Neutral citation [2018] CAT 18

IN THE COMPETITION APPEAL TRIBUNAL

Case No: 1280/3/3/17

Victoria House
Bloomsbury Place
London WC1A 2EB

7 December 2018

Before:

THE HONOURABLE MR JUSTICE MANN
(Chairman)
DR CLIVE ELPHICK
ANNA WALKER CB

Sitting as a Tribunal in England and Wales

BETWEEN:

(1) VIASAT UK LIMITED

(2) VIASAT, INC.

Appellants

- v -

OFFICE OF COMMUNICATIONS

Respondent

- and -

INMARSAT VENTURES LIMITED

Intervener

Heard at Victoria House on 26-28 June and 3 July 2018

JUDGMENT (NON-CONFIDENTIAL VERSION)

APPEARANCES

Mr Michael Bowsher QC, Ms Fiona Banks and Ms Khatija Hafesji (instructed by Latham & Watkins) appeared on behalf of the Appellants.

Mr Josh Holmes QC and Ms Julianne Kerr Morrison (instructed by Ofcom Legal) appeared on behalf of the Respondent.

Mr Tim Ward QC and Ms Anneli Howard (instructed by Jones Day) appeared on behalf of the Intervener.

Note: Excisions in this Judgment (marked "[…][✂]") relate to commercially confidential information: Schedule 4, paragraph 1 to the Enterprise Act 2002.

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ANNEXES

Annex 1: Milestones (set out in the Annex to Decision 626/2008/EC)

A. INTRODUCTION

1. This is an appeal from an authorisation of Ofcom ("the Ofcom Decision") given to the intervener Inmarsat Ventures Ltd ("Inmarsat"), dated 22nd January 2018, in which Ofcom authorised the use of the 2 GHz spectrum by ground stations in connection with the operation of a satellite mobile comunications network, pursuant to the Wireless Telegraphy Act 2006.[1] The appellants are Viasat UK Ltd and Viasat Inc. It is unnecessary to distinguish between those two corporations so we can treat them both together and call them "Viasat". Inmarsat and Viasat are commercial competitors. Ofcom is the telecoms regulator for the UK. Viasat challenges the authorisation principally on the grounds that the system properly viewed does not fall within the authorising power, though there is also a challenge to what is said to be Ofcom's discretion. Inmarsat has joined as Intervener. It makes common cause with Ofcom in resisting this appeal. Where it is appropriate to refer to Ofcom and Inmarsat together we will refer to them as "respondents", even though that does not technically describe the position of Inmarsat.

2. The system for which Inmarsat has achieved its authorisation is not one for providing a mobile phone and data service to terrestrial users in the familiar sense, that is to say users who use the service while on the ground, including use on boats and vehicles. Rather, it is a service (its European Aviation Network, or EAN) intended to provide broadband-like service to passengers in aircraft across Europe. It is that distinction which lies at the heart of this case, and which, at root, is the source of Viasat's complaints. The system is said by the respondents to be a "mobile satellite system", which involves a satellite receiving and transmitting data and ground stations which are part of the system and which are said to be "complementary ground components" within the meaning of the legislation. These significant points are contested by Viasat.

[1] Viasat brought its appeal on 8 December 2017 following the publication of the Authorisation Statement on 10 October 2017. This was before the Authorisation Decision was taken on 22 January 2018. Ofcom accepted that nothing turns on this timing point.

3. It is right to record that Viasat is not taking just technical points without a commercial point. Its underlying commercial complaint is that Inmarsat has gained an advantage by having the benefit of moved goalposts. It maintains that the intention of the scheme was for a satellite focused system which would provide useful benefits for people on the ground in the form of a signal which would not otherwise be available for them because commercial providers had not provided it. The spectrum which was the subject of the application was valuable, but the selection mechanism did not require any payment to be made for it, presumably on the basis that there was an element of public benefit in the use of the spectrum. Inmarsat have now departed from that scheme by providing a commercial service, using valuable but free (to Inmarsat) spectrum, to a limited number of paying airlines (or their customers), and it has done so by devising a service with heavy use of ground-based components which was not originally anticipated. If that sort of use had been apparently on offer at the time then others, including Viasat, would have wished to be able to apply for the free use of the spectrum as well. What has happened is said by Viasat to be unfair and anti-competitive.

4. In order to make part of its case Viasat does advance some of those competition-related points, but it also takes (in the main) technical points about the nature of what has now been authorised by Ofcom. All those points are dealt with below.

5. It will assist an understanding of the developing legislation in this case to have in mind an outline of how mobile satellite services were envisaged by that legislation. They envisage a satellite in geostationary orbit which communicates bilaterally with a ground station, that is to say something on earth (on land, in a vehicle, in a boat or in an aircraft) that is to say not in orbit – the equivalent (for these purposes) of a mobile phone handset. The satellite is "connected" to central earth-based facilities via a dedicated receiving station – usually a large dish (or conceivably more than one). That may, in some circumstances, be sufficient to provide a way of allowing an earth station to communicate with another station on the ground. However, the concepts in this case also include additional ground components ("complementary ground components") which are also themselves capable of communicating with the

earth stations (handsets), just like a familiar mast-based mobile phone system. They do this to "complement" the satellite element. In order to bring those concepts within the facts of the present case, one has to imagine the equivalent of a handset or handsets on a plane, capable of talking up to the satellite or down to a "complementary ground component" (and in using that analogy we do not intend to pre-judge one of the issues in this case which is whether there is a handset-equivalent on a plane in the case of the EAN).

6. Mr Michael Bowsher QC led for Viasat; Mr Josh Holmes QC led for Ofcom; and Mr Tim Ward QC led for Inmarsat.

B. THE LEGAL FRAMEWORK – OUTLINE

7. This section sets out the relevant legal framework at both EU and national level in outline as a precursor to a more detailed exposition of its provisions.

8. The provisions show a progression under which the European Union institutions were concerned first to provide the harmonisation of the use of the radio spectrum generally, and then in 2007 they turned their attention to the 2 GHz part of the spectrum with which this appeal is concerned. In what follows the labels given to the various documents are sometimes those appearing in the documents themselves, and sometimes our own which we provide in order to provide meaningful descriptions.

(1) **Decision** No 676/2002/EC of the European Parliament and of the Council (7th March 2002 - the **"2002 Radio Spectrum Decision**"). This established a policy and the beginnings of a legal framework to ensure the co-ordination of policy approaches and harmonised conditions in relation to use of the radio spectrum. It is of background relevance to the present dispute.

(2) **Directive** 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) (the **"Authorisation Directive"**). This sought to implement an internal market in electronic

communications, and harmonisation and simplification of authorisation rules. Although part of the background, it is again of limited relevance.

(3) **Directive** 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (the **"Framework Directive"**). This does what its description suggests.

(4) **Report** from CEPT (European Conference of Postal and Telecommunications Administrations) to the European Commission of July 2006 (the "**CEPT Report"**). This was a report provided under a mandate from the Commission, pursuant to the preceding two pieces of legislation, dealing with the harmonisation of technical conditions for the use in the EU of the 2 GHz frequency range. Since this body and its functions are provided for and referred to by the legislation, and the more crucial legislation came after it, its pronouncements are of potential relevance.

(5) **Commission Decision** 2007/98/EC of 14 February 2007 on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing MSS (the **"2007 Harmonisation Decision"**). This provided, in general terms, for the harmonisation of the conditions for the availability and efficient use of of the 2 GHz frequency band.

(6) **Decision 626/2008/EC** A joint Decision of 30 June 2008 of the European Parliament and of the Council on the selection and authorisation of systems providing MSS (the **"Selection Mechanism Decision"**). This established the selection procedure for operators in the 2GHz frequency band for satellite/earth communications, pursuant to the 2007 Harmonisation Decision. It is around the provisions of this piece of legislation that many of the issues in the present appeal turn.

(7) A Commission **Call for applications**, (2008/C 201/03) which invited applications to be processed under the 2008 Selection Mechanism Decision. Inmarsat responded to this call, with 3 other applicants.

(8) **Commission Decision** dated 13th May 2009 (2009/449/EC), which awarded use of the 2 GHz spectrum to Inmarsat and Solaris Mobile Ltd.

(9) **Commission Decision** of 10 October 2011 on the co-ordination of the rules on enforcement in relation to mobile satellite services (the "**Enforcement Mechanism Decision**") – 2011/667/EU. It is said by the respondents that the mechanism for enforcement informs the approach to be taken to some of the issues in this case.

(10) So far as English legislation is concerned, the Communications Act 2003 and Wireless Telegraphy Act 2006 set out the functions and powers of Ofcom. The Authorisation of Frequency Use for the Provision of Mobile Satellite Services (European Union) Regulations 2010 (the "**Satellite Services Regulations"** - SI 2010/672) require Ofcom to grant authorisation for Viasat and Solaris to use the spectrum which they gained under the above process and are ultimately the power under which the Ofcom Decision was made.

C. THE LEGISLATIVE BACKGROUND – DETAIL

9. We can now turn to the legislative background in more detail. We will take the provisions in the order in which they appear in the preceding section.

10. The 2002 Radio Spectrum Decision is principally significant for forging a link with outside organisations whose views and pronouncements are relied on variously by the parties to this appeal. Article 1(3) says:

> "3. Activities pursued under this Decision shall take due account of the work of international organisations related to radio spectrum management, e.g. the International Telecommunication Union (ITU) and the European Conference of Postal and Telecommunications Administrations (CEPT)."

Article 4(2) gives a specific function to CEPT, which resulted in the CEPT Report:

> "For the development of technical implementing measures referred to in paragraph 1 which fall within the remit of the CEPT, such as the harmonisation of radio frequency allocation and of information availability, the Commission shall issue mandates to the CEPT, setting out the tasks to be performed and the timetable therefor. The Commission shall act in accordance with the procedure referred to in Article 3(2)."

11. The principal significance of the Authorisation Directive is the importance given to Member States giving effect to agreements at the European level. This is significant to the present appeal. Thus Article 8 provided:

> "Harmonised assignment of radio frequencies
>
> Where the usage of radio frequencies has been harmonised, access conditions and procedures have been agreed, and undertakings to which the radio frequencies shall be assigned have been selected in accordance with international agreements and Community rules, Member States shall grant the right of use for such radio frequencies in accordance therewith. Provided that all national conditions attached to the right to use the radio frequencies concerned have been satisfied in the case of a common selection procedure, Member States shall not impose any further conditions, additional criteria or procedures which would restrict, alter or delay the correct implementation of the common assignment of such radio frequencies."

The emphasis is ours in order to point up obligations which are relied on by the respondents in this case.

12. The CEPT report was prepared pursuant to the mandate referred to above. Section 2 deals with "Services provided by MSS [in this context, mobile satellite services, not mobile satellite systems] operators". It starts by extolling the virtues of such services:

> "MSS systems can offer instant and reliable global communication systems anywhere in the world together with social, economic, public safety and humanitarian relief benefits. MSS applications may include a large variety of services including road transport services, industry communications, video and radio services, services tailored to the needs of governments, national security requirements and emergency and disaster relief services. The roll-out and development of these applications is in line with the EU policies and the spread of Information Society and the European Space Policy.
>
> …
>
> MSS systems provide ubiquitous connectivity through widespread, international coverage, with simultaneous access to the satellite service at the

instant of service commencement in the entire footprint of the satellite. Such service, although not indispensable for the wider public, is an integral part of some niche markets in which MSS has traditionally provided service including maritime, (which includes distress and safety communications); aeronautical (which includes the provision of communications to aircraft for the purposes of air traffic management, operational communications for airlines and communications for passengers); exploration (for example services to the mining, oil and gas industries); and public safety.

In addition, even on land there are areas within the EU, where terrestrial communications do not reach, or where the service levels of such terrestrial communications systems are not sufficiently high for the needs of consumers, for example in some mainly rural areas where the economics or geography do not support terrestrial system built-out. In such circumstances satellite communications provide an important service to EU customers, ensuring that they have access to reliable, high quality services and avoiding the creation of a two tier communication society of the 'haves' and 'have-nots'. Satellite services employ cost-effective technology to serve communities with low penetration rates, especially in remote and rural and semi-rural communities. Where sparse population does not provide the economies of scale to justify the roll-out of wireline networks or of land-based wireless network requiring a large number of transmitters, satellite networks have historically provided a swift and efficient deployment of services to communities which would otherwise not have access to such services. Current MSS service provides mobile data speeds up to 0.5 Mbps, which makes it another technology for wireless broadband services. MSS systems can therefore be used to provide broadband services, including content delivery, to rural areas. In the case of MSS the further dimension of mobility is added for these consumers.…

…

In the context of the drive to deliver broadband services throughout the European Community, the designation of the 2 GHz bands to MSS will promote the rapid deployment and delivery of such services to rural areas, geographically isolated areas and new EU Member States where wireline networks are still in need of significant upgrading before wireline broadband is achievable. In those rural areas where broadband is already or is soon to be available, the deployment of MSS broadband services will provide an alternative service, thereby promoting choice.

The designation of the 2 GHz bands to MSS including the possibility to implement complementary ground components will allow for the development of a range of new markets and services. New satellite technologies (high-power platforms, large antennas) together with improved coverage in urban areas will attract larger consumer markets and initiate development of new services such as broadband services. Satellite systems are inherently capable of reaching a larger population of users and as such are very suited for multicasting operations, and the delivery of multimedia services to a large population of users. This type of applications [sic] is at the heart of the convergence of services enabled by electronic communications networks. The 2 GHz MSS band has been identified in the draft Radio Spectrum Policy Group Opinion on Multimedia Services is one possible non-broadcast candidate band for the provision of such services."

13. This passage is potentially important to Mr Bowsher's case insofar as he seeks to say that Inmarsat's proposed use is nothing like the sort of use that was intended by the legislation. It is said to demonstrate important background to the legislation which followed.

14. The report goes on to introduce "Complementary Ground Components", the concept which lies at the heart of this appeal. It introduces the concept in section 4.2.

> "4.2.1 Elements about CGC
>
> Complementary Ground Components (CGCs) i.e. ground based stations operating at the same frequencies as the associated satellites and used at fixed locations to improve the availability of MSS, for example in areas where the communication with space stations cannot be guaranteed. Typically CGC can improve the quality of service available to users by ensuring that MSS services can be extended into areas where traditionally service availability has been poor – for example, in buildings, in vehicles, in urban 'canyons', and in regions where the topography creates large satellite 'shadows' – for example mountainous regions, or regions at the very edge of the satellite footprint. Furthermore, they may play an important role in enhancing the efficiency of use of the radio spectrum. Some types of CGCs can transit traffic from one end user to another without passing through the satellite component of the system, reusing spectrum used by the satellite in another geographical area. Such direct routing would temporarily bypass the satellite component to provide communications services which are identical to and fully integrated with the service offered by the whole MSS system footprint. Such bypass would allow increased spectrum efficiency for MSS, in line with EU spectrum policy."

