Summary

Overview

1. The Competition and Markets Authority (**CMA**) has decided that the anticipated acquisition (the **Merger**) of Inmarsat Group Holdings Limited (**Inmarsat**) by Viasat, Inc (**Viasat**) (together, the **Parties** or, for statements referring to the future, the **Merged Entity**) may not be expected to result in a substantial lessening of competition (**SLC**) in the supply of broadband inflight connectivity (**IFC**) services to commercial airlines or business aircraft operators serving the United Kingdom (**UK**).

The Parties' activities

2. Both Parties are satellite network operators (**SNOs**) that own and manage a fleet of satellites. They use their satellite capacity to provide connectivity services to customers across different industries or 'verticals' including fixed broadband, government, maritime, offshore energy and aviation.

3. Our investigation has focused on the supply of IFC, as this is the main area of overlap between the Parties in the UK. IFC allows passengers to access the internet while flying (eg for work and recreational purposes, such as for social media or video streaming).

The supply chain for IFC

4. There are three main levels in the supply chain for satellite based IFC services:

   (a) SNOs own and manage satellite fleets. They may supply satellite capacity at the wholesale level to satellite service providers (**SSPs**) and resellers that sell IFC services to airlines and/or use their capacity captively to sell IFC services directly to airlines.

   (b) SSPs use satellite capacity to assemble IFC services that can be sold to airlines directly or through resellers.

   (c) Resellers purchase IFC services from SSPs and sell them to airlines. Some resellers provide value added services and are known as value added resellers (**VARs**).

The types of satellites used to supply IFC

5. Different types of satellites can be used to supply IFC and other types of satellite connectivity services:

   (a) Traditional geostationary earth orbit satellites (**GEOs**) are large satellites positioned at around 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).

   (b) New generation low earth orbit satellites (**LEOs**) are much smaller satellites positioned at around 500-2,000 kilometres above the Earth's surface and orbit around the Earth.

6. These differences mean that GEOs and LEOs have different strengths and weaknesses:

   (a) Many more LEOs are required in a constellation to provide global coverage. LEOs also have a shorter lifespan than GEOs. This means that global LEO constellations are more expensive to build and maintain.

   (b) Since LEOs orbit closer to the Earth's surface than GEOs, latency (or 'lag time') is lower. Lower latency improves user experience for certain end-use applications such as gaming and videoconferences.

   (c) LEO constellations can provide full global coverage, whereas GEOs cannot provide coverage over polar regions, which is relevant for certain long-haul flights.

   (d) LEO satellites orbit the Earth, including oceans and uninhabited areas, whereas GEOs provide stationary capacity where it is required. The proportion of usable capacity in LEO constellations is therefore lower than for GEO constellations.

   (e) As LEOs are closer to the Earth's surface, they have smaller beams than GEOs. This makes it more challenging to serve areas where demand is concentrated (such as airports or busy flight paths), as all users under a single beam need to share that capacity. This means that LEO constellations require a large number of satellites in order to provide sufficient capacity in areas where demand is highest.

The satellite industry is evolving

7. Satellite connectivity is a dynamic sector, with supply expected to expand rapidly in the next few years. The sector has recently seen, and is likely to continue to see, disruptive entry by new players with innovative technologies and substantial resources, while established providers are also responding to these threats and opportunities in various ways. This is affecting conditions of competition across all services provided using satellite connectivity, including IFC. For example:

   (a) SNOs such as Starlink and OneWeb have launched LEO constellations and are expanding their capabilities including in IFC.

   (b) Other players such as Amazon and Telesat have plans to launch LEO constellations.

   (c) Established SNOs such as the Parties, Eutelsat and SES have recently launched or have plans to launch additional GEO satellites.

   (d) SNOs and SSPs have announced plans to combine LEO and GEO technologies through mergers or other commercial partnerships. In July 2022 Eutelsat and OneWeb announced plans to merge, and in August 2022 and October 2022 OneWeb announced distribution partnerships with Intelsat and Panasonic respectively (both SSPs active in IFC) to develop hybrid (GEO/LEO) IFC services.

   (e) Other consolidation has happened or is being explored in the sector. For example, in December 2020, Intelsat acquired the commercial aviation IFC business of Gogo.

8. Our view is that these developments would occur irrespective of the Merger and we have taken them into account in our competitive assessment where relevant.

