IN THE COMPETITION Case No. 1280/3/3/17

APPEAL TRIBUNAL 27 June 2018

Victoria House,

Bloomsbury Place,

London WC1A 2EB

Before:

THE HON. MR. JUSTICE MANN

(President)

DR CLIVE ELPHICK

ANNA WALKER CB

(Sitting as a Tribunal in England and Wales)

BETWEEN:

VIASAT UK LTD AND VIASAT, INC Appellants

- and -

OFFICE OF COMMUNICATIONS Respondent

-supported by-

INMARSAT VENTURES LIMITED Intervener

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HEARING

A P P E A R AN C E S

Michael Bowsher QC, Fiona Banks and Khatija Hafesji (all of Monkton Chambers) appeared on behalf of the Appellant .

Josh Homes QC, Julianne Kerr Morrison appeared on behalf of the Respondent.

Tim Ward QC and Anneli Howard (both of Monkton Chambers) on behalf of the Intervener.

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Wednesday, 27 June 2018

(10.30 am)

THE CHAIRMAN: Yes, Mr. Holmes.

Opening submissions by MR. HOLMES (Continued)

MR. HOLMES: Good morning, sir. If it pleases the tribunal I will begin this morning by showing you the statutory basis for the tribunal's jurisdiction, the basis for Ofcom's jurisdiction, and take you to the decision which is under appeal in these proceedings.

The basis for the tribunal's jurisdiction lies in section 192 of the Communications Act 2003. Unfortunately, the original version --

THE CHAIRMAN: Sorry, forgive me. Say the number again?

MR. HOLMES: Section 192 of the Communications Act 2003.

THE CHAIRMAN: Yes.

MR. HOLMES: Unfortunately the wrong version found its way into the bundles, the original version, which has been amended on several occasions. Could I hand up the consolidated version.

If I might give these to one of the referendeur. Thank you. If I could ask the tribunal to insert that in place of the existing document in bundle F1 at tab 14.

THE CHAIRMAN: I only have one F, is there an F2?

MR. HOLMES: I'm so sorry, mine was split, I think, by my

instructing solicitors.

THE CHAIRMAN: F/14.

MR. HOLMES: F/14, the legislation bundle at tab 14.

THE CHAIRMAN: Now, is it agreed that this is the correct version from which we should be working?

MR. BOWSHER: I am not sure what was being handed up. I thought the right version was in my bundle but --

THE CHAIRMAN: You had better let Mr. Bowsher have one. I really do not want to have to rule on who has handed up the better version of legislation.

MR. HOLMES: This came from Westlaw and it is the current consolidated version but let me --

MR. BOWSHER: Can I check what I have in my bundle which I thought was the right thing is what Mr. Holmes --

THE CHAIRMAN: Yes, you check with Mr. Holmes before we get into any argument. (Pause).

MR. HOLMES: It may be that there is a difference between the bundles. The version that was in my bundle -- in any event, I had the wrong version. I hope you have the right one now. The one I have just handed up is certainly the correct one.

THE CHAIRMAN: Mr. Bowsher, you had better keep an eye on what is being said about this version in case you think there is a difference.

MR. HOLMES: Indeed.

Yes, apologies, we only noticed the discrepancy in my bundle during the course of the evening.

There is clearly a problem with the bundles generally, sir, because my learned friends for Inmarsat have the original unamended version, so there is obviously been a glitch of some kind in the preparation of the bundles.

The provision I wanted to show you is section 192(1)(a) which provides that the section applies --

THE CHAIRMAN: Just a minute, let's turn it up. 192(1)(a), yes.

MR. HOLMES: "This section applies to the following decisions:

"(a) a decision by Ofcom under this Part (or any of Parts 1 to 3 of the Wireless Telegraphy Act 2006) that is not a decision specified in schedule 8."

And section 192(2) then provides that:

"A person affected by a decision to which this section applies may appeal against it to the Tribunal."

The decision taken by Ofcom was one under section 8 of the Wireless Telegraphy Act 2006, which is in part 2 of that Act and is, therefore, within the scope of section 192(1)(a) not being one of those decisions specified in schedule 8.

If you turn to the next tab, tab 15, you find there the Wireless Telegraphy Act, and section 8 is on page 5 in my bundle, and it specifies in section 8(1) that:

"It is unlawful --

"(a) to establish or use a wireless telegraphy station, or ...

"(b) to install or use wireless telegraphy apparatus - except under and in accordance with a licence (a "wireless telegraphy licence") granted under this section by Ofcom."

As the tribunal will see from section 9(1):

"The licence may be subject to such terms, provisions and limitations as Ofcom thinks fit."

THE CHAIRMAN: I could if I had section 9 in the bundle, which I do not.

MR. HOLMES: The mysteries of the bundles, sir. I shall liaise with my brethren and we will arrange for a complete copy to be provided.

THE CHAIRMAN: Nobody has challenged the jurisdiction. Does this jurisdictional point matter in this case?

MR. HOLMES: It matters to the extent that -- it is simply to show you the basis for Ofcom's decision, which I will take you to in a moment, which is a decision -- it is not in fact the authorisation statement to which you were taken yesterday. It is a different decision, and

it is worth looking at that decision because there are submissions that I would want to make by it, so that is why I am showing you Ofcom's vires.

THE CHAIRMAN: You are trying to point us to the right authorisation document, that is the purpose of all this?

MR. HOLMES: Indeed. Yes, sir. And also to show the basis for the tribunal's jurisdiction.

THE CHAIRMAN: Right. Tell us what section 9 -- section 9 says that conditions can be imposed?

MR. HOLMES: Indeed, that is the only point on that.

THE CHAIRMAN: I will make a note of that and you can give me a page in due course.

MR. HOLMES: Yes. Now, in this case Ofcom's exercise of its power under section 8(1) was done in performance of a duty imposed upon it under the statutory instrument to which Mr. Bowsher took you yesterday, namely the Electronic Communications Authorisation of Frequency Use for the Provision of Mobile Satellite Services EU Regulations 2010, and those regulations implement the United Kingdom's obligations under European Union law to ensure that Inmarsat is authorised to provide mobile satellite systems on the one hand, and CGCs on the other, and the tribunal will recall the two distinct obligations upon the member states to ensure under Articles 7 and 8 of the EU decision to authorise mobile

satellite systems, the use of mobile satellite systems and the use of CGCs respectively.

If we could go to the regulations. Now again, sir, in my bundle the version that I have is the original and unamended version of the 2010 regulations. That may or may not be the case with my learned friends or with the tribunal.

THE CHAIRMAN: I think I can tell you that looks pretty unamended to me.

MR. HOLMES: Yes. So the correct version we obtained overnight and, again, I am handing it up.

THE CHAIRMAN: This is tab 16; is that right?

MR. HOLMES: Yes, sir.

THE CHAIRMAN: We will just take out the old one, despite the fact we have marked it up.

MR. HOLMES: Starting with Regulation 3, this requires Ofcom to grant authorisation to each of the selected applicants, that is the applicants selected by the Commission, for use in the United Kingdom of the two GHz frequencies, subject to the conditions set out in the regulations. That provision implements Article 7 of the EU decision, the first of the two authorisation obligations under the EU decision allowing applicants to operate mobile satellite systems.

The Article 7 common conditions applicable to the

mobile satellite system authorisation are then set out in Regulation 4. The tribunal will see that under Article 4(1)(c), applicants are required to honour all commitments given during the selection process and under Article 4(1)(d), applicants are required to provide Ofcom with an annual report detailing the status of development of their proposed system, and this is a part of the separate apparatus laid down for monitoring and enforcing compliance with the Article 7 mobile satellite system common conditions, including commitments under the selection process.

The tribunal will recall that Mr. Bowsher showed you yesterday two Inmarsat documents described as "Progress updates" which he said were examples of Inmarsat urging regulators to get on and authorise its CGCs. Those documents were in fact examples of these annual progress reports statutorily required under Regulation 4, and the licence granted pursuant to it, and in the other member states under Article 7, mobile satellite system common conditions. They are part of a parallel track of monitoring enforcement, which was the intended mechanism for identifying and rectifying any deviation from the MSS common conditions.

There are then provisions about the monitoring and enforcement of compliance with the Article 7 conditions

in regulations 5(a) to 5(f), which basically involve a staged approach and the involvement of the Commission and the other national regulators in a process of dialogue.

Finally, at the tail end of the regulations, regulation 13 on page 11, one comes to the authorisation of complementary ground components, and that is the particular aspect of the selection and authorisation process with which we are concerned in these proceedings. So consistent with the structure of the EU decision, authorisation of CGCs is dealt with as a separate matter from the authorisation of mobile satellite systems in Regulation 13, which implements Article 8. Regulation 13(1) requires Ofcom to:

"... 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."

And Regulation 13(2) specifically requires use of the Wireless Telegraphy Act powers to licence the applicant to use CGCs subject to the separate CGC common conditions which the tribunal saw yesterday in Article 8 of the EU decision.

To return to my submission of yesterday evening,

I do emphasise the unconditional nature of the obligation as specified under Regulation 13(2). We say that the draftsman of these regulations here correctly understood and implemented the obligation arising under Article 8 of the EU decision, which requires Ofcom to licence CGCs subject to the common conditions.

Of course, to reiterate my response to your question of yesterday, Ofcom was required to verify that what it was authorising was, indeed, a CGC of a mobile satellite system. We do not seek to shy away from that, and that is Mr. Bowsher's ground 1(a).

However, in my submission, Ofcom was neither required nor permitted to withhold authorisation under Regulation 13 based on a failure by an operator to comply with any of the separate conditions pursuant to Inmarsat's Article 7, Regulation 3 authorisation. That is Mr. Bowsher's ground 1(c).

The MSS common conditions are subject to a separate monitoring and enforcement regime, and the legislation expressly divorces the licensing of CGCs from the broader authorisation to provide mobile satellite systems.

By the same token, Ofcom was neither required nor permitted to withhold authorisation under Regulation 13 on the basis that an operator had modified its mobile

satellite system since the time of its application to the Commission. That is Mr. Bowsher's ground 1(b).

The outcome of the selection process was crystallised in commitments which were in turn incorporated in the conditions applicable to the authorisation to provide mobile satellite systems, and they are to be dealt with under the separate monitoring and enforcement regime applicable to those conditions.

Finally, Ofcom was neither required nor permitted to withhold authorisation in exercise of any residual discretion in order to avoid alleged risks of competitive distortions for adverse effects on incentives to innovate and invest. That is Mr. Bowsher's ground 3.

The EU legislation and the national legislation that implements it leave no room for any such discretion, which would threaten the harmonised result which was intended.

Now, if I am right about those submissions, that leaves grounds 1(a) and 2 in play. Ground 2, in my submission, can also be quickly addressed. There are two main contentions under this ground. One is that Ofcom should have investigated the local conditions relating to each ground station to see whether that station could be said to improve the availability of

mobile satellite services locally.

But that argument depends upon whether Ofcom was right that ground stations may be used to improve the availability of the services offered by boosting capacity. If Ofcom was right about that, there was no need for a fine-grained analysis of conditions at individual sites to see whether there were any coverage issues caused by signal blockage, which seems to be the -- that is the only basis on which it was suggested that local conditions might be relevant to the authorisation of CGCs.

If Ofcom was wrong, then Mr. Bowsher will have already succeeded on his ground 1(a). So we say this limb of ground 2 adds nothing to Viasat's case under ground 1(a).

The other component of ground 2, the other contention under ground 2, and as we understand it, this is the main crux of ground 2, is that it was unreasonable for Ofcom not to attach additional conditions of its own specification to Inmarsat's CGC licence in order to ensure that the European Aviation Network should only be operated with aircraft fitted with satellite receivers as part of their mobile earth station.

Now, it is accepted by Ofcom that under section 9 of

the Wireless Telegraphy Act, Ofcom could have stipulated additional conditions besides the common conditions applicable to CGCs, provided that those were compatible with superior EU law. So we do not take an objection to this argument on the basis that Ofcom lacked the power to do as it is proposed that it should have done.

Our case is that Ofcom was entitled to conclude, in exercise of its regulatory discretion, that such additional conditions were not necessary in this case, and to rely instead on enforcement of the common conditions in line with the policy which it adumbrated in the authorisation statement which Mr. Bowsher showed to you yesterday. So that, in a nutshell, and those are my opening submissions in a nutshell on all of the grounds bar ground 1(a).

If I could now show you the appealable decision itself. It is in bundle B at the back, tab 25. You see that the decision from the top left heading is taken under the Wireless Telegraphy Act 2006. The date of issue is 22 January 2018. Paragraph 1 grants the licence to Inmarsat to establish, install and use wireless telegraphy stations and/or apparatus as described in the schedules.

Paragraph 10 requires the licensee to ensure that the radio equipment is established, installed and used

only in accordance with provisions in the schedules.

Schedule 1 at page 5 specifies as the purpose of the radio equipment that it shall form part of a mobile satellite system.

The common conditions are then set out in -- the common conditions under Article 8 and Regulation 13 are then set out at paragraph 4. 4(a) states the requirement that operators shall used the assigned radio spectrum for the provision of complementary ground components of mobile satellite systems.

At paragraph 9 you see the frequency blocks that were granted to Inmarsat in accordance with the assignment under the EU legislation, and at paragraphs 10 to 14, some specific technical provisions are set out on the transmitted power and out of block transmissions that are allowed in order to avoid interference with adjacent uses -- the uses of adjacent frequency blocks.

In paragraph 15 you see that the schedule incorporates expressly the definitions of CGCs and of mobile satellite systems specified in the EU decision, and schedule 2 then shows which stations are being authorised. That is to say, you know, particular facilities at stated addresses. So that is the appealable decision.

The authorisation statement to which Mr. Bowsher took you, and which prompted his client's appeal, is not itself an appealable licence under section 8 of the Wireless Telegraphy Act. It does not identify and authorise the installation of any particular wireless telegraphy stations. Rather, it is a statement of policy in which Ofcom announced its intention to licence Inmarsat's CGCs, and explained why, based on an assessment of Inmarsat's proposed European Aviation Network it considered that that was appropriate.

Now, the statement therefore sets out reasoning relevant to Ofcom's decision, but it is not the decision itself. Having shown you the appealable decision, I can now briefly conclude my submissions on the independent limb of Mr. Bowsher's ground 2, alleging that Ofcom should have attached further conditions to Inmarsat's CGC licence, prohibiting use by aircraft which lacked satellite connectivity.

As I have shown you, the decision incorporates already common conditions which stipulate that the spectrum should be used for provision of CGCs forming part of mobile satellite systems, and in the authorisation statement, Ofcom makes very clear that it will address any failure to install satellite antennae on planes by way of enforcement action under the terms

of the schedule.

If I could ask you to turn back to the authorisation statement at tab 1 of bundle B. Mr. Bowsher took you to paragraphs 3.23 to 3.28, beginning on page 12 of the statement. He used these to illustrate the concern that underlies ground 2, namely that aircraft might not install a satellite antenna and might use only the CGCs to connect to the EAN.

Now, those paragraphs, in my submission, are a neutral and balanced description of the evidence that Ofcom had collected from Inmarsat. They are not passing any comment on the appropriateness of any of that material -- of the approach that was described in any of that material.

Turning to section 4, Ofcom set out its conclusions and identified next steps, and Mr. Bowsher took you to paragraph 4.9, which again identifies the concern. Ofcom noted that Inmarsat's EAN service can technically be provided without the satellite terminal being installed and that there may be incentives for airlines not to install the terminal despite having purchased an integrated system from Inmarsat.

But Ofcom then continues to explain how it proposes to deal with that. At 4.10 it stated its intention:

"... to monitor carefully the deployment of the EAN

in order to ensure that the Ground-based Stations are indeed being used as complementary [ground] components of the EAN; and that use is also being made of the MSS [I think it means the system], including the Satellite Terminal, by aircraft which utilise Inmarsat's service.

"4.11. To that end, Ofcom will collect information from Inmarsat to verify that aircraft using the EAN are being fitted with the Satellite Terminal; and that services are being provided using the MSS as well as the Terrestrial Segments.

"4.12. If it transpires that, after being authorised by Ofcom, Inmarsat is providing services to aircraft exclusively by means of the Terrestrial Segment, Ofcom will consider taking enforcement action on the basis that the Ground-based Stations are not in fact being used as CGCs (ie as complementary components of a system for providing MSS in order to improve the availability of the MSS) as is required under the terms of Inmarsat's authorisation."

So in my submission --

THE CHAIRMAN: There is something odd about that, is not there? It strikes me there is something odd about that. Supposing you have a situation in which the -- we arrive at the situation in which aircraft are flying around up there without the satellite bit and they are just taking

signals from the ground bit. They are at risk of being held not to be using the CGC as part of a -- as complementary to a satellite system.

MR. HOLMES: Yes, sir.

THE CHAIRMAN: One would have thought that the remedy for that would be to say "well, turn it off then", but what Ofcom seem to be proposing is they will just make sure they put a satellite dish on which, by definition, is virtually redundant, because aircraft are managing perfectly well without it. In other words, they are making them add a component which sort of adds an ingredient. It seems very odd to me.

MR. HOLMES: Taking it in stages, it is not accepted on the evidence that the satellite component is virtually redundant.

THE CHAIRMAN: But this scenario sort of proves it.

MR. HOLMES: Well, sir, with respect, in our submission it does not prove it, because the plane would not be able to receive a continuous service. It would not be able to obtain a service in relation to portions of many of the flights which are made across Europe. It would not be able to receive a service in areas where CGCs were malfunctioning. It would not be able to receive a service where mountains obscured the signal.

In our submission, there are a number of

circumstances in which the satellite usefully contributes to the service which is being received. That, of course, will all of course be rehearsed in evidence before you. I do not want to anticipate that discussion too much in opening submission, but that is the first point.

The second point is that we are here involved with an authorisation of the use of particular stations as part of a system which is not yet even in commercial operation. There are no planes yet that are obtaining a service from it.

THE CHAIRMAN: Yes.

MR. HOLMES: To jump to enforcement, to anticipate problems in the licence, well, that might be one possible approach that a regulator could take.

THE CHAIRMAN: You see, I think you misunderstand me. I am not suggesting we are jumping to enforcement now. I am looking to a time when the thing has been turned on.

MR. HOLMES: Yes, sir.

THE CHAIRMAN: It is turned on, and it turns out that there are aircraft flying round up there which have not got satellite dishes on. The conclusion is that it is not being used as part of an MSS. That would be the only reason why Ofcom would be concerned.

MR. HOLMES: Yes. Agreed, sir.

THE CHAIRMAN: So what Ofcom then do is to say: well, put a satellite dish -- basically -- it can probably be dealt with in Europe, but assuming it is Ofcom for the moment, Ofcom say: put a satellite dish on the plane. They are sort of enforcing the addition of an element to make something part of an MSS when it has been demonstrated on this hypothesis there are aircraft flying around not using it as part of an MSS?

MR. HOLMES: Well, Ofcom recognised in the decision that these ground components could operate to provide an independent service.

THE CHAIRMAN: Yes.

MR. HOLMES: But that was not the intended nature of the European Aviation Network, as it was described to Ofcom. On the contrary, what was proposed was an integrated system in which the service would switch between the satellite component and the ground stations in different sections of the aircraft's flight across Europe in order to improve the service.