15. The report records that this way of operating was being considered elsewhere, to produce "integrated hybrid satellite/terrestrial systems" for which licences have been granted in the US and Canada.

> "Accordingly, endorsement of the CGC opportunity by the EU and national regulators will put Europe on a level playing field with the United States and Canada, in terms of MSS innovation and services to consumers.
>
> Apart from providing more efficient spectrum use, CGCs will benefit consumers by allowing MSS to provide improved quality of service. Improved coverage would result in continuous development of the ubiquitous connectivity which would be particularly beneficial to transport markets. According to the satellite industry, improved coverage would further attract large consumer markets resulting in improved economies of scale, which will partially off-set the development costs of new services such as ubiquitous mobile digital telecommunications, mobile broadband and mobile multicast services.…

> CGCs differ from independent ground components used by MS [mobile system] operators as they are technically and operationally an integral part of the satellite system and are controlled by the resource and network management mechanism of such system operating on the same frequencies as the associated satellite components and being delivered to an integrated user terminal." (The emphasis is in the original.)

16. A proposed draft definition of the CGC is then proposed:

> "The complementary ground component (CGC) is an integral part of a Mobile Satellite system and consists of ground based stations used at fixed locations to improve the availability of the mobile satellite service in zones where the communications with one or several space stations cannot be ensured with the required quality. CGC uses the same portions of the mobile satellite frequency bands ... as the associated space station(s)."

17. That Report was followed by the 2007 Harmonisation Decision which took up its findings and sought to require harmonisation in respect of its implementation. Its recitals set out material parts of the background to the Decision, including summaries of part of the CEPT report. Recital (2) says that the Commission promotes new and innovative communication systems using any types of technical platform. Recital (3) refers particularly to mobile satellite services:

> "(3) In this context, systems capable of providing mobile satellite services (MSS) are seen as an innovative alternative platform able to provide various types of pan-European telecommunications and broadcasting/multicasting services regardless of the location of end users, such as high speed internet/intranet access, mobile multimedia and public protection and disaster relief. These services could improve coverage of rural areas in the Community, thus bridging the digital divide in terms of geography. The introduction of new systems providing MSS would potentially contribute to the development of the internal market and enhance competition by increasing the offering and availability of pan- European services and end-to-and connectivity as well as encouraging efficient investments.
>
> (4) systems capable of providing MSS should include at least one or more space stations and they could include complementary ground components (CGC), i.e. ground-based stations used at fixed locations in order to improve the availability of the mobile satellite service in zones where communications with one or several space stations cannot be ensured with the required quality."

18. Recital (5) identifies the relevant part of the spectrum and recital (7) refers to the mandate given to CEPT. Recital (8) says that the 2 GHz bands, which are currently unused in most member states, should "in line with the CEPT technical conclusions" be designated and made available without unnecessary

delay in all Member States for systems providing MSS (services) to ensure the development of such systems.

19. Recital (9) deals with the question of interference:

> "(9) CEPT has concluded that the coexistence of systems capable of providing MSS and systems providing terrestrial-only mobile services in the same spectrum in the 2 GHz bands without harmful interference is not feasible in the same geographical area. Consequently, in order to avoid harmful interference to MSS and inefficient use of spectrum, it is necessary to designate and make available the 2 GHz bands to systems capable of providing MSS on a primary basis. This means that where the 2 GHz bands are used by other systems, which are not capable of providing MSS, these other systems should not cause harmful interference to nor claim protection from systems providing mobile satellite services. According to the CEPT, CGCs would not cause harmful interference, as long as they are an integral part of the system providing MSS, are controlled by the resource and network management mechanism of such system, and are operating on the same portions of frequency band as the satellite components of the system. Under these conditions, subject to an appropriate authorisation regime, CGCs could also be utilised even if signals are not transmitted through the satellite components."

20. The main body of the Decision then requires Member States to designate and make available the relevant parts of the 2 GHz band and to ensure non-interference between that system and other systems. Article 3 (2) deals with CGCs:

> "2. Any complementary ground based station shall constitute an integral part of the mobile satellite system and shall be controlled by the satellite resource and network management system. It shall use the same direction of transmission and the same portions of frequency bands as the associated satellite components and shall not increase the spectrum requirement of its associated mobile satellite system."

21. That leads one to the **Selection Mechanism Decision**, on which most of the argument in this case turned. This is the Decision which provides the mechanics for the selection of a limited number of providers of mobile satellite services. Much of Mr Bowsher's case turned on his saying that what is proposed by Inmarsat did not fall within what was authorised and required by this Decision, principally because what Inmarsat proposed was not a CGC within the meaning of the Decision, or what would result was not a mobile satellite system required by that Decision. The arguments require that extensive parts of the Decision be set out here.

22. The first few recitals set the scene. Recital (1) recites the need for coherent use of the radio spectrum to develop electronic communications services and thus contribute to stimulating growth, competitiveness and employment. Recital (2) refers to a previous resolution of the European Parliament which emphasised the importance of communications:

> "for rural and less-developed regions, for which the diffusion of broadband, lower frequency mobile communications and new wireless technologies could provide efficient solutions to achieving universal coverage in 27 Member States with a view to the sustainable development of all areas."

23. Recital (3) refers to the Commission having established an objective of:

> "facilitating the introduction of innovative satellite communications services, in particular by aggregating demand in remote and rural areas, while stressing the need for pan- European licensing of satellite services and spectrum."

24. Recital (5) identifies mobile satellite services ("MSS" in the Decision) as contributing to the development of the internal market and as constituting:

> "an innovative alternative platform for various types of pan- European telecommunications and broadcasting/multicasting services, regardless of the location of end users… MSS could, in particular, improve coverage of rural areas in the Community, thus bridging the digital divide in terms of geography, strengthening cultural diversity and media pluralism and simultaneously contributing to the competitiveness of European information and communication technology industries…"

25. Recital (6) refers to the ability of satellite communications to cross borders and thereby contribute to such objectives as the expansion of geographical coverage of broadband. It goes on:

> "New applications of mobile satellite systems will emerge in the coming years."

26. Recital (10) refers to Regulations of the International Telecommunications Union (ITU) which provide for procedures for satellite radio frequency coordination as a tool for management of harmful interference. This reference may be of significance to the reliance by Mr Bowsher on certain definitions proposed by the ITU.

27. Recitals (11) and (12) refer to the need for harmonisation of the award of spectrum in order to avoid fragmentation of the internal market. We set them out below in one of the contexts in which they are significant.

28. Recital (13) deals with the respective functions of the Community organs and the authorisation authorities in Member States. It starts with the proposition that authorisation issues should be dealt with by the competent authorities of the Member States since authorisation of the selected MSS operators involves attachment of conditions to such authorisations and requires the taking into account of a broad range of applicable national provisions. The recital goes on to state:

> "However, in order to ensure consistency of authorisation approaches between different Member States, provisions relating to the synchronised assignment of spectrum and harmonised authorisation conditions should be established at the Community level, without prejudice to specific national conditions compatible with Community law."

The relevant conditions (the "common conditions") appear in Articles 7 and 8 of the Decision, and are important to this case.

29. Recital (14) is said to provide some guidance as to what the European Parliament and the Council had in mind in terms of authorised purposes. It reads:

> "MSS can generally reach geographic areas not well covered by other electronic communications services, in particular rural areas. The coordinated selection and authorisation of new systems providing MSS could therefore play an important role in bridging the digital divide by improving the accessibility, speed, and quality of electronic communications services in these areas, thus contributing to social cohesion. Therefore, the proposed coverage area of MSS (service area), as well as the timeframe for providing MSS within all Member States, are important characteristics which should be taken into account in an appropriate manner during the selection procedure."

30. Mr Holmes points to the words "in particular" and "could" as indicating that minds were not shut as to all the purposes for which an MSS could be deployed.

31. Recital (18) introduces CGCs.

> "Complementary ground components are an integral part of a mobile satellite system and are used, typically, to enhance the services offered via the satellite in areas where it may not be possible to retain a continuous line of sight with the satellite due to obstructions in the skyline caused by buildings and terrain. In accordance with Decision 2007/98/EC, complementary ground components use the same frequency bands as MSS (1980 to 2010 MHz and 2170 to 2200 MHz). The authorisation of such complementary ground components will therefore mainly rely on conditions related to local circumstances. They should therefore be selected and authorised at national level, subject to conditions established by Community law. This should be without prejudice to specific requests made by competent national authorities to the selected applicants to provide technical information indicating how particular complementary ground components would improve the availability of the proposed MSS in geographical areas where communications with one or more space stations cannot be ensured with the required quality, provided that such technical information has not already been provided in accordance with Title II." [Title II is the part which deals with the selection of providers.]

32. Recital (20) provides that the right to use the specific radio frequencies should be granted to the selected applicants as soon as possible after their selection.

33. Recitals (21) and (22) refer to enforcement. Recital (21) provides that decisions on the withdrawal of authorisations in relation to MSS or CGCs due to the non-fulfilment of obligations should be enforced at national level. However, while monitoring and enforcement was to be undertaken at national level, recital (22) provides that it should remain possible for the Commission to define the "modalities of a coordinated monitoring and/or enforcement procedure". This has in fact happened. Under the structure as it now is any questions relating to enforcement or other action to be taken against a selected operator have to be referred to European institutions for prior consultation so as to ensure a co-ordinated approach, as will appear below. National authorities do not enforce simply on their own initiative.

34. We can now turn to the Articles of the Decision themselves. Article 1(1) sets out the Objective and Scope:

> "1. The purpose of this Decision is to facilitate the development of a competitive internal market for mobile satellite services (MSS) across the Community and to ensure gradual coverage in all Member States.
>
> This Decision creates a Community procedure for the common selection of operators of mobile satellite systems that use the 2 GHz frequency band… for space to Earth communications."

35. The Article goes on:

> "2. Operators of mobile satellite systems shall be selected through a Community procedure, in accordance with Title II.
>
> 3. The selected operators of mobile satellite systems shall be authorised by Member States in accordance with Title III.
>
> 4. Operators of complementary ground components of mobile satellite systems shall be authorised by Member States in accordance with Title III."

36. Article 2 contains important definitions:

> "(a) 'mobile satellite systems' shall mean electronic communications networks and associated facilities capable of providing radio-communications services between a mobile earth station and one or more space stations, or between mobile earth stations by means of one or more space stations, or between a mobile earth station and one or more complementary ground components used at fixed locations. Such a system shall include at least one space station;
>
> (b) 'complementary ground components' of mobile satellite systems shall mean ground-based stations used at fixed locations, in order to improve the availability of MSS in geographical areas within the footprint of the system's satellite(s), where communications with one or more space stations cannot be ensured with the required quality."

37. Article 4 contains conditions for the admissibility of applications. They include the following significant provision in relation to coverage:

> "1. The following admissibility requirements shall apply:
>
> …
>
> (c) applications shall include a commitment on the part of the applicant that:
>
> (i) the mobiles satellite system proposed shall cover a surface area of at least 60% of the aggregate land area of the Member States, from the time the provision of MSS commences;
>
> (ii) MSS shall be available in all member states and to at least 50% of the population and over at least 60% of the aggregate land area of each Member State by the time stipulated by the applicant but in any event no later than seven years from the date of publication of the Commission's decision adopted pursuant to Articles 5(2) or 6(3)."

38. The first selection phase is dealt with in Article 5. It provides that the assessment of applications should rely on the satisfactory completion of milestones 1 to 5 as set out in the Annex. That Annex is reproduced in Annex 1 to this Judgment. If eligible applicants do not, in aggregate, require more than the amount of the spectrum available then they will be selected at that stage. If there is a greater demand among eligible applicants than the

spectrum available the eligible applicants move into a second phase which is dealt with by Article 6. This second phase involves weighing various matters, including an assessment of the degree of compliance with the 50/60% coverage requirements of Article 4(c). However, because the first phase on our case generated only two applicants who did not seek a combined share of the spectrum which exceeded that which was available (one of whom was Inmarsat), it was unnecessary to go on to the second phase.

39. The Decision separates local authorisation of the satellite and CGC elements of a system into two and deals with them in two separate Articles. Article 7 contains a degree of obligation, imposed on Member States, to ensure that local authorisations are granted to selected applicants in respect of the satellite elements of the scheme. It reads:

> "1. Member States shall ensure that the selected applicants, in accordance with the time frame and the service area to which the selected applicants have committed themselves, in accordance with Article 4(1)(c), and in accordance with national and Community law, have the right to use the specific radio frequency identified in the Commission decision adopted pursuant to Articles 5(2) or 6(3) and the right to operate a mobile satellite system. They shall inform selected applicants of those rights accordingly.
>
> 2. The rights covered by paragraph 1 shall be subject to the following common conditions:
>
> (a) selected applicants shall use the assigned radio spectrum for the provision of MSS;
>
> (b) selected applicants shall meet milestones six to nine set out in the Annex within 24 months of the selection decision adopted pursuant to Articles 5(2) or 6(3);
>
> (c) selected applicants shall honour any commitments they give in their applications or during the comparative selection procedure, irrespective of whether the combined demand for radio spectrum exceeds the amount available;
>
> (d) selected applicants shall provide to the competent authorities of all Member States an annual report detailing the status of development of their proposed mobile satellite system;
>
> (e) any necessary rights of use and authorisations shall be granted for a duration of eighteen years from the date of the selection decision adopted pursuant to Articles 5(2) or 6(3)."

