
Satellite Filings Cost Recovery

Implementing new charging powers under section 28A
of the Communications Act 2003 – Notice of charges

STATEMENT:

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1. Overview

A satellite filing provides international recognition of satellite networks and systems under the International Telecommunication Union (ITU) Radio Regulations. Ofcom carries out satellite filing work as the notifying administration for the UK under those Radio Regulations. Our satellite filing work enables a wide variety of satellite projects, from cubesats observing the Earth to constellations providing global broadband services.

Managing satellite filings costs Ofcom approximately £1m per year on average. To date, we have performed this work at no charge to the organisations who request that we manage their satellite filings. The Government initiated legislation to give us new powers in 2017 (under section 28A of the Communications Act 2003) to recover our costs for this work from the organisations that request it.

We consulted on proposals for satellite filing charges in June 2018 and received support for our preferred charging option (option 3), with some refinements suggested. This statement sets out the charges that we are now introducing and serves as our Notice of Charges for 2019/20.

What we have decided – in brief

We are introducing the following charges for our satellite filing work:

- **An upfront application fee for new submission (and modification) requests.** Non-GSO (geostationary orbit) filings with EPFD (Equivalent Power Flux Density) mask assessments will be charged a higher upfront application fee than for all other filing types, recognising the extra work they require.
- **An annual management charge** between the initial request and notification, incurred on 1 April annually (unless suspended or suppressed/cancelled), with different charges for different filing types based on the complexity of coordination requirements:
 - non-coordinated API (Advance Publication Information) filings;
 - less complex coordinated GSO and non-GSO filings (<100 ITU units); and
 - more complex coordinated GSO and non-GSO filings (≥100 ITU units).
- **An application fee for notification requests.** Non-coordinated filings will be charged a lower application fee than coordinated filings, recognising their reduced complexity.

Charges will apply to requests for all new filing submissions (and activities related to those new submissions) received by us from (and including) 1 April 2019. The relative size of each charge reflects the average level of effort involved for that activity or filing type. Existing filings received on or before 31 March 2019 will not incur charges for any part of their management.

Our charges are likely to vary every year. We intend to publish our Notice of Charges for satellite filings on our website on or before 31 March annually. Charges for 2019/20 are summarised in table 2 below and will be revised annually in line with the approach set out in this statement.

This overview is a high-level summary only. The decisions we have taken, and our reasoning are set out in this statement.

Our charging approach

- 1.1 Our charging approach is broadly the same as our proposals in the consultation. We have made some refinements in response to stakeholder comments to:
- recognise that the complexity of filings is an additional driver of our costs;
 - reassess the weighting attached to non-GSO filings; and
 - reduce the weighting of notifications for non-coordinated filings.
- 1.2 The result of these changes is to reduce the filing charges for simpler satellite projects and may benefit some of the innovative new projects being developed by the sector. A comparison of proposed charges in the 2018 consultation with those we are implementing as a result of decisions taken in this statement, is shown in table 1 below.

Table 1: Comparison of satellite filing charges between the 2018 consultation and this statement

2018 consultation			Our decision in this statement		
Filing activity/type	Effort weighting	Proposed charge	Filing activity/type	Effort weighting	Charges 2019/20
Submissions (and relevant modifications)					
New request (all filings)	1.0	£1800	New requests (except non-GSO EPFD filings)	1.0	£1800
			New non-GSO EPFD filing requests	3.0	£5400
Annual management					
Non-coordinated API filings	1.0	£1800pa	Non-coordinated API filings	1.0	£1800pa
			Coordinated GSO and non-GSO filings (<100 ITU units)	2.0	£3600pa
			Coordinated GSO filings	3.0	£5200pa
Coordinated non-GSO filings	4.5	£7800pa			
Notifications					
Notification request (all filings)	1.3	£2300	Non-coordinated API requests	1.0	£1800
			Coordinated (GSO and non-GSO) requests	1.3	£2350

- 1.3 Our charges for 2019/20 reflect our forecast costs for 2019/20 and current filing volumes (as described in section 2 and annex 3) and are in line with our proposed charges in the 2018 consultation.