So it is not Ofcom stipulating that the satellite terminal needs to be added: it is Ofcom requiring that the service as it has been described and authorised, should be installed in accordance with the description which has been given to it by the operator, Inmarsat.

THE CHAIRMAN: Well, I am afraid -- we may come back to

that. It seems to be an odd way of going about it. It is an odd corner of the case. They are saying: you must put a satellite terminal, which by definition they did not want to put on, on a plane, in order to make it an MSS. I will have to think this through a little more. I think it represents a bit of a flaw in the analysis, but we will come back to it, Mr. Holmes.

MR. HOLMES: I am grateful, sir.

To just top off my submissions on this, the tribunal may take a different view as to how it would have approached this discretionary question of whether to attach further bespoke conditions to the licence. I apprehend, though, that your point goes more, really, to ground 1(a) than to this ground.

THE CHAIRMAN: No, it does. It is nothing to do with conditions. It is really what it says about what the system really is.

MR. HOLMES: That is noted, sir, and I am grateful for that indication. For the purposes of ground 2, however, my submission is that Ofcom had a discretion as to whether to apply conditions, and an approach which explained its policy towards enforcement was a legitimate one for a regulator to take and within the legitimate margin of discretion to be allowed to the regulator, and that it has not been shown that that was an unreasonable

approach outside the bounds that a reasonable regulator might choose to adopt.

If I could ask the tribunal to take up section 192 again, it is perhaps an opportune moment to deal briefly with the standard of review and to show you the authorities which I promised, and which I know you were anticipating with great enthusiasm.

THE CHAIRMAN: Yes. Can we put bundle B away?

MR. HOLMES: Yes, sir, I am grateful.

THE CHAIRMAN: Remind us of the tab in bundle F.

MR. HOLMES: Bundle F, tab 14. Now, I have shown you section 192. Sections 193 and 194A are not relevant, they concern a different type of appeal.

Section 194A then is relevant and concerns the disposal of appeals under section 192 and this is the new provision inserted by the Digital Economy Act 2017, this being the first appeal to be decided under it.

Under section 194A(1):

"This section applies to an appeal against a decision referred to in section 192(1)(a) ..."

Which this is.

Section 194A(2) specifies that the Tribunal is to decide the appeal by reference to the grounds of appeal set out in the notice by applying the same principles as would be applied by a court on an application for

judicial review.

That replaces section 195(2) of the Communications Act as originally enacted which required the tribunal instead to decide the appeal on the merits.

So the appeal is to be decided on judicial review principles and it must comply with the requirements of applicable European Union law, and of relevance in this regard is Article 4 of the Framework Directive, which you were taken to yesterday. For your note, it is bundle F/3, and as you saw it provides that:

"Member states shall ensure that the merits of the case are duly taken into account and that there is an effective appeal mechanism."

Now, in applying judicial review principles, the tribunal must therefore ensure that the merits of the case are duly taken into account, and although this is the first case under section 194A(2), I mentioned yesterday that there is previous authority of the standard of review in the context of High Court judicial reviews that were within the scope of Article 4.

I would like to take you to two examples of those to see the approach that was taken. Bundle G, please, the authorities bundle, at tab 4.

THE CHAIRMAN: Mr. Holmes, at the risk of patronising my colleagues, which I do not wish to do at all, it may be

that they would find it helpful to understand what the limits of judicial review are and prima facie what problems are posed by bringing in a merits consideration to a judicial review, because I think I understand it but, if they will forgive me, they may not.

So would you like to put a bit of background for them?

MR. HOLMES: I am grateful. I will do my best on my feet. It may be that I will have to flesh that out in my written closing submissions, if that is convenient.

THE CHAIRMAN: I think it would provide -- I do not know what these authorities are going to say but I think it might provide a helpful bit of background, it might even help me. I hope you do not mind my making that proposal.

MR. HOLMES: By way of broad overview, there are three well established heads of judicial review. One is error of law, and it is of course accepted that a court or tribunal is always the arbiter of the law. It can substitute its decision and determine whether the regulator got the law right or wrong. If the regulator erred in terms of its understanding of its powers, the relevant statutory provisions, then its decision must be set aside provided that the error was material.

The second well established head of judicial review

is that of a procedural error, that is to say some failure to consult or failure to afford a fair hearing. That really does not concern us for the purposes of these proceedings, I think. I do not believe any of the grounds really raise a challenge to the process that Ofcom ran.

The third limb is whether the decision was unreasonable in any relevant respect, and reasonableness in classic judicial review is defined under a sort of test deriving from a case, the *Wednesbury v Picture Houses* case, from the immediate post-war period, and it specifies that a decision would be unreasonable in confined circumstances. The role of the court or tribunal is not to consider the merits of the decision and to decide whether it agrees or disagrees with the decision. Instead it should consider whether the decision was outside the range of reasonable responses that are open to a regulator or a statutory decision-maker, or to put the point more colourfully, as it is sometimes put, whether the decision was so unreasonable that no reasonable regulator could have reached it.

There are other strands as well, whether any relevant considerations were not taken into account, or whether any irrelevant considerations were taken into

account. But relevance and irrelevance is to be defined by the statute. It is ultimately -- and it is for the decision-maker, subject to the extreme unreasonableness formulation I described, to decide whether appropriate weight was attached to any consideration which is relevant and was duly taken into account.

So, sir, forgive me, I hope that that fairly summarises classic judicial review principles.

THE CHAIRMAN: Right.

MR. HOLMES: You will correct me if you feel that I have misled.

THE CHAIRMAN: I did not identify any errors of principle. None of that was judicially reviewable.

MR. HOLMES: The question then arises, given that judicial review is, by its nature, inimical to a detailed consideration of the merits, a consideration of whether the decision-maker reached the right conclusion in the view of the superior body, the court or tribunal, the question is how the merits are to be taken into account compatibly with judicial review principles, and the question was addressed in these cases, and where I think we have got to is that within the sphere of European Union law it would certainly be appropriate to consider whether the measure was proportionate. Proportionality being a concept of EU administrative law. It is rather

uncertain as to what extent it applies under ordinary judicial review but in the context of European judicial review and what proportionality requires is that one considers whether the decision goes beyond what is necessary to achieve its stated objective, is more intrusive in relation to some valued consideration than is necessary to achieve the stated objective. So it is a kind of means-ends rationality assessment.

Again, I am not terribly sure that proportionality arises under any of the grounds in this case.

There is then a question about where proportionality is not an issue, whether the reasonableness standard needs to be somehow adjusted to make it more intensive, and where I think the case law takes one, we can go to the cases, is that it depends on the nature of the decision which is being taken. It depends on whether the decision is one which involves appraisal and evaluation within the decision-maker's particular field of expertise.

Insofar as that is the case, the correct approach is to afford what is sometimes described as a margin of discretion or a margin of appreciation where the court or tribunal does not interfere unless satisfied that there is really -- something has gone wrong, that there is something materially wrong in the process of analysis

which the decision-maker has applied to arrive at their conclusion.

An example might be some error of primary fact which invalidates the train of reasoning which one sees in the decision.

THE CHAIRMAN: Would that not come under the taking into account the relevant factor in traditional JR?

MR. HOLMES: It may do, sir, although -- the trouble is I am falling back -- I would not pretend, sir, to be an expert in the field of contemporary public law. You probably know more about it from your judicial experience elsewhere than I do.

THE CHAIRMAN: Do not assume that, Mr. Holmes. This is, I think I can say speaking from recollection, technically the first JR case I have ever done. I have applied the JR standard, but I have never done a JR case, that is the other division.

MR. HOLMES: Very good, sir. But in general, errors of fact were traditionally not accepted as a head of judicial review. Factual findings were for the regulator and I think it is a vexed question how far that has been intruded upon, but I do not want to mislead the tribunal so it may be it is something I am better addressing with the assistance of general public law authority in closing submissions if needed.

THE CHAIRMAN: If necessary. I was just trying to tease out some of the notions with you. I doubt it will need to go there.

MR. HOLMES: I am grateful, sir.

In areas of evaluation or appraisal, a margin of discretion is to be allowed and, in my submission, it is necessary to show that something has gone plainly wrong.

THE CHAIRMAN: And that is merits under this regime, is that --

MR. HOLMES: That, in my submission, sir, is what merits implies. Merits does not imply what might be described as a full rehearing where the tribunal places itself in the shoes of the primary decision-maker, hears evidence afresh, and reaches its own conclusions based on the evidence applying the statute. That plainly is not what is required.

To use the colourful language of Lord Justice Jacob, the vivid terminology of T-Mobile, it cannot be required under Article 4 that a member state should put in place a duplicate regulator waiting in the wings to repeat the exercise which the appointed decision-maker has already conducted. I should show you that, sir.

THE CHAIRMAN: The duplicate regulator being the court?

MR. HOLMES: The court or tribunal, exactly --

THE CHAIRMAN: I see.

MR. HOLMES: -- deciding the matter afresh. It is easier to show you the passage rather than attempting to recall it from memory.

THE CHAIRMAN: Just before we go on, Mr. Holmes, I am sorry to keep interrupting.

MR. HOLMES: Not at all.

THE CHAIRMAN: How much of this really arises on the case we have got? Do you say that Mr. Bowsher is trying to sneak in some inadmissible merits? Because it seems to me that most of what he has been saying comes down to a question of construction, and therefore lawfulness/unlawfulness, so we do not need to worry about that, or it is his iure(?) point about the change of circumstances, and it does not arise there either, does it? Where does it arise?

MR. HOLMES: There are three particular ways in which it arises. The first is under ground 2, the point we have just been canvassing, whether Ofcom acted unreasonably by failing to insert additional bespoke conditions to address the concern that airlines might not install or might not install immediately the satellite terminals as part of their mobile stations, to describe them neutrally. That is point one.

Point two, there are some hard-edged questions of construction, but as you canvassed with Mr. Bowsher,

there is also an element of his case which addresses a sort of broader question of whether the satellite plays a useful role, will be used as part of a system, and whether CGCs can be said to contribute usefully to the services provided by the proposed system, to the availability of the system of the required quality.

Now, there are mixed questions of law and of fact in there. The questions of law are for the tribunal to determine, but there are some -- there is also factual assessment involved in Ofcom's conclusion that the EAN was capable of conforming with the definition, and those are questions of appraisal.

To take one particular example from ground 1(a), just to illustrate the point, it is said against Ofcom that Ofcom was wrong to conclude that the European Aviation Network was capable of complying with one of the CGC common conditions which specifies that the CGC and the satellite should both be controlled by a single spectrum resource and network management mechanism.

Mr. Bowsher made the submission yesterday that no one had been able to identify any such mechanism. That surprised me, sir, and it also, I think, illustrates the need to be cautious and careful about the fact that this is a judicial review of a decision by Ofcom, because in the reasoning stated in the

authorisation statement prior to the decision, Ofcom expressly found that there was a satellite resource and network management mechanism, and identified it as, I believe -- let me get the language correct -- the integrated -- if I could ask you, sir, quickly to go to the authorisation bundle just to make this point good. Tab 1 of the authorisation bundle. Page 16. So page 16 is in Ofcom's conclusions. Does the tribunal have it?

THE CHAIRMAN: Yes.

MR. HOLMES: And at 4.6(b), you see the conclusion that:

"The CGCs are an integral part of [the] system; will be controlled by the satellite resource and network management mechanism ..."

Paragraph 3.8 is referenced. 3.8, a paragraph which Mr. Bowsher did not show you in his opening submissions, crisply describes the operation of the system as Ofcom found it to be intended to work, and at 3.8(c), you see that:

"Both the satellite gateway [that is to say the terminal on the ground feeding information through the satellite] and the Ground-based Stations connect to a Routing Engine (also referred to as the Integrated Transport Management Centre) which receives internet services from internet services 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."

Now, so Ofcom found that this was all knit together in a system which used the spectrum so as to avoid interference and to deal with the efficient use of the spectrum taking account of congestion, traffic load and so on.

Now that, sir, in my submission, is a classic example of technical appraisal. Now, I do not think anyone at the Bar before you, sir, is well placed to comment on whether the description of the EAN system can be said to incorporate a satellite resource and network management mechanism of the kind that was specified by CEPT, in fact, as the expert body which then set the framework for the subsequent harmonisation decisions.

But in my submission, my client, Ofcom, as the appointed regulator, is well placed to undertake that kind of technical appraisal, and the tribunal should be slow to overturn a decision of that kind unless there was some indication that Ofcom had gone wrong in some respect which the tribunal is well placed to identify based on the material before it.

THE CHAIRMAN: Just on that small point, does not one of the

witnesses also specifically refer to this point on the evidence before us?

MR. HOLMES: Yes, sir, I believe it is dealt with in --

THE CHAIRMAN: I cannot remember who it is. I thought someone -- I think Mr. Sharkey, is it?

MR. HOLMES: Yes.

THE CHAIRMAN: Actually says something about this.

MR. HOLMES: Indeed, sir, and Mr. Sharkey has provided helpful contextual evidence which really confirms for Inmarsat's part findings that were contained in the authorisation statement. But what there is not is any material, in my submission, before the tribunal which would permit it to conclude, taking account of Ofcom's margin of appreciation and matters of expert appraisal, that Ofcom has gone wrong in any material respect in that evaluative exercise.

Then the third way is really a very minor one. I am not sure whether -- I mean, ground 3 was hardly opened by Mr. Bowsher, and it may not be pursued. While ground 2 was said to be serious, he did not dwell on ground 3. But insofar as it is pursued we say --

THE CHAIRMAN: Remind us of ground 3.

MR. HOLMES: Ground 3 is the suggestion that Ofcom had and should have exercised a residual discretion --

THE CHAIRMAN: Oh yes.

MR. HOLMES: -- to refuse the authorisation, despite the obligation contained in Regulation 13 and Article 8, on the basis of alleged concerns about competitive distortion and adverse effects on, I believe, investment and innovation. That is the argument.

You have heard what I say about that as my primary submission: Ofcom lacked a discretion.

But Ofcom, given the representations that had vociferously been made to it during the administrative process, did consider what its statutory duties suggested, if applicable. It was done briefly, but if we are still in the authorisation bundle, I can show you the passage.

Sorry, sir, I am jumping around rather. It is helpful, I hope, to cover the points as they arise.

If you look at paragraph 4.8, Ofcom said there that:

"Insofar as they are applicable [that is a nod to the legal point that I advance as my primary submission] Ofcom is satisfied that its decision to authorise Inmarsat's use of the ground-based stations is in accordance with its general duties. The authorisation will enable Inmarsat to use the frequency bands which currently are not being used, lying fallow, to provide an innovative service to consumers in the UK and EU."

Now, in my submission that is a classic regulatory

judgment that involves weighing a number of policy considerations and taking a view based on Ofcom's understanding of spectrum policy at European level and at UK level, and of the needs of consumers in the market based on its monitoring -- continual monitoring of the market, and that is exactly the type of decision that is not amenable of judicial review under any standard. Only if something has gone plainly wrong, only if there is some material error in the premises upon which Ofcom arrived at that conclusion would it be one that could possibly be revisited at the appellate stage, on whatever standard of review.

Now, sir, I am conscious of the time. I can very, very quickly take you to the cases now, before the break.

THE CHAIRMAN: Yes.

MR. HOLMES: So tab 4 of the authorities bundle, the *T-Mobile* case.

This case, sir, was concerned with the question of whether, in order to achieve compliance with Article 4, the correct course was for the High Court to entertain the challenge by way of judicial review, or whether instead the challenge should proceed in the tribunal, applying EU law to invalidate or reinterpret the jurisdiction of the tribunal so that the appeal could

proceed instead before the tribunal. To determine that, the question was whether judicial review in the High Court could do the job, whether it was flexible enough to be capable of taking due account of the merits.

THE CHAIRMAN: You had better tell me -- tell us what this was an appeal from, what the background was. I am afraid what you just said makes no sense without context.

MR. HOLMES: I apologise, sir.

So, standing back, T-Mobile and Telefonica brought an appeal against an Ofcom spectrum licensing decision. They began in the tribunal. Ofcom raised an objection of inadmissibility in the tribunal on the basis that it was outside the jurisdiction of the tribunal because it was a decision under schedule 8 and therefore was not within the scope of section 192(1)(a), which the tribunal will recall.

THE CHAIRMAN: Yes.

MR. HOLMES: They argued that insofar as schedule 8 applied, it should be read down, or the relevant paragraph of it should be struck out as incompatible with European Union law on the basis that the effect of it, of that piece of the domestic legislation, would be to deprive them of their merits appeal to which they were entitled.

THE CHAIRMAN: The "them" is T-Mobile & Telefonica?

MR. HOLMES: So sorry, the appellants, yes.

THE CHAIRMAN: They argued that schedule 8 should be struck down?

MR. HOLMES: Yes. The tribunal concluded that that was incorrect; that schedule 8 -- sorry, that the statutory route did not provide the exhaustive means of achieving compliance with Article 4 because under English administrative law there is always the inherent jurisdiction of the High Court which permits any act of a public authority to be brought before a judge and to be challenged by way of judicial review.

They concluded that judicial review was flexible, as was illustrated by cases in the field of human rights, and that that flexibility was sufficient for judicial review to meet the needs of Article 4 and therefore there was no need to do any harm to the domestic legislation.

THE CHAIRMAN: So schedule 8 stood because JR provided an adequate alternative?

MR. HOLMES: Exactly. Exactly.

THE CHAIRMAN: Right.

MR. HOLMES: And that was appealed to the Court of Appeal, and the Court of Appeal agreed with the tribunal that judicial review was fine and well, thank you very much,

expressing, you know, in essence very much the view that you have expressed during the course of the hearing, or the idea that you have floated that judicial review is really -- is well established and is capable of flexible application according to the circumstances.

One sees that, so just to take you through the judgment quickly, at paragraph 6 you see:

"The narrow point before us ... are these matters to be raised by way of an appeal to the Competition Appeal Tribunal ... or must they go by way of judicial review ..."

THE CHAIRMAN: Sorry, "these points" being? What the tribunal decided was a jurisdictional point. It decided it did not have jurisdiction.

MR. HOLMES: And it was that preliminary issue which went on appeal to the Court of Appeal. These objections are the substantive arguments outlined in the preceding paragraphs of the judgment, paragraphs 2 to 5, which T-Mobile and O2 wished to raise in whatever was the correct forum.

THE CHAIRMAN: Right.

MR. HOLMES: We can pick up, sir, at paragraph 20:

"Despite Lord Pannick's concession, Miss. Dinah Rose QC for Ofcom rightly, firmly and forcefully [as is her wont] went on to demonstrate that it was correctly made,

and that the JR standard of review can and does mould itself to any requirement imposed by other rules of law."

I am so sorry, I should have taken it from paragraph 19, probably:

"... Lord Pannick's initial submission that JR would not comply with Article 4."

And Lord Pannick made a concession during the course of the proceedings, I think at the hearing, as I recall, and Ms. Dinah Rose showed that that was the right concession to make and that judicial review can mould itself.

Then we see what judicial review means which takes due account of the merits at paragraphs 29 to 31:

"Accordingly I think there can be no doubt that just as JR was adapted because the Human Rights Act so required, so it can and must be adapted to comply with EU law and in particular Article 4 ...

