

OneWeb is pleased to submit the following responses to the questions raised by the Consultation on Procedures for the management of satellite filings.

Summary

Question 1: We don't agree with the proposed additional requirement and milestones and the current procedure should remain unchanged.

Question 3: We welcome the changes, however the timing of 30 days is short. Our proposal is provided below.

Question 4: The proposal is welcomed. See additional comments below.

Question 5: The proposal is welcomed.

Question 7: We do not support the proposal as the current Procedures already provides flexibility to achieve its intent. See additional comments.

Question 8: The proposal is welcomed.

Question 9: We propose that any cancellation of assignments from the MIFR be carefully considered.

Responses

1) Response to Question 1

Question 1) Do you have any comments on our proposals to

- include additional milestones to provide evidence that the satellite project is on-going and that its frequency assignments will be brought into use within the seven year regulatory period;*
- clarify what evidence we will accept to demonstrate milestones have been completed, and*
- set specific deadlines for milestones?*

Do you have any comments on how these changes are worded in the proposed revised Procedures?

Response Summary:

OneWeb does not agree with Ofcom's proposal to add additional requirements in the Procedures, as the existing procedures already provide adequate measures for monitoring the progress of projects against key milestones. We also understand that Ofcom has successfully carried out due diligence necessary for all UK operators for many years.

Detailed Response:

As a company that maintains an effective dialogue with Ofcom, OneWeb is of the opinion that the current Procedures, specifically its current Due Diligence provisions, are more than adequate to provide Ofcom with the ability to engage with applicants/operators, and to ensure that progress is being made by a satellite project from its inception - i.e. from the submission of the API. Ofcom has control of the due diligence process, which enables operators to update Ofcom twice a year on the progress of their project. Therefore, Ofcom already has the flexibility to request information to ensure that the project is real and progressing to bring into use the assignments in the UK ITU filing (before the end of the seven year regulatory period). The additional milestones, which have been proposed in this consultation for Due

Diligence in Section 5 of the Procedures, are a general concern since they will add significant burden to OneWeb. It is understood that in order to carry out its functions in relation to satellite filings, Ofcom must monitor the development of satellite projects by, amongst other things, setting certain milestones. However, as previously mentioned, the existing procedures provide adequate measures for monitoring the progress of projects against key milestones, and as we understand Ofcom has successfully carried out the necessary due diligence on all UK operators for at least the past 10 years. Ofcom, in its representation to the ITU of UK companies, needs to ensure that the procedures it puts into place are fair, and that it allows industry to prosper competitively at the international level. Ofcom also has the responsibility of representing the UK HMG internationally, and should not impose unnecessary burden than that which already exists in the ITU Radio Regulations. However, we will comment on certain milestones proposed for addition to the current list.

2) Response to Section 5 Table

Section 5: Table 1: Stage 1- Deliverables

Deliverable No 1: Response Summary:

OneWeb does not agree with the Ofcom proposal to add additional requirements (Milestones and Deliverable) in the Procedures, as these will create unnecessarily heavy burden on both the operator and Ofcom. As the intent of Ofcom is to make sure that a filing is brought into use, the existing procedures already provide adequate measures for monitoring the progress of projects against key milestones, and as we understand Ofcom has successfully carried out for many years the necessary due diligence on all UK operators, which have led to the BIU of assignments of real satellite systems.

Detailed Response:

This places a requirement on an applicant for a NGSO system to provide information on: "the minimum number of satellites needed to be deployed in order to provide the intended service to at least the minimum quality " It was noted that the Consultation document proposes that this requirement should be placed at the CR/C stage. Therefore, we believe that this was erroneously placed at the API stage. While we understand the intent behind such a proposal, we feel that this proposal and its intended use does not serve its purpose and goes beyond Ofcom's duties given by the MoU and Directions set by the Secretary of State. We also have grave concern if this proposal is to be retained in the update of the Procedures, since Ofcom's request for a "declaration" (at the time of the CR/C application, 5-6 years before the end of the seven years regulatory period) of minimum quality of service to be measured at the time when the Network is BIUed and Notified is not at all envisaged in the ITU Treaty and its Radio Regulations (RR) (particularly under the provisions in Section II of Article 11, i.e. "Examination of notices and recording of frequency assignment into the Master Register"). The ITU Treaty and its RR require the ITU BR to examine the notices for recording assignments in the master register (see 11.31 to 11.33) and do not require information related to minimum quality of service for assignments. Our concern is further strengthened as this new rule has no basis, and is left to interpretation and risk of challenges, which then may results in failure of enforceability by Ofcom. We believe that Ofcom's duty is not to monitor the risks inherent to the quality of services of a satellite system, but instead to monitor the progress of the project and ensure that the deployments of satellites are a genuine attempt to utilise spectrum sought for the NGSO system. Above all, the current Procedures already allow for a regular dialogue with Ofcom through due diligence, which occurs twice a year.