40. The "common conditions" should be noted. They were an important feature of this appeal.

41. Article 8 sets out the authorisation procedure for CGCs. In these proceedings, along with Article 2, it is one of the critical provisions that was the focus of the dispute between the parties. It is necessary to set out Article 8 in full:

> "1. Member States shall, in accordance with national and Community law, ensure that their competent authorities grant to the applicants selected in accordance with Title II and authorised to use the spectrum pursuant to Article 7 the authorisations necessary for the provision of complementary ground components of mobile satellite systems on their territories.
>
> 2. Member States shall not select or authorise operators of complementary ground components of mobile satellite systems before the selection procedure provided for in Title II is completed by a Commission decision adopted pursuant to Articles 5(2) or 6(3). This is without prejudice to the use of the 2 GHz frequency band by systems other than those providing MSS in accordance with Decision 2007/98/EC.
>
> 3. Any national authorisations issued for the operation of complementary ground components of mobile satellite systems in the 2 GHz frequency band shall be subject to the following common conditions:
>
> (a) operators shall use the assigned radio spectrum for the provision of complementary ground components of mobile satellite systems;
>
> (b) complementary ground components shall constitute an integral part of a mobile satellite system and shall be controlled by the satellite resource and network management mechanism; they shall use the same direction of transmission and the same portions of frequency bands as the associated satellite components and shall not increase the spectrum requirement of the associated mobile satellite system;
>
> (c) independent operation of complementary ground components in case of failure of the satellite component of the associated mobile satellite system shall not exceed 18 months;
>
> (d) rights of use and authorisations shall be granted for a period of time ending no later than the expiry of the authorisation of the associated mobile satellite system."

42. Again the "common conditions" should be noted.

43. Article 9 deals with monitoring and enforcement. It requires that Member States should monitor compliance with the common conditions and take appropriate measures to address non-compliance. The process of enforcement is elaborated upon by the Enforcement Mechanism Decision. That Decision requires a co-ordinated approach to enforcement. Its effect can be summarised as follows. If a member state considers that an operator of an MSS has been in breach of the relevant common conditions (see above) it should inform the

Commission. The Commission then refers the matter to a Communications Committee which considers the matter and discusses appropriate measures. Member States are not to reach any final decision on sanctions until that committee has deliberated. Once it has deliberated the national authority can apply a sanction short of withdrawal or suspension. If, despite those measures, there is still a serious or repeated breach and a national authority wishes to withdraw or suspend its licence, again the matter has to be referred back to the Commission and the Communications Committee, which has to deliberate on the matter before a decision is made about withdrawal or suspension of the licence.

44. That deals with the European legislation. The detail of the relevant UK legislation is as follows.

45. This appeal is brought under section 192 of the Communications Act 2003; it is unnecessary to set that out. The manner in which this is to be dealt with appears in section 194A of the same Act:

> "194A(2) The Tribunal must decide the appeal by reference to the grounds of appeal set out in the notice of appeal, by applying the same principles as would be applied by a court on an application for judicial review."

European legislation requires the "merits" to be taken into account – see below.

46. Last, it is necessary to set out some of the provisions of the statutory instrument pursuant to which Inmarsat's licence was granted (the "Satellite Services Regulations"). Regulation 2 makes it a criminal offence to use the relevant part of the spectrum without a licence. Regulation 3 requires the granting of an authorisation to each of the applicants selected by the procedure referred to above. It provides:

> "3 – Granting authorisations to the selected applicants
>
> (1) Ofcom shall grant an authorisation under these regulations to each of the selected applicants for use in the United Kingdom of the frequency specified for that selected applicant in Article 3 of the Commission Decision subject to the conditions set out in these regulations."

47. The conditions are set out in Regulation 4.

" – Conditions of an authorisation

(1) Ofcom shall ensure that the authorisations are subject to the common conditions, namely

(a) the selected applicants shall use the frequencies which those applicants are authorised to use pursuant to regulation 3(1) for the provision of mobile satellite services;

(b) each selected applicant shall meet milestones 6 to 9 set out in the Annex to the EU Decision by 14 May 2011;

(c) each selected applicant shall honour all commitments given by that applicant in its application or during the comparative selection procedure referred to in Articles 4 and 6 of the EU Decision respectively;

(d) each selected applicant shall provide Ofcom with an annual report detailing the status of development of their proposed mobile satellite system."

48. Regulation 13 deals with CGCs:

"13 – Complementary ground components

(1) Ofcom shall carry out their functions under the Wireless Telegraphy Act 2006 so as to give effect to the obligations of the United Kingdom under the EU Decision and the Commission Decision insofar as those obligations have not been given effect by these Regulations.

(2) Ofcom shall in particular pursuant to their powers under that Act grant a selected applicant, if requested, the authorisation necessary for the provision of complementary ground components of systems providing mobile satellite services subject to the common conditions specified in Article 8(3) of the EU Decision.

(3) In this regulation 'complementary ground components' means ground-based stations used at fixed locations in order to improve the availability of mobile satellite services in geographical area [sic] covered by those services."

49. The Wireless Telegraphy Act 2006 provides for licensing of the use of the spectrum. It is unnecessary to set any of it out here.

D. THE ROUTE TO THE OFCOM DECISION

50. In considering the scope, and permitted scope, of the Ofcom Decision, and in order to understand the arguments in this appeal, it is necessary to consider how Inmarsat got there.

51. Inmarsat participated in the first phase of the process by responding to the Call for applications and putting itself forward as an appropriate operator under the

process laid down by the Selection Mechanism Decision along with three other operators. The scope of what Inmarsat was proposing at the time is not fully known because Inmarsat's application documentation has not been disclosed (there is an outstanding application by Viasat about that in the General Court), but it is known that at the time it was proposing a 9 beam satellite in 2 polarisations using a 12m antenna. It must have demonstrated its technical capacities and financial status, compliance with the other requirements of the Selection Mechanism Decision (especially those in Article 4(1)) and must also have complied with Milestones 1 to 5 in the Decision; a launch contract was procured to launch by the 2011 deadline in the Joint Decision. It can also be inferred that whatever the proposal was it was not for anything like the EAN system, though it must have involved a satellite.

52. Of the four original applicants, two were ruled out at the first selection stage, leaving only two left in the competition - Inmarsat and Solaris Mobile Ltd. Since their combined requests for radio spectrum did not exceed the radio spectrum available those two providers were selected to provide mobile satellite services in the relevant spectrum without the need to go through a second part of the selection procedure and they were selected under the Selection Mechanism Decision. Their formal selection was achieved by the Commission Decision of 13th May 2009 which said:

> "Article 2
>
> Inmarsat Ventures Limited and Solaris Mobile Limited are eligible applicants as a result of the first selection phase of the comparative selection procedure provided in Title II of [the Selection Mechanism Decision].
>
> As the combined demand for radio spectrum requested by the eligible applicants retained as a result of the first selection phase of the comparative selection procedure does not exceed the amount of radio spectrum available … Inmarsat Ventures Limited and Solaris Mobile Limited are selected."

53. Inmarsat then applied to Ofcom for authorisation to use the relevant part of the spectrum for satellite use (not yet for CGC use) under Reg 3 of the 2010 Regulations, and obtained it on 31st August 2010. Paragraph 1 of the authorisation is a simple authorisation to use two frequency ranges of the spectrum for space-earth and earth-space respectively, within the UK. Reg 6 required Inmarsat to meet milestones 6-9 of the Selection Mechanism

Decision and Reg 7 provided that Inmarsat would honour all commitments it gave during its application of the selection procedure. That was the first phase of the authorisation procedure.

54. It seems that Inmarsat did not consider that its then plans for the use of the spectrum were sufficiently commercially viable, and it did not seem to pursue the use of the spectrum at the time. It was suggested, without evidence, that that was because of the financial crisis, but we make no finding in that respect, and the reason does not really matter for present purposes. By 2014 Inmarsat had found what it considered to be a commercially exploitable manner of using its part of the spectrum, namely providing a pan-European service for airline passengers in aircraft, and this ultimately became the EAN for which its 2017 authorisation was obtained. It had changed its satellite plans in the course of this (and missed one of the milestones, because it did not launch on time); it decided to share a satellite with a Greek broadcaster and this satellite was launched in 2017. It had only 3 beams as opposed to the originally proposed 9. Inmarsat has been pitching its system to airlines.

55. The EAN required ground stations (said to be "complementary ground stations" within the meaning of the European provisions). Inmarsat approached Ofcom for authorisation for those stations in accordance with the requirements. Ofcom decided to consult on the authorisation of terrestrial mobile networks complementary to the use of 2 GHz mobile satellite systems for aeronautical use and received observations from Viasat to the effect that Inmarsat's proposed use was outside the scope of the European authorising legislation. In its decision document Ofcom expressed its satisfaction that Inmarsat's proposals were within that legislation and on 22nd January 2018 it issued the licence to Inmarsat which is the subject of this appeal.

E. THE EAN

56. The nature and operation of the EAN lies at the heart of this appeal, so it is necessary to understand it properly. It will be useful to describe that operation at this stage of this Judgment.

57. The object of the system (when operative - it is not currently operational) is to provide Europe-wide internet services to passengers (and crew) on aircraft, both in terms of emails and in terms of other internet access. The standard of service is intended to emulate the standard provided by home broadband. The satellite provided by Inmarsat would not have the capacity to do that by itself on any simultaneous and widespread scale, so the relevant signal is sent to and from aircraft via two routes - to and from the satellite, and to and from ground stations. So there are two principal elements to the EAN - the satellite element and the ground station element. The signals are fed into a central server on the plane and distributed to passengers who communicate with the server via their mobile telephones or tablet (via wifi which is internal to the aircraft). The ground station element is said by Inmarsat (and Ofcom) to be a CGC within the legislation. That is one of the issues in this appeal.

58. Each aircraft which is equipped with EAN equipment has two modules for communicating with the outside world and conveying signals to and from its internal wifi unit. It has a module consisting of an aerial and receiving equipment which points upwards and is capable of two-way communication with the satellite, and it has an aerial and receiving equipment which points downwards and is capable of two-way communication with ground-based systems. Inmarsat has launched a satellite which provides the satellite limb of the communications scheme, and the ground-based systems are provided by transmitters and receivers on masts. They may or may not be added to already existing masts. As well as talking to the aircraft, the satellite talks to the ground via a larger scale gateway (one can think of it as a large dish) which feeds back into internet service providers; and the ground-based elements on masts also have links into internet service providers. The ground-based services for EAN are to be operated by Deutsche Telekom, a point which gives rise to one of the grounds of appeal in this case.

59. The path that the EAN signals take (earth or satellite) is determined by systems on the ground which feed the relevant instructions to the aircraft via the satellite. The aircraft-to-satellite link and the aircraft-to-ground link each use a different communications protocol (language) and cannot talk directly to each other. Thus the earth-facing module on the aircraft could not talk to the

satellite even if it were facing upwards, and the same is true of the satellite-facing module and the ground stations if the module were pointing downwards.

60. The satellite and ground segments respectively have different coverage and capacities. Because of its distance, the satellite (in geostationary orbit 36,000 km above the earth) has much greater area coverage than any individual ground station. The satellite can provide and receive a signal to and from the whole of the EC area (including the sea areas). There may be exceptions in certain areas where the signal is blocked by a high building, or even occasionally foliage, but basically the area of coverage is universal within the beams of the satellite (which cover Europe). However, because of its distance, and because of power constraints, the capacity of the satellite to transmit and receive data is much less than a ground station. Ground stations can transmit a great deal more data, but their respective ranges are very much less - their range is between 80km and 150km. In the EAN they will cover the European land mass with the exception of Serbia. Where ground transmitters are sufficiently close to the coast those transmitters may also provide coverage over sea areas as well, but there will inevitably be large areas of the English Channel, North Sea, Bay of Biscay, Mediterranean and Baltic which will not be covered by any terrestrial transmitter/receiver.

61. The rationale of the EAN is said to be to provide full coverage for European passengers by a combination of the two segments. When the aircraft is over land, or within the coverage of the terrestrial stations, those stations will be able to provide good capacity for all or most of the time. However, the satellite can also provide coverage, albeit to a lower capacity, and can provide coverage over the land where that is required, and is the sole means of providing coverage over the sea (and Serbia) when the aircraft is outside the coverage area of land transmitters. Thus the two segments work together, or are capable of working together, to provide the EAN.

62. More detailed aspects of how the system operates and of the relative functions of the satellite and ground stations will appear later in the Decision in the context in which they are relevant.

F. THE DECISION APPEALED FROM - THE OFCOM DECISION

63. Ofcom's formal authorisation is contained in a Licence dated 22nd January 2018, but its reasons appear in the preceding Ofcom Authorisation Statement dated 10th October 2017. It is this latter document which is the more material for these purposes, because that is the document which makes it apparent what Ofcom did and did not consider.

64. The first section in the Ofcom Authorisation Statement is an Introduction. Paragraph 1.1 records that it concerns the use of frequency bands 1980 to 1995 MHz and 2170 to 2185 MHz which must be used for the implementation of systems providing Mobile Satellite Services. Paragraph 1.7 records that Inmarsat has said it intends to use those frequency bands to provide "broadband services" to passengers in aircraft flying over Europe, and that its EAN system will consist of "a combination of satellite and ground based communications links to the aircraft". Paragraph 1.8 records that Inmarsat has requested authorisation to that end, and paragraph 1.9 summarises Ofcom's decision in the following terms:

> "1.9 Based on the information provided by Inmarsat (as set out in Section 3 below), Ofcom is satisfied that (if the EAN is implemented in the way described by Inmarsat) the ground-based stations will constitute CGCs as defined in the EU Decision and the Regulations, and will comply with the applicable common conditions. Ofcom has therefore decided to grant Inmarsat an authorisation to transmit on the Frequency Bands using the ground-based stations, pursuant to section 8 of the Wireless Telegraphy Act 2006 ("WTA"). This authorisation will be issued shortly."

65. Section 2 correctly sets out the legal provisions which led up to the Ofcom Decision. Paragraph 2.11 reflects Ofcom's view that it was under an obligation (under the Regulations) to grant an authorisation in respect of CGCs, and goes on to set out other duties under the Communications Act 2003 (basically furthering the interests of consumers, promoting competition and managing the use of the electromagnetic spectrum) which do not seem to us to have been particularly invoked in the Ofcom Authorisation Statement.

66. Section 3 sets out details of the EAN and, to a significant degree, how Inmarsat proposes to introduce it into service, including some indications of

how relevant modules are to be fitted into aircraft. It also deals with the extent to which network functionality requires a satellite:

> "3.19 Inmarsat confirmed to Ofcom that the EAN network functionality can technically be provided without the satellite facing EAN MSS terminal installed on the aircraft".

67. Inmarsat confirmed that the Terrestrial Segment (the ground element) "can intrinsically carry more traffic through the same amount of spectrum" than the Satellite Segment. As a result Inmarsat was pushing for acceptance among airlines of both MSS and CGC terminals, so as to benefit from optimum connectivity. A configuration of the system "would seek to achieve the optimisation of coverage, grade of service and user experience". At paragraph 3.21 Ofcom acknowledged that airlines may have incentives not to install the Satellite Terminal, which gave rise to questions about the likely extent of the installation of that terminal. Ofcom had asked Inmarsat about the extent to which the EAN is offered and marketed as a hybrid system incorporating both terminals. The following paragraphs reflected that Inmarsat had confirmed to Ofcom that it was marketing the EAN as an integrated system. Both terminals were offered and Inmarsat was not considering offering a CGC-only system EAN to potential customers, although there was to be no obligation for customers to install the Satellite Terminal. Paragraph 3.27 set out material which Ofcom considered demonstrated that Inmarsat had a commitment to ensuring that a launch customer airline installed the satellite terminal on its fleet.