"I would add this: it seems to me to be evident that whether the 'appeal' went to the CAT or by way of JR, the same standard for success would have to be shown. In either case it would not be enough to invite the tribunal to consider the matter afresh as if the award had never been made."

Then a particular decision is then distinguished as

irrelevant, and then at paragraph 31, and this is the passage upon which I place particular reliance:

"After all it is inconceivable that Article 4, in requiring an appeal which can duly take into account the merits, requires Member States to have in effect a fully equipped duplicate regulatory body waiting in the wings just for appeals. What is called for is an appeal body and no more, a body which can look into whether the regulator had got something material wrong. That may be very difficult if all that is impugned is an overall value judgment based upon competing commercial considerations in the context of a public policy decision."

That applies in spades to their ground 3. It applies also to ground 2, and in my submission it can be extended to evaluative questions relating to the technical operation of the satellite system at issue in this case.

THE CHAIRMAN: I am sorry, I am not seeing how you are applying that to the grounds. This is stating what you do on appeals?

MR. HOLMES: Yes. The final sentence, sir, of paragraph 31 indicates --

THE CHAIRMAN: Oh, I see.

MR. HOLMES: -- that it would be very difficult to conclude

that a regulator has got something material wrong if what is impugned is an overall value judgment.

Now, ground 3, concerning the application of general statutory duties and an assessment of competitive conditions, what is required for innovation, incentives to invest, those are surely questions of high regulatory policy of a kind that it would be difficult to challenge as materially wrong, unless there is some underlying premise which was fundamentally misconceived. Now, just for your note, sir -- I am conscious of the time -- it is also worth looking at the application of the *T-Mobile* formula in another Article 4 judicial review before Mr. Justice Cranston.

THE CHAIRMAN: Before you move on, so this case decides, first of all, that for the purpose of this appeal it does not matter to us, schedule 8 could safely exclude the appeals to Ofcom because there was the JR route?

MR. HOLMES: Exactly so, sir.

THE CHAIRMAN: And what Lord Justice Jacob is reflecting on is what you do via the JR route.

MR. HOLMES: Yes.

THE CHAIRMAN: Which is JR, basically?

MR. HOLMES: Yes, sir.

THE CHAIRMAN: Right. When I say that is all he is doing, I do not want to minimise it, but that is all this case

tells us?

MR. HOLMES: This case tells us, sheds light on the standard of review, because that was the key issue for determining whether judicial review was compliant.

THE CHAIRMAN: Yes, but with all due respect, it does not tell us very much there. What it tells us in paragraph 31 is what the limits of the process are.

MR. HOLMES: That is correct, sir, yes.

THE CHAIRMAN: In other words, you do not embark upon a full investigation of the merits, again. That is the last sentence -- well, a particular consideration.

MR. HOLMES: It goes slightly further than that, yes. It suggests there are some types of decision which are really very difficult to impugn by way of even judicial review which takes due account of the merits, and those are decisions which involve broad questions of policy.

THE CHAIRMAN: It does not tell us what taking into account the merits is: it tells us what it is not?

MR. HOLMES: Yes, sir, I think that is a fair observation.

THE CHAIRMAN: Right. One more case and then we will have our transcribers' break.

MR. HOLMES: The other case I would like to show you is at tab -- I think I will take you to an authority from another context under general EU law, which is the *Mabanaft* case at tab 5. There are

a couple of other authorities but I can give you the references to those in my written closing submissions. This is a case relied on --

THE CHAIRMAN: You can --

MR. HOLMES: I am setting out the relevant passages.

THE CHAIRMAN: Yes, I am sorry, just to anticipate the way you may be conducting your final submissions, we do not propose to receive final submissions which are simply hurling documentary and authority cross-references at us which we go away and read at our leisure. I hope you are going to take us to relevant authorities.

MR. HOLMES: I shall, sir. Perhaps --

THE CHAIRMAN: I am not bothered about when you do it, I just want to put down a flag that I do not expect that we will receive a reading list of authorities in your final submissions which we are expected to go away and work out for ourselves.

MR. HOLMES: I am grateful, sir. The written closings are a support for the oral proceedings and they are not intended to substitute for them. That is well understood.

So at tab 5, the case is *Mabanaft* . So this is from another area, but I should take you to it because it is relied on against me by my learned friend Mr. Bowsher in order to show that judicial review

under European Union law is intensive. The facts, I think, need not concern us. It was a decision of the Secretary of State to impose rules regarding crude oil reserves under legislation implementing a harmonising directive, and which was subject to a requirement to ensure that the rules were fair -- let me get the formulation right -- were fair and non-discriminatory.

The passage that Mr. Bowsher relies upon is at paragraph 30, where Lady Justice Arden giving the decision of the court says:

"The decision of the Secretary of State which *Mabanaft* challenges is a decision to set up a new regime imposing stocking obligations on both importers and refiners. By virtue of his decision, these obligations are not to be assessed by reference to the minimum operating requirements established by the IEA ... this decision was taken pursuant to Article 3(2) of the 2006 directive. It is therefore subject to judicial scrutiny in accordance with the principles of judicial review laid down by Community law. These are in general stricter than the test of Wednesbury unreasonableness [which I referred to earlier] used in domestic law, and are not lower than that test, and so it is common ground that we need only concern ourselves with the question whether the Secretary of State's

decision should be set aside under Community law."

Now, the only proposition I want to get from this is at paragraph 32 where Lady Justice Arden observes that:

"... the obligation imposed [under the relevant provision] confers freedom on the member states to choose the method by which they will comply with their obligations ... it follows under Community law that the court must allow the Secretary of State a large measure of discretion in choosing an appropriate method. In reviewing the legality of the exercise of such discretion, the court must limit itself to examining whether the decision of the Secretary of State discloses a manifest error or constitutes the misuse of powers or there has been a clear disregard of the limits of his discretion. This is because under Community law, where the decision-maker in the member state is required to evaluate a complex economic situation -- and the same would apply to a complex technical situation as here -- the intensity of the review is low. The decision-maker will enjoy a large measure of discretion and the court will limit itself to asking [I think it should be whether] the assessment is manifestly unreasonable. The court will not substitute its judgment for that of the decision maker."

Then it refers to the Upjohn case.

I am not suggesting -- the facts of that case are obviously very different, but the basic proposition is that as a matter of European Union law, as under domestic judicial review, the standard of review is not intensive where there are complex technical questions of evaluation or where there are broad questions of policy in play, and I emphasise the words that the same approach would apply to a complex technical situation, and the criteria that Lady Justice Arden identifies as though to which the court must limit itself, whether there is a manifest error, misuse of powers, or a clear disregard of the limits of discretion, are really, in my submission, very close to classic judicial review, as I described it before.

So those are my submissions on the standard of review. That is taken me much too long, but I propose now to turn to ground 1(a), which is the remaining element of the case that I must meet.

THE CHAIRMAN: Before you do that we will have our five-minute break for the shorthand writers.

(11.44 am)

(A short break)

(11.55 am)

THE CHAIRMAN: Yes.

MR. HOLMES: Sir, in order to address the statutory

construction points it is helpful to return to the European harmonising legislation. If I could ask you to take up bundle F and turn to tab 5, this is the first stage in the progressive harmonisation affected by European Union law, February 2007.

The meat of the decision is in Article 3, and paragraph (1) requires member states to make available the 2 GHz bands for use by mobile satellite systems, systems providing mobile satellite services.

Article 3 does not preclude other uses, but what the second unnumbered subparagraph of article 3(1) shows is that such other uses as are made should not cause harmful interference to mobile satellite systems and should not be allowed to claim any protection from harmful interference caused by mobile satellite systems.

So in the interests of avoiding interference, mobile satellite services are given a priority over other systems, and the reason behind this prioritisation is explained in the recitals. Recital 2 explains the Commission's general policy, which is to promote new and innovative communications system using any kind of technical platform and capable of providing services whether at the level of the member states, regionally or at a pan-European level. Recital 3 then turns specifically to mobile satellite systems, and it

explains that:

"... systems capable of providing mobile satellite services are seen as an innovative platform able to provide various types of pan-European telecommunications and broadcasting/multi-casting services regardless of the location of end users ..."

Various examples are then given.

"These services could improve coverage of rural areas in the Community thus bridging the digital divide. 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-end connectivity as well as encouraging efficient investments."

So we take two points from this. First, the particular advantage identified for mobile satellite systems which explains the decision to prioritise their use is their potential to increase the offering and availability of pan-European services. The recital mentions pan-European not once but twice, and also lays emphasis on the availability of such services regardless of location. It is, therefore, the wide coverage which satellite systems are able to achieve which commends them to the European Commission.

The reason is, of course, because satellites sit so far above the earth's surface that they are able to cover with their beams up to a third of the earth's surface.

The second point we take is that provided that the system achieves wide coverage, the European framework is not prescriptive as to the particular service the mobile satellite systems provide. The recital refers to various types of pan-European telecommunications and broadcasting multi-media services in an unspecific way, and it is said because of their wide coverage, such services could help to bring services to under-served rural areas, but this is identified as only one of the possible uses to which such systems --

THE CHAIRMAN: That depends what you mean by "could". "Could" might mean, "amongst other things could" or it might mean "might be capable of". "Could" has two possible meanings --

MR. HOLMES: That is correct, sir, but in this particular case, one needs to look at the CEPT decision which is really the inspiration, and if we go back to that, sir, as I shall in a moment, it confirms that the correct interpretation of "could" in this context is as implying that there are a range of uses of which wide coverage is only one -- sorry, of which rural connectivity is only

one. Wide coverage is the key in all cases, but there are various services with various advantages that could be offered.

Now, Viasat has tried to characterise Inmarsat's proposed service as a niche service and has suggested that the legislation was really about improving the digital divide. We say that that is not a correct reading of the legislation.

Recital 9 then explains why it is necessary to prioritise the use of mobile satellite systems over separate purely terrestrial mobile systems used to provide -- such as are used to provide mobile telephone services.

Now, we have seen that the Commission's decision was preceded by the CEPT report. The European Conference of Postal and Telecommunications Administration on which the national regulators all sit. Recital 9 explains that the:

"CEPT has concluded that the co-existence of systems capable of providing MSS and systems providing terrestrial-only mobile services in the same spectrum without harmful interference is not feasible in the same geographic 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 mobile satellite services 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."

We have seen how that is affected by Article 3.

A central plank of Viasat's case is that the legislation is based around a prioritisation of earth satellite communications within a mobile satellite system, and that this therefore requires that the preponderant use made of the 2 GHz frequency bands should be to provide communications from the satellite.

But in our submission, that is not the prioritisation which underlies the legislation at all. It is true that the European legislation is built upon a prioritisation of mobile satellite systems, which are permitted to use the bands on a primary basis in order to protect them from harmful interference from separate mobile terrestrial systems, but there is no basis for saying that any particular component of a mobile satellite system must provide the preponderant use.

On the contrary, recital 9 goes on to explain that based on the expert opinion of the CEPT, picking up

where I left off:

"... CGCs would not cause harmful interference as long as they are an integral part of the system providing mobile satellite services, are controlled by the resource and network management mechanism of such system, and are operating on the same portions of frequency bands as the satellite components of the system. Under those conditions, subject to an appropriate authorisation regime, CGCs could also be utilised even if signals are not transmitted through the satellite components."

This explains the choice to permit mobile satellite systems to include ground-based stations as well as satellites.

They are consistent with the wide coverage achieved by the satellite, they do not detract from that, and they do not cause harmful interference, provided that they are part of the same system.

So the prioritisation of mobile satellite systems over separate terrestrial mobile systems providing a different service, simply does not apply to require any prioritisation of the extent to which the mobile satellite services are provided by the satellite or by the ground stations.

We do also attach significance to the final sentence

in the recital, referring to -- it shows that the CGCs may be used to carry signals independently of the satellite, and in my submission that shows that they are not confined to propagating a signal also transmitted by the satellite. They can also be used to carry signals separately and independently, and because they can use the spectrum independently, they can be used to contribute to the capacity of the system and they are not confined to plugging holes in the satellite's coverage by re-propagating the signal from the satellite.

The other point to note about recital 9 is that it is, of course, the origin of the various CGC common conditions, and one sees why those common conditions are being specified.

The purpose is to ensure that CGCs do not cause harmful interference, so when interpreting what is meant by, for example, a resource and network management mechanism, the touchstone should be what the system needs to encompass to avoid harmful interference, any contradiction in the use of the spectrum made by the ground stations and the satellite respectively.

In my submission, all of those points are made good by the CEPT report which precedes the decision. If we could go previously there, that is at the previous tab,

tab 4, and beginning at page 5 in the third paragraph:

"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."

That is the coverage point which explains the particular appeal of satellite systems, systems incorporating at least one satellite, pan-European service provision:

"Such service, although not indispensable for the wider public, is an integral part of some niche markets in which MSS has traditionally provided services including maritime ... 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 ... and public safety."

And as you observed, sir, that shows that from the get-go an aeronautical system was within the contemplation of the harmonising legislation. Equally, niche markets are among the uses expressly contemplated.

The following paragraph begins with the words:

"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, such as in some rural areas where the economics or geography do not support terrestrial system build-out."

Two points to note. First of all, the "in addition". In my submission that supports the interpretation of "could" as meaning that the provision of rural connectivity services is only one of the intended functions to which mobile satellite systems could be put.

I would also emphasise the words "even on land". So it was always contemplated that one particular role that mobile satellite systems -- the satellite component of a mobile satellite system could play is in reaching the parts that other components could not reach. Again, the broad coverage allowing for people to consult their e-mail not only over the Bay of Biscay, but also over large swathes of the Mediterranean, the North Sea, the Baltic, all those areas where other network components cannot assist.

Turning on to page 11 --

THE CHAIRMAN: Well, page 6.

MR. HOLMES: Yes, sir.

THE CHAIRMAN: The third paragraph, the second complete paragraph, that does seem to have an emphasis on rural

developments.

MR. HOLMES: Yes, sir. There is no doubt that one of the appealing considerations -- one of the appeals of mobile satellite systems was the hope that they might help with the digital divide, and one sees that in many places, in a number of recitals of the various decisions.

But in my submission, read together with what we have seen, that was one possible use that might emerge. It was one that might well have appealed in particular to many of those involved in the policy process, but it was not a requirement that was transposed into the legislation and, moreover, it is worth bearing in mind that the selection process was to appoint more than one system operator. If one looks at the provisions, there were a minimum of two operators, given the amount of spectrum available, so the maximum allocation that was possible was an uplink and a downlink block of 15 MHz each out of the total 60 MHz, so one operator would get 30 MHz maximum and the other operator would get up to 30, if there were two. As it turned out there were only two that met the eligibility criteria and therefore that is what we ended up with, two being selected.

But more could have been selected, depending upon the candidates that came forward, and it could not be assumed that those systems would all provide the same

functionality. Indeed, the variety of services which are emphasised suggests that that was not what the European Union legislature was looking for. So we are concerned with one of the operators here having adopted one use which, in my submission, is within the permissible scope of the legislation and was always a use contemplated by those who were designing and driving forward the harmonisation process.

THE CHAIRMAN: It does not look at though the tender requirements, so far as we can tell, actually required anybody to specify a use. They just had to specify they were up to the job of providing a satellite service. They did not have to say: it will be terrestrial, it will be maritime, it will be aeronautical. They just had to say: we are up to it.

MR. HOLMES: Sir, one needs to be -- they had to bring forward a business plan. I think it might be better if I address that when I come to the call for applications, but the business plan, including revenue forecasts, and so on, would inevitably have involved some identification of the particular use to which this system was to be put.

THE CHAIRMAN: Yes.

MR. HOLMES: But I do submit that the focus of the scoring was primarily upon coverage, and also a consideration of

the number of users that would be reached, which were generic considerations that could have applied to a number of different uses.

You have my point already that the selection was to appoint operators. The particular fruit of the selection process were the commitments and the operators were held to those commitments by means of the Article 7 common conditions that were then to be inserted in national authorisations and enforced via the harmonised enforcement procedure.

THE CHAIRMAN: Sorry, you were trying to take us to page?

MR. HOLMES: Page 11, sir. This is where we come to a more detailed discussion of complementary ground components, and then there is the heading in wonderful European English "Elements about CGC":

"Complementary Ground Components ... ie ground-based stations operating at the same frequencies as the associated satellites and used at fixed locations to improve the availability of MSS (that is mobile satellite services), 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 ..."

And that is the urban canyon or mountainous region scenario.

"Furthermore, they may play an important role in enhancing the efficiency 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 communication services which are identical to and fully integrated with the service offered throughout the whole MSS system footprint. Such bypass would allow increased spectrum efficiency for MSS in line with the EU spectrum policy."

Now, pausing there, two points to make. The first is that the problem of particular coverage not-spots, to use a modern term, areas within the satellite footprint where there are obstructions to the line of sight which prevent the satellite's signal being received, the urban canyon scenario, are identified, but as an example of a use to which CGCs could be put, and that is shown both by the words "for example" and by the word "typically".

Then one sees "Furthermore", another use identified, which is rather technically expressed, but the key point here is that you could have independent use of the CGCs

over the same spectrum to enhance capacity, to promote the efficient use of the radio spectrum.

In my submission that is what the CGCs within the EAN are intended to achieve. That was contemplated by the CEPT. It was not all just about line of sight and continuous reception of the signal. It was also about the possibility of efficient use of the spectrum through independent transmission from the CGCs.

We then see that:

"An increasing number of MSS operators, are considering the possibility of extending their international MSS operations with CGCs."

It turns out this was done first in the United States and Canada, as so often, all good things come from the United States.

Then:

"Apart from providing more efficient spectrum use, CGCs will benefit consumers by allowing MSS to provide improved quality of service."

Then skipping on to "CGCs", I think a paragraph that Mr. Bowsher showed you:

"CGCs differ from independent ground components used by MS 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. While the co-existence of MSS and MS in the same frequency band is impossible, because satellite components and CGCs have a common spectrum control, frequencies can be coordinated to ensure that no inter- or intra-system interference is caused."

So what this is saying is that the prioritisation of mobile satellite systems over MS operators, that is to say a purely mobile system, mobile terrestrial system operators, is important to avoid interference, but provided the CGCs are controlled as part of a common mechanism, they can co-exist, and you note also the reference to being delivered to an integrated user terminal.

So the user terminal receives signals, is capable of receiving signals from both the ground stations and from the satellite, and we say that is of relevance to ground 1(a), first limb, the argument that we should construe "mobile earth station" so as though exclude that part of the equipment on the plane which is used to connect with the ground station because it is not capable -- that particular antenna is not capable of connecting with the CGC -- with the satellite.

So the second step in the harmonisation process was the EU decision, and that is at tab 6 of bundle F. That adds two elements to the harmonisation of the frequency bands: selection and authorisation. On the one hand it establishes a harmonised process for selecting operators, and on the other hand it imposes harmonised requirements to authorise the operators selected as a result of that process.

