and are considered weak alternatives by customers.

234. Finally, due to its limited capabilities, narrowband IFC cannot provide the type of service sought by business aviation customers. Thus, the CMA considers that narrowband IFC is unlikely to pose any material constraint on the Merged Entity.

[373] Responses to business aviation customer and VAR questionnaires, and competitor questionnaire.
[374] Response to competitor questionnaire.
[375] For instance, Annex VA00011123 to Viasat's response to the CMA's first Notice, [✂], October 2021, for Viasat; and Annex 9.5 to Inmarsat's response to the CMA's second Notice, [✂], for Inmarsat.

Competitive constraints from NGSO entrants

Parties' submissions

235. The Parties submitted that NGSO providers are targeting business aviation and that their manifested intention to enter is already disrupting competition.[376] Hence, the CMA should adopt a forward-looking assessment to evaluate the effects of the Merger.[377]

236. The Parties submitted that LEO providers have competitive advantages (including lower latency services and 'truly' global coverage) and are expected to lead market expansion and win a significant proportion of demand going forward.[378] Further, the Parties submitted that NGSO operators are already working with established IFC providers, VARs and OEMs in the business aviation segment, which gives them a credible and fast route to market.[379]

The CMA's assessment

237. The CMA notes that its assessment of whether competition from NGSOs in business aviation would effectively constrain the Merged Entity largely corresponds with its assessment in the context of commercial aviation. Based on the available evidence, the CMA considers that NGSOs must overcome the financial,[380] operational,[381] technical,[382] regulatory,[383] and commercial[384] barriers set out at paragraph 174 to compete effectively in business aviation.[385]

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[376] FMN, paragraphs 903 to 905 and 925.
[377] FMN, paragraph 881.
[378] FMN, paragraph 865. The CMA notes that third-party responses to the CMA's questionnaire did not identify low latency as an important choice factor for IFC services in business aviation (see responses to business aviation customer and VAR questionnaires). The Parties also submitted in paragraph 193(ii) of the Issues Letter Response that NGSOs' ESA terminals will be small enough to serve a broader range of aircraft than the Parties are able to serve. The CMA notes, however, that these smaller aircraft are outside the CMA's frame of reference because neither of the Parties can supply IFC to these aircraft.
[379] FMN, paragraph 867.
[380] Responses to SNO, competitor, business aviation customer and VAR questionnaires.
[381] Responses to SNO and competitor questionnaires.
[382] Responses to SNO, competitor, and business aviation VAR questionnaires.
[383] Responses to SNO and competitor questionnaire.
[384] LEOs must develop expertise and a good reputation in the business aviation sector (responses to business aviation OEM questionnaire); build relationships with OEMs necessary to become line-fit offerable (responses to business aviation customer and VAR questionnaire); build relationships with MROs and business aviation customers to persuade them to incur the significant costs of retro-fitting an unproven solution, including the costs of 'extensive' downtime, which can be one to two months (responses to business aviation customer and VAR questionnaires).
[385] With respect to SES, account is taken of its expansion of NGSO capacity in considering the competitive strength of Luxstream (see paragraph 219 above). Moreover, the evidence set out in paragraph 184 above, in relation to the complementarity between LEO IFC and GEO IFC, applies to both commercial and business aviation.

238. As discussed above, certification is a requirement for business aviation just as it is in commercial aviation. However, since the OEMs differ, the timing of certification also differs slightly. In response to the CMA's questionnaires, third parties estimated that it may take nine to 24 months for line-fit and six to 24 months for retro-fit certification in business aviation (although it may take a further six months to cross-certify the STC internationally).[386] A business aviation OEM noted that line-fit certification may take up to 30 months for 'new technologies'.[387]

239. Nevertheless, third parties estimated that it could take five years or more for LEOs to enter business aviation,[388] including due to the requirement to develop ESAs[389], ISLs,[390] and the variety of commercial and customer-service functions required to service the specific needs of business aviation customers globally.[391]

240. For the reasons set out in paragraphs 189 to 192 above, the CMA considers that there is also insufficient evidence supporting the Parties' submissions that the competitive threat from NGSOs constrains the Merged Entity effectively 'in the present'.[392] Indeed, the Parties have not provided any documents supporting a current competitive constraint from NGSOs in business aviation.