Demand for satellite connectivity is also growing fast

9. Demand for satellite connectivity is growing rapidly across most end-use applications, driven by increasing use of the internet and demand for data.

10. As regards IFC, airlines told us that IFC is important to the service they offer and that passengers increasingly expect the same level of connectivity on flights as they have elsewhere. Many airlines told us they plan to expand or improve their IFC services in the next five years by improving their existing offer and by installing IFC on more aircraft.

11. According to industry analyst Euroconsult, there were approximately 9,900 connected aircraft globally providing IFC services through more than 120 commercial airlines at the end of 2021, and this is expected to exceed 20,900 connected aircraft by 2031. Penetration rates are higher for widebody aircraft used for long-haul flights than for narrowbody aircraft used for short-haul flights, as connectivity is generally seen as more important for long-haul flights.

How airlines buy IFC services

12. Contracts to supply IFC services are often awarded through a competitive tender process. Airlines can choose to line-fit IFC on aircraft (ie install the equipment required to provide IFC services during the manufacture of new aircraft) or retro-fit IFC (ie install the equipment after delivery or once in service).

13. Airlines consider a wide range of factors when selecting a supplier. These include route coverage, service reliability, technical support and maintenance, speed, whether a supplier has or can obtain the necessary regulatory certifications, supplier reputation/track record, the cost of the IFC service and other commercial terms, capacity, whether a supplier owns the satellites it uses, whether it also offers in-flight entertainment (**IFE**) and whether it operates in the Ka or Ku frequency band. Some of these factors are seen as more important than others. The weight attached to them also varies by airline and by contract.

14. The evidence we received suggests that airlines are generally sophisticated customers that are highly engaged with the IFC market and largely up to date with market developments.

15. We also found that airlines have some flexibility over how they procure IFC to encourage participation by emerging competitors and new technologies. For example, airlines can increase their available options by choosing to retro-fit rather than line-fit new aircraft, as it is quicker and easier for an emerging supplier to get the necessary regulatory certifications for a retro-fit. Airlines can also delay retro-fits to wait for new technology to emerge (there is much less flexibility over timings for line-fits).

How we assessed the Merger

16. The market for the supply of IFC services is evolving rapidly, and significant developments have taken place during our phase 2 investigation: OneWeb completed its global constellation, Starlink successfully launched many more

satellites, OneWeb announced its distribution partnership with Panasonic, Eutelsat launched a new GEO satellite that will provide capacity over Europe, Starlink's IFC service went live on commercial aircraft in the United States, Starlink obtained Federal Communications Commission (**FCC**) authorisation to launch an additional 7,500 satellites and Starlink won its first contract with a European airline.

17. Our approach to assessing the Merger is forward-looking, and accounts for the future evolution of competitive conditions. This includes developments in the Parties' competitive offers as well as the competitive offers of their rivals. We adopted a time horizon of a few years for our assessment. We consider that any impact from entry or expansion by rivals that only manifests itself after this time horizon would not be sufficiently timely to be relevant to our assessment of the loss of competition between the Parties resulting from the Merger.

18. We have gathered a substantial volume of evidence to assess the impact of the Merger. This includes evidence on recent tenders, the Parties' internal documents relating to tenders, information on the Parties' and their rivals' strategic plans (including internal documents) and evidence from airlines, SNOs/SSPs/VARs and original equipment manufacturers (**OEMs**), including their views and assessment of emerging technologies and suppliers.

19. To assess the impact of the Merger we first considered the extent of competition between the Parties that would be lost because of the Merger, and then considered whether that loss would be substantial in view of the constraints that the Merged Entity would face post-Merger from emerging and established rivals. Below we set out our findings first for commercial aviation IFC and then for business aviation IFC.

Competition between the Parties and how this would evolve

20. Both Parties have been growing faster than other established suppliers of IFC services at a global level, regularly bid against each other in tenders, identify each other in internal documents as likely rivals in upcoming tenders and are regarded as strong alternatives by airlines. Our analysis of a sample of tenders for IFC on aircraft that are likely to serve UK customers shows that the Parties won more contracts for IFC services between January 2020 and September 2022 than other suppliers.

21. Both Parties also have plans to launch additional satellites in the next few years that will significantly increase their capacity and, in Viasat's case, its

geographic coverage (where it has relied on capacity from third parties historically).