- 1.4 Introducing charges does not change how we undertake our satellite filing work. We remain committed to delivering this work efficiently and to a high standard. In addition, as Ofcom's budget is limited by an overall spending cap, introducing charges simply changes the source of funding for our satellite filing work, rather than making additional funds available for that work.

Implementation measures

- 1.5 Existing filings and those received prior to 1 April 2019 will not incur charges for any part of their management. This means that a proportion of our total satellite filing costs will be attributed as legacy, non-recoverable costs in the initial years of charging. The proportion of non-recoverable costs will reduce over time as new satellite filings are submitted and existing (legacy) filings complete the ITU process. These non-recoverable costs are excluded from the costs we pass on as charges to chargeable filings in a given year.
- 1.6 Our charges are set annually. Each year, they will be adjusted against actuals for the previous year following an annual reconciliation process, to ensure that we do not over or under recover our costs for this work. As a result, we expect the actual charges organisations pay to vary year by year, to reflect actual volumes and costs. Changes in filing volumes can affect per filing charges because many of our costs are fixed. Charges could increase as a result of increased costs or if volumes reduce whilst costs remain relatively constant, or conversely could decrease where costs reduce, or volumes increase.
- 1.7 For submission (and relevant modifications), and notification requests, payment is due in advance, when the application is made. For annual management charges, payment is due on receipt of the invoice, with liability incurred on 1 April every year that the filing remains active before it is notified (or suppressed or cancelled). We do not anticipate processing submission, relevant modification or notification requests unless payment is received, and we will not accept a notification request unless all annual management charges have been paid. Non-payment of annual management charges may ultimately result in us cancelling the filing(s).
- 1.8 Liability to pay for charges falls to the organisation to whom the satellite filing is authorised. A third party may submit filings on behalf of the relevant satellite filing organisation provided they have the necessary authority to do so, although the liability for payment remains with the organisation to whom the satellite filing is authorised.

Satellite filing charges for 2019/20

- 1.9 Our Notice of Charges has been published alongside this statement (see also annex 4). These charges apply for the 2019/20 financial year (from 1 April 2019 to 31 March 2020 inclusive) and are summarised in table 2 below.

Table 2: Satellite filing charges by filing activity/type (for 2019/20)

Filing activity/type	Effort weighting	Payment due	Charges (2019/20)
Submissions (and relevant modifications)			
New requests (except non-GSO EPFD filings)	1.0	On date of request/application	£1800
New non-GSO EPFD filing requests	3.0		£5400
Annual management			
API filings	1.0	Q1 annually (on receipt of invoice)	£1800pa
CR/C GSO and non-GSO filings (<100 ITU units)	2.0		£3600pa
CR/C GSO and non-GSO filings (≥100 ITU units)	3.0		£5400pa
Notifications			
API requests	1.0	On date of request/application	£1800
CR/C GSO and non-GSO requests	1.3		£2350

Figures have been rounded to the nearest £50

- 1.10 We may also charge a fee for exceptional cases where a significant cost arises from work which goes beyond the typical and usual satellite filing activities we carry out. The charge would be based on cost recovery, determined on a case-by-case basis, and notified to and agreed to by the organisation before we undertake the requested work.

2. Background

- 2.1 This section explains the satellite filing process, our role in managing the UK's filings, and how we calculate our satellite filing costs. It summarises and, where appropriate, updates the material presented in section 3 of our 2018 consultation.