This is a necessary and sufficient dialogue that already provides Ofcom with sufficient intelligence on the progress and the development of a NGSO satellite system. During these meetings, Ofcom has the flexibility to raise the necessary queries and finally to satisfy itself of the progress of the project. With this, we urge Ofcom to reconsider and repeal its proposal as it does not have basis of legal enforcement.

Deliverable Nos 2 & 3:

OneWeb believes these Deliverables place an insurmountable burden on SME's and start-up companies, possibly also to some of the established companies. Some reasons are that many projects may not have adequate financial arrangements in place to ensure that certain milestones are achieved at the times specified by Ofcom in their proposal. Also, Ofcom may baseline older procurement schedules, which do not accurately portray the current state of the satellite industry, in which it is possible to procure, manufacture and launch a small satellite (less than 1000 kg) within a period of tens of months. Additionally, the one rule/set of milestones fits all concept is extremely dangerous to propose in this consultation and for implement purposes. API and the CR/C filings are the normal starting point for funding a satellite project especially promoted by a start-up company, such as OneWeb. For these reasons, we propose that these milestones and deliverables not be set in stone (time and space) in the Procedures, but instead be set in consultation with the applicant – where Ofcom can judge the specific conditions of the applicant, and thus can provide the required flexibility as to when such deliverable should be provided.

Stage 3.1: Deliverable - Milestones 1, 2, 3 and 4:

The additional milestones in the Procedures propose 36, 24, and 12 month deadlines to produce evidence for these milestones. Our first reaction is that such proposals are most likely intended for GSO type networks, where typically one large satellite (much greater than 1000 kg) and one large Earth station (typically with an antenna diameter larger than 6 meters) are deployed. Project implementation and regulatory schedules may be different from satellite network to satellite network; as it is the case for satellites smaller than 1000 kg, and even so for satellites, like that of OneWeb, with a mass less than 200 kg. We believe that the proposed milestone will be extremely burdensome on both systems like OneWeb and Ofcom due to the unnecessarily large amount of information that OneWeb has to provide and the unnecessary burden Ofcom will have to endure. Our solution is that Ofcom does not adopt a milestone approach, because the timing of deadlines proposed is inappropriate for all satellite systems. Satellite manufacturing procedures and timelines are evolving. Smaller satellites, like OneWeb's satellites, will be built in an assembly line and launched in a matter of days. As such, imposing a 3 year milestone for a contract, or a 1 year milestone for an Earth stations, is no longer appropriate for companies. It is also unrealistic for Ofcom to receive an extremely large amount of paper work, which at the end may not be useful for monitoring system progression and determining whether the system will meet its intended launch date. Hence, as the applicant/operator is expected to maintain a dialogue with Ofcom mainly through the existent due diligence process, Ofcom already has the flexibility to ask the operator/applicant the necessary information to monitor such progress. Thus, compliance with milestones should be judged on the basis of these on-going discussions rather than setting artificial deadlines on an administrative basis by Ofcom.

Stage 3.1: Deliverable - Milestone 4:

OneWeb plans to deploy a large number (more than 50) of Gateways around the globe, i.e. Earth stations for feeder link and TT&C services. As such, providing the required evidence under this new milestone approach would be impractical, due to the extreme regulatory and

physical burden it imposes on OneWeb and other companies. The effort required on Ofcom's behalf to receive and evaluate the information will also prove overly burdensome, and thus should not be implemented. The current process already provides enough flexibility in its due diligence, whereby it is possible to discuss such issues bilaterally, which can then provide Ofcom with the necessary evidence to demonstrate the true progress of the project.

3) Response to Question 3

Question 3) Do you have any comments on our proposed changes to the reporting requirements illustrated in paragraphs 4.18 – 4.25 above?

Do you have any comments on how these changes are worded in the proposed revised Procedures?

We welcome the change to yearly reporting. It will ease the burden on operators. In the section 4.25, we believe that a 30 day period is too short to consider the possibility for Ofcom to cancel a satellite filing. We propose that Ofcom adopts a timing approach, such as a first notice of 60 days, with the possibility for the applicant to request a justifiable delayed response.

4) Response to Question 4

Question 4) Do you have any comments on our proposal that a request for notification under No. 11.41 must be supported by evidence of efforts to coordinate with the other operator(s)/administration(s)?

Do you have any comments on how these changes are worded in the proposed revised Procedures?

Ofcom's proposal to apply 11.41 is appreciated. However, its implementation should be as stipulated by the ITU without any additional national requirements, which will have the potential to impose additional burdens on the operator.

5) Response to Question 5

Question 5) Do you have any comments on our proposal to clarify the Procedures to set out that we may, at our discretion, allow UK satellite networks with junior filings to be notified to the ITU without requiring completion of all frequency coordination with UK networks having senior filings, and the conditions on which we would proceed with notification in such cases?