22. We have therefore concluded that the Parties compete closely and would likely remain close competitors in the next few years absent the Merger.

The constraint from established suppliers and how this would evolve

23. The Parties currently compete principally with three established suppliers of IFC services: Intelsat, Panasonic and Anuvu. We considered the likely constraint they would exert on the Merged Entity.

Intelsat

24. Intelsat filed for Chapter 11 bankruptcy in May 2020 from which it emerged in May 2022. In December 2020 it acquired Gogo's commercial aviation IFC business and became a vertically integrated supplier.

25. Intelsat supplies IFC services that use GEO satellite capacity sourced from a combination of Intelsat's satellites and satellites owned by third parties. Intelsat recently launched an additional GEO satellite and plans to launch more to improve its access to GEO satellite capacity in the next few years.

26. Intelsat also recently started to commercialise a hybrid LEO/GEO IFC service that will utilise OneWeb's LEO capacity (once its constellation is ready to support IFC) and Intelsat's GEO satellite capacity.

27. Although we recognise there is some uncertainty, given that this hybrid IFC service is not yet live on passenger flights, we consider it likely, based on the evidence we have received, that this hybrid service will be successfully deployed in the next few years. OneWeb's constellation reached the threshold for global coverage in March 2023 following recent successful satellite launches and Stellar Blu, a technology supplier, has developed the equipment, an electronically steered antenna (**ESA**), that is required to supply Intelsat's hybrid LEO/GEO IFC service to aircraft. Recent test flights using the ESA and OneWeb's constellation have been successful. We received consistent feedback from both airlines and SSPs/SNOs that hybrid services are an attractive proposition, as they combine the best technological characteristics of GEO satellites and LEO satellites. In January 2023, Intelsat won its first customer for its hybrid GEO/LEO IFC service, Alaska Airlines, which has said publicly that it expects the service to go live on some of its aircraft in early 2024.

28. Intelsat's position in IFC globally has declined in recent years measured by the share of active aircraft globally with its IFC services installed. However, it has bid and is bidding on a wide range of opportunities, is regularly identified as a likely bidder in upcoming tenders in the Parties' documents, is regarded as a strong IFC supplier by most airlines, and has recently won IFC contracts. We expect that its vertical integration following the acquisition of Gogo, improved balance sheet following its emergence from Chapter 11 and the launch of its hybrid GEO/LEO IFC services and access to additional GEO satellite capacity will improve its competitive offer.

29. We have therefore concluded that Intelsat would likely be a significant constraint on the Merged Entity in the next few years.

Panasonic

30. Panasonic supplies IFC services that use GEO satellite connectivity sourced from satellites owned by third parties.

31. In October 2022, Panasonic announced that it had entered into a distribution agreement with OneWeb that will allow it to offer LEO IFC services and hybrid LEO/GEO IFC services that will utilise OneWeb's LEO constellation once it is ready to support IFC. Panasonic will also have access to additional GEO satellite capacity from Eutelsat following Eutelsat's recent satellite launch.

32. Panasonic's market position globally has remained relatively stable over the last five years, it frequently bids on a wide range of opportunities, regularly competing with both Parties in tenders, it is regularly identified as a likely bidder in upcoming tenders in the Parties' documents, it is seen as a strong supplier of IFC by most airlines and it has won recent IFC contracts.

33. While recognising there is some uncertainty, for similar reasons as for Intelsat, we expect that Panasonic's launch of a LEO service and a hybrid LEO/GEO service will improve its competitive offer. Panasonic's services will rely on the same LEO constellation (OneWeb) and will also use ESAs developed by Stellar Blu that have been demonstrated to work in test flights. A number of third parties (including airlines and SSPs/VARs) have said that they believe that Panasonic's partnership with OneWeb is a potential source of future strength, and Panasonic is, like Intelsat, a well-established IFC supplier.

34. We have therefore concluded that Panasonic would likely be a significant constraint on the Merged Entity in the next few years.

Anuvu

35. Anuvu bids against the Parties in tenders less frequently than the Parties bid against each other or Intelsat or Panasonic, and is seen as a weaker IFC supplier by airlines. However, it does bid for and win contracts for narrowbody aircraft.