So beginning with the preamble, recitals 1 to 3 are, in my submission, scene-setting recitals. They are not expressing the views of the legislature itself. They are identifying previous remarks made by three institutions of relevance to the harmonisation of radio spectrum, beginning with the Council in recital 1, the European Parliament in recital 2, and the Commission in recital 3. We then come to recital 4, which refers to the harmonisation directive -- sorry, to the Framework Directive and in recital 5 --

THE CHAIRMAN: Sorry, just going back to the scene-setting thing, I am not quite sure how dismissive you were being or were intending to be of the other institutions that were referred to, and you are right, it refers to the Council and the European Parliament and then the Commission, but in the third paragraph of the overall document it says, "Having regard to the proposal from

the Commission", so obviously the Parliament and Council were basically implementing the proposed Commission's views, or thought they were.

MR. HOLMES: It is a tripartite legislative process in which the Commission proposes and then the Council and the Parliament can amend and must approve.

THE CHAIRMAN: Yes.

MR. HOLMES: But you are quite right, sir. I did not mean to be dismissive, it is simply that they do not express with one voice the legislative intention behind the legislation. That actually begins, in my submission, at recital 5. It is a point of, I think, very minor importance. I do not attach any significant weight to it. It is simply that if you want to understand what is the legislative purpose, the best place to start is with recital 5 which returns to the policy objective identified in the harmonisation decision and focuses, as the harmonisation decision did, upon the coverage role that the satellite component of a mobile satellite system brings, allowing pan-European services regardless of the location of end users.

Recital 6 notes that satellite systems are susceptible to international and regional regulation precisely because of this wide area coverage, crossing national borders.

At the end of this recital one sees the observation that:

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

So in my submission this further underlines the fact that the legislation is permissive as to the uses to which mobile satellite systems may be put, and it also explains why the legislation is not prescriptive: mobile satellite systems can be used to serve a range of purposes, which are evolving over time.

Recital 7 then refers to the harmonisation decision. Recital 8 notes that the earlier decision did not cover procedures for the assignment of spectrum and granting rights of use, in other words, selection and authorisation.

Recital 9 refers to the authorisation directive. Now, this is the directive under the common regulatory framework which concerns licensing of communications services generally, and it is a sort of -- it is a light harmonisation. Licensing and authorisation is left to member states' national authorities. There is no European licensing of operators as a rule, subject to requirements, as you would expect, of non-discrimination and of that kind.

Recital 9 observes that generally operators are

selected and authorised at national level under the existing EU regulatory framework for electronic communications.

But it notes one relevant exception to that, which is Article 8 of the authorisation directive, and I think this is relevant to the question of whether Ofcom enjoyed any discretion. So we might just quickly turn it up. It is at tab 2A. We will return to the EU decision, but if I could take you quickly to 2A, you will see that Article 8 provides that:

"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."

So an emphasis that where you have, as here, the

selection of an operator under European law, the member states shall grant the right of use.

Turning to the accompanying recital, which is recital 24 in the preamble of the directive, one sees the same point:

"Where the harmonised assignment of radio frequencies to particular undertakings has been agreed at European level, member states should strictly implement such agreements in the granting of rights of use of radio frequencies from the national frequency usage plan."

"Strictly implement".

Returning, if I may, to the European decision at tab 6, that is recital 9. Recitals 11 and 12 explain the reason why the selection of operators needs to be harmonised, and recital 11 deals firstly with the selection criteria to be applied and it explains that:

"In order to prevent Member Sates from taking decisions that might lead to fragmentation of the internal market and undermine the objectives identified in Article 8 of the [framework] Directive ... selection criteria for mobile satellite systems should exceptionally be harmonised so that the selection process results in availability of [mobile satellite services] across the European Union."

The reason why it is important to ensure that availability is explained in the final sentence, or one of the reasons:

"High up-front investment is required for the development of mobile satellite systems and the associated high technological and financial risks necessitate an economy of scale for such systems in the form of wide pan-European geographic coverage, so that they remain economically viable."

So just to break that down a little, a satellite is capable of broad coverage, providing a pan-European service. Now, you could have a number of satellites up there which could reach the whole of Europe, but which because of a chequerboard approach to licensing, in fact serve a differing selection of member states.

But the difficulty with that is that it would result in a division of the commercial benefits that could be achieved from launching a satellite, and therefore make it harder to obtain the huge sums and to run the significant project risks which are involved in the launch of a satellite. So for that reason, the legislature -- in order to foster these systems which incorporate these expensive and delicate and difficult pieces of equipment, it was necessary to ensure that all member states, that the same operators were selected

across the Union, and the same point applies then, of course, also -- and so that requires, first of all, common selection criteria, recital 11, and recital 12, it also requires the same authority to select:

"... 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."

So to cut a long story short, you had to have a single authority doing this selection and that was the European Commission.

But the same point that applies to selection applies also to authorisation. There is no point achieving a single selection of pan-European operators if member states then decline to authorise -- some member states decline to authorise while others authorise, and one sees that from recital 13:

"Since authorisation of the 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 electronic communications must thus be taken into

account, the authorisation issues should be dealt with by the competent authorities of the Member States."

So licensing kept at the national level because there is national legislation to be considered, and also national conditions to be taken into account. I showed you, for example, the technical conditions which had to be attached to the CGC authorisations to avoid interference in adjacent bands, the use of which might vary from member state to member state. So you still needed to have the national authorities involved.

But then one comes to the crux:

"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 [EU] level, without prejudice to specified national conditions compatible with Community law."

And, in my submission, the approach taken, reflected in recital 13, explains why Articles 7 and 8 are framed as mandatory obligations on the national authorities to avoid fragmentation of the internal market and to ensure that the selected operators are, in fact, able to operate in all member states, so that the economies of scale needed to get satellites -- the satellite

component of a mobile satellite system up in the air can be exploited by the successful candidates.

Now, recitals 14 to 17 concern the selection procedure. Recital 14 is relied upon by Viasat on the basis that it shows a social policy focus to mobile satellite services, but considering the recital, it shows in fact the identification of this as one possible outcome:

"MSS can generally reach geographic areas not well covered by other electronic communications services [the coverage point] 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 time frame for providing MSS within all Member States, are important characteristics which should be taken into account in an appropriate matter during the selection procedure."

Now I emphasise the word "could". It does not suggest that the social policy objective is essential: it is one role that mobile satellite services could

provide.

In recital 15 one finds recognition of the:

"... comparatively long period of time and complex technical development steps required for the launch of [mobile satellite services, and for those reasons], progress in the technical and commercial development of mobile satellite systems should be assessed as part of the selection procedure."

So recognition that this is a fraught and a difficult process, getting a satellite up in the air. It is therefore unsurprising, in my submission, that when one comes to look at the Call for Applications and the criteria on which applicants were scored, such a focus was placed upon the satellite component. That was a necessary component of a mobile satellite system, and indeed it conferred the coverage benefit, which was why the EU embarked on this harmonisation process at all.

But it does not show that CGCs cannot be used as an important element of a system and it does not show any prioritisation of the satellite component in the subsequent functioning of the mobile satellite system.

Then at recital 18 one comes to the authorisation of CGCs, and Mr. Bowsher relies on the typical use identified. So:

"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."

He says that shows that more often than not within a system, the complementary ground components should play the role of providing for continuous line of sight, addressing the urban canyon problem, in particular problems of coverage.

Now, sir, we rely on the word "typically" as showing that this is only one possible function, even if it was the one that was envisaged at the time as the most likely to be adopted, and there is no requirement that complementary ground components are used only, or at all for that purpose, within a given mobile satellite system.

The language "typically" of course comes from the CEPT report, which I showed you, that is the origin of it, and we saw in the CEPT report specific acknowledgment that that was not the only use to which CGCs could be put: they could also be used to ensure efficient use of spectrum, enhancing the capacity that

could be achieved by the system, and that, we say, endorses our interpretation of recital 18.

The remainder of recital 18 then identifies the need for an authorisation regime in very similar terms to the regime under recital ... (Pause)

So the remainder of the recital then identifies the need for an authorisation regime in very similar terms to the regime described in recital 13, which governs the authorisation of mobile satellite systems more broadly. As with authorisations of the systems themselves, it says that operators should be:

"... selected and authorised at national level subject to conditions established by Community law."

The final point to note, recitals 21 and 22, provide that:

"Decisions on the withdrawal of authorisations granted in relation to [mobile satellite services] or complementary ground components due to the non-fulfilment of obligations should be enforced at national level."

But recital 22 anticipates harmonisation in this field also by noting that:

"... it should remain possible for the Commission to define the modalities of a coordinated monitoring and/or enforcement procedure."

And that has, indeed, come to pass.

Turning to the operative provisions, I can deal with these briefly because I have already been through them yesterday.

Title I deals with object, scope and definition. The definitions in Article 2 I do need to pause over because they are obviously central to the ground 1(a) statutory construction arguments, and beginning with mobile satellite systems, the definition entails, as the tribunal has seen, three basic components of a mobile satellite system. The first is mobile earth stations. These are not defined in the legislation but are clearly intended to be portable pieces of equipment, hence "mobile" through which a communication service is provided to end users. They are where end users connect.

Second, there must be at least one satellite or space station in the system, and there needs to be at least one satellite because that is how you secure the pan-European coverage which explains the harmonisation.

Thirdly, there may also be complementary ground components used at fixed locations, so ground stations may also be included in the system.

The definition also identifies three services that a mobile satellite system may be capable of providing.

It must provide at least one of them, but it is not specific as to which are provided.

These are together the mobile satellite services which are identified by the abbreviation "MSS" at various points in the legislation, and the three services are as follows: the first is communications between a mobile earth station and one or more space stations. The second, an alternative service, is between mobile earth stations by means of a satellite or satellites, and the third is a service between a mobile earth station and one or more complementary ground components.

In my submission, this definition clearly shows three things. First, hybrid systems, which include ground stations as well as a satellite, are expressly permitted. Now, to be clear, Inmarsat's system certainly does include a satellite. It is not a paper satellite, it is a $300 million satellite which is in geostationary orbit above the earth as we speak. Whether the satellite plays a genuine role will be a matter for evidence.

Second, the definition envisages that mobile earth stations will be able to connect directly with complementary ground components without the intermediation of the satellite. Now, at times, Viasat

has appeared to suggest that the lack of a direct link between the CGCs and the satellite presents a problem for the EAN. If I could just take you to one particular passage of my learned friend's skeleton argument to give you an example of this, it is in bundle A at page 6, and you see in the second sentence, about five lines down, there is a reference to:

"... a 'vast' ground-based network of radio-communications towers [ie the complementary ground components, being used] to provide a service targeted only at aircraft ..."

THE CHAIRMAN: Sorry, I am behind you. Where are you? Which paragraph?

MR. HOLMES: Sorry, paragraph 8, second sentence, beginning "That proposal ..."

THE CHAIRMAN: Yes.

MR. HOLMES: "That proposal utilised almost exclusively a 'vast' ground-based network of radio-communications towers to provide a service targeted only at aircraft, by seeking authorisation of their use as 'complementary ground components' even though they do not and cannot communicate with the satellite."

Now, for the avoidance of doubt, there is no requirement in the definition of mobile satellite systems that any connection should exist between -- any

direct connection should exist between the complementary ground component and the satellite. What is required is a connection between the mobile earth station and a CGC and/or a connection between the mobile earth station and a satellite. Those are the communications paths which are possible. There is no requirement for a sort of triangular connection between the satellite and the CGC, and you saw the final sentence of recital 9 of the harmonisation decision, which showed that the signal broadcast, or transmitted by the CGC, could be wholly independent of the satellite.

So the third submission is that in view of the fact that the definition expressly envisages that mobile earth stations will be able to connect directly with complementary ground components without the intermediation of the satellite, it would not be appropriate to read into the legislation a definition of mobile earth stations, the effect of which is to exclude the components used to establish a connection with complementary ground components at the end user's location.

But that is what ground 1(a) of Viasat's grounds seek to do by reference to the definitions in the ITU regulations, and just to show that error by reference to the radio regs, the ITU radio regs, if we could take

them out. For me they are in a separate bundle, but for you I think they are at the back of bundle F at tab 18.

Now, these definitions go back some considerable time, and Mr. Bowsher was right to say they have not changed over time.

The first point to note is the observation on page 7 in the introduction to the terms and definitions of Article 1:

"For the purposes of these regulations, the following terms shall have the meanings defined below. These terms and definitions do not, however, necessarily apply for other purposes."

It is a fairly obvious point, but a recognition that one needs to apply the regulations contextually and according to the specific circumstance in which they are being used.

Turning on to page 13 -- I am so sorry, to page 9. We say that the real root of the error in Mr. Bowsher's argument lies in his suggestion that a mobile earth station for the purposes of the EU definition should be confined in its functionality to the definition of mobile satellite service which operates within the ITU regulations, and you see the definition there which limits a mobile satellite service for the purposes of the ITU regs to two limbs:

"A radiocommunication service ..."

On the one hand:

"Between mobile earth stations and one or more space stations, or between space stations used by this service; or

"Between mobile earth stations by means of one or more space stations."

On that basis he says all of the equipment comprising the mobile earth station must be capable of being used in connection with a mobile satellite service, and he says: look, mobile satellite service is only about the connection between the satellite and the mobile earth station. Therefore you must exclude the antenna from the portable equipment on the plane which connects with the ground stations because that is not capable of providing a mobile satellite service.

THE CHAIRMAN: No, let's be clear about this because we are capable of getting into difficulties if we do not define things.

As I understand Mr. Bowsher's submission, he draws attention to the distinction between two pieces of kit: one the antenna and the receiver, including -- and the modem, I suppose, on the satellite thing on top, and the antenna and the receiver and the modem underneath. It is not just one antenna serving one receiver; it is two

pieces of kit and that is key to this argument, it seems to me.

MR. HOLMES: Sir, I agree with you, it is important to the argument, but the answer to that point is partly a legal one and it is partly a factual one, which Dr. Harrison has canvassed in his evidence.

The legal answer, or the legal part of the answer, can be found in the definitions on page 13, which shows the definition of "station" at 1.61. This shows that a station can encompass:

"... one or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment".

So there is no dispute that under the ITU regulations a mobile earth station can have several antennae. Transmitters or receivers are just in the context of this service antennae, effectively. Nor is there any dispute that the accessory equipment is included.

And, indeed, Dr. Harrison gives the example of another type of station. A mobile station in the context of a terrestrial mobile system, which is a telephone handset, and that can, in most cases, communicate using several different spectrum bands which use different protocols, different communications

languages, if you like, 3G, 4G, GSM, depending on what signal is available in a given area, and different transmitters and different receivers are used for the purpose of establishing a connection with these different frequency bands. That is a station that incorporates a number of different transmitters or receivers speaking different languages and attaching to -- communicating through different bits of the radio spectrum.

That is well recognised as a station. This definition of station is a broad and permissive one because it is intended to cover many and various different types of portable equipment. It can encompass an assemblage of equipment including multiple transmitters or receivers, and it is really, in our submission, arbitrary to split off -- to be clear, that was the factual component of my answer, the legal component was the definition of "station", the factual component is Dr. Harrison's evidence about how stations are used in practice.

The point is that it is, in our submission, arbitrary, given what the mobile satellite services encompass under EU law, to exclude the antenna which is used to secure one of the connections expressly permitted and provided for under the EU decisions

definition of a mobile satellite system. That is my point.

Returning, just to make good my point on 1.25, you see there the definition of mobile satellite services for the definition of the ITU regs. That is been in place since before any of this harmonising legislation was in place. But what the EU legislator decided to do was to modify that approach for the purposes of EU law, so that you see in the definition of the services which a mobile satellite system may be capable of providing, that the two limbs in 1.25, the connection between the mobile earth station and the space stations on the one hand, and between mobile earth stations by means of one or more space stations, are supplemented by a third possible service in the case of EU law, and that is the connection between the mobile earth station and the CGC.

So we say to try to import this framework and to read it in a way which by definition excludes the receiver, the antenna used to secure and achieve one of the permitted mobile satellite services under EU law is not well founded.

Moreover, and my learned friend will correct me in his closing submissions if I am wrong about this, but it is very unclear what purpose is served by importing that definitional restriction into EU law. These definitions

from the ITU regulations, which nowhere feature in the EU legislation, are said to require a result which appears on its face to be at odds with the definition of "systems capable of providing mobile satellite services" under the EU decision. At the very least, in my submission, one would need to see a good, purposive argument for doing that, and for my part I have not been able to detect that in the papers. It seems to be purely logic-chopping, an intricate legal argument I think my learned friend Mr. Ward called it in his skeleton argument.

So that is my submission in response to the first limb of ground 1(a).

The other definition in Article 2 is of complementary ground components, and this states that such components must be used to:

"... improve the availability of mobile satellite services in geographical areas within the footprint of the system satellite or satellites where communications with one or more space stations cannot be ensured with the required quality."

Now, there are two points that we say are important to understanding the requirements of Article 2(2)(b). The first is that what is being improved, the services, the availability of which are being improved, are the

mobile satellite services covered by all three limbs of the definition of mobile satellite systems. So one is looking at the availability of the systems services as a whole, and one is looking to see whether the CGCs usefully add to the availability of those services, insuring them with the quality required for those services considered as a whole. There is, in my submission, no basis for the submission that the ground-based stations are only permitted to improve the availability of the service provided by the satellite, or that the required quality is to be specified by the satellite component. All that this definition is achieving is ensuring that the ground components are complementary; they usefully add to the overall availability to the required quality of the service being offered by the system as a whole.

THE CHAIRMAN: I am afraid I have got a little lost in the distinctions you are drawing there, Mr. Holmes.

MR. HOLMES: I am grateful for that indication, sir. If this were a convenient moment, perhaps I should return to it after the short adjournment when I am a little refreshed.

THE CHAIRMAN: Yes. Very well. We will rise until 2 o'clock. How are we doing for time?

MR. HOLMES: I would say, sir, that with a fair wind

I should be another half an hour. I understand that Mr. Ward has about three-quarters of an hour of submissions.

MR. WARD: Something like that.

MR. HOLMES: So we should be able to commence Dr. Webb's evidence this afternoon, and at the very least cover the examination-in-chief, which I know is to be the beginning of his oral evidence.

THE CHAIRMAN: I would hope we would have more than that. Yes. Very well. 2 o'clock.

(12.58 pm)

(The Luncheon Adjournment)

(2.01 pm)

THE CHAIRMAN: Yes.

MR. HOLMES: When you rose, sir, I was addressing the definition of complementary ground components, and my rather dense submission was not, perhaps, the clearest. So if I might return to that now. The relevant provision, it is easiest to have it in front of us, is at tab 6 of the legislation bundle, file F, Article 2(2)(b) and it provides that:

"'Complementary ground components' of mobile satellite systems shall mean ground-based stations used at fixed locations, in order to improve the availability of [mobile satellite services] in geographical areas

within the footprint of the system's satellites where communications with one or more space stations cannot be ensured with the required quality."

Now, I make three submissions in relation to that definition. The first is that the services, the availability of which is being improved, are not the services offered exclusively by the satellite component of the system, but all of the services offered by the system as set out in Article 2(2)(a).

THE CHAIRMAN: Why do you say that?

MR. HOLMES: Because, sir, mobile satellite services is not a defined term. Where it appears it is by reference to the services that mobile satellite systems are able to provide. If you return to the harmonisation decision, which is at tab 5, you see the original definition of mobile satellite systems in Article 2 which, in my submission, makes the point tolerably clear:

"For the purposes of this decision, 'systems providing mobile satellite services' are systems capable of providing ..."