Do you have any comments on how these changes are worded in the proposed revised Procedures?

Extending the 11.41 arrangement to UK operators would allow UK operators to benefit from these arrangements, while not unduly disadvantaging the operators with senior filings. We believe that the management of this arrangement will be done with appropriate diligence on harmful interference.

6) Response to Question 7

Question 7) Do you have any comments on our proposals that, for non-GSO systems, operators are asked to indicate, at CR/C stage, the minimum number of satellites needed to be deployed in order to provide the intended service to at least the declared minimum quality of service, and that this information (i.e., the minimum number of launched satellites) is used to verify that the system has been brought into use?

Do you have any comments on how these changes are worded in the proposed revised Procedures?

Response Summary:

We do not agree with the Ofcom proposal as it is unnecessarily burdensome on the overall NGSO technology and value chain. If Ofcom's objectives are to ensure that NGSO satellite filings can be BIUed, then we believe that the current Procedures are more than adequate to give Ofcom the necessary tools to follow the progress of the project from the inception and leading to the BIU.

Detailed Response:

Ofcom proposes in its Consultation (section 6.9) the following for NGSO systems, i.e.:

“• Require, at CR/C stage, for a non-GSO network that the operator declares the minimum number of satellites required to be in orbit in order to deliver the service detailed in the business case;

• require, at CR/C stage, the operator to set out the minimum quality of service offered to customers with this minimum number of satellites; and,

• state that the declaration of bringing into use for a non-GSO network may be conditional on at least that number of satellites being successfully placed in the relevant orbit within the regulatory period.”

The requirement for declaring a “minimum quality of service offered to customers with this minimum number of satellites” is worrisome for OneWeb.

As previously mentioned, this requirement is against the rules of the ITU RR, specifically to the Section II of Article 11 on “examination” and “notification” of notices. The ITU BR does not require to verify “quality of service” to BIU a satellite network and thus the Ofcom rule is undermining UK industry over the international treaty obligations and over what other countries will require.

We urge Ofcom not to adopt this new rule as it will strongly undermine NGSO satellite operators' efforts to bring into use real systems. Furthermore, Ofcom's ability to threaten to cancel a satellite filing and not notify its assignments (see 3rd bullet above) will strongly impact the NGSO industry and technology.

In particular the proposal is inappropriate and undermines the NGSO satellite industry because:

-It is well known in satellite industry that the development of a system is an on-going process, and decisions are often made at the later stages of the process that may modify the constellation and consequently vary the number of satellites during the coordination process;

-A NGSO constellation of many satellites will require numerous launches. Hence, there may be scenarios where due to a force majeure (e.g. launch failure, economic downturn, financing) where launches are delayed and the “promised” number of satellite in orbit is not reached before the end of the seven years regulatory period;

The objective of Ofcom should be to ensure that NGSO constellations are real and that they use spectrum effectively. The objective of Ofcom should not be to elicit fear into the NGSO ecosystem, which will result if Ofcom threatens to cancel satellite filings. The potential cancellation of an NGSO’s satellite filings could also hinder an operator’s effort to acquire funding and procure satellites.

Ultimately, this proposal is unnecessarily unfair for NGSO systems. Ofcom’s fears can be easily alleviated through the current Procedures; i.e., Ofcom already has the necessary tools to follow the progress of the project from the inception and leading to the BIU, where in the due-diligence discussions Ofcom will be appraised on the progress of the system and its real implementation. It is here that Ofcom needs to enforce its presence rather than ask the operator to make commitments that can destroy its project and business.

These arguments should also be taken in relation to Section 7.21 of the Procedures (Bringing into use of NGSO). We will be pleased to provide Ofcom with additional information to assist with its final preparation of the Procedures.

7) Response to Question 8

Question 8) Do you have any comments on our proposal to include provisions in the Procedures for the transfer of an application at API stage, subject to certain conditions being met?

Do you have any comments on how these changes are worded in the proposed revised Procedures?

This arrangement is satisfactory.

8) Response to Question 9

Question 9) Do you have any comments on our proposals to set out the requirements on operators and the consequent actions that we may take in cases where assignments are no longer in use? Do you have any comments on how these changes are worded in the proposed revised Procedures?

Cancellation of assignments should be considered only when an operator continually fails to meet the conditions set forth by Ofcom and does not engage with Ofcom to defend its position.

Cancellation of assignments in the event of satellite malfunction should not be considered. In such cases, the operator should make arrangements, although it will take longer than regulations allow, to restore the services (as also envisaged in the ITU RR). Such delays can be justified to the RRB, or at a WRC, as it has been the case in the past, to maintain the assignments. Ofcom should support such initiatives, and should not shy away from protecting the Assets (i.e. orbital resources) that belong to the UK.