36. We have therefore concluded that Anuvu would likely be a moderate constraint on the Merged Entity in the next few years, but only for narrowbody opportunities.

The constraint from emerging suppliers and how this would evolve

37. Starlink, Amazon, Telesat and OneWeb have all launched, or have plans to launch, LEO constellations.

38. OneWeb has agreed to supply satellite capacity to Intelsat and Panasonic, and we have considered any impact from OneWeb's entry in our assessment of those suppliers. Other than Starlink, we do not consider that there is sufficient evidence to show that entry by any other players in IFC will be sufficiently likely and timely to impact our assessment of the Merger.

39. Our assessment of emerging players has therefore focused on the constraint that Starlink would likely exert on the Merged Entity.

40. Starlink has achieved significant milestones since it won its first contract to supply IFC services in March 2022, including many during the course of our phase 2 investigation.

41. Starlink has won a number of additional contracts covering different regions (United States, Asia Pacific and recently Europe), aircraft types (widebody and narrowbody) and airlines (both low cost carriers (**LCC**) and full-service carriers), showing that Starlink is capable of winning contracts with a broad mix of customers. Starlink's award of a contract by airBaltic in January 2023 represents its first win with a European airline, and for aircraft that will fly to and from the UK.

42. Starlink's IFC service is now live on passenger flights in the United States. Test data and recent reviews show the quality of its IFC service is high. Starlink is also continuing to launch additional satellites – in 2022 alone it launched more than 1,700 satellites and recently received approval to launch 7,500 more. Future satellite launches will increase its capacity and geographic

coverage and will likely improve the quality of IFC service that Starlink can provide at airport hubs and other areas where there is concentrated demand.

43. Most airlines told us that Starlink is a strong or very strong supplier of IFC. Several airlines explained that they had rated Starlink based on its future potential. Although some airlines told us that Starlink's lack of certifications and experience and its commercial model means that it is not a viable option for them currently, feedback from airlines overall suggest that they have confidence that Starlink is likely to succeed and to be a strong competitor in time.

44. Starlink has competed with the Parties on some recent tenders, and we have seen some evidence of airlines using Starlink as leverage to extract better terms from the Parties.

45. Although we recognise that there is necessarily a degree of uncertainty regarding the pace and scale of Starlink's expansion in IFC, we expect Starlink to become a stronger competitor to the Merged Entity within the next few years as it launches additional satellites, obtains more certifications, gains more experience and data from serving customers and can demonstrate to other potential customers that its technology is mature.

46. We expect the strength of the constraint Starlink provides on the Merged Entity will vary from contract to contract depending on a range of factors such as the required certifications, the routes the aircraft will fly, whether the opportunity is for line-fit or retro-fit installation, and the airline's appetite for risk and willingness to accept Starlink's preferred commercial model, but that, overall, it will likely increase over the next few years.

47. We therefore concluded that the existing constraint from Starlink will have grown within the next few years and that Starlink will likely have become a significant constraint on the Merged Entity.

Decision for commercial aviation

48. The evidence we have assessed has led us to decide that, while the Parties compete closely and would likely remain close competitors absent the Merger, the aggregate constraints the Merged Entity would likely face from other rivals are significant and are likely to increase, such that the Merger may not be expected to give rise to an SLC as a result of horizontal unilateral effects in the supply of broadband IFC services to commercial airlines serving UK consumers.

Decision for business aviation

49. We have also considered the Merger's effect on the supply of IFC to large business aircraft operators. Supplying IFC to business aircraft operators has many of the same features as supplying it to commercial airlines. Currently the Parties compete closely as the two main providers offering satellite-based IFC to business aircraft operators outside North America. However, we expect other suppliers to expand and improve the services they offer in the next few years. Gogo, currently the largest supplier in North America (where most business aircraft operators are based), has signed an agreement with OneWeb that will allow it to offer a global service. Starlink is also successfully targeting business aircraft operators. Two further suppliers, Intelsat and Satcom Direct, are also likely to expand and improve what they currently offer by leveraging their respective positions in closely related markets.

50. We have therefore decided that the aggregate constraints the Merged Entity would likely face from other rivals are significant and are likely to increase such that the Merger may not be expected to give rise to an SLC as a result of horizontal unilateral effects in the supply of broadband IFC services to large business aircraft operators serving UK consumers.