68. The Conclusions are set out in Section 4. Paragraph 4.1 and 4.2 reflect the view of Ofcom that it was obliged to grant the authorisation sought provided that Inmarsat was seeking to have authorised something which fell within the definition of CGCs within the definition in the legislation, and paragraph 4.3 sets out that definition together with the definition of "mobile satellite services". Paragraph 4.4 records that Ofcom was satisfied that the ground-based stations would constitute CGCs on the footing that:

(a) the ground-based stations would be used at fixed locations

(b) Inmarsat had confirmed to Ofcom that the system would make use of both the Satellite Segment and the Terrestrial Segments to provide service to aircraft. "The ground-based Stations comprising the Terrestrial Segment will therefore be used as complements to the MSS Segment."

(c) the ground-based stations would improve the availability of MSS because the Satellite Segment alone would have a lower performance, particularly in very dense areas, than an integrated service. Inmarsat's intention was therefore that the Terrestrial Segment would be used as complements to the MSS, improving the availability of the MSS within the EU.

69. Paragraph 4.5 recorded that Ofcom considered that, based on information provided by Inmarsat, the Ground-based Stations would comply with the common conditions required by Article 8(3) of the Decision. In relation to Condition (c) (independent operation in case of a failure of the satellite should not exceed 18 months) Ofcom recorded:

> "(c) Inmarsat's satellite has been launched and is currently operational, and there is currently no reason to suppose that the satellite component of the EAN system will be unavailable for any period."

70. We mention that last point because one of the criticisms of Mr Bowsher was that that paragraph misuses the word "unavailable". We do not think it does.

71. Paragraph 4.8 reads as follows:

> "4.8 Insofar as they are applicable, Ofcom is satisfied that its decision to authorise Inmarsat's use of the Ground-based Stations is in accordance with its general duties under the Communications Act and the WTA [Wireless Telegraphy Act]. The authorisation will enable Inmarsat to use the Frequency Bands (which are currently lying fallow) to provide an innovative service to consumers in the UK and the EU. The system developed by Inmarsat incorporates the Ground-based Stations as an integral part. They are needed as part of the system in order to improve its availability and to ensure the required quality of aeronautical broadband services which the system will provide."

72. Paragraphs 4.9 and 4.10 reflect the fact that the service could technically be provided without the Satellite Terminal being installed and that there may be

incentives for airlines not to install the Satellite Terminal. Ofcom therefore intended to monitor carefully the deployment of the EAN in order to ensure that the Ground-based Stations were indeed being used as complementary components of the EAN, and that use was also being made of the satellite side, including the Satellite Terminal. If it transpired that Inmarsat was providing services to aircraft exclusively by means of the Terrestrial Segment, Ofcom would consider taking enforcement action on the basis that the Ground-based Stations were not in fact being used as CGCs.

73. The licence referred to above recites some of the factual material and that the licensed equipment should form part of "a mobile satellite system", and that the licence was subject to the common conditions identified above. It is not necessary to set out or describe any other parts of that document.

G. THE WITNESSES

74. We received oral and written evidence from several witnesses, as follows.

75. **Dr William Webb.** Dr Webb gave expert evidence for Viasat. He explained how some of the technicalities of the EAN worked, or were likely to work (Inmarsat did not disclose some details for commercial confidentiality reasons) and sought to draw some inferences as to the relative contributions to the system of the satellite and CGC components. He was a straightforward witness, but from time to time he was forced to accept that his analysis had not gone down the right route, or far enough down the right route. Overall his evidence was helpful and credible but from time to time was not quite complete.

76. **Mr David Harrison** is currently Director of Technology and Strategy for Ofcom. He gave careful, measured and fair evidence about usage and capacity as he and Ofcom saw it.

77. **Mr Patrick Sharkey** is the programme director at Inmarsat who co-ordinates and supervises the technical development for the EAN. He gave evidence of the system, how it works, what the various elements do, their respective

capacities and the like. His evidence was clear, though his style was sometimes somewhat over-combative (though ultimately that did not affect his credibility).

78. We also received unchallenged witness statements from Mr Richard Baldridge (President and COO of Viasat), Mr Rupert Pearce (CEO of Inmarsat), Mr John Colahan (solicitor to Viasat, who produced some technical documents and public announcements) and Mr Brice Dorman (Lead of Analytics at Viasat, who produced some underlying flight data used in the case).

79. We do not propose to set out or summarise the evidence given by those various witnesses. The significant elements appear in the findings that we make below as to the nature, capacity and likely usage of the EAN.

H. THE RESPECTIVE CAPACITIES AND CAPABILITIES OF THE TWO SEGMENTS

80. The two experts in this case (Dr Webb and Mr Sharkey) had different perspectives on the significance to the overall EAN of the satellite and ground elements. Mr Harrison of Ofcom also expressed views on it. The debate was quite wide-ranging, and a number of figures and analyses were bandied around. They were all directed to assessing how the system might be used, or might best be used, or would probably be used, because the system is not currently in operation and there was no substantial evidence from Inmarsat as to how it would actually or definitely be used and configured.

81. The main point that Viasat sought to derive from the expert evidence in the case was that the satellite did not make a particularly meaningful contribution to the system, and the system was not in reality a mobile satellite system with complementary ground systems merely supplementing the satellite signal, but was one which was more properly described as a ground system with a bit of satellite add-on. It sought to make this point by analysing the capacity of part of the system and showing that the capacity, and likely usage, of the ground elements vastly exceeded the satellite's contribution. In this section of this Judgment we do not intend to set out the detail of the various wide-ranging

arguments. We shall confine ourselves to making our findings in respect of those matters. We can do so by making the following listed points. In what follows, and unless the contrary appears, references to percentages or proportions of flights or aeroplanes are references to all European flights, imagining that they were all interested in receiving the EAN service even though it cannot be predicted that they will all take it up.

(1) The ground components are undoubtedly capable of providing the vast bulk of the broadcast traffic in terms of measured data - in the region of 99%. The satellite is confined by its construction, nature, power and distance from the earth to much more limited available bandwidth. As a matter of pure carrying capacity the satellite's maximum capacity is 42.1 Mbits/s or 19 Gbytes/hr and the ground cells' aggregate capacity was 34,268 Mbits/s or 15,421 Gbytes/hr.

(2) Both the satellite and the CGCs are capable of providing coverage to aircraft over the land mass of Europe (apart from Serbia, where there is no CGC coverage). They are also both capable of providing coverage over the sea in regions adjacent to the land mass where the CGCs can still be picked up. The extent of that region depends on where the particular ground station is situated. It may be up to 150km from land, but may be rather less. For the remainder of the sea areas covered by the system (which is a considerable area) only the satellite can provide coverage.

(3) Turning the last point into some figures, it has been calculated that of European flights in the EAN area, planes spend 8.9% of their flight time over non-CGC covered areas (ie areas covered only by the satellite). For UK originating flights the figure is 6.7%. Those figures are based on the assumption that CGC stations are capable of reaching 150km out into the sea. If and insofar as that reach is less (which is quite conceivable) then those figures rise. For example, if the figure is reduced to 100km then the 8.9% figure rises to 12.3%.

(4) In terms of numbers of flights, and again assuming a 150km coastline coverage by CGCs, 30.7% of all flights would be dependent on the satellite for coverage for at least part of the flight. If one assumes a 100km coastline coverage that figure rises to 43%. Of the 30% flights, 20.6% of flight time would be in a satellite-only coverage area.

(5) Turning to the actual service which could be provided by the satellite, that is very much dependent on the demands of the consumer and the level of service which a subscribing airline chooses to provide. Using email and a little browsing is a relatively low-level usage level. Streaming video is a much higher usage level. Airlines can decide what levels of service to provide.

(6) Mr Webb carried out some assessments of the level of data that he thought the satellite could usefully convey to passengers on two bases. The first was a low load scenario based on some of Viasat's experience in providing aircraft services in the US. This was a figure of […][✂] per passenger on average. The second was a higher load scenario, in which 50% of passengers were streaming, browsing and using social media. This led to an average usage of […][✂] on average. No-one knows which pattern would be applicable to EAN. It all depends on what hypothesis one adopts as to passenger usage, whether charges are made for usage, and other factors. It is unnecessary, if not impossible, for us to determine which is the more likely, or whether the likely figures lie elsewhere. They are all within a possible range. What we can say is that those figures demonstrate that the satellite by itself can service no more (and probably less) than 2 aircraft on the high load scenario, and something like 20 aircraft on the low load scenario. Those are the bald figures arising out of that exercise.

(7) The significance of those figures to the EAN in practice depends in part on the number of planes that choose to install EAN. There are on average 550 shorthaul planes flying above Europe at any one time. If one takes the low load scenario, the satellite alone has the capacity to service only a very small portion of them. However, if one assume

that, say, only half of them use the EAN system then the proportion (of that number) doubles. Viasat would presumably say that that is a pitifully small proportion and contribution.

(8) However, if one then looks to those planes that need to use the system, because they are flying outside CGC coverage, then the picture changes. The percentage of flights that need to use the system at any one time is about 8% - see above. That translates to 44 planes. If only half of those were fitted with EAN then the low load scenario would be capable of being fulfilled in respect of practically all those planes (22).

(9) Those figures attempt to reduce potential coverage to some statistics which do not necessarily reflect the real world operation of the system. What is apparent from them is the satellite coverage cannot be described as de minimis; nor can it be described as predominant. It can be described (if adjectives matter) as significant in the sense of not insignificant. It is not, and can never be, anything like as significant as the ground-based coverage.

(10) Such figures are not necessarily the only basis of analysis. One can make the following observations about coverage more generally.

(11) Coverage over land is likely to be predominantly via the ground links. They have vastly more capacity and if they are working there is little reason to engage the satellite.

(12) The satellite has an obvious purpose where ground coverage is not available.

(13) The satellite has a potential purpose if there are odd blank spots in ground coverage caused, for example, by an inconveniently configured and placed mountain. It also has a purpose if a tower is temporarily down. It can produce continuity of coverage if, for example, a credit card payment is under way on a plane and ground coverage fails or is not available in the area.

(14) Each of the limbs of the system (satellite and CGC) would be capable of providing some sort of service by itself. However, the satellite by itself would provide a rather small scale service in its area which would be unlikely to be capable of providing a service which was attractive to airlines (or indeed to Inmarsat, bearing in mind the cost involved), whereas the CGC would be capable of providing, in its area of coverage, a much better level of service (though whether it would be commercially viable without the satellite is not something we can say). For aircraft travelling only within its area of coverage it would provide a good broadband-like service to lots of passengers. Mr Sharkey accepted this, and it is reflected by the fact that at least one airline has expressed an interest in fitting the ground-facing terminal alone, without the satellite element.

(15) Having said that, Inmarsat has not stated that it intends to make such an offering. It presents EAN as an integrated system in which both satellite- and ground-facing modules are to be installed in aeroplanes (though not necessarily on the same occasion because the former takes longer to install than the latter and a longer period for the aircraft to be out of service would have to be allowed for it).

(16) There was some consideration as to whether the balance would be materially shifted had a more powerful satellite been put up by Inmarsat, whether of the kind originally proposed in its application to the Commission or a comparable kind. While it is apparent that a bigger, more powerful, satellite would provide more satellite coverage, it would not change the above balance particularly significantly. One of the more powerful satellites proposed would still have left the CGCs potentially carrying 96%, as opposed to 99%, of the load (looking at overall capacity), and while that would affect the detail of some of the figures set out above, it would not significantly change the relative significance of the satellite and CGC coverages. At the end of the day we do not consider this to be a relevant matter.

I. THE STANDARD OF REVIEW

82. We are to apply a judicial review test but taking account of the merits (see Article 4(1) of the Framework Directive):

> "Member States shall ensure that effective mechanisms exist at national level under which any user or undertaking providing electronic communications networks and/or services who is affected by a decision of a national regulatory authority has the right of appeal against the decision to an appeal body that is independent of the parties involved. This body, which may be a court, shall have the appropriate expertise to enable it to carry out its functions effectively. Member States shall ensure that the merits of the case are duly taken into account and that there is an effective appeal mechanism."

83. Although we received submissions and authorities on this exercise we did not in the end detect much relevant dispute between the parties about its significance. The grounds of the appeal were, when analysed, within familiar judicial review territory - jurisdictional matters, or matters which ought to have been taken into account but were not. We do not think it necessary to dwell on the standard of review. The introduction of the interesting additional requirement of the "merits" did not seem to us to require any special consideration for these purposes.

J. VIASAT'S CASE ON THIS APPEAL

84. There were several grounds for Viasat's appeal, with various common threads running through them. The grounds, and our decision on them, appear in the sections below. We take them as expounded in Viasat's written final submissions.

K. GROUND 1(a)(i) - THE EAN IS NOT A MOBILE SATELLITE SYSTEM

85. It was not disputed that this was effectively a jurisdictional question. If the EAN was not a mobile satellite system within the European legislation then there was no power to authorise something as a CGC which could not, on this hypothesis, be within the legislation either.

86. Mr Bowsher advanced other reasons, dealt with elsewhere, for saying that the EAN was not a mobile satellite system, but Viasat's point under this ground is that the EAN system is not a mobile satellite system because there is no mobile earth station. The definition of "mobile satellite system" in Article 2(2) of the Selection Mechanism Decision is said to describe three paths for signals - mobile earth station to/from a satellite; mobile earth station to mobile earth station via a satellite(s); and mobile earth station to CGC station. We consider that to be correct; it was not disputed. Thus a mobile earth station has to be present in every path. Again, that is correct. Then Viasat argues that that latter factor is not present in the EAN because there is no mobile earth station where the CGC is involved.

87. The reason for that is said to be that a mobile earth station has to be capable of communicating with both the satellite and the CGC and under the EAN there is no such thing. The aircraft has two communications modules - the one on top which communicates with the satellite, and the one underneath which communicates with the ground (ie with the CGC). They are, for these purposes, separate entities (stations, we suppose). The upper one is a mobile earth station, but the lower one is not because it is not capable of communicating with the satellite, which any mobile earth station has to do. This is because of its positioning, design, function and language. It is positioned on a part of the plane where it cannot "see" (and therefore cannot communicate with) the satellite. It is not designed to do so, and that is not its function. Furthermore, in the EAN it speaks a different language from the satellite and could not communicate even if it were pointing the right way.