And then the three services are specified. And you see in recital 3, just to make the same point:

"In this context, 'systems capable of providing mobile satellite services' (MSS) ..."

So the services that the systems are capable of

providing are those set out in Article 2.

THE CHAIRMAN: So it improves the communication between mobile earth station and one or more space stations. Well, sorry, it overcomes the lack of availability of that; is that right?

MR. HOLMES: Well, it can improve the availability of the services offered by the system generally.

THE CHAIRMAN: Yes.

MR. HOLMES: One does not take as the reference the services offered by the satellite component of the system. That is the submission that I am making.

THE CHAIRMAN: But would you say it is not only -- what are improved are not only the services -- the thing whose availability is improved -- let's use the word -- you say are not the services of the satellite component but all the services offered by the system.

MR. HOLMES: Yes.

THE CHAIRMAN: What are "all the services offered by the system".

MR. HOLMES: That will depend, sir -- the service will depend on what the system is being deployed to achieve. We know that mobile satellite systems can be used to provide a range of services, but mobile satellite services are, in my submission, all of the outputs that a mobile satellite system are capable of producing, all

of the services provided by the system.

THE CHAIRMAN: But the words, or the abbreviation, "MSS" is slightly inappropriate in that definition, is it not? MSS means mobile satellite systems.

MR. HOLMES: No, sir, it means mobile satellite services in contradistinction to mobile satellite systems.

THE CHAIRMAN: Yes, I am sorry, quite right, and the definition is, I will go back to that in a minute, mobile satellite services, then for new systems it is not defined, it is just an acronym which is not defined.

So you mean by "availability of MSS", that could be the availability of streaming video, or e-mails, so you mean specific IT-related services?

MR. HOLMES: Yes, the services provided by a particular mobile satellite system.

DR. ELPHICK: It could also presumably mean, say, maritime, as opposed to aeronautical, whatever it is being used for.

MR. HOLMES: Indeed, the particular category -- indeed, sir. I am grateful for that. I am grateful, sir. That is my submission.

The second submission is that the provision stipulates that complementary ground components should improve the availability of the service, the particular services, where the communications with one or more

space stations cannot be ensured with the required quality, and the words "required quality" show that one's focus is not only on brute availability, whether one is able to receive a signal at all, but more generally the quality of the service which is being offered, including, for example, the bandwidth which is available to users of the service.

My third submission is that the contribution that complementary ground components must make -- may make, must always be within the footprint of the satellite or satellites, and the reason for that is the particular focus on ensuring the wide scale coverage that the satellite component of a mobile satellite system can offer, and it would defeat that purpose if one could implement a mobile satellite system using CGCs, by having a satellite that covered only some fraction of Europe, but the service was then extended out outside the coverage of the satellite by installing a broad, ground-based network of components. You cannot use CGCs to extend coverage beyond the footprint, because that would be inconsistent with the purpose of achieving the wide area coverage and the pan-European services that a satellite component is able to provide.

The comparison for determining whether the service being provided is improved is with the service that

would otherwise be available by means of communications with one or more space stations, the satellites. That follows logically from the fact that the satellite is required under a mobile satellite system, but the addition of CGCs is optional. You were deciding whether to add CGCs to the satellite, and therefore, of course, you compare the availability of services of the required quality with only the satellite on the one hand with the services that are available with the addition of the CGCs.

That does not show that the baseline for the quality required is the contribution that the satellite is able to provide, and this is, we say, an error in Viasat's analysis. Viasat assumes that the required quality is all about bringing the quality of the system as a whole up to the level of the satellite, and they say the ground stations increase the capacity greatly by comparison with the capacity that can be achieved by the satellite. We say there is nothing in this definition which supports the contention that the quality is to be defined, the required quality is to be defined as the quality that can be achieved only by the satellite.

As we say, without obvious justification or purpose, that would restrict the quality of the service that can be offered by a hybrid system, preventing CGCs from

usefully enhancing capacity to the benefit of consumers, and there is no support that we see in the legislation for such an interpretation of the definition of CGCs.

Now, I appreciate that is all rather dense for oral submission, and the tribunal will no doubt wish to come back to it, but those are my submissions on the interpretation of the meaning of CGCs.

THE CHAIRMAN: And the way that it is implemented in your particular case, or in this particular case, is first of all the areas which do not achieve the required quality are deemed to be everywhere, because there is blanket coverage, everywhere on land, basically, leaving aside Serbia. First of all, it is everywhere, and secondly, the quality is the quality which is, I think on anybody's evidence, vastly superior to the quality that can be provided by the satellite.

MR. HOLMES: Sir, certainly the CGC greatly enhances the quality of the service.

THE CHAIRMAN: Or it improves it beyond that to which it could be provided by the satellite unless you had, if I take the slightly absurd example of Mr. Bowsher's case, one man sitting with the receiver somewhere, and he has the satellite's entire attention, then you could get good service.

MR. HOLMES: Yes.

THE CHAIRMAN: So you use the CGCs everywhere, not just in particular -- everywhere is deemed to be an area where the satellite cannot provide MSS of the required quality.

MR. HOLMES: Sir, the system that my client, Ofcom, as regulator was considering in order to determine whether the proposed use made by Inmarsat of the ground stations constituted CGCs, does involve installing a broad-based network of ground-based stations, which improve the quality of the service available.

THE CHAIRMAN: Everywhere?

MR. HOLMES: Everywhere where they can be stationed within the footprint of the satellite, and we say --

THE CHAIRMAN: I am sorry but the whole purpose of this exercise is to make sure that a high quality is available to people in aircraft everywhere.

MR. HOLMES: Yes.

THE CHAIRMAN: Right, so it is everywhere, it is not to everywhere -- of course it is everywhere where you can install the ground station. That is in order to achieve this superior coverage everywhere and the superior coverage is effectively that which can be achieved by ground stations, because it can never be achieved except in a very, very narrow basis, a few aircraft, or if you want to project it on the ground, a little area on the

ground by the satellite alone.

MR. HOLMES: Yes, by this satellite or by any satellite, that's correct sir.

THE CHAIRMAN: Right.

MR. HOLMES: We say that is consistent with the definitions in the legislation.

THE CHAIRMAN: Yes.

MR. HOLMES: What we do strenuously resist, and this will be canvassed in evidence, is the suggestion that the satellite does not play a useful role and does not contribute usefully to the functioning of the system. That is what is suggested. That is the case that is put against us: that the satellite is virtually useless, that it serves no real function, and that it ... well, when they put their case at its highest, it amounts to a claim that it is a sort of ribbon, a bow that is been affixed on top of the system purely for regulatory reasons.

THE CHAIRMAN: A submission which -- to come back to a point I made this morning, Mr. Holmes -- seems to get some legs from the fact that Ofcom contemplates fixing the problem of there being no satellite on an aircraft and the problems which that would present as to whether this is an MSS, by making them put a satellite on the aircraft --

MR. HOLMES: No --

THE CHAIRMAN: -- a satellite dish on the aircraft.

MR. HOLMES: With respect, sir, and we can look at what was proposed, the proposal that was presented to my client, Ofcom, as the regulator, was a proposal for an integrated system. Now, Ofcom was told by Viasat that it had particular concerns about the way this would be deployed, and so Ofcom went out and it investigated and it gathered information, and Inmarsat provided information, including information under formal powers, which showed that some -- I mean, I have to be careful because some of the material is confidential, but it raised a concern that aircraft may not have the incentive in all cases to install the satellite component, although it was being offered as an integrated service by Inmarsat, and Ofcom made clear that an integrated service is what it needed to be to comply with the licensing requirements. So that is had true.

But that is not the same as saying the satellite plays no useful role and that we do not agree with. Had we thought that it might have been a basis for not licensing, but it is not the conclusion that Ofcom arrived at, and we will explore that in evidence.

Sir, unless I can assist you further, those are my

submissions, really, for opening on the second limb of ground 1(a).

THE CHAIRMAN: Yes. Carry on.

MR. HOLMES: I am grateful.

Moving briskly on through the provisions of the EU decision which are of particular relevance to the case, a point is taken against Ofcom in relation to Article 4(1)(c) of the selection, the admissibility criteria for the selection of applications. The reason why that is said to be relevant now is because 4(1)(c) sets out the minimum commitments which must be respected by the operator of a mobile satellite system by virtue of the common conditions which apply to the authorisation to provide mobile satellite systems under Article 7. So this does not relate to any common condition applicable to CGCs; it relates to a common condition relating to the authorisation of mobile satellite systems, and one sees it, one sees how 4(1)(c) is carried through if you turn over the page to Article 7, from Article 7(2)(c):

"Selected applicants shall honour any commitments they give in their application or during the comparative selection procedure irrespective of whether the combined demand for radio spectrum exceeds the amount available."

So these are binding notwithstanding that the

selection process stopped at the first phase, because there were only as many applicants as there was spectrum available.

So what is said is by Viasat that Ofcom could not authorise CGCs under Article 8 because of a continuing breach of the common condition under the mobile satellite system authorisation relating to the common condition required under Article 7(2)(c).

Now, my primary submission you have, which is that the authorisation of CGCs is separate from the authorisation of mobile satellite systems. A breach of a common condition in the authorisation of mobile satellite systems is subject to a separate and harmonised enforcement process, and Ofcom could not refuse to licence CGCs on the basis of a separate authorisation.

On the contrary, Ofcom was not permitted to do that. The correct approach is the enforcement process which has been ongoing and has been encouraging Inmarsat towards the launch of its service.

But there is also a point about the interpretation of Article 4(1)(c) where a disagreement, I believe, exists between Ofcom and Viasat, and I should briefly address you on that.

In our submission, both limbs of Article 4(1)(c)

relate to the area covered by the system. It is true that what must be done within the area differs under 4(1)(c)(i) and 4(1)(c)(ii). 4(1)(c)(i) requires that a:

"... mobile satellite system shall cover a service area of at least 60 per cent of the aggregate land area of the Member States, from the time the provision of MSS commences."

Now, in relation to that criterion, there is a satellite in the air and it covers 60 per cent of the aggregate land area, but it is only about -- that criterion is only about the size of the footprint of the satellite, how much land is covered by it.

4(1)(c)(ii) requires that:

"[Mobile satellite services] shall be available in all Member States, and to at least 50 per cent of the population and over at least 60 per cent of the aggregate land area of each Member State by ... [in the second eventuality], no later than seven years from the date of publication of the Commission's decision adopted pursuant to articles 5(2) or 6(3)."

And in relation to that criterion, we say that it means that the services shall be commercially available in all member states, so different from just the coverage of the service area, and shall cover an area which reaches at least 50 per cent of the population,

and is over at least 60 per cent of the aggregate land area of each member state. We say that is the interpretation that is required. It is still about the area covered, and again, the area covered by the satellite would conform to both of those requirements, so that when commercial service is launched, provided that there is commercial availability in all member states, the service will be commercially available in the areas specified.

Now, we say no other interpretation is tenable. It certainly cannot be correct that the legislation required 50 per cent of the population actually to be receiving -- in each member state actually to be receiving the service. It was well understood that that was not -- that would require an extraordinary -- actually to be taking the service that would require extraordinary success, and it cannot be the number of simultaneous users that could be provided.

Equally, the focus is upon area coverage, in our submission, as is shown by the reference to the 60 per cent of the aggregate land area of each member state, and it is difficult to understand what the 50 per cent of the population could be aimed to assess, other than whether the area of coverage was an area within which 50 per cent of the population were located.

THE CHAIRMAN: Forgive me, Mr. Holmes, it is plain, is it not: they want to make sure that somebody is not just focusing on the outer mountainous parts of various places, but they want to make sure it covers a worthwhile area of land, but within that they also want to make sure that it covers -- I am not going to use the word "available" deliberately for the moment -- at least 50 per cent of the population to make sure there is a worthwhile number of people within the area.

MR. HOLMES: That is absolutely right, so it needs to cover an area covering 50 per cent of the population.

THE CHAIRMAN: But it is an area defined by the number of people in the area. Actually it is a very common metric for all sorts of things, mobile phone coverage here, all sorts of things.

MR. HOLMES: We fully agree, sir.

THE CHAIRMAN: So what is the difficulty?

MR. HOLMES: The difficulty is that Mr. Bowsher says that when a service is provided in the air, it is only available in the sense of being capable of being consumed by that subsection of the population who happen to be on flights at any one time and that, therefore, an aeronautical service could not meet the criterion in 4(1)(c)(ii).

THE CHAIRMAN: Yes. What is wrong with that? I am sorry,

if the service that is provided by this is available only to however many thousands of people who happen to be in the air at any one moment, and that number is less than 50 per cent of the population of member states, then why does the service not fail to comply?

MR. HOLMES: Well, sir, two points: the first point is, if it were correct that the service actually had to be capable of being consumed at any one time by 50 per cent of the population, then no aeronautical service would ever be possible, and we have seen that was within the contemplation --

THE CHAIRMAN: Well, I think that is Mr. Bowsher's point.

MR. HOLMES: Yes, but we have seen the legislature regarded an aeronautical service as one -- we have seen from the CEPT report for example that it was one possible use to which the service could be put. We have seen from the Commission's information memorandum accompanying the Call for Applications that aeronautical services were always envisaged as one possible use.

But also if one turns to the -- sorry, just to complete the point, the service is commercially available within an area which extends across 50 per cent of the population. So the coverage does reach the most populous areas of the Union, and we say that it therefore conforms with the requirements of

Article 4(1)(c)(ii).

DR. ELPHICK: But am I right in saying that your fundamental point on this is that in regard to the authorisation of complementary ground components, we should only be focusing on the conditions in Article 8 and not the prior.

MR. HOLMES: That is quite correct, sir.

DR. ELPHICK: That is a fundamental point.

MR. HOLMES: I am grateful for that.

THE CHAIRMAN: That is the prior point. We should not be considering this -- Ofcom should not have been considering this and was right not to consider it, but if it was considering it, it did not make a mistake.

MR. HOLMES: I am grateful sir.

THE CHAIRMAN: That is how you put it?

MR. HOLMES: Yes, sir.

THE CHAIRMAN: Can I just ask you this to see how it fits in?

MR. HOLMES: I am sorry.

THE CHAIRMAN: Do you want to make your very good point before I ...

MR. HOLMES: The point was simply, sir, that what the mobile satellite service enables is, of course, communications between the plane and the population on the ground, so that it would not be correct to say that the only people

who have use of the service are those who are actually happening to be flying at any one time.

DR. ELPHICK: Because you could be making phone calls to people on the ground in that whole area?

MR. HOLMES: Yes, and to that extent -- yes, one could say that the service was indeed commercially available to a broader population than just --

THE CHAIRMAN: Well, by that token the service is available, if you are talking about people on the plane making telephone calls, it is available to everybody in Europe, America and Asia, because you can make a phone call to any of those places.

MR. HOLMES: Yes.

THE CHAIRMAN: So it is an empty requirement in this context, or it is automatically fulfilled as soon as you have one person on a plane with a phone.

MR. HOLMES: Well, sir --

THE CHAIRMAN: Because they can call anybody in the world.

MR. HOLMES: Yes. I think we have probably taken this as far as it --

THE CHAIRMAN: Yes, I am not sure it was such a good point.

MR. HOLMES: You are right, sir, it is always a dangerous thing to adopt points on your feet. It is also dangerous sometimes to adopt points of judges in my experience because then they think about why they might

be wrong and you can find yourself in terrible trouble with that.

THE CHAIRMAN: Well, you are obviously engaged in a completely hazardous activity. So let me ask my question now.

MR. HOLMES: Yes.

THE CHAIRMAN: It is not a point, it is a question.

MR. HOLMES: Yes.

THE CHAIRMAN: Supposing that Ofcom had come to the conclusion, contrary to your reasoning, that in fact this system, as it was proposed, failed to comply with this requirement. Do you say that its proper stance is to say: well, okay, you are going to have to do something about it, but we have nevertheless got to give you a CGC authorisation for this system. I think that is where your submission goes, does it not? Supposing it was absolutely plain that this requirement was not fulfilled and if you look at the current plans and the way they are going to run it never could be fulfilled because you are wrong about the 50 per cent population bit, do you still say: well, they still have to give authorisation and somebody else has to enforce it?

MR. HOLMES: Yes, sir, because there is a harmonised enforcement process and the interpretation of that commitment which I think, sir, my submission will be

that on any view it is unclear, would not be for Ofcom or for this tribunal. It would be for the member states, the European Commission, and for consideration in other tribunals than this.

THE CHAIRMAN: So they would have to give authorisation even though it was clear on this hypothesis it was not fulfilled and nor were there any apparent proposals for fulfilling it --

MR. HOLMES: Yes, sir.

THE CHAIRMAN: -- because they -- the system, if you are wrong about the construction, it simply can never be fulfilled by this system but they nevertheless have to authorise. I think that is consistent with your submission, is it not?

MR. HOLMES: It is, sir, yes.

THE CHAIRMAN: Right.

MR. HOLMES: So the other provisions we should consider, sir, are in Article 8, which is in my submission are more directly relevant. They are the common conditions applicable to complementary ground components. We accept, sir, that if it were the case that the ground stations proposed by Viasat were unable to meet any of the common conditions which were to be inserted in the licence, it would not in those circumstances be appropriate to grant an authorisation for them, and

accordingly, Ofcom did consider whether these common conditions were met by the ground stations proposed for the EAN.

Mr. Bowsher relies on three of the common conditions in Article 8(3). First he says that operators will not be using the assigned radio spectrum for the provision of complementary ground components of mobile satellite systems, and he relies there on the fact that there is no mobile earth station in the mix because of his argument that the ground --

THE CHAIRMAN: Sorry, would you be good enough to start again, Mr. Holmes. It is my fault, not yours.

MR. HOLMES: No, no. Of course, sir.

We are now in Article 8.

THE CHAIRMAN: Yes.

MR. HOLMES: The complementary ground components.

THE CHAIRMAN: Yes.

MR. HOLMES: And we are considering the common conditions in Article 8(3).

THE CHAIRMAN: Yes.

MR. HOLMES: And Ofcom accepts that if the ground stations that were proposed --

THE CHAIRMAN: I got that bit. It was the bit afterwards, yes.

MR. HOLMES: And Mr. Bowsher relies upon three of the four,

as I understand his case. The first is that he says that (3)(a) is not met, Article 8(3)(a) is not met because operators will not use the assigned radio spectrum for the provision of complementary ground components of mobile satellite systems, and that depends on his argument under the first limb of ground 1(a) that the mobile satellite system, that the CGCs are not using the mobile satellite system because a ground-facing antenna is not part of a mobile earth station because it is not capable of communicating with the satellite. So that point is parasitic on the first limb of ground 1(a), and you have my submission on that.

DR. ELPHICK: If you like, the definition of a station?

MR. HOLMES: Yes. Yes, sir.

The second point that is taken relates to Article 8(3)(b) and it is said in relation to that that there is no satellite -- that the complementary ground components are not controlled by a satellite resource understood as something separate from the network management mechanism.

Now, in our submission, that is not the correct interpretation of Article 8(3)(b). What is required is a satellite resource and network management mechanism. One sees that the purpose of the mechanism is to avoid harmful interference between the two elements of the

system, and one sees that from recital 9 to the harmonisation decision, to which I took the tribunal, and which shows that these common conditions were inserted -- this common condition was inserted to avoid the risk of harmful interference. So what is required is a mechanism which manages when the two components of the system will be used to provide the service.