Conclusion on competitive constraints exerted by NGSOs

241. Based on the above, the CMA considers that there is not sufficiently robust evidence that entry by LEOs will be timely, likely, or sufficient to constrain the Merged Entity and thereby prevent an SLC. The CMA also considers that any dynamic constraint currently exerted by LEOs is negligible.

Third-party views

242. A significant number of third parties expressed concerns about the impact of the Merger on competition in the supply of IFC to business aviation customers.

    (a) Half of the customers that responded to the CMA's questionnaire told the CMA that the Merger would reduce the number of providers in an already-concentrated market.[393]

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[386] Responses to SNO, competitor, business aviation customer and business aviation VAR questionnaires.
[387] Response to business aviation OEM questionnaire.
[388] Responses to competitor and business aviation VAR questionnaires.
[389] See paragraph 174(c) and responses to SNO and business aviation questionnaires.
[390] See paragraph 174(c) and 183(b) above.
[391] The Parties submitted in paragraph 184 of the Issues Letter Response that VARs can sponsor NGSOs' entry into business aviation. However, the CMA notes that the limited traction of Collins Aerospace's solution since its entry in 2019 shows that VAR sponsorship does not necessarily translate into effective competition.
[392] FMN, paragraph 953. See paragraph
[393] Responses to business aviation customer questionnaire.

(b) [✂] VARs said that the Merger would lead to combination of the two largest service providers which would jointly have control over all Ka-band IFC solutions that are 'line-fit ready' and a multi-year advantage over any future competitors. While noting that new competitors might be entering, one third-party submitted that competition is 'not here yet' and timing for potential entry is unclear, as there are significant barriers to overcome before they can be commercially operational.[394]

(c) One competitor noted that the Merger involves the consolidation of two global SNOs that are also the two largest providers of satellite based IFC services to business aviation customers. As a result, it expects the Merger to restrict customer choice and reduce competition.[395]

(d) One OEM submitted that the Parties are the only providers of IFC in Ka-band and post-Merger will become a monopoly.[396]

243. The CMA notes that these concerns are consistent with the evidence collected throughout its investigation.

Conclusion on horizontal unilateral effects in the supply of IFC to business aviation customers

244. For the above reasons, the CMA considers that the Merger gives rise to competition concerns and that there is a realistic prospect that the Merger will result in an SLC in the global supply of broadband IFC to large business jets.

CONCLUSION ON SUBSTANTIAL LESSENING OF COMPETITION

245. Based on the evidence set out above, the CMA believes that it is or may be the case that the Merger may be expected to result in an SLC as a result of horizontal unilateral effects in relation to (a) the global supply of broadband IFC services to commercial aviation customers, and (b) the global supply of broadband IFC services to large business jets.

[394] Responses to business aviation VAR questionnaire.
[395] Response to competitor questionnaire.
[396] Response to business aviation OEM questionnaire.

DECISION

246. Consequently, the CMA believes that it is or may be the case that (i) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and (ii) the creation of that situation may be expected to result in an SLC within a market or markets in the United Kingdom.

247. The CMA therefore believes that it is under a duty to refer under section 33(1) of the Act. However, the duty to refer is not exercised whilst the CMA is considering whether to accept undertakings under section 73 of the Act instead of making such a reference.[397] The Parties have until 13 October 2022[398] to offer an undertaking to the CMA.[399] The CMA will refer the Merger for a phase 2 investigation[400] if the Parties do not offer an undertaking by this date; if the Parties indicate before this date that they do not wish to offer an undertaking; or if the CMA decides[401] by 20 October 2022 that there are no reasonable grounds for believing that it might accept the undertaking offered by the Parties, or a modified version of it.

Colin Raftery
Senior Director, Mergers
Competition and Markets Authority
6 October 2022

[397] Section 33(3)(b) of the Act.
[398] Section 73A(1) of the Act.
[399] Section 73(2) of the Act.
[400] Sections 33(1) and 34ZA(2) of the Act.
[401] Section 73A(2) of the Act.