88. The respondents say that this a faulty analysis. There is a single mobile earth station, made up (compositely) of the two modules which communicate with space and ground, and the central connected server and control unit. As such, this station does communicate with the satellite as well as with the ground and is therefore a mobile earth station.

89. Viasat supports its analysis by logical analysis and by reference to definitions of the ITU. The ITU, which is an organisation made up of a large number of states which is responsible for international co-ordination of various aspects of

radio spectrum usage, issued a Final Act in 1992. It contains various Regulations, and those Regulations form part of the background to the legislation in this case. The ITU is referred to in the 2002 Radio Spectrum Decision, which requires due account to be taken of its work. It is referred to in Article 10 of the Selection Mechanism Decision. Its pronouncements are, in our view, capable of being a relevant part of the background.

90. The pronouncement relied on by Mr Bowsher is some of the definitions in the Regulations in the Final Act. Article 8 allocates the 2MHz band to mobile satellite services. The latest version of its Regulations (Edition of 2016) contains a series of definitions. "Station" is defined at Article 1 paragraph 1.61 as:

> "One or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radio communication service, or the radio astronomy service.
>
> Each station shall be classified by the service in which it operates permanently or temporarily."

91. There then follow a series of classifications of which the following are said to be relevant:

> "1.63 earth station: A station located either on the Earth's surface or within the major portion of the Earth's atmosphere and intended for communication:
>
> – with one or more space stations; or
>
> with one or more stations of the same kind by means of one or more reflecting satellites or other objects in space."

92. A "mobile station" is also defined:

> "1.68 mobile earth station: An earth station in the mobile-satellite service intended to be used while in motion or during halts at unspecified points"

93. "Mobile satellite service" is also defined:

> "1.25 mobile-satellite service: a radio communication service:
>
> – between mobile earth stations and one or more space stations, or between space stations used by the service; or
>
> – between mobile earth stations by means of one or more space stations.

This service may also include feeder links necessary for its operation."

94. Mr Bowsher submits that the earth-pointing equipment is a "station" for these purposes, and is defined by reference to the service in which it operates. That service is not a mobile satellite service because its ground-facing function does not fall within the definition of "mobile satellite service".

95. We do not consider that these particular definitions help us much in this appeal. While the Selection Mechanism Decision clearly treats the ITU material as part of its own background, it does not follow that one applies its definitions uncritically. The purpose for which the definitions are included in the ITU Regulations is set out in Article 1 paragraph 1.1:

> "For the purposes of these Regulations, the following terms have the meanings defined below. *These terms do not, however, necessarily apply for other purposes.*" [Our emphasis]

96. One therefore applies the definitions with caution. The ITU Regulation's "mobile earth station" is used as part of the "mobile satellite service", and it would indeed seem to point upwards (as it were) rather than downwards. However, the definition of "mobile satellite service" does not include any equivalent of the CGC element provided for by the Selection Mechanism Decision, so it does not assist on what constitutes a "mobile earth station" for the purposes of that Decision. In fact, a "mobile earth station" within the context of a mobile satellite system within that Decision may, unlike the one referred to in the ITU Regulations, point earthwards because the third pathway clearly anticipates that.

97. That assistance is therefore not available to us. We therefore have to decide, on the true construction of the Selection Mechanism Decision, whether the downward facing part of the system is a separate system from the satellite-facing part, and cannot be a mobile earth station, or whether the equipment on the plane, of which the downward-facing equipment forms part, should be taken as a whole and properly viewed as a mobile earth station.

98. We have concluded that the latter is the proper view. The starting point in the logic is that, obviously, one single unit - say, a handset - which talked to both

the satellite and the CGC would be a mobile earth station. There is no dispute about that. We do not think that that conclusion would be affected if the unit had two internal aerials, one of which addressed the satellite and one of which addressed the CGC. That would merely be a technical design choice which would not affect the overall description of the unit as a mobile earth station. Next imagine that the handset had separate circuitry as well for addressing the satellite and CGC respectively. Again, we do not think that that would affect the conclusion.

99. That is pretty close to what happens on an aircraft fitted with EAN. There are two separate aerials and separate circuitry (modems and other items supporting the aerials). The difference from the putative handset is that they are spatially separated. However, we do not think that that makes a difference. They both feed into the same central system in the aircraft including (we were told) a central controller which chooses from where to take and send a signal under control from the ground (via the satellite). The routed signal then feeds a central server, which accepts and distributes it to and from the passenger devices on the aircraft. The whole thing is, in our view, a mobile earth station as much as a single handset would be. There is therefore a mobile earth station in every path. The satellite-facing part of the system is undoubtedly capable, by itself, of constituting a mobile earth station, and we consider that the addition of a part which is designed just to address the ground, as part of the overall system on the plane, is an addition to a mobile earth station, bearing in mind that such things are entitled to address CGCs. Nor do we consider that it matters that the two parts speak different languages. That is a technical choice, and does not affect the correct view of the overall gathering together of the equipment.

100. Mr Bowsher had various counters to this conclusion. He said (correctly) that the ground-facing terminal was incapable of communicating with the satellite. That is true, both as a matter of physical positioning and as matter of communications language choice. However, that does not conclude the question. Rather, it assumes that the correct approach is to consider each element separately. If one assumes that then Mr Bowsher's answer automatically follows. However, we do not accept the assumption. It is

neither obvious nor correct, for the reasons given in the preceding paragraphs of this Judgment.

101. Next Mr Bowsher relied on a situation in which only a ground-facing module was fitted to an aircraft without a satellite-facing module. That, he said, would not amount to a mobile earth station because there was nothing communicating with a satellite. This was not a fanciful situation because Inmarsat was said to have indicated that the satellite equipment would not be fitted to every aeroplane, and at least one airline had expressed a real interest in not having the satellite-facing module. If such an installation would not amount to a mobile earth station, then the addition of a satellite facing station would not create one if it is added later.

102. The factual underpinning of this submission was not quite right. While it is right that there has been an expression of interest from at least one airline in having only the one module fitted, that was not something which was offered, as such, by Inmarsat. When Ofcom asked whether all components would be installed on each aircraft, Inmarsat responded:

> "Our expectation is that over time airlines will install all components on most aircraft. Due to aviation certification and installation considerations we plan to install the "Communications Manager" and "CGC terminal" on aircraft before we install the MSS terminals."

103. This indicates that there would be a sequencing of events, with the ground-facing terminal going first. There may be practical reasons for this in that fitting the ground-facing terminal takes much less time to fit than the satellite-facing terminal, and therefore does not take the aircraft out of service for so long and is easier to fit in with routine maintenance. But, it does not clearly say that it was "made clear" that Inmarsat would not fit the satellite equipment to all aircraft. A sample commercial proposal provided to Ofcom, said to be typical, offered both units, though it can fairly be said that Inmarsat seem to have been careful not to answer directly the question posed by Ofcom: "Is there to be a commercial option to take up only the ground components or only the satellite component?" There is no clear evidence that Inmarsat definitely intended to offer the ground-facing solution only.

104. But be that as it may, the analysis is irrelevant. It is in our view correct that a plane with only a ground-facing module would not be, or be carrying, a mobile earth station, because we agree that a mobile earth station has to be capable of communicating with a satellite (as Ofcom expressly accepted in Mr Holmes' final submissions). It is the addition of the satellite-facing unit which makes the overall unit a mobile earth station. That is our conclusion above. The system for which the authorisation has been granted is for a system which has such mobile earth stations, and the frequency band is licensed for use in that system. If it were the case that there were aircraft which had the ground-facing module fitted, but not the satellite-facing module, and if the ground-facing unit alone were used, then, to that extent, there would be an unauthorised and unlawful use of the frequency, but that would be a matter for the regulator to pursue. One would expect Ofcom, as the regulator, to do that unless there was a good (and probably short term) reason for fitting and using just the one terminal. Otherwise it would seem there would be an abuse of the system. But it would not mean that the EAN as a system should not be authorised, because the EAN as a system is one which has both satellite and ground-facing elements in one mobile earth station. That is what the authorisation sought, and that is the authorisation that was granted. The fact that it might be abused does not affect the lawfulness of the authorisation.

105. This ground therefore fails.

L. GROUND 1(a)(ii) - THE GROUND BASED STATIONS OF THE EAN ARE NOT COMPLEMENTARY GROUND COMPONENTS WITHIN THE MEANING OF ARTICLE 2(2)(b)

106. There are a number of aspects to this ground, but at its heart lay a point which was much emphasised by Viasat at various points in the argument. It is summarised by Viasat's submission that the Selection Mechanism Decision (and the preceding relevant Directives and Decisions) "prioritised" (Mr Bowsher's oft-used word) the satellite limb of the system.

107. What this undefined characterisation seems to have been intended to mean is that the underlying legislation required the satellite to be the mainstay of the

system, or the principal provider of the signal and data, or the predominant transmitter/receiver, or something like that. That situation was to be contrasted with what Viasat said existed under the EAN, where it is said that the ground-based element contributes the vast bulk of the signals and is the predominant element. Putting the point another way, and slightly more colloquially, Viasat says that the European legislation provided for a satellite system with a more limited ground-based supplement, whereas the EAN is a principally ground-based system with a bit of a satellite bolt-on. That is not what the legislation authorises.

108. We will deal with the factual correctness of this analysis before turning to other points. On the facts as we have found them to be there is no doubt that the EAN is a system in which the CGC carries the bulk of the payload in terms of data transmitted and received. Those facts appear above. While over land (apart from Serbia) and while near the coast the ground components could and probably will provide the level and standard of service to the consumer which the marketing proposes without the satellite. The same is not true of the satellite over the sea (and Serbia). It could provide coverage over those areas but not to the same standard. To that extent the ground element can be said to be dominant. On the other hand the satellite is an integrated part of the system, and is the only way of achieving coverage over the sea (and Serbia). That is a significant function both in terms of where coverage is provided, and also in terms of achieving a degree of continuity of coverage for aircraft flying over both sea and land. It is also capable of providing coverage over land where required in the event of ground transmitter outages or (not particularly likely) a ground signal being blocked by a physical feature.

109. Accordingly, the satellite cannot be dismissed as irrelevant. It has a relevance, though in coverage areas and data throughput terms it is not nearly as significant as the ground-based component.

110. Viasat relies on the relative significance of those two elements as demonstrating that the ground element does not meet the definition of CGC in Article 2(2) of the Selection Mechanism Decision. Mr Bowsher submits that that state of affairs demonstrates two things. First, that the CGC is not

complementary to the satellite element, and second that the ground stations do not "improve the availability of MSS" in the relevant areas, within the meaning of the definition.

111. As to the first of those, Viasat submits that the ground system cannot be "complementary" to the satellite-based part of the service because of its vastly disproportionate contribution to the system. Ofcom failed to consider this because it failed to consider whether the CGC contributed to the "legislative imperative of prioritising communications between Earth and space", and had it done so it should and would have concluded that it did not so contribute. The terrestrial segment could not be "complementary" to the satellite segment if it provided such a large part of the service to aircraft.

112. The first point we make is a linguistic one. The submission assumes that "complementary" imports a degree of subservience to the other part of the enterprise. The definition in the Oxford English Dictionary (not cited to us by any party) does not contain such an element. The two definitions are:

> "a. Forming a complement; completing, perfecting"; and
>
> "b. Of two (or more) things: Mutually complementing or completing each other's deficiencies."

113. None of the examples given under those definitions would support the necessity of a form of subservience of either part to the other. In fact, they would support the idea that relative importance in the relationship does not matter.

114. So linguistically Mr Bowsher's arguments are off to a bad start. However, his argument proceeding from the use of the word "complementary" has to be treated with great caution anyway. The word was not used in an undefined fashion, leaving a court to consider (amongst other things) what its normal meaning would be. It was used as part of a defined expression. What has to be construed is the words which are imported by the expression "complementary ground components", that is to say the words which follow and which define it. While the particular words used in the defined expression might be some guide as to intention if there was a degree of equivocation

elsewhere, what really matters is how the legislator defined the defined term, not the meaning of the individual words which are defined compositely.

115. That conclusion means that it is not necessary, at least at this stage of the argument, to consider whether Mr Bowsher was right to say there was "prioritisation" of the satellite element, but since the point was a running theme in Viasat's submissions, we will consider it at this point.

116. The key provision in this regard is said to be Article 1(1) of the Selection Mechanism Decision. It is said that this Article makes it clear that the Decision creates a harmonised procedure for the selection of operators to use the 2Ghz band for communications between earth and space. This is contrasted by Mr Bowsher with the nature of a CGC, which is a terrestrial link. So far as we understand this submission, we think it vests Article 1(1) with too much significance for these purposes. It certainly sets out its intentions for what it regards as "mobile satellite systems" and communication between earth and space, but that does not of itself give "priority" or some sort of electromagnetic dominance to the earth-space links, though exploiting those links is certainly the purpose of the Decision. There is no suggestion of any form of spectrum superiority of the satellite link here.

117. Mr Bowsher went on to rely on other matters from the recitals - the desire of the legislator to promote the availability of pan-European services including rural areas (recitals (5) and (14)); the need for harmonisation given the high up-front investment required for a satellite and the potential for interference (recitals (11) and (12)); the need for a long period of time before launch and the complex technical steps required (recital (15), which we do not think it necessary to quote); and the Annex to the Decision setting out milestones calibrated by reference to the specific satellite proposed. We consider that, while these provisions obviously cater for, require and pre-suppose a satellite, they do not support a case for "priority" for the satellite element of the kind suggested by Mr Bowsher. Obviously they require a satellite - that is what the whole scheme is about. But they do not necessarily presuppose a spectrum-dominating satellite.

118. Next Mr Bowsher relies on recital (9) of the Harmonisation Decision (above). It is suggested that the reference to "primary basis" is a reference to the satellite being the primary provider in a mobile satellite system. We consider that that misreads the recital. The reference to "primary" is not a reference to the satellite's capability. It qualifies the preceding concept of making available and designating the 2 GHz bands - they are to be made available primarily (to use an associated word) for mobile satellite services, ie those services are to be given precedence over any other services which might otherwise interfere with their signalling. The true concept is embodied in recital (11), which reads:

> "(11) It is appropriate to give priority to systems providing MSS in the 2 GHz bands because other frequency bands, for example those designated for GSM and UNTS/IMT-2000, are available for systems providing terrestrial-only mobile services.