Ofcom found that in the case of the EAN there was such a mechanism, and you have my submission that that type of technical appraisal is one that the tribunal should be slow to impugn.

The final point which is taken under Article 8 is Article 8(3)(c), which provides that:

"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."

Now, in our submission this was not a relevant condition. There was nothing to indicate at the time of authorisation that this condition was not capable of being met by the EAN, and therefore it provided no basis to refuse the authorisation.

The satellite has not failed. It is not out of action, and therefore there is no reason to believe that the system will be used without a satellite component

for a period in excess of 18 months.

This point really comes down to the suggestion that if some planes, some aircraft, were to use the system without a satellite terminal installed because of the delay that was anticipated in installing the satellite terminal, that would amount to independent operation of the complementary ground components.

But, sir, you have my point on that: that Ofcom was entitled to deal with that by way of enforcement afterwards, and it still does not make Article 8(3)(c) relevant because it is not the situation which is contemplated by Article 8(3)(c). If anything, there is a point we say which supports Ofcom's analysis of the legislation in Article 8(3)(c). What it confirms is that the complementary ground components can, indeed, operate without the satellite. That is not -- it does not in itself stop them from being complementary ground components. It does not stop the system from being a mobile satellite system. The operation can continue for a period not exceeding 18 months.

So the fact that the EAN could in principle be used only as a terrestrial system cannot be determinative.

Now, sir, I am very conscious of the time, and I have now given you my submissions on all of the grounds, and so unless there are any further questions

from the tribunal, I think that is sufficient to open the case.

THE CHAIRMAN: Thank you very much.

Mr. Ward.

Opening submissions by MR. WARD

MR. WARD: I am going to make brief submissions from Inmarsat's perspective on the factual context, some very limited points on the regulatory framework, and then some observations on the question of whether the ground components are complementary. I will, of course, endeavour not to repeat Mr. Holmes' submissions.

In short, our submission is that this is an unjustified attempt by a direct commercial rival to block a competing product that offers real consumer benefits. Viasat's case suffers from two overarching flaws. Firstly, it seeks to read new requirements into the harmonised regulatory framework. Ofcom's task was a narrowly-confined one: to determine whether to authorise the CGCs.

On the facts of this case it had no choice but to grant that authorisation. But, secondly, Viasat seeks to blur the distinctions between that task and the other elements of this regulatory framework. This is not a regulatory audit of the EU tender process, nor is it an appraisal of the design of Inmarsat's S-band project,

the different terminals, the satellite, and so on. It is, or it should be, a tightly-focused judicial review of the particular decision in question, and viewed in that light, most of Viasat's complaints are simply irrelevant to the issues that the court has to decide.

Starting, then, with the facts, as the tribunal is now well aware, there is nothing at all novel in the use of satellites to provide in-flight connectivity. As the Chairman observed on the first day, that particular use was contemplated in the background to this legislation and, indeed, there are a number of providers using satellites to provide in-flight connectivity already, including Inmarsat and including Viasat.

The reason for that is obvious: the satellites can cover a vast amount of terrain. With three satellites you can cover the entirety of the earth. With one satellite you can cover the whole of the EU.

Just for the tribunal's note, Dr. Webb discusses that in his first report in bundle D/8, paragraphs 17 and 18.

But as the tribunal has also heard, whilst satellites have this huge advantage of coverage, they may be subject to capacity limitations, in other words, the amount of data they can transmit, and the speed and the quality of that transmission. That is because,

among other things, the satellite in this case is 36,000 kilometres above the earth, so the signal has a long way to travel.

But there is another important contextual factor which one can pick out of the witness statements, which is that there are constraints arising from the type of spectrum and the amount of spectrum at issue. What we had here was 2 GHz spectrum, only 15MHz in each direction. What the evidence shows is that there is a lot more spectrum available at higher frequencies, and at those higher frequencies, it is possible to have higher capacity.

But we must recall it is a remarkable technical achievement to provide this kind of service at all to a moving aircraft, high up in the sky, and what I would like to do now is, if I may, show you a bit of Mr. Sharkey's first witness statement in bundle D/4, where he explains the nature of the kind of broadband products that Inmarsat, for example, currently offers. This is on page 8 of D/4. What this passage does is talk about an existing and well established product that Inmarsat has, which is not --

THE CHAIRMAN: Page 8, yes?

MR. WARD: Page 8, yes.

THE CHAIRMAN: Thank you.

MR. WARD: It is talking about a different in-flight connectivity product that Inmarsat successfully markets in the L-band, which is a different frequency band. If I can just take you through a couple of paragraphs.

THE CHAIRMAN: It is said to be analogous to or similar to. It is because -- it is not proximate in frequency is it?

MR. WARD: Close, if not proximate.

THE CHAIRMAN: Is that why it is said to be analogous?

MR. WARD: Yes.

THE CHAIRMAN: Right.

MR. WARD: You will see here -- none of this evidence has been contested --

THE CHAIRMAN: Well that is because this seems to be, with respect, Mr. Ward, to be advertising.

MR. WARD: Sir, it goes beyond advertising, I hope. Will you bear with me for five minutes while I --

THE CHAIRMAN: Yes, I am not stopping you. I am just pointing out how it seemed to me.

MR. WARD: Well I hope you will be persuaded in the end it has more value than that.

"As discussed in more detail below Inmarsat already provides connectivity for airlines and their passengers through similarly performing satellites using the L-band."

Then it says -- at 28 it lists a number of airlines,

points out that various people buy this product, but if I can just take you to the end of paragraph 29:

"... satellite-based SwiftBroadband [which is this particular product] supports internet browsing, e-mail, voice and similar services, it does not have sufficient capacity to support more data intensive services such as, for example, streaming video or games ..."

We will want that witness statement again, but I would like to show you, if I may, the exhibit which makes good what he is saying, which is in bundle E3/108. This is a printout from the website of the Emirates airline, which is one of the customers for that product I was just showing you, and I think, sir, you will see now, I do not think this will fall in the category of advertising, because the point I am going to make is the limitations upon the use that the airline actually itself warns.

So you will see on the first page of the exhibit that although you get 20MB free, unless you are a member of the Emirates Skywards then you have to pay for more. Then there is another tariff even for Emirates Skywards members over the page, and then it is really the bit at the end where it says:

"Our on-board wi-fi performs best if you:

"Avoid streaming videos.

"Don't send pictures.

"Use apps instead of data.

"Turn off background apps you aren't using.

"Refrain from using VPNs."

Which are virtual connections to one's desktop.

THE CHAIRMAN: They are not quite, but you do not have to go into that.

MR. WARD: I was doing my best, so you are ahead of me on that.

The point I am making is simply this: quite the contrary of just shameless advertising, this evidently is a viable tool, at least for business. One can log-in, send a few messages, but one cannot, proverbially or literally, stream Netflix all the way through the journey and of course what the tribunal now has seen, and I will not labour, is this particular product does take this forward a very long way indeed.

Now, it is not the only way this can be done, but this is an important improvement on the level of service that can be provided. If I could ask you -- we are done with the exhibit bundle, but to turn back to what Mr. Sharkey says about how this is done on page 7 of his witness statement, so this is D/4 again, you will see in paragraph 20 that under the heading of "Spectrum reuse and efficiency":

"Spectrum is a finite natural resource and Inmarsat's allocation of the S-band is limited to 15MHz in each direction. Inmarsat has integrated CGC components whose use is coordinated with that of the satellite in order to maximise and make best use of its limited spectrum allocation."

Then it is the next bit I really wanted to draw attention to:

"The resulting EAN makes an exceptionally efficient use of the spectrum assigned through frequency reuse between the satellite and the ground network. Indeed, the limitations on Inmarsat's spectrum forces the exploitation of the two components, satellite and CGCs, to their fullest potential."

Again, please keep that to hand because we will be going back to it. Can I just take you back to bundle F now, and just remind you of the language of the CEPT report, which Mr. Holmes read out earlier. It is bundle F/4 on page 11, I am afraid I am now the third advocate to show you this page so I will take it quickly. It is on the bottom of page 11. The tribunal saw earlier this paragraph at the bottom of the page, talking about elements about CGC, starts talking about how typically CGCs can improve the quality of service in rural areas -- sorry, in canyons, and then about five lines

from the bottom:

"Furthermore, they may play an important role in enhancing the efficiency use of the ... spectrum."

And that is precisely what is going on in our case: efficiency reuse by using the same rather narrow band of spectrum for two different mechanisms to transmit the same service to the consumer who is sitting in the seat on the aeroplane, and before we put it away, I would like, again, to turn the page again to something Mr. Holmes showed you, but perhaps in slightly different emphasis.

The second paragraph, or the first full paragraph on the next page says:

"An increasing number of MSS operators, are considering the possibility of extending their international MSS operations with CGCs. The United States and Canada recently created a licensing regime for integrated hybrid satellite/terrestrial systems ... "

What we have is an integrated hybrid satellite/terrestrial system and this CEPT paper of course contains quite a lot of the thinking that went into the licensing regime that we are here discussing today.

Then the CEPT says:

"Accordingly, endorsement of the CGC opportunity by the EU and national regulators will put Europe on a level playing field with the [US] and Canada, in terms of MSS innovation and services to consumers."

Then as Mr. Holmes showed you the beginning of the next paragraph:

"Apart from providing more efficient spectrum use [which is what we have just been talking about] CGCs will benefit consumers by allowing ... improved quality of service. Improved coverage would result in continuous development of the ubiquitous connectivity particularly beneficial to transport markets."

Eg, I would say, aviation.

So what we are doing, in my submission, is precisely what is envisaged by the CEPT. We respectfully submit Ofcom was right in its authorisation to conclude, and Mr. Holmes read this out so I will just read it, that the authorisation would:

"... 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."

Now, I want to just say something about how it will be used in practice, as there is some misunderstanding about this. You will have seen in Viasat's skeleton

that they make a lot of the suggestion that the CGC element will in fact be used without the satellite element, and we were surprised to see that, and the reason is, in the witness statement of Mr. Pearce, which is in bundle D under tab 3, and if I might ask you to turn up page 13 of that witness statement, at the top of the page, page 13 under D/3, this is Mr. Pearce, who is the CEO of Inmarsat, and he has not been called for cross-examination. At the top of page 13, paragraph 57:

"As we have stated to Ofcom, airlines will ultimately use the entire integrated EAN so that CGCs will not be used independently from the satellite element."

Which is why we have been surprised to hear the way that case has been put. But I would also echo the point that Mr. Holmes made: what Ofcom did is take the view that it would licence on the basis that that was how it would be used, and then see how the world turned out, and then take whatever enforcement measures it thought were applicable.

Now, just to explain what the current state of play is with the EAN, if that would be of assistance, the satellite was launched in June 2017 and is now fully operational. The network of CGCs are fully deployed, ready for service. National regulators in all 28 member

states have awarded the satellite licences, in other words, the Article 7 licences, needed to operate the satellite element, and in respect of the CGC component it has authorisation from 24 of the other member states, and I understand that the remaining authorisations are nearing completion.

For that last point, the reference is Mr. Pearce's witness statement at paragraph 49, bundle D/3, page 11. He gives the figure of 23, but Slovakia has also just granted authorisations.

DR. ELPHICK: Can I ask, do you know if those authorisations are themselves the subject of appeal? Have they completed their processes in those member states, do we know?

MR. WARD: Sir, the position is that there is a pending appeal in Italy. In France there is a challenge by Eutelsat, who was formerly Viasat's commercial partner, I believe.

THE CHAIRMAN: An appeal. Does that mean a -- it is a challenge, is it?

MR. WARD: A challenge to the appeal to the Conseil d'État in France. Then in Belgium, the regulator's decision, which was favourable to Inmarsat, has been remitted, albeit on the grounds of insufficient reasons, and there is a small irony in that that the Belgian court compared

the decision unfavourably to that of Ofcom's that you are considering in this case. So that is the state of play around Europe.

DR. ELPHICK: So it sounds as though in 21 member states we are saying it sort of completed the process and in three it is still continuing?

MR. WARD: Let me just see if that is a fair reflection.

So there is -- sorry, Belgium is not among the 24.

DR. ELPHICK: Right, yes.

MR. WARD: That is what I am being told. But the 24 does include France and Italy, where there is a pending appeal.

DR. ELPHICK: Thank you very much.

THE CHAIRMAN: Has the time now passed for any appeals in the other 22?

MR. WARD: Let me see if I can take instructions on that briefly. I am not sure. We can try and find out. I am not sure.

Now, what we would emphasise is that the kind of service that Inmarsat is seeking to launch, and is on the cusp of launching, is the kind of pan-European service offering real consumer benefits which is precisely the kind of thing the EU legislator had in mind when it harmonised the S-band. Can I ask you to turn up again bundle F, which is the legislation bundle,

and I would like to highlight just a small number of passages you have already seen, starting under tab 6.

What I am going to show you is repeated references to the benefits of competition, innovation and efficiency. So recital 5 --

THE CHAIRMAN: I really question whether this is going to help us. We have got narrow questions in this case of construction, and wider questions on the transparency, euro-type point.

Extolling the innovative aspects of this product are not going to help us much, are they?

MR. WARD: It helps to this extent, I will cut it short in light of your observation, sir --

THE CHAIRMAN: Do not cut short a submission you think you need to make but I am challenging whether you need to make it at all.

MR. WARD: Let me go to the quick of why we think it matters. It matters because essentially there are complaints in this case that the service that is being offered is somehow outwith the scope of what is being proposed. The short submission I am making here, which really does build upon what Mr. Holmes has already said, is it is precisely the kind of thing that was envisaged, in other words, a service that would be innovative, would offer competition to existing services, but the

legislative framework does not specify beyond that what is required, provided, of course, it fits within the definitions.

But Mr. Bowsher's attempt to narrow this down to knock out what would be a very serious competitor for his client is just not founded in the language of this legislation.

THE CHAIRMAN: The latter point is the more important one. We assume it is competitive with the competitors, that is actually Mr. Bowsher's complaint --

MR. WARD: Well, it is.

THE CHAIRMAN: -- and I think we are prepared to assume in your favour that it is innovative. Assume all that for the moment. Describing it as competitive and innovative does not seem to me to meet any of Mr. Bowsher's points.

MR. WARD: It meets -- the really underlying point of legal substance, sir, is the point that Mr. Holmes has really already made and therefore I can just cut to the chase of, which is that this legislation is clearly open to innovative uses that will bring competition to the market. It is not carefully circumscribed so that it is only about rural broadband. It is not carefully circumscribed so that it is only about putting ground stations in places where there might be canyons between buildings. That is where the submission bites, and I am

happy to fast-track it.

What we do say though is that the complaint that that competition is unfair is really just a classic attempt to put the interests of a producer, namely Viasat, ahead of the interests of consumers. The purpose of this legislation is to bring benefits to consumers in the form of new and innovative services.

The complaint that this competition is unfair is, in my respective submission, completely wrong and indeed irrelevant to the narrow exercise Ofcom embarked upon, for the high-level reason that Inmarsat won this spectrum in an open and competitive selection exercise.

Viasat was free to participate but chose not to do so. It complains: well, we could never have known that this kind of system was permissible. But, of course, for the reasons Mr. Holmes has already developed in detail, it is perfectly obvious that it is open to any use that fits within the definitions. Viasat could have read those rules and seen for itself.

Now, I want to talk a little bit about the complaints about the selection process, albeit that my overarching submission is going to be that they were irrelevant, but I would like to explain a little more about the change in the satellite design which Mr. Bowsher has given some prominence in his

submissions, and the most useful place to see what actually happened is in a news article that he, I believe, opened, but certainly inserted in the bundle, which is in exhibit bundle 2 under tab 86. This gives a potted history of this project.

THE CHAIRMAN: E2/86? I do not think this was opened to us. Something else was opened to us so we could see a picture.

MR. WARD: Well there are pictures here but that is not why I am taking you there.

THE CHAIRMAN: Oh, shame.

MR. WARD: This is a blog item from something called Spaceflight 101, which is probably about the right level, at least for me, and it is just explaining the history of what happened here. I am going to just draw your attention to a few paragraphs and flesh them out a little more. You can see under the very impressive photograph of something the full paragraph which is below that. Actually, sorry, it is useful to see, it is talking about the satellite the Inmarsat-S/HellasSat 3 which is the satellite which is actually 36,000 kilometres above us as we speak. You can see, just in my file, at least, it is level with the second hole punch:

"The project finds its roots in the original

EuropaSat concept that was ordered by Inmarsat from satellite builder Thales ... in 2008 after receiving clearance for use of the 2 GHz S-band frequency ..."

Then it says, as Mr. Bowsher did point out yesterday:

"Per the original design, the 5,700-kilogram satellite was to host a large 12-meter S-band antenna reflector and deliver 9 spot beams in two polarisations to provide mobile broadcasting services and two-way telecommunications."

Then it says, it is a bit broken up, the text, but at the bottom of the page:

"Inmarsat put the EuropaSat project on hold in 2009 to seek external investors in to potentially spin the satellite off into a separate company, partly owned by Inmarsat."

So, pausing there, the date of that is significant. 2009, as the tribunal will recall, was the depth of a worldwide financial crisis. So what this is obviously saying is that alternative means of funding this project were being sought.

Then over the page it explains that:

"The project's revival did not come until 2014 when Inmarsat partnered with Hellas-Sat to share the cost of the satellite platform & launch."

And this is all described very disparagingly by Viasat as some form of wrongful cost-cutting. But you can see that obviously is something that you could imagine might make a lot of commercial sense, and it explains:

"Under the new plan, the all-S-band EuropaSat was re-designed into a multi-mission platform with an S-band package for operation by Inmarsat under the EuropaSat designation and a Ku/Ka-Band payload for HellasSat to be marketed as HellasSat 3."

And as a result the platform went slightly bigger. So in other words there is a financial crisis, there are funding issues --

MR. BOWSHER: I am sorry to interrupt, there is now a bit of evidence here. I am not quite sure where this financial issue is going but we are now having some evidence about the financial issues which I do not think is anywhere in the papers, if it is relevant at all.

MR. WARD: I am sure the court can take judicial notice that there was financial crisis at that time. What we are seeing though is that the project as redesigned, and then there is more detail of the satellite that we need not be concerned with, and then it explains what else happened if we go to the bottom of page 3, just the last paragraph on page 3:

"The satellite was initially booked to ride into orbit on a SpaceX Falcon Heavy rocket for launch in 2016 and Inmarsat also secured an option for a Proton-M ... launch vehicle to safeguard for any further delays of SpaceX's heavy lifter. However, with Falcon Heavy still waiting for a debut mission and Proton suffering an extended grounding to engine problems, the satellite was moved in late 2016 to a mid-2017 launch on Europe's Ariane 5 rocket, taking advantage of that vehicle's schedule certainty to get the mission into orbit with only months of delays instead of years."

So you can see from that article that there were difficulties in launch and in fact I am going to say something on instructions now and if Mr. Bowsher wants this in writing I am sure it can be arranged.