119. The next factor relied on took Mr Bowsher back to details of the Call for Applications and the assessment process which followed. He submitted that the emphasis was all on assessing the quality of the applicants in relation to the satellite services, and the structure was such that there was no assessment of the ability to provide CGCs at that stage. This, and the subsequent CGC authorisation mechanism (which left it to member states) demonstrated that the satellite element was the more important element, and supported his case on "prioritisation". We disagree. The Call for Applications was designed to end up with undertakings that were properly fitted to launch and run a satellite. The material relied on demonstrates that that qualification was (not surprisingly) the important thing. It does not say anything about the relative data-bearing significance of the satellite and any CGC elements.

120. Thus far, therefore, we do not consider that there is material supporting Mr Bowsher's "prioritisation" point. However, he had a particular point supporting his proposition that the CGCs were not actually complementary for these purposes, turning on another of the recitals.

121. Recital (18) of the Selection Mechanism Decision is the recital which says most about CGCs and their purpose. It describes what the "typical" use of the CGCs would be - to "enhance the services offered via the satellite in areas

where it may not be possible to retain a continuous line of sight with the satellite due to obstructions in the skyline caused by buildings and terrain."

122. Mr Bowsher said this was consistent with, and demonstrated, that the CGCs were to bolster an otherwise predominant satellite in terms of coverage and data provision. Its use was to be limited, not as general as in the EAN. We agree that that recital is consistent with that, but the word "typically" is important. It does not connote a degree of exclusivity in terms of the example given. What is given is what was considered, in 2008, to be a typical example. Great care must be taken in translating such a statement into a more general proposition, especially in a context in which weight is given to innovation and services to consumers. If there were more material in the Decision (or elsewhere) which supported a dominant position for the satellite then this statement could be added to the catalogue but (as will appear by the end of this Judgment) we do not think there is. What is of more significance is what the operative part of the Decision says (or does not say, or prescribe) about the relative importance of the satellite and CGC elements. We do not think that "prioritisation" is sufficiently required there. Accordingly we do not consider that the "prioritisation" underpinning is available to Viasat.

123. In this context Mr Bowsher sought to make much of the constant use of "MSS" meaning "mobile satellite systems" (as defined) in various of the provisions of the Selection Mechanism Decision. He pointed in particular to Article 1(1), Article 4(1)(c)(ii) and Article 7(2)(b) and the incorporated Milestones. He submitted that all references to MSS must mean the satellite-only part of the system, which emphasised the "prioritisation" of the satellite. We do not consider these references have that effect. They are a natural way of describing the system which the legislators wished to describe but we do not think they introduce the "prioritisation" relied on by Viasat. Nor do we consider that the background of the CEPT report assists Mr Bowsher at the end of the day, when the legislation itself is considered.

124. As well as relying on the actual word "complementary", Mr Bowsher then submitted that the CGCs do not, on the facts of the EAN, "improve the availability of MSS [within the satellite footprint] where communications with

one or more space stations cannot be ensured with the required quality" within the wording of Article 2(2)(b) of the Selection Mechanism Decision, and that the Ofcom Decision erred in holding that it did. First, it would not be used for that purpose because it would be used where the satellite terminal had not been fitted (so there was no satellite system to improve) and second, where it was fitted the ground resources were being used in accordance with "what is the optimum use of the available radio signal" (to quote the Ofcom Authorisation Statement at para 3.8(c)), which is not the same thing as the legislative requirement. Accordingly, he submitted, the EAN ground stations could not be CGCs within the wording of the legislation and ought not to be authorised.

125. His first point has no relevance here. It is no part of the system as authorised that satellite terminals should not be fitted to aircraft. If they are not then that is a matter of compliance, not something which undermines the authorisation and means the authorisation is for something other than it should be.

126. The second point has a resonance with the "prioritisation" point. At its heart is the proposition that the CGCs are not enhancing the quality of the satellite signal in some situations where that signal is not of the required (satellite-strength) quality. Instead, the CGCs are setting their own baseline and providing a signal up to that much higher standard, not filling in holes in the satellite quality where the satellite, for one reason or another, cannot provide it. That is said to be not "improving the availability" of the signal where "it cannot be ensured with the required quality". The "required quality" is said to be ascertainable by going back to the proposals and commitments given at the time of the selection process.

127. Mr Bowsher relied on the Call for Applications. This required applicants to fulfil criteria, including criteria described as "Pan-EU geographic coverage … comprising the following three sub-criteria". One of the criteria was that applicants should "declare the service area of the mobile satellite system". The description of that goes on:

> "The service area is defined as the area wherein, for the services referenced in the sub-criterion 1.1, the field strength is sufficient for electronic communications with adequate permanent availability and quality of service

> using vehicular, handheld or other mobile user terminals depending on the principal means of reception of the services concerned." (Mr Bowsher's emphasis)

128. It was not clear from his written submissions quite how Mr Bowsher deployed this provision in his favour, but we assume that he was suggesting that it provided, or supported the suggestion, that the overall quality of service to which the CGCs were to contribute was to be set by the satellite as proposed in the application and could not be generally improved by CGCs. We do not consider that this provision provides that support. It is a provision tucked away in a list of criteria that have to be demonstrated for an application to succeed. It was not intended itself to set a standard of signal; it was intended to be a way of measuring the coverage area. It might be thought to import a minimum standard in order to make sense of the area requirement, but it was not prescribing any further standard, or assuming any more than that.

129. There is in our view no other relevant standard by which "improvement" should be judged which would help Mr Bowsher. The CGCs do "improve the availability of [mobile satellite services] in the area covered by" the satellite, and they improve it where the satellite cannot achieve the "required quality". We do not think that this test falls to be considered by a benchmark set by the satellite alone, with the CGCs filling in a few patches where the satellite cannot cope. While it is true that that was the "typical" situation envisaged when the system was authorised, we do not consider that the wording requires that that situation, and its analogues, are the only things covered by the wording of Article 2(2). Nor do we consider that Mr Bowsher's increasingly heavy reliance on the true meaning of MSS in Article 2(2)(b) assists him in this regard. We do not consider that its meaning there (accepted by Ofcom to mean just the satellite element) means that inevitably the satellite-only part of the service should be a benchmark, when that provision is viewed as a whole (as it has to be).

130. Last under this ground, Mr Bowsher submitted that Ofcom erred in not conducting a tower by tower analysis of whether the state of the satellite signal required the assistance of each tower at that particular position. He relied again on recital (18) of the Selection Mechanism Decision and its reference to

national authorities making requests "to provide technical information indicating how particular complementary ground components would improve the availability of MSS in the geographical areas where communications with one or more space stations cannot be ensured with the required quality". (Mr Bowsher's emphasis of the important word in the recital for these purposes.)

131. It is true that Ofcom did not consider the need for any given tower on a tower by tower basis, but we do not consider that that was required. The full wording of recital (18), set out above, demonstrates that the local regulatory authorities might make requests if they wished, but were not obliged to. If they had all the information they needed then they need not make requests. In the present case Ofcom had the information. The coverage was intended to be blanket coverage. No requests were required to establish that. Had the proposal been one to fill in particular blank spots in coverage, then requests might or might not be needed, and questions might have been necessary (though if that had been the basis of the application one would have expected Inmarsat itself to have justified each tower), but that was not the basis of the application. Inmarsat wanted to have coverage to achieve its standard of widespread and apparent universal coverage, and no tower by tower consideration would be required in relation to that (unless it were suggested that the number of towers was excessive for that purpose, which it was not).

132. This ground therefore fails.

M. GROUND 1(a)(iii) - NON-COMPLIANCE WITH THE COMMON CONDITIONS

133. It was common ground that Article 8(3) of the Selection Mechanism Decision required any national authorisation for a CGC to comply with the conditions listed under paragraphs (a) to (d) of that provision. Viasat contends that the EAN is non-compliant with those conditions for the following reasons, that Ofcom erred in failing to find that and, as a result, it granted an authorisation which ought not to have been granted.

134. Viasat's first point is based on the second condition:

> "(b) complementary ground components shall constitute an integral part of a mobile satellite system and shall be controlled by the satellite resource and network management mechanism …"

135. It is said by Viasat that there is non-compliance with this because the CGC is not "an integral part of a mobile satellite system". Ofcom merely considered whether the CGCs in this case were part of the EAN, and not whether they were part of a mobile satellite system within the legislation. Had it asked the right question then it would have concluded that it was not because the CGCs were not capable of communicating with a mobile earth station.

136. This turns out to be a different way of putting the point which we have dealt with above, which is whether the equipment on the plane is capable of amounting to a mobile earth station. If one considers the earth-facing module by itself, then that is not a mobile earth station for the reasons appearing above. But the correct view is that which we have found above - the totality of the equipment on the plane should be viewed as a mobile earth station, because as a whole it is capable of communicating with the ground and with the satellite (which is the important factor). Since, on our findings, the totality of the equipment is a mobile earth station, this point fails for that reason.

137. Next Viasat relies on another breach of the same condition. It is said that the CGCs are not controlled by the satellite, or that the satellite does not have any role in the control of the CGCs, so this requirement is not complied with and Ofcom erred in not so finding.

138. This ground is based on a misconstruction of the provision and a misunderstanding of the facts. The CGCs have to be controlled by "the satellite resource and network management mechanism". That is a composite phrase (and notion). There are not two things - a "satellite resource" and a "network management mechanism". There is one thing - a "satellite resource and network management mechanism", a management mechanism which controls both the satellite resource and the network. That does the controlling - not just the "satellite resource".

139. The Ofcom Authorisation Statement finds that there is such a thing. Paragraph 3.8(c) says:

> "(c) Both the satellite gateway and the Ground-based Stations connect to a **Routing Engine** (also referred to as the Integrated Transport Management Centre) which receives services from internet providers. The Routing Engine determines whether the Communications Manager on the plane should use the Satellite Terminal or the Ground-facing Terminal according to prevailing congestion, traffic load and link quality to make optimum use of the available radio resources."

140. There is a diagrammatic representation of this above the paragraph in the Ofcom Authorisation Statement. Paragraph 4.6(c) finds that the requirement in Article 3(3)(b) is fulfilled for this reason. The facts are not challenged, and once the correct construction is understood it becomes apparent that Ofcom's conclusion is correct. On the footing of the correct construction Dr Webb accepted that the CGCs could be controlled from the ground. His report had previously proceeded on the wrong construction of the condition. This basis of appeal therefore also fails.

141. The third condition-related ground of appeal relates to condition (c):

> "(c) independent operation of complementary ground components in case of failure of the satellite component of the associated mobile satellite system shall not exceed 18 months."

142. Viasat contends that independent operation of the system will not be limited to 18 months, or the failure of the satellite, because, despite the fact that a satellite has been launched, the CGCs in the EAN can and will be used independently because of delays in fitting the satellite-facing module after the ground-facing module has been fitted to an aircraft, and the expectation that the satellite-facing module would not be fitted to all aircraft. Accordingly this condition would not be fulfilled; there would be independent operation from the outset. Ofcom ought to have found that this amounted to independent use contrary to this condition, which required satellite failure before that independent use is permitted.

143. This ground, so far as we understand it, seems to us to proceed on a false assumption as to when and how this condition operates, and the same erroneous approach to the authorisation and Inmarsat's alleged plans as that

identified above. First, this condition deals explicitly with the eventuality of a satellite failure and, as a result of that failure, the use of CGCs without the satellite. It provides that in that event independent operation of the CGCs shall not exceed 18 months. It is a condition which looks to the future, and by implication reinforces the notion that CGCs have to be used with a satellite under normal conditions, but does not itself relate to normal conditions. There is no question of that condition having any material operation as at the date of the Authorisation, because there had been no satellite failure. It is a condition that ought to be imposed in the Authorisation (and was), in order to deal with future events. Ofcom did find that there was no reason to suppose that the satellite component would be unavailable for any period, but that is an irrelevant finding for these purposes (and there is nothing wrong with it anyway). It ought to have imposed this condition as a condition of the licence, and it did - see Schedule 1 of the licence granted as a result of the Authorisation Statement (which it is unnecessary to set out).

144. Second, it confuses what the Authorisation authorises with what Inmarsat are said to want to do. We have dealt with this above. The Authorisation authorises use of the CGC elements with the satellite. Use of it without the satellite would not comply with the authorisation, so even if Inmarsat intended to try to use it independently, without fitting a satellite terminal, it would be in breach of the Authorisation and Licence - see above. What was authorised was the EAN as presented to Ofcom. Anything else is unauthorised by Ofcom.

145. Again, therefore, this ground fails.

N. GROUND 1(b) - CHANGES IN INMARSAT'S PROPOSALS OVER TIME REQUIRE OFCOM TO REFUSE TO AUTHORISE THE EAN

146. This ground of appeal starts with what are said to be the original proposals of Inmarsat when it got through the selection process (so far as those proposals are known) and then compares them with the EAN as it was presented to Ofcom. There are said to be very material differences between the two such that if Inmarsat gets an authorisation from Ofcom then there has been an

infringement of the EU law principles of transparency and equal treatment. That is because the original system for which it was authorised was so different that the competition at the time has been rendered meaningless and unfair to other potential applicants who did not apply.

147. So far as the principles of equality and transparency are concerned, it is Viasat's case that they are engaged by the authorisation process in this case - see Articles 3(1) and 3(2) of the Selection Mechanism Decision and would be engaged anyway because this is a cross-border authorisation exercise of the kind which invokes them. The application of those principles requires the authorising bodies (viz Ofcom in this case) to see whether what has been done to the project by Inmarsat is an infringement of those principles, and if it is then they are obliged to reject the authorisation application because those bodies are required to apply European law principles in considering them.

148. The principles are best illustrated in cases involving tenders, where they have been held to operate so as to prevent altering the terms of the tender in respect of less than all the tenderers, and to prevent improper alterations of the contract after the tender process has been completed. Thus for example:

> "28. It follows from the Court's case-law that the principle of equal treatment and the obligation of transparency resulting therefrom preclude, following the award of a public contract, the contracting authority and the successful tenderer from amending the provisions of that contract in such a way that those provisions differ materially in character from those of the original contract. Such will be the case if the proposed amendments would either extend the scope of the contract considerably to encompass elements not initially covered or to change the economic balance of the contract in favour of the successful tenderer, or if those changes are liable to call into question the award of the contract, in the sense that, had such amendments been incorporated in the documents which had governed the original contract award procedure, either another tender would have been accepted or other tenderers might have been admitted to that procedure (see, to that effect, inter alia, judgment of 19 June 2008, *pressetext Nachrichtenagentur*, C-454/06, EU:C:2008:351, paragraphs 34 to 37).
>
> 29. As regards the latter case, it must be noted that an amendment of the elements of a contract consisting in a reduction in the scope of that contract's subject matter may result in it being brought within reach of a greater number of economic operators. Provided that the original scope of the contract meant that only certain undertakings were capable of presenting an application or submitting a tender, any reduction in the scope of that contract may result in that contract being of interest also to smaller economic operators. Moreover, since the minimum levels of ability required for a specific contract must,

> pursuant to the second subparagraph of Article 44(2) of Directive 2004/18, be related and proportionate to the subject matter of the contract, a reduction in that contract's scope is capable of resulting in a proportional reduction of the level of the abilities required of the candidates or tenderers." (Case C-549/14 *Finn Frogne A/S v Rigspolitiet ved Center for Beredskabskommunikation* EU:C:2016:634)

149. The principles are not absolute, however. If the terms of a tender allow for subsequent alteration of terms then there can be a variation:

> "37. Although the principle of equal treatment and the obligation of transparency must be guaranteed even in regard to specific public contracts, this does not mean that the particular aspects of those contracts cannot be taken into account. That legal imperative and that practical necessity are reconciled, first, through strict compliance with the conditions of a contract as they were laid down in the contract documents up to the end of the implementation phase of that contract, but also, second, through the possibility of making express provision, in those documents, for the option for the contracting authority to adjust certain conditions, even material ones, of that contract after it has been awarded. By expressly providing for that option and setting the rules for the application thereof in those documents, the contracting authority ensures that all economic operators interested in participating in the procurement procedure are aware of that possibility from the outset and are therefore on an equal footing when formulating their respective tenders (see, by analogy, judgment of 29 April 2004, *Commission* v *CAS Succhi di Frutta*, C-496/99 P, EU:C:2004:236, paragraphs 112, 115, 117 and 118)." (*Finn Frogne,* supra).

150. The principles are also capable of applying to concessions which do not take the form of selection from tenders:

> "28. Moreover, even though service concessions do not come within the scope of Directive 2004/18 by virtue of Article 17 thereof, the public authorities which grant such a concession are required to comply with the fundamental rules of the TFEU, the principles of non-discrimination on grounds of nationality and equal treatment, and also the obligation of transparency thereunder, since that concession is of certain cross-border interest (see, to that effect, inter alia Case C-347/06 *ASM Brescia* [2008] ECR I-5641, paragraphs 58 and 59 and the case-law cited)." (Case C-221/12 *Belgacom NV v Interkommunale voor Teledsitributie van het Gewest Antwerpen (Integan) and others* EU:C:2013:736)

151. Viasat submits that the principles therefore apply to the grant of authorisation by Ofcom in this case. It says that they are infringed by reason of the following matters:

(1) The original applications were for a mobile satellite system and were assessed accordingly. However, the system on which the application

for authorisation was based (the EAN) is not for such a system for the reasons given above.

(2) The definitions within Article 2(2) of the Selection Mechanism Decision have not been met; nor have the milestones and social policy commitments required by the application procedure. Inmarsat have been forgiven and allowed delays in the project and the substitution of a different satellite. If other potential applicants (such as Viasat) had understood that that would be the case then they might (and in Viasat's case would) have joined in the process. As it is they have been deprived of doing so because they did not know how the goalposts would be moved (to put it colloquially).

(3) Inmarsat have not complied, and have not been required to comply, with various of the Common Conditions imposed under Article 7 of the Selection Mechanism Decision. The "economic balance" has been shifted by this and by the fact that a substantially different satellite has been launched and cheaper equipment has been used when compared with that in Inmarsat's application. Furthermore, it is not making available a continuous service to 50% of the population in each member state, and has introduced a different partner or sub-contractor (Deutsche Telekom). There is therefore a change in operator.

152. It is said that there has therefore been a substantial modification of the original proposals and in the working out of the first authorisation, in contravention of the above principles. To quote from Mr Bowsher's written final submissions: "[The EAN for which authorisation has been given] is radically different in content, has required less investment by Inmarsat, its coverage is very different and it is being provided very late." If the EAN, with its extensive network of ground stations, providing far more capacity than the satellite, had been understood to be within the possible authorisation then others (including Viasat) might have applied themselves. As it is Inmarsat have got very valuable rights for no consideration when those rights were not those originally contemplated by the authorisation mechanism. Those in the market have not been treated fairly or equally. Mr Bowsher said the position was akin

to that which operates where there has been a tender process and the final contract is very different from that proposed in the tender process; if the terms of the final contract had been part of the original tender, potential participants would have acted differently. The economic balance has been shifted in favour of Inmarsat in a way that was not contemplated in or foreshadowed by the original process. There has been a failure to force adherence to the Common Conditions, including commitments given, which changes the economic balance and amounts to a fundamental change.

153. Ofcom's and Inmarsat's response can be summarised briefly. They do not accept that the EAN is not a mobile satellite system, and the remaining matters complained of by Viasat are, so far as they are legitimate complaints at all, not matters for Ofcom in its authorisation process. They are matters of enforcement. The principles of equality and transparency do not operate in the process in the manner suggested by Viasat.

154. We start by listing items which Viasat says amount to substantial change in the project and making some findings about them. They were listed as follows:

(i) The satellite which Inmarsat now propose to use is "radically different" from the one proposed in the Commission selection process. It has 3 beams, not 9 (in 2 polarisations), from multiple antennas none of which is bigger than 3m in diameter, which is understood to be a smaller diameter than that originally proposed. Dr Webb described 3 beams as being "an exceedingly low number for a communications satellite". As a result the satellite capacity is very much lower than that in Inmarsat's original application.

(ii) The satellite equipment was cheaper than would be used in a true satellite-based system.

(iii) Inmarsat is unable to meet the requirement of making available a continuous mobile satellite service to 50% of the population in each member state.

(iv) Inmarsat has introduced a different partner, a substitute or a sub-contractor, in the form of Deutsche Telekom, which provides the CGC element.

(v) Inmarsat delayed the availability of the satellite service beyond the deadlines of 13th May 2011 said to be required by the Selection Mechanism Decision Article 7(2)(b) (one of the application Common Conditions) and 12th June 2016 said to be required by Article 4(1)(c) (specified coverage required to be achieved by 7 years from the publication of the Commission's decision).

(vi) There also seems to be an overriding complaint that what Inmarsat are proposing is not a mobile satellite system at all. It is a ground-based system with a satellite add-on. That, too, is said to be a departure from the original application and first authorisation.

155. We can deal with point (vi) at this stage because we have already dealt with it above. If Mr Bowsher were right about that then he would not need this additional ground 1(b) because Inmarsat would not have a compliant system at all. However, we have rejected that argument for the reasons appearing above, and it therefore cannot be re-introduced under this head.

156. So far as the other complaints are concerned, not much is known about the detail of the system described in Inmarsat's original application for selection because it has not been disclosed by Inmarsat. However, from what information we have we are able to find the following facts so far as the other complaints are concerned, though without the value judgments engrafted on to them by Mr Bowsher.

(i) this seems to be true.

(ii) Mr Pearce, for Inmarsat, accepted that Inmarsat's costs of EAN were lower than originally prescribed, so we assume the system is indeed cheaper.

(iii) while the satellite covers over 50% of the population in footprint coverage terms (it covers 100% in those terms) the service is not to be made available to 50% of the population in terms of their being able to access it on the ground. The service is directed to those on planes, who will at any one moment be a small fraction of the population of Europe. Only those on planes will be able to receive it.

(iv) it is true that Deutsche Telekom has been introduced to run the ground-based CGCs. However, it does not appear that they are a "partner" in a meaningful sense. Nor are they substitutes. They seem to be contractors and there is no evidence that they are not accountable to Inmarsat, who seem to be in overall control. To call them "sub-contractors" would suggest a head contract, which does not exist.

(v) the delays described under this ground did indeed exist. Inmarsat did not achieve a satellite launch within 24 months of its selection (Milestone 7) and did not achieve the coverage required by Article 4(1)(c) within 7 years from selection. Mr Baldridge gave evidence, based on Inmarsat's public filings, of some sort of arrangement between Inmarsat and the Commission which enabled a late start, but details of that are not known. Some sort of compliance notice was issued to Inmarsat by Ofcom on 1st November 2016, requiring the spectrum to be put to use no later than December 2016, but even that has not been complied with.

157. There is therefore some substance in the underlying facts relied on, but we consider that this ground fails for the reasons given by Ofcom and Inmarsat. The equality and transparency principles relied on do operate in relation to

aspects of the overall selection mechanism, but not in relation to the disputed authorisation in the manner suggested. That is because of a combination of three related factors - the nature of the parameters which underlie Viasat's specific complaints, the appropriate method of enforcement and Ofcom's limited functions. Between them they leave no room for the operation of the principles of equality and transparency as they are invoked by Viasat.

158. Once Mr Bowsher is deprived of the opportunity to say that what is proposed is not a mobile satellite system within Article 2(2), he has to say that what he says is non-compliance with the original specifications is a shift in the economics such as to contravene the principles. In order to consider this point it is necessary to consider how, if at all, the boundaries that he says have been transgressed have been embedded in the scheme.

159. So far as the capacity of the satellite is concerned (his point (i)), it is not apparent that this was actually embedded as a requirement of the scheme. It is vital to remember that what was authorised under the application system was not a particular satellite system, but a provider of a mobile satellite system. This is apparent throughout the Selection Mechanism Decision. Thus (by way of example):

> Article 1(1) - "This Decision creates a Community procedure for the common selection of operators of mobile satellite systems …"
>
> Article 1(2) - "Operators of mobile satellite systems shall be selected through a Community procedure in accordance with Title II."
>
> Article 5 - "Within 40 working days … the Commission shall assess whether applicants have demonstrated the required level of technical and commercial development of their respective mobile satellite systems. Such assessment shall rely on the satisfactory completion of milestones one to five as set out in the Annex. The credibility of applicants and the viability of the proposed mobile satellite systems shall be taken into account throughout the first selection phase."

> Article 6 - "Within 80 working days following publication of the list of eligible applicants identified in the first selection phase, the Commission shall … adopt a decision on the selection of applicants. The decision shall identify the selected applicants ranked on the basis of the extent to which they meet the selection criteria, the reasons on which the decision is based, as well as the frequencies which each selected applicant is to be authorised to use …"

160. The same point is also apparent from the actual Selection Decision – see the terms set out above.

161. The call for applications required the provision of information on which applications could be judged, but the only commitments which were called for were those reflecting Article 4(1)(c) of the Selection Mechanism Decision, namely the coverage requirements. There was no required commitment as to the nature or type of the particular satellite to be deployed. While Milestone 2 required evidence of a binding agreement for the manufacture of the satellite required, the applicants were not necessarily tied into that particular satellite (though it was obviously not actually anticipated it would change).

162. The method of ensuring that authorised undertakings stayed within the right parameters was thus not by tying them in to some detailed specifications as a matter of primary obligation (save for any specific commitments which were given and compliance with which was required under Article 7(2)(c)). It was by requiring compliance with the Milestones set out in the Annex to the Selection Mechanism Decision. Milestones one to five had to be complied with as part of the first selection process; Milestones six to nine were made conditions of the authorisation of the provision of satellite services. Those Milestones did not tie the undertakings to specific systems against which the EAN can be measured (and, if Mr Bowsher is right, found wanting). They did not enshrine the content of the original application so as to make it an absolute benchmark.

163. Furthermore, the function of the national authorities did not involve their carrying out the sort of assessment which Viasat now requires. Their

functions were and are more limited than that. The structure of the authorisation scheme is designed to prevent a fragmentation of approach to matters affecting the scheme as a whole while allowing national authorities the right to control matters affecting their localities. This is evident from a number of things:

(i) Overall harmonisation in terms of the assignment of the 2 Ghz band to mobile satellite systems is achieved by the Harmonisation Decision.

(ii) Recital (11) of the Selection Mechanism Decision provides:

> "In order to prevent Member States from taking decisions that might lead to fragmentation of the internal market and undermine the objectives identified in Article 8 of Directive 2002/21/EEC, selection criteria for mobile satellite systems should exceptionally be harmonised so that the selection process results in availability of MSS across of the European Union."

(iii) Recital (12) is in the same vein:

> "Moreover, the successful launch of MSS requires coordination of regulatory action by Member States. Differences in national selection procedures could still create fragmentation of the internal market due to the divergent implementation of selection criteria, including the weighting of the criteria, or different timescales of the selection procedures. This would result in a patchwork of successful applicant selected in contradiction to the pan- European nature of those MSS. Selection of different operators of mobile satellite systems by different Member States could imply complex harmful interference situations or could mean that a selected operator is prevented from providing a pan- European satellite service, for instance where different radio frequencies are assigned to the operator in different Member States. Therefore, harmonisation of the selection criteria should be supplemented by the establishment of a common selection mechanism that would provide a coordinated selection outcome for all Member States."

164. Similarly Recital (13):

> "Since authorisation of selected operators of mobile satellite systems involves attachment of conditions to such authorisations and a broad range of national provisions applicable in the field of European communications must thus be taken into account, the authorisation issues should be dealt with by the competent authorities of the Member States. However, in order to ensure consistency of authorisation approaches between different Member States, provisions relating to the synchronised assignment of spectrum and

> harmonised authorisation conditions should be established at the Community level, without prejudice to specific national conditions compatible with Community law."

165. Once an applicant has been selected Member States come under a form of obligation to grant an authorisation. The national authorities are not entitled to review the application for authorisation and consider the sort of things that were dealt with in the original application. That is reflected in Article 7(1):

> "1. Member States shall ensure that the selected applicants, in accordance with the time frame and the service area to which the selected applicants have committed themselves, in accordance with Article 4(1)(c), and in accordance with national and Community law, have the right to use the specific radio frequency identified in the Commission decision adopted pursuant to Articles 5(2) or 6(3) and the right to operate a mobile satellite system. They shall inform selected applicants of those rights accordingly."

166. The Decision even goes so far as to prescribe the conditions to be imposed in that national authorisation, namely the common conditions imposed by virtue of Articles 7(2) and 8(3). Those conditions include compliance with milestones six to nine, and adherence to any commitments made during the original selection process. The national authority's scope for review is therefore limited. In the case of Ofcom that is reflected in Regulation 3(1) of the Satellite Service Regulations, set out above.