Apparently, with each of those rockets the launch immediately prior to the one that Inmarsat was supposed to be taking advantage of blew up, so there were delays and complications, to put it mildly.

What we say about this, should, is that clearly this is a long and challenging road and, in fact, we can now turn back to the evidence and see what exactly is said about this, which is undeniably high-level. It is in Mr. Pearce's witness statement, which is in bundle D/3 at page 11.

At paragraph 50 he makes a point which is both obvious, in a sense, and --

THE CHAIRMAN: Just a second. Let us find it.

MR. WARD: I am so sorry, sir.

THE CHAIRMAN: Paragraph 50.

MR. WARD: Yes. He says:

"Like many other projects of this technical complexity, dimension and vast geographic scale, this has been a long and difficult project. It has been made harder by Viasat's numerous regulatory challenges. We also suffered some set-backs which delayed the launch of the satellite. What is important for us, however, is that we have managed to overcome those set-backs very successfully."

Then over the page he deals with the question of the design changes at 55, and he says that:

"... the fact that Inmarsat has achieved the intended coverage and quality levels to which it committed back in 2008 through lower costs than expected should not be a cause for criticism. By lowering its costs, Inmarsat is in a position to provide an extremely competitive value proposition to its customers, which can only benefit the end users of the EAN services. It improves the competitive proposition ... [of] Inmarsat ..."

The reason I point to that is, again, that we do place emphasis on the fact that all of this is ultimately about driving benefits for consumers, and if Inmarsat can produce a viable product at a lower cost, that is a good thing, not a bad thing, at least for consumers.

One can see why it is a bad thing for Viasat, but for the interests of the community in having EU-wide services that are attractive to consumers, it is a good thing.

Now, what we do say --

THE CHAIRMAN: Is that a convenient moment for us to take our break, Mr. Ward?

MR. WARD: A perfect moment, thank you.

THE CHAIRMAN: We will take five minutes for our transcribers.

(3.10 pm)

(A short break)

(3.22 pm)

MR. WARD: Just a few more brief submissions about the regulatory framework. I can take it very quickly as I am covering some of the same ground as Mr. Holmes.

With the very greatest of respect to Ofcom, on this occasion its part in this process is both mechanical and subsidiary. It is the Commission that has harmonised

the use of the bands. That is the harmonisation decision under F/5. It is the EU Parliament and Council that harmonised the selection and authorisation criteria, that is the EU decision under F/6, and it is the Commission that carried out the selection process, the decision is under F/8.

What Ofcom is left with is a narrow and tightly-defined task. The reason it is narrow and tightly defined is to prevent national regulators from fragmenting this overall EU-wide product by imposing a patchwork of different threshold conditions or eligibility criteria, and of course the Community could have decided to link the CGC authorisation to the selection process, or it could have decided to link it to the Article 7 conditions which apply to the authorisation for a satellite. But it did not, and it did not because, of course, that would have simply greatly complicated the task in issue.

Now, I wanted to show you a little bit more, if I may, of the enforcement regime for the Article 7 conditions, and that is in the authority -- so sorry, legislation bundle under tab F. Sorry, bundle F/12, I am very sorry.

Just to be clear, bundle F/12, this is the harmonised enforcement regime which applies to the

Article 7 conditions. It has nothing at all to do with the Article 8 CGC conditions that we are directly concerned with, and we can see that from recital 9 which says:

"This decision should not cover enforcement of purely national conditions, nor apply to enforcement measures concerning conditions other than the common conditions referred to in Article 7(2)."

So it is only the Article 7 conditions. But recital 11 is important here because it explains the thinking. It starts by referring to the authorisation directive, but that does not really matter. It just says:

"Article 10 of [that] directive ... provides for a graduated approach to enforcement, envisaging a first phase where the alleged breach is investigated and measures aimed at ensuring compliance are adopted. Such measures should stipulate a reasonable period for the operator to comply. In general the determination of a reasonable time to comply should take into account the specific nature of the satellite industry, of the breach concerned, and of the remedy envisaged. In particular, where the launch of a satellite would be necessary to achieve compliance with any of the common conditions concerned, measures adopted may provide for a roadmap

including intermediate steps and corresponding time limits. A second phase triggered by the failure to address serious and repeated breaches can then lead to withdrawal of the rights of use."

And we can see how it is supposed to work in Article 3. It is headed "Coordination of enforcement of common conditions", so Article 3(1):

"Where an authorising Member State finds that an authorised operator does not comply with one or more of the common conditions [under Article 7, that should say] and informs that operator of its findings ... it shall at the same time inform the Commission ... [and] the other Member States."

Then it provides for a period of investigation.

"(4) Member States shall refrain from adopting any final decision.

"(5) After the meeting of the Communications Committee ... each authorising Member State which has notified the authorised operate of its findings ... and concludes that one or more common conditions have been breached shall take appropriate and proportionate measures, including financial penalties, aimed at ensuring compliance by the ... operator ... with the common conditions, with the exception of withdrawal ..."

So in other words the initial phase cannot involve

withdrawal.

"(6) In the event of serious or repeated breaches of the common conditions, any authorising Member State ... shall inform the Commission of its intention and provide a summary of any measure taken ... to comply ...

"(7) Within 3 months of the transmission by the Commission ... a meeting of the Communications Committee shall be convened with the objective to coordinate any withdrawal of an authorisation ... in the meantime all authorising Member States shall refrain from adopting decisions entailing withdrawal ..."

So the point I am making is simply that there is a carefully graduated regime for enforcing those conditions of authorisation of the satellite under Article 7. Why is it like that? The answer is given in recital 11: it is the specific nature of the satellite industry. Ultimately the purpose of this regime is to put in place mobile satellite services for consumers, but as the potted history of this particular product shows, that is expensive and complex and plans can go wrong. So instead of a strict liability regime that would revoke authorisation, what you have instead is a graduated process coordinated across the EU.

As Mr. Holmes has said, there has been an enforcement process of this kind, but the important

point is none of this at all has any bearing on the issues that Ofcom had to decide in this particular case.

THE CHAIRMAN: Can you just help me with this, Mr. Ward, to make sure I just understand. Article 3(4):

"Member States shall refrain from adopting any final decision on the alleged breach before the meeting of the Communications Committee ..."

But as I understand this mechanism, having read it briefly, the individual member states never get to decide finally whether anything shall be done. That is always taken centrally and then it is sent out to them to enforce; is that right?

MR. WARD: I am not sure that is quite right.

THE CHAIRMAN: How does it work then?

MR. WARD: Sorry, maybe I will get a quick answer. (Pause).

So it is after the -- essentially they notify the committee of what they are proposing to do. There is then a discussion of it and then in the light of that the member state can act. So it is not the case that the Commission just takes the action.

THE CHAIRMAN: I see. It is not -- yes. Right, yes, thank you.

MR. WARD: So in my respectful submission, all of the debate about whether or not these Article 7 conditions were met, whether or not the satellite was launched late,

which undoubtedly it was, is simply irrelevant to the narrow scope of this judicial review challenge.

We would also say the same about the various other complaints, about essentially what are public procurement-type complaints, about departures from whatever was originally proposed by Inmarsat.

I did give the tribunal the references for the key commission correspondence when I popped on my feet just when Mr. Bowsher was opening his case, but if it would be of assistance, I would like just to take you, just to drill in slightly more closely to what Viasat was saying to the Commission. The letters are marked confidential, I do not need to read them out, but the Viasat complaint is in bundle E1 under tab 49, and I am going to do some sort of pointing rather than reading out.

MR. BOWSHER: Just to clarify, I think we are happy that you read it out. It is only marked yellow because of, perhaps, oversensitivity about the proceedings.

MR. WARD: Dare I read out what the Commission said as well?

MR. BOWSHER: That is for you.

MR. WARD: That is not really yours?

MR. BOWSHER: I do not see why you should not.

MR. WARD: It is E1/49 and it is a Latham & Watkins letter to the Commission which essentially kicked off its dialogue, if I can call it that, with the Commission.

Do you have that?

THE CHAIRMAN: Yes, I do.

MR. WARD: I am not going to read it all out or, indeed, sit here and watch you read it, although you have the opportunity to read it, it is helpful.

I would like to take you, if I may, to the third page of the letter and just highlight some of the things that were being said. You will see there are a series of bullets which are numbered in the text, and it is the first and the third that are particularly helpful for the purposes of this part of the argument:

"First, the S-band spectrum was allocated to Inmarsat and EchoStar in a competitive tender, only for the provision of MSS ... the Commission set up a dedicated legislative framework ... Inmarsat cannot now be rewarded for its failure to respect the conditions of utilisation, with an authorisation to redefine the purpose of the same spectrum. Any additional delays ... in meeting the relevant progression 'milestones' should lead to the forfeiture of its MSS licences."

Now you already have my submission about why that point was going nowhere.

Then thirdly, the third bullet point has a strong echo in Mr. Bowsher's opening:

"... allowing the change of use requested by

Inmarsat without recourse to a new competitive tender, open to all interested bidders, according to updated terms and conditions, would very likely undermine competition in the emerging new market for [in-flight connectivity]."

So that is the complaint again that Mr. Bowsher was making.

At least here it is being made to the Commission rather than Ofcom. And then over the page, the third paragraph, which is the second paragraph after the bullet point, it says:

"Viasat is convinced that a thorough and poised assessment of the above-mentioned legal and policy issues should bring the Commission to conclude that the new use Inmarsat requests cannot be granted without a new competitive tender process."

So all this, broadly what I would call public procurement argument was advanced to the European Commission and the answer it gave is in bundle E2/58. If I can summarise the answer in a word, that word was "No". But I am not brave enough to read out the European Commission's letter.

I will just draw your attention to just two paragraphs. They are quite short. I am content for the court to read them.

THE CHAIRMAN: E2/58, this is what we have seen before?

MR. WARD: Yes, you have, and on the first page it is the main paragraph, which is the fourth paragraph, it is the only one of any substance, if I could just ask you to read that. (Pause).

Then over the page, the most helpful paragraph is the second to last that begins with the words "In this context ..." (Pause).

THE CHAIRMAN: But that is about enforcement action against a member state.

MR. WARD: Indeed. Indeed. But the tenor of this letter is that these complaints, which were, at least, insofar as they were talking about the procurement exercise, the tender exercise, were at least targeted at the right person, namely the Commission who had conducted it, but the Commission has expressed no interest at all in these complaints.

The position of Ofcom is even stronger because it is not even in any way responsible for that aspect of the process.

THE CHAIRMAN: This seems more concerned with the enforcement side rather than the public procurement side.

MR. WARD: Yes, well it is both, and the letter governs both sets of complaints. Sorry, if you will give me

a moment.

MR. BOWSHER: Just to say, when you read the paragraph you have just been taken to, I think it only makes sense if you read it in the light of the paragraphs at the top of the page which I took you to yesterday which explains why you would end up with enforcement against member states. I mean, it is the -- in response to that I would confirm that no decision has been taken by the Commission on any -- well, while the Commission services do monitor what is going on, it is a matter to be dealt with by the competent national regulatory authorities, and that is the short point. That is why they end up talking about enforcement against member states presumably, because they are saying: if they are not doing it, we will enforce against them.

THE CHAIRMAN: Yes, this is a letter referred to in public proceedings, so I am not just going to leave it hanging as to whether this is confidential or not. Does anybody want to make a submission that the paragraphs read should be treated as confidential?

MR. WARD: No.

THE CHAIRMAN: In that case, for the purposes of anybody who might otherwise be entitled to inspection of that document, it is a document read in public proceedings, and I do not know whether the tribunal rule which

corresponds with the CPR on that point, that document shall not be regarded as confidential.

MR. WARD: Thank you, sir.

The broad point I make, though, is that these complaints about the tender process had no bearing on what Ofcom was doing. It was not a public authority letting a contract that is applied to public toilets, like the *Wall* case that Mr. Bowsher took you to: it was simply performing a narrow role in a harmonised framework. We will deal with Mr. Bowsher's authorities in our closing rather than take up time with them now, but none of them have any bearing on that particular exercise. Ofcom was not responsible for the tender exercise, nor was it in a position to remedy its defects.

I am very conscious of the time and I want to take my last point very briefly, which concerns the question of complementarity. The basic complaint of Viasat is that the terrestrial segment of the EAN is not a complementary ground component because there are too many ground stations and they provide too much capacity, but the fatal objection to this argument that emerges from Mr. Holmes' submissions is there is no threshold condition of the permissible ratio between ground station and satellite, if I can put it neutrally,

contribution to the services.

Of course the Commission or the Parliamentary Council could have imposed that kind of condition, but it is obvious why it would not do; because it would be a fetter on innovation and the scheme is there to foster innovation in the provision of services.

But when we heard Mr. Bowsher's case yesterday there were times when it sounded as if Inmarsat had not put up a satellite at all, whereas the reality is, of course, that there is a satellite up there, it is the product of very large investment, but the case that was put yesterday is that it really is not doing anything, and I will quote Mr. Bowsher from yesterday's transcript. He accused Inmarsat of:

"... throw[ing] the word 'satellite' in here and there because it sounds good and also ticks a regulatory box."

That is in the transcript of yesterday on page 133.

In their skeleton they contrast the satellite with what they would call a bona fide satellite system. That is on page 46 of their skeleton at paragraph 77(a). Dr. Webb says:

"... it seems possible Inmarsat has built the satellite ... solely ... to appear to meet the requirements of the legislature's MSS Decision."

That is paragraph 119 of his report, bundle D/8, page 40. So this is all quite close to the allegation that the satellite is really some kind of sham, and they need to put the case that high precisely because the legislation has not got any kind of threshold built into it.

But it is a remarkably bold case when one looks at the facts on the ground, or in the air: there is a satellite; the scheme is being actively marketed; Inmarsat is in the process of persuading airlines to purchase and install the satellite equipment and carry it with them round the world, or at least round Europe, burning jet fuel.

So in our respectful submission the evidence which you are going to hear in the next day and a half does not come anywhere near to establishing that the satellite is really just in some way decorative, or deliberately there to tick the box in a regulatory sense but has no function.

Then finally an aspect of this argument is that there is a debate raised by Viasat about the type of satellite that Inmarsat put up and, in a nutshell, Viasat criticises Inmarsat for not putting up a satellite with a bigger antenna that could have transmitted more beams, a more powerful satellite.

But we do respectfully remind the tribunal this is an application for judicial review of a decision by an expert regulator. What this argument amounts to is that Ofcom should have second-guessed Inmarsat's judgment about what kind of satellite to launch and should have refused authorisation because they used the wrong type of satellite. That is evidently a hopeless proposition. It is far beyond the function that Ofcom was actually performing, which was a narrow authorisation exercise.

But this proceeding is even one further removed from that: Viasat has to persuade this court on the judicial review threshold that the decision is flawed on that basis. What we will see from the evidence is that, in truth, there are commercial engineering choices about what kind of satellite to put up. That bears on costs. That, in turn, bears on competitiveness. In our submission there is no basis for the tribunal any more Ofcom to conclude that because different system design choices could have been made, the system fails some hypothetical threshold test and, as a result, the services should not be provided.

Unless I can assist further, those are the opening submissions for Inmarsat.

THE CHAIRMAN: No, thank you.

MR. WARD: Thank you, sir.

THE CHAIRMAN: Just before we start, I think Mrs. Walker has a question for Mr. Holmes.

MS. WALKER: I do, thank you very much indeed.

Both you and Mr. Ward have emphasised at various points the restrictions on the role that Ofcom plays during this function. Mr. Ward has drawn attention to the significant benefits to consumers of what the satellite system has to offer. Can you just talk me through where in this process Ofcom has looked at the interests of consumers, if it has?

MR. HOLMES: Yes, of course, madam. The process of selection was, of course, not undertaken by Ofcom but the Commission, and consumer benefits were considered among the selection criteria by the Commission then.

MS. WALKER: Yes.

MR. HOLMES: So Ofcom had no role in that. Turning to consider authorisation, Ofcom had, again, to grant an authorisation of the mobile satellite system governed subject to common conditions, and it lacked any discretion at that point either to consider directly the consumer benefits that would flow from authorising either of the appointed operators. At that stage it was a fairly mechanical question.

Now, of course, in formulating the -- and then

finally at the authorisation stage again Ofcom is required to authorise the candidates selected. So it leaves very little room for Ofcom to consider consumer benefit directly because it lacks a discretion to refuse to issue a licence.

Indirectly it did, however, consider consumer interests in several aspects of its work. Firstly, I showed you the passage at the end of section 4 of the decision in which Ofcom considered whether it would be inclined to authorise Inmarsat having regard to its statutory duties if it were correct, as Viasat was contending, that it needed to consider a wider range of matters. In relation to that Ofcom did consider, and the considerations that weighed with it were that the spectrum is currently reserved for particular operators, and Ofcom cannot look beyond that; there are priority uses and so therefore it cannot grant licences of this spectrum willy-nilly, so spectrum lying fallow, as it put it.

MS. WALKER: Yes.

MR. HOLMES: And it regarded the Inmarsat service as bringing a new and innovative service for the benefit of consumers, and so to that extent it considered the consumer interest in order to check that if it did have a discretion it would be inclined to exercise that

discretion by granting an authorisation for the CGCs.

MS. WALKER: Right, thank you. Actually, I am glad I asked the question because, as I understand what you have said to me, first of all the interests of consumers through this process is primarily in the EU framework?

MR. HOLMES: Yes, that is correct.

MS. WALKER: Legally you do not have the discretion to look at your duties under the WTA and the Telecommunications Act. If you had -- you do not have the legal discretion under the process.

MR. HOLMES: That is my submission, yes.

MS. WALKER: Yes. If you did have and you did think about it, you would have been positive about this proposal on behalf of consumers. That is what I understand you are saying?

MR. HOLMES: Indeed. Save that the last point is a little stronger than the way in which you have put it.

MS. WALKER: Yes.

MR. HOLMES: Because Ofcom did consider the point --

MS. WALKER: Yes.

MR. HOLMES: -- and it can be seen from the authorisation statement that the point was given some attention.

MS. WALKER: Yes.

MR. HOLMES: So it is not just me saying ex post facto we would have reached a particular conclusion: I am

saying that was the view that the decision-maker behind me reached at the time.

MS. WALKER: I understand. Thank you very much indeed.

MR. HOLMES: I am grateful, madam.

Unless there is anything further?

THE CHAIRMAN: No. Thank you, Mr. Holmes.

Mr. Bowsher.

MR. BOWSHER: The next stage is to call Dr. Webb to give evidence.

THE CHAIRMAN: Yes.

DR. WILLIAM WEBB (Affirmed)

THE CHAIRMAN: Do stand or sit as you like, Dr. Webb.

A. I will stand, thank you.

THE CHAIRMAN: Right. If you are going to stand I expect you will need something to put some documents on. Can somebody find a box. Is there an unused lectern at the back?

Examination-in-chief by MR. BOWSHER

MR. BOWSHER: Could the witness have file D and file F.

THE CHAIRMAN: Dr. Webb, if you feel after a while you are tired and would like to sit, you may do so, but you cannot bob up and down because of the lectern.

MR. BOWSHER: Are your full names William Webb?

A. Yes.

Q. And your address is Hawksmead, Moat Lane, Melbourn,

Hertfordshire, SG8 6EH?

A. Correct.

Q. Could you turn to file D. Do you have file D? And turn to tab 8, which is a document of 51 pages. Is that your signature on the very back page there?

A. Yes, it is.

Q. And then if you turn to tab 9, again if you go to the last page is that your signature there?

A. Yes.

Q. And are these two reports which you have prepared in those proceedings?

A. Yes, they are.

Q. Have you had the opportunity to re-read them before coming to give evidence today?

A. I have, yes.

Q. Is there anything in them that you wish to qualify, reflect upon?

A. Yes, there is one minor amendment that I would like to make, which is in my first statement in paragraph 41. About mid-way through that paragraph I note that:

"... the ground-facing terminal faces away from the satellite (ie, is under the airplane fuselage, pointing towards the ground), which further makes communication between the systems impossible."

On reflection I think "impossible" is perhaps

slightly too strong a word. There is often some technical workaround that can be achieved; I would be inclined to rephrase that as "extremely challenging", or something along those lines.

Q. Thank you. Are there any other qualifications you wanted to make?

A. No, thank you.

Q. Subject to that, do these two reports set out your opinion on the matters you have been asked to address in this matter?

A. Yes, they do.

Q. And if I can just very briefly ask you to comment on your qualifications. Page 50 of the first report at tab 8 is a short biography of yourself, in which you note various previous activities. Of the various activities that you note there, what experience is it your opinion is most relevant to the exercise of judgment in this matter, by yourself?

A. I would say the seven years I spent at Ofcom where I both more deeply understood the regulatory environment, but also for a number of those years I was head of Ofcom's research and development activity where I took a look at a number of new technologies across the broad swathe of different spectrum usage regimes.

Q. Mr. Sharkey, whose witness statements you have seen.

A. Yes.

Q. He has put in two witness statements and in his second witness statement he spends quite a bit of time talking about what you may or may not agree and how you may or may not be talking at cross-purposes. With the Tribunal's permission, may I just ask a few questions about defined terms, because it seems to me that, if you are able to define the terms that the two of you are talking about, we may be able to clarify what you are or are not agreeing upon, if that is helpful. I have only got ten or so questions in that space.

To that end, it is probably helpful that you take the legislation file, file F, so we all have the context that we are talking about. Keep D just in case you need to jump back to it. Keep D to one side, and if you would turn to file F, it will not be any surprise that we are again going to tab 6, and the definitions in Article 2(2) where we have various concepts, if I use "concept" as a neutral term.

In Article 2(2)(b), you will have heard some discussion today, there is reference at the very end to the term "quality". Just in general terms in the context of these sorts of matters, what do you understand is the technical significance of the term "quality"?

A. Yes, so I would like to take a moment to put this into a framework of terminology, because I think it is best understood in that respect, and it seems to me that there is a hierarchy of terms that starts with "quality" at the bottom and then goes up through "coverage", "availability", "capacity", and then "overall user experience".

So unless it is qualified by another term -- and I will come back to that at the very end -- my understanding of "quality" is whether a signal can be received with sufficient quality that it can be adequately decoded. So could a receiver understand the contents of that signal, and that measure of quality is often picked up in terms such as "adequate signal strength", or something like that, such the receiver is able to understand the information encoded on that particular signal. So it might be able to understand that the base station is saying to it that it has certain particular parameters.

"Coverage" we have talked about a little --

Q. Sorry, just before you go there, can we just look at -- in that provision there is the term "required quality"; how would you fit that in with what we are talking about in terms of quality?

THE CHAIRMAN: Well, this is a question of construction of

this document, is it not?

MR. BOWSHER: It may be a technical term. Given that these are all technical terms --

MR. HOLMES: Sir, I am slightly concerned. I should clarify, there are certain points that are covered in Dr. Webb's evidence on which I do not intend to cross-examine because they appear to Ofcom to really concern the construction --

THE CHAIRMAN: Yes.

MR. HOLMES: -- and purpose of the legislation.

THE CHAIRMAN: I agree.

MR. HOLMES: In relation to those matters, of course it is for the tribunal to decide, it is not for expert evidence to be given.

THE CHAIRMAN: Yes.

MR. HOLMES: I am slightly concerned by the direction of this line of questioning which, as you say, sir, appears to be trespassing on matters of legal construction rather than expertise. I had taken it that the core of Dr. Webb's expert evidence, and we fully acknowledge his expertise, but with great respect, the core is about the design and operation of wireless systems and it is on that that I was proposing to cross-examine him.

THE CHAIRMAN: Yes, just one moment, Mr. Bowsher. (Pause).

Mr. Bowsher, I am going to stop cross-examination

which goes to this witness's opinion of what this document means. This witness can give evidence of what "quality" would mean to an engineer and then you would be able to make submissions as to whether it means the same thing here, but so far as he is being invited to give evidence of his opinion of what it means here, I am not going to -- we are not going to allow that.

MR. BOWSHER: I am grateful. If we shut the legislation and, as it were, take --

THE CHAIRMAN: Well, if you want to use the legislation as a reference point, then I do not think there is any harm in that provided it is quite clear what you are asking questions about.

MR. BOWSHER: The question I am wanting to ask in each case is "What is your understanding is the technical significance of quality"?

THE CHAIRMAN: What would it mean to an engineer in this context?

MR. BOWSHER: In this context.

THE CHAIRMAN: Yes.

MR. BOWSHER: Let me try that again. So you have covered quality. Maybe we can come back to and move on to coverage, a concept which you discuss in your first report. Is coverage a -- what is your understanding as to how one measures or establishes better or worse

coverage as an engineering concept?

A. Yes, so my understanding is that coverage is all of the geographical area where a minimum quality threshold is exceeded such that a signal can be received with the required quality, and that requirement may vary. In some cases regulators set out a requirement for a very minimum degree of quality. In other cases it is a higher degree to enable faster data rates or similar, but essentially coverage is the geographical area where the quality threshold is met.

Q. You have used the phrase now, so I may as well ask. In your terms is "required quality" a technical phrase or a regulatory phrase; does it have an engineering meaning, the term "required quality"?

A. It absolutely has an engineering meaning and it is normally expressed in engineering terms such as signal to noise ratio or signal distortion, which essentially is a specific technical measurement of whether the signal could be decoded by a competent receiver.

Q. You mentioned other language contexts in which the word "quality" might be used which ought to be pointed out. Are there any that you would point out here to, as it were, distinguish other uses of the word "quality" in this framework?

A. Yes, "quality" is a broad term and is also sometimes

used in terms such as quality of service, abbreviated to QOS, where it is then specifically applied to service, and that is normally understood to mean the overall service that an end user receives, which would then encompass all aspects of the service including both the signal levels and the capacity of the system as well.

DR. ELPHICK: So quality at one level for the engineer could be at the bottom of your hierarchy, but it can also, perhaps for other audiences, commentators, be at the top of your hierarchy of user experience.

A. Indeed, that is very correct, sir, and typically then you would look for the context or the qualifying words such as quality of service in order to understand exactly what is meant in that case.

MR. BOWSHER: So we have covered quality and coverage, going through the hierarchy, what is your understanding of the technical significance of "availability" as an engineering concept in this context?

A. So I consider "availability", the super position of coverage and ability of a user to actually make use of that coverage, which would typically mean being able to able to obtain a terminal, being able to obtain a service, perhaps by paying a tariff or some other kind of ability to make use of that.

So, essentially, a service is only available if

somebody can actually go about and use it, for which there must be coverage is the basis, but there must be other things as well depending on its commercial offering and so on.

Q. I perhaps do not need to ask this, but could you just explain therefore the difference between coverage and availability is what?

A. So coverage is a basic metric of geographical area. It does not necessarily imply anyone can actually use it. So coverage could be provided by a satellite across an area and that could be measured in terms of its signal quality at any point in that area, but it does not specifically imply that somebody could actually go out and buy a terminal and make use of that coverage. It becomes availability when it is possible to actually make use of that service, it becomes an available service to a group of users.

THE CHAIRMAN: So what have you added to "coverage" in order to achieve availability in those circumstances?

A. The availability of terminals, of commercial offerings as and when needed.

THE CHAIRMAN: So coverage -- right. Coverage will mean -- could also mean, then, availability to someone who has the right kit and the right contract?

A. Yes. Yes, sir.

MR. BOWSHER: Now, you discuss capacity in some length in both your reports, so I do not want to go over that again, but just to highlight one point: why is it that you say in your first report that overall system capacity rather than data rate is --

MR. HOLMES: Sir, I hesitate to interrupt Mr. Bowsher, but the understanding was that there would be examination-in-chief in relation to Mr. Sharkey's second report. I do not understand how any of these questions have yet been related to the second report which covered narrow matters. There have been two expert reports already submitted by Dr. Webb. I of course do not want to circumscribe his evidence. I hope my questions will enable him to give a proper account of himself under oral examination, but Mr. Bowsher's questions appear to be broad re-coverage of terrain which has already been covered in two expert reports which bear no relation to Mr. Sharkey's second statement, which was the basis on which open examination-in-chief was agreed.

THE CHAIRMAN: Mr. Bowsher, the first challenge is that you are not asking questions which arise out of Mr. Sharkey's second report; do you accept that?

MR. BOWSHER: I think that last question I probably accept it for that last question. The previous questions do arise out of it, because -- again, I do not want to

waste time now --

THE CHAIRMAN: Never mind about those, because you have asked those questions and we have heard the answers.

Can we hear the full question, please, before I decide whether to allow you to ask it?

MR. BOWSHER: Let me move on to the further question, which is plainly out of Mr. Sharkey's second statement. If I can move on to, as it were, the final question, can I do that?

THE CHAIRMAN: All right.

MR. BOWSHER: The premise arising from the second statement is that Mr. Sharkey says that you both agree that EchoStar, the EchoStar satellite, would have 25 to 30 times capacity of the payload that is part of the Hellas Sat 3 payload. He says that you agree that. Now, do you accept that that is agreed between you?

A. I think we are close on that matter. My estimates were that the capacity, I think I said, may be something in the region of 30 to 90 times. I do not have detailed design data, so I accept that there may be some uncertainty in what I am saying. His factor of 25 seems quite close to my bottom factor of 30. I think for the purposes of the debate we are having, that is sufficiently close.

Q. How is it possible to reconcile that with Mr. Sharkey's

assertion in his second witness statement that the EchoStar satellite within the EAN would still provide -- that if the EchoStar within EAN, it would only provide less than, I think, 4 per cent of the total EAN capacity. How does one reconcile the 25 to 30 times capacity increase, yet you are changing between 1 or 2 or 3 per cent in the 90 per cent range; how does that work?

A. Yes, so in my first statement I concluded that the satellite -- that the current Inmarsat satellite provides about 0.1 per cent of the total system capacity. If, therefore, there was a satellite with, let's say, 30 times more capacity, then that would provide roughly 30 times 0.1 per cent, which is 3 per cent, so that would move it to 97 per cent, I think Mr. Sharkey said 96, which would imply 40 times more capacity. That is within my bounds of what I thought the increase in capacity of the EchoStar satellite compared to the Inmarsat satellite was. So that all seems to make sense in terms of overall numeric numbers.

MR. BOWSHER: I think that that probably covers what I needed to deal with arising out of Sharkey 2.

THE CHAIRMAN: Can I just ask you one question of clarification just before cross-examination. I am

entirely sure this is my fault but I cannot quite work this out. Paragraph 115 of your statement, please.

A. Yes.

THE CHAIRMAN: This is your 0.1 per cent high load scenario statement. What numbers do you apply to get to 0.1 per cent? What numbers from your report? I could not work out what numbers you applied to get there?

A. Yes, so I believe that I am taking the 42 Mbits/s from the satellite, and the 34 Gbits/s of the total system capacity of the ground component, and then essentially noting that 42 is roughly 0.1 per cent of 34,000.

THE CHAIRMAN: So the mathematical calculation --

A. Yes.

THE CHAIRMAN: -- is 42 megabytes over 32 gigabytes; is that right?

A. Yes, I believe it is 34, but yes.

THE CHAIRMAN: Times 100 over 1.

A. Yes.

THE CHAIRMAN: And I assume at the moment 32 -- sorry, the 30 whatever it was, gigabytes is in paragraph ... this is not a quiz and if anybody can find it before Dr. Webb does --

A. It is in 105.

THE CHAIRMAN: Where?

A. 105, sir, in the table in paragraph 105.

THE CHAIRMAN: Oh yes.

A. 34,268 megabytes.

THE CHAIRMAN: I see, thank you.

A. So that would equate to slightly more than 0.1 per cent, but when rounded, would round to 0.1 per cent.

THE CHAIRMAN: I can see where your numbers come from. Thank you very much.

Mr. Holmes, who is cross-examining first?

MR. HOLMES: I am, sir.

Cross-examination by MR. HOLMES

MR. HOLMES: Good afternoon, Dr. Webb, thank you very much for joining us today.

Your doctorate was in the field of electronic engineering; is that correct?

A. Yes.

Q. And you are expert in the design and operation of wireless communications networks?

A. Yes.

Q. Before I come to the substance, there is just one minor point of correction which I would like to canvass with you to see whether we can agree upon it.

If you could turn in your second report to paragraph 52. I hope that I am right about this, but if not then you must correct me, because I know that you are knowledgeable in these matters.

At 52, you say that:

"Even when very low narrowband voice-only rates are assumed and users are restricted to less than two minutes voice call per day, Mr. Harrison [that is Ofcom's witness] calculates that 141,600 users could be served simultaneously ... "

By the Inmarsat satellite given its 42 Mbits/s capacity.

A. Yes.

Q. "... whereas the Commission envisaged the minimum number of users required to receive a score to be 1 million simultaneous users."

Could I ask you to take up the legislation bundle, which is bundle F, and turn to tab 7. You will see that this is the call for applications. Am I correct that this is the document from which you took the million simultaneous users point?

A. Yes.

THE CHAIRMAN: Sorry, you are in F/7?

MR. HOLMES: F/7. Yes, this is really just a very small point, but it is just for correction.

If you could turn within tab 7 to page 15, you will see the numbering is in the corner, you will be familiar with these documents.

A. Yes.

Q. Do you see it?
A. Yes.
Q. Do you see under the scoring method there is a table which sets out different types of service and different simultaneous end user numbers?
A. Yes.
Q. And do you see in relation to basic voice, at B, there is:

"Two-way voice, multi-media and/or data services."

Do you see that?
A. Yes.
Q. And under that at 1 there is:

"Basic voice and low speed ... interactive data services."

Now I have to say very low speed, 64 Gbits/s, by modern standards, but in 2008 we see the band rate has shifted a bit.
A. Yes.
Q. And if you look across there are then various numbers specified, but if you look to the right of the B category it says:

"Planned simultaneous end users in the EU: thousands."
A. Mm.
Q. And the first score is for under 10,000 but above 1,000.

So are you prepared to accept in the light of this that paragraph 52 should be corrected so as to read:

"... required to receive a score to be 1,000 simultaneous end users."

A. Yes. Thank you, I am prepared to accept that. Thank you for that clarification.

Q. And on the same point, if you could just keep this open for a moment and turn within your first witness statement, if you have that to hand?

A. I do, yes.

Q. To paragraph 125. You say there that:

"Recall that this is the entire capacity of one beam of the satellite, each beam covering approximately a third of a service area ... in the case of handheld satellite terminals, the data rate of 2.2 Mbits/s would be shared across all users in that beam. Assuming a minimum of 100 kbits/s for certain of the services described at paragraph 59 above, access this implies 22 simultaneous users across a beam, or 66 users across the entirety of the satellite coverage. This is clearly not a viable consumer broadband service. Indeed, in the selection criteria published by the European Commission, maximum points are scored for more than 50 million simultaneous end users and the lowest points score was for services providing services to more than 1 million

simultaneous users."

Returning to the scoring method on page 8 --

A. Yes.

Q. -- would you accept that the maximum number of scoring for interactive high speed data, which back in those days was rates of over 64 kbits/s, nowhere close to the rates you are considering, was over 50,000 simultaneous users?

A. Yes, I see I have made the same error there, yes.

Q. And would you accept that the lowest point score was for services providing services to more than 1,000 simultaneous users?

A. Yes, I would accept that.

MR. HOLMES: I am grateful.

THE CHAIRMAN: So what corrections do we have to make to paragraph 125?

A. To change the word "million" to "thousand".

THE CHAIRMAN: Thank you.

MR. HOLMES: While we are on that page, the services in relation to which very high numbers of users were the subject of -- were required to obtain a score, the identified service is one-way, multi-media and data services. Am I right in understanding that the service that would be provided in that case would effectively be a broadcasting of data from the satellite across

a coverage area so that it was only capable of being received, basically a Sky satellite providing data instead of TV, and not any kind of an interactive or two-way service?

A. I am not absolutely certain on that. One-way certainly indicates it is intended to be coming down from the satellite to the end user. Whether that implies it could only be a broadcast service or whether there could be some kind of individual service within that I think would require further consideration.

MR. HOLMES: I am grateful, thank you. So we can put that away now and turn to the substance of your reports.

THE CHAIRMAN: Well, before we start that, rather than getting into it, is that a convenient moment?

MR. HOLMES: It is, sir, yes, if that is convenient for you.

THE CHAIRMAN: And I am not asking this in order to suggest time limits, but can you give an estimate, please, for how long you will be, then Mr. Ward, and how that is going to pan out with the rest of the witnesses tomorrow?

MR. HOLMES: It is always very difficult. Dr. Webb is admirably crisp. I do not imagine that I will be more than a maximum of two hours.

THE CHAIRMAN: Right. Mr. Ward?

MR. WARD: I was going to say a maximum of one hour.

THE CHAIRMAN: Right, and then the other witnesses tomorrow?
MR. BOWSHER: Well, yes, I was going to say, that rather compresses -- I have two witnesses to cover in about two hours, which is going to be rather tight, I think.
MR. HOLMES: What is your estimate?
MR. BOWSHER: I certainly thought more than two.
THE CHAIRMAN: Two what?
MR. BOWSHER: More than two hours. One hour each is going to rather stretch it. I think one would be about an hour and I thought the other would be about two, so I reckoned about three hours, I have to say.
THE CHAIRMAN: We will have to see where we go. I do not want to compress cross-examination. I think if we start imposing arbitrary time limits on cross-examination you will not be able to do justice to the case. We will take a view tomorrow and see how it is going, but you should all assume that whatever you can do to shorten your cross-examinations, you should do. We planned to finish tomorrow. I think the openings have gone on longer, for entirely understandable reasons, nobody is to blame for that. We will have to see where we go, but you should all try -- and I know you will all do this anyway -- to keep your cross-examinations as short as possible. We will take a view as the morning progresses as to what we should do about it.

MR. WARD: Sir, I should assure you that Mr. Holmes and I have ensured that our topics do not overlap.

THE CHAIRMAN: Good. Thank you.

Right, Dr. Webb, you may have given evidence before, you may not have done, you may know what I am about to say, but now you are in the middle of your evidence you are not allowed to talk about the case with anyone else, not anybody, as it were, your side, or to those for whom you are giving evidence, I should say, or with anyone else.

A. Understood. Thank you very much.

THE CHAIRMAN: We will resume tomorrow at 10.00 am.

(4.18 pm)

(The hearing adjourned until 10.00 am on Thursday, 28 June 2018)

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