167. We consider that that structure of the legislation makes it unlikely that it was intended that individual national authorities should consider the sort of points that Viasat seeks to raise under this ground. It would lead to the sort of fragmentation of approach which the structure seeks to avoid. Furthermore, the sort of wide-ranging inquiry which would be involved would not really be consistent with the terms and structure of the legislation under which operators (not systems) were approved by the Commission and the national authorities were then essentially obliged to grant local licences taking into account local factors (provided, of course, what was put forward was still a mobile satellite system).

168. In reaching this conclusion we have not ignored the wording of Articles 7(1) and 8(1) of the Selection Mechanism Decision, relied on by Mr Bowsher. That wording refers expressly to principles of Community law:

> "7(1) Member States shall ensure that the selected applicants… in accordance with national and Community law, have the right to use the specific radio frequency identified in the Commission decision…"

And Article 8(1):

> "Member States shall, in accordance with national and Community law, ensure that their competent authorities grant to the applicant selected in accordance with Title II … the authorisations necessary for the provision of complementary ground components…"

169. Mr Bowsher seems to rely on the words which we have emphasised as allowing or requiring the exercise which he seeks to have conducted. We agree with Mr Holmes that that reliance is misplaced. Member States are required to "ensure" an outcome, that is to say, the grant of authorisation. That is to be done so as to comply with Community law, and Community law must not be contravened by the manner in which that is done, but it does not in our view mean that a national authority can refuse to grant an authorisation on the footing of the sort of points relied on under this head by Mr Bowsher. The word "ensure" is a strong one, and is inimical to the introduction of that sort of consideration.

170. This view of the structure of the rights and obligations is reinforced by the enforcement mechanisms. If there is a breach of the terms of the licences granted by the national authorities (including the common conditions required by Articles 7 and 8 of the Selection Mechanism Decision) then appropriate enforcement action can be taken. But national authorities are not free to carry out that enforcement as they see fit in relation to their territories without more. The Enforcement Mechanism Decision on "modalities for coordinated application of the rules on enforcement with regard to mobile satellite services (MSS) pursuant to Article 9(3) of [the Selection Mechanism Decision]" deals with just that - co-ordination of enforcement. Its terms are long and we do not need to lengthen this Judgment by setting them out. It is sufficient to note their effect.

171. Recital (5) notes particularly the obligations to comply with the common conditions, including commitments given by the applicants, and recital (7) states the need (generated by the cross-border implications of the common

conditions) to have a co-ordinated approach to enforcement of them to avoid "a patchwork of enforcement measures". Recital (9) recites the appropriateness of leaving local matters, as opposed to the common conditions, to national authorities. Basically, this Decision operates in relation to enforcement of the common conditions. It then contains provisions which require national authorities to monitor compliance. If non-compliance is found then the authority must inform the Commission and other Member States. Findings are referred to a Communications Committee and Member States are to refrain from adopting a final decision on enforcement (short of suspension or revocation) before the Committee has met. In the event of more serious or repeated breaches which might lead to a withdrawal or suspension of the authorisation then a national authority must, before taking that step, report the matter to the Committee which will seek to co-ordinate an appropriate response. Until it has done that Member States are to refrain from taking their own steps.

172. Thus serious breaches of the common conditions (which are the essential controlling mechanism for the important parts of the structure) are not just left to national authorities to consider and enforce. They are to be dealt with centrally, to ensure a non-fragmented response. The most important alleged departures from what was said to be the original plan would be covered by the common conditions. The coverage condition is particularly important in this respect. It is that that lies at the heart of the complaint about the changed nature of the system. That is covered by the Article 7 common conditions. If there is a complaint about it then the mechanism for dealing with it is not the deployment of the principles of equality and transparency by one jurisdiction only, but the invocation of the enforcement mechanisms just discussed. Of course, that does not give Viasat quite the same direct route of complaint, but it demonstrates that there is a structure which enables the points to be taken up whilst preventing a fragmented approach.

173. We therefore do not consider that this ground succeeds because Viasat cannot invoke the doctrines relied on in the manner which it seeks to deploy.

174. Before leaving this ground we deal with one specific aspect of the complaints, namely the complaint that there was some fundamental shift in the approval arising out of the introduction of Deutsche Telekom in the CGC element. We have difficulty understanding this particular complaint. There is no evidence that Deutsche Telekom is somehow operating entirely independently so as to have purloined the benefit of the authorisation for the CGC element. The only evidence there is about it came from Mr Pearce who said in his witness statement:

> "The integrated infrastructure which makes up the EAN platform is controlled and operated by Inmarsat."

175. That evidence was not challenged; indeed, Mr Pearce was not cross-examined. This aspect of this ground is therefore simply not made out on the facts.

176. This ground 1(b) therefore fails.

O. GROUND 1(c) - OFCOM SHOULD NOT HAVE AUTHORISED A SYSTEM UNDER WHICH IT IS CLEAR THAT THE ARTICLE 7 COMMON CONDITIONS WILL NEVER BE MET

177. This ground turns on Article 7 common condition (c) - the obligation to honour commitments given during the application process - and the commitment which was required to ensure that "MSS shall be available in all Member States to at least 50% of the population and over at least 60% of the aggregate land area of each Member State". It is said that under the EAN this will never be complied with because the service will never be available to that number of people on the ground. Accordingly this condition will never be complied with and the EAN was necessarily incapable of complying. In those circumstances it would be wrong to authorise the system. The legislative purpose of the scheme would be frustrated. Just as a scheme which is not a mobile satellite system should not have ground stations authorised, so should a scheme which cannot comply with an important requirement not be authorised.

178. Ofcom and Inmarsat dispute that the system will not have the coverage required. It is said that the system will be available for any European citizen choosing to buy a ticket and that the requirement will be fulfilled. Furthermore if Viasat were right then it would rule out some of the applications which were apparently intended by the original European decisions, which use marine, aeronautical and emergency services as being potentially appropriate uses for the system.

179. Within this Tribunal there are differing views as to the merits of those respective arguments of the parties. But we do not have to decide it and will not do so. The short answer to this ground is that appearing under ground 1(b), namely that this is a matter of enforcement not grant. We repeat what we said there about the structure and the function of Ofcom. If Viasat's point is a good one it should be dealt with by the pan-European co-ordinated enforcement mechanism which the system builds in. That allows for the possibility of a pan-European view that there should be no enforcement in all the circumstances if that is held to be desirable. It is at that level that the matter should be dealt with. The enforcement could be in relation to the earlier mobile satellite authorisation, where there was an appropriate common condition obligation. On the present occasion Ofcom has to fulfil its authorisation obligations and functions, which do not include enforcement matters.

180. This ground of appeal therefore fails.

P. GROUND 2 - OFCOM ACTED UNLAWFULLY IN FAILING TO ENSURE THAT IT WAS AUTHORISING ONLY CGCS OF A MOBILE SATELLITE SYSTEM

181. This ground re-visits some familiar territory. It alleges two things:

(i) It was apparent on the facts before Ofcom that the CGCs would be used to service aircraft which had only the ground-facing terminal fitted. Those terminals were not mobile earth stations and such servicing was outwith any authorisation, which

extended only to CGCs servicing genuine mobile earth stations. Ofcom ought to have appreciated that, and the prospect of such use, and imposed a condition preventing it.

(ii) Ofcom ought to have conducted a tower by tower analysis to find out whether, based on local conditions (including expected levels of traffic) each tower was necessary because otherwise communications could not be ensured with the required quality.

182. These points fail.

183. As to (i), the relevant background appears above. While it was apparent that the system could, to a significant degree, operate without the satellite, and while it was apparent there was interest on the part of some airlines in having just the ground-facing terminal installed, nonetheless Ofcom operated on the basis of Inmarsat's professed intention to fit both terminals to aircraft even if the ground-facing one would be installed first with an intervening period before the satellite-facing one was installed. A two terminal system is what was authorised. There was no need to impose a specific condition preventing separate use of ground-facing terminals. Such a use would be outwith the authorisation anyway. Ofcom was aware of this and in paragraph 4.10 of the Authorisation it stated it would monitor deployment carefully to make sure that ground-based stations were indeed being used as complementary components of the EAN and that use was also being made of the satellite element. Nothing more than that was required. In this context Ofcom relied on *British Telecommunications plc v Ofcom* [2016] CAT 25. We reach our decision without relying on that case, but our decision is consistent with it.

184. As to (ii), we have already dealt with this above. On the basis of Inmarsat's application, it was not necessary to conduct a tower by tower analysis of necessity, or at least not of the kind apparently suggested by Viasat. Inmarsat's application was for a number of towers to complete a large area of ground-based coverage. Provided that it did not seem excessive for that purpose (and it would be odd if Inmarsat were proposing such an excess) then a tower by tower analysis was not necessary or relevant.

185. Ground 2 therefore fails.

Q. GROUND 3 - OFCOM BEHAVED UNREASONABLY, IRRATIONALLY AND/OR DISPROPORTIONATELY IN AUTHORISING CGCS IN THE FACE OF A BREACH OF COMMON CONDITION 7(2)(b) AND THE COVERAGE COMMITMENT, WHICH HAD THE POTENTIAL TO DISTORT COMPETITION

186. Once again this ground takes us back into previously visited territory. Mr Bowsher argues thus:

(i) Article 8(1) requires that any authorisation be subject to national law.

(ii) Ofcom was obliged under national law to discharge its duties with due regard to the principles of transparency and proportionality, and the desirability of promoting competition and encouraging investment and innovation.

(iii) The CGC element did not require the same degree of harmonisation as the satellite signal because ground signals did not have the same propensity to cross national borders.

(iv) No continuous commercial mobile satellite service had been provided within the time required by the common conditions and milestone 9.

(v) Ofcom should have taken into account the prioritisation of the satellite element.

(vi) In the light of the above, Ofcom should have declined to exercise its discretion to authorise the CGCs given the passing of the deadline just referred to, and the distortion of competition that the whole EAN gave rise to. By operating the EAN Inmarsat would be utilising valuable bandwidth for which

> it paid nothing in commercial competition with competitors who did not have that luxury. It would also give it a head start in the market and the considerable benefits of incumbency - airlines would be slow to change a system they had already installed.

187. The answer to these points lies in various stages of our analysis in relation to earlier grounds of appeal. We do not consider that the scheme of the legislation left it open to Ofcom to consider at length the sort of competition points that Mr Bowsher raises. For the reasons given above Ofcom was obliged to grant authorisation to part of a mobile satellite system whose operator had already been chosen. It was not within Ofcom's functions to conduct a wide-ranging inquiry into competition elements. The reference to national law did not import those sort of wide-ranging functions on this occasion. To do so would be inimical to the non-fragmentation intentions underpinning the legislative scheme.

188. One element of the above is a failure to comply with the common conditions and to achieve milestone 9. Milestone 9 required that clear evidence be provided of continuous commercial MSS within the territories of Member States by the date of the provision of MSS. This slightly elliptically phrased milestone seems to require that the service be up and running by the time it was up and running, but be that as it may, if there was a breach of this provision then it fell within the enforcement regime we have identified above. It was not a matter to be considered on the grant of an authorisation by Ofcom.

189. It follows that there is nothing in this point, and this ground fails.

R. CONCLUSION

190. All grounds of appeal having failed, it is our unanimous view that it follows that this appeal shall be dismissed.

POST SCRIPT

191. While this Judgment was in the final stages of its preparation we received further written submissions from Mr Bowsher arising out of a recent publication by Ofcom on the improving internet services for rail passengers. It is said to have contained Ofcom's view about data rates on which Mr Bowsher sought to rely. Having considered those submissions, we did not consider that they assisted Mr Bowsher (or us) and we did not call for a response from the respondents.

Mr Justice Mann
Chairman

Dr Clive Elphick

Anna Walker CB

Charles Dhanowa O.B.E., Q.C. (*Hon*)
Registrar

Date: 7 December 2018

ANNEX 1

MILESTONES (set out in the Annex to Decision 626/2008/EC)

1. Submission of International Telecommunications Union (ITU) request for coordination

The applicant shall provide clear evidence that the administration responsible for the ITU filing of a mobile satellite system to be used for the provision of commercial MSS within the territories of the Member States has submitted the relevant ITU Radio Regulations Appendix 4 information.

2. Satellite manufacturing

The applicant shall provide clear evidence of a binding agreement for the manufacture of the satellites required for the provision of commercial MSS within the territories of the Member States. The document shall identify the construction milestones leading to the completion of manufacture of satellites required for the provision of commercial MSS. The document shall be signed by the applicant and the satellite manufacturing company.

3. Satellite launch agreement

The applicant shall provide clear evidence of a binding agreement to launch the minimum number of satellites required for the continuous provision of commercial MSS within the territories of the Member States. The document shall identify the launch dates and launch services and the contractual terms and conditions concerning indemnity. The document shall be signed by the mobile satellite system operator and the satellite launching company.

4. Gateway Earth Stations

The applicant shall provide clear evidence of a binding agreement for the construction and installation of Gateway Earth Stations that would be used for the provision of commercial MSS within the territories of the Member States.

5. Completion of the Critical Design Review

The Critical Design Review is the stage in the spacecraft implementation process at which the design and development phase ends and the manufacturing phase starts.

The applicant shall provide clear evidence of the completion, no later than 80 working days after the submission of the application, of the Critical Design Review in accordance with the construction milestones indicated in the satellite manufacturing agreement. The relevant document shall be signed by the satellite manufacturing company and shall indicate the date of the completion of the Critical Design Review.

6. Satellite mating

The mating is the stage in the spacecraft implementation process at which the Communication Module (CM) is integrated with the Service Module (SM).

The applicant shall provide clear evidence that the Test Readiness Review for SM/CM mating has taken place in accordance with the construction milestones indicated in the satellite manufacturing agreement. The relevant document shall be

signed by the satellite manufacturing company and shall indicate the date of the completion of the satellite mating.

7. Launch of satellites

The applicant shall provide clear evidence of the successful launch and in-orbit deployment of the number of satellites required for the continuous provision of commercial MSS within the territories of the Member States.

8. Frequency coordination

The applicant shall provide clear evidence of the successful frequency coordination of the system in accordance with the relevant provisions of the ITU Radio Regulations. However, a system which demonstrates compliance with milestones one to seven inclusive is not obliged to demonstrate at this stage completion of successful frequency coordination with those mobile satellite systems which fail to comply adequately and reasonably with milestones one to seven inclusive.

9. Provision of MSS within the territories of Member States

The applicant shall provide clear evidence that it is effectively providing the continuous commercial MSS within the territories of the Member States using the number of satellites it has previously identified under milestone three to cover the geographical area the applicant has committed to in its application by the date of the commencement of the provision of MSS.