Overview of satellite filings

- 2.2 Satellites provide a diverse range of important benefits to UK citizens and consumers – from broadcast TV, broadband connections, positioning, earth imagery and better weather forecasts. They also offer a unique ability to deliver communications to many parts of the world not adequately served by other means. Satellite services have predominately been operated by larger organisations, however with a reduction in costs associated with hardware and launches, we are seeing an increase in the number of start-ups, smaller companies and academics entering the sector.
- 2.3 In addition, the space sector forms an important part of the UK economy, and we note the UK Government's objectives to grow the sector, with a target to achieve 10% of the global market by 2030¹.
- 2.4 To operate a satellite network/system, and realise the above benefits, it is necessary to obtain access to appropriate spectrum - for the uplink (Earth to space) and the return path downlink (space to Earth) from the satellite to stations in the service area. An orbital position in space, which influences the area of the earth's surface that the satellite can serve (the coverage area), must also be secured. A satellite filing is the tool to obtain international recognition of these spectrum and orbital resources.
- 2.5 Spectrum and orbital positions are valuable and limited resources and must be managed and planned to allow equitable access to all and mitigate any potential interference. Satellite filings in certain frequency bands are required to coordinate with higher priority filings, and operators typically have seven years to complete this coordination.
- 2.6 Currently, the majority of communications satellites are located in the geostationary orbit (GSO), i.e. rotating around the Earth at the same rate as the rotational speed of the Earth and thus appearing to be stationary to an observer on the ground. There are plans for many new non-geostationary orbit (non-GSO) satellite systems which typically operate at a lower altitude than GSO satellites and can operate in multiple orbital planes.

International Telecommunication Union

- 2.7 The international nature of satellite services requires that coordination of the position in orbit and the frequencies at which satellites operate, takes place within a framework of international rules administered by the ITU.

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/444918/SPACE-IGS_report-web-JJF-V2.0.pdf

- 2.8 The ITU is a specialised agency within the United Nations (UN) for coordinating global telecommunications networks and services. It operates under an international treaty governing the use of the radio spectrum to which the signatory ITU Member States (of which the UK is one) are bound.² Its regulations (formalised in the ITU's Radio Regulations) govern the following areas:
- frequency allocations to different categories of radiocommunication services;
 - the rights and obligations of Member States in obtaining access to spectrum and orbital resources; and
 - international recognition of these rights by recording frequency assignments in the Master International Frequency Register (MIFR), and as appropriate, orbital positions used or intended to be used.
- 2.9 Member states, including the UK, are each represented by their national regulatory authority (NRA), which is the government department or service responsible for discharging the obligations set out in these instruments and for developing appropriate national legislation to implement these obligations.
- 2.10 The Radio Regulations are reviewed and revised every three to four years at the World Radiocommunications Conference (WRC); the next WRC will be held in November 2019. Agenda Item 7 specifically addresses potential changes to the rules and regulations pertaining to satellite filings. In between WRCs, ITU Study Groups conduct studies and prepare global standards/ recommendations for the international community. We represent the UK at these international meetings.

Ofcom's role in managing satellite filings

- 2.11 We act as the notifying administration in the ITU for the UK, including representing the British Overseas Territories (BOTs), the Channel Islands and Isle of Man³.
- 2.12 Our role ensures that new satellite filings can be brought into service without causing harmful interference to, or receiving harmful interference from, existing or planned services, as required under the ITU Radio Regulations. The process that organisations filing through the UK are required to follow are set out in our 'Procedures for the Management of Satellite Filings' (the Procedures)⁴.
- 2.13 As at 31 December 2018, we were managing 219 active filings plus maintaining 92 notified satellite filings (a total of 311 satellite filings), on behalf of 28 organisations. This number has increased slightly from the 215 active satellite filings (89 notified, making 304 in total) being managed at the time of the 2018 consultation.

² Information about the ITU and the Radio Regulations is available at <http://www.itu.int>.

³ The Channel Islands and Isle of Man are also referred to in this document as Crown Dependencies (CDs).

⁴ https://www.ofcom.org.uk/data/assets/pdf_file/0027/63495/new_procedures1.pdf

2.14 We undertake several types of activities in dealing with satellite filings, and these are summarised below. The activities which we consider fall within the meaning of chargeable ‘satellite filing work’⁵ that relates to our new charging powers are as follows:

- Submitting the filing application – as set out in the Procedures, we review the satellite operator’s business plan, assess and validate the filing’s technical characteristics and ensure we are content with the due diligence requirements (as set out in table 1 of the Procedures), before submitting the filing to the ITU. This activity includes addressing queries from the ITU before the submission⁶ is accepted and can involve meetings with the operator both before and during submission. For submissions containing frequencies subject to coordination, the date of receipt is vital in securing priority against other satellite filings. For some submissions we will also carry out the following work, where required:
 - liaise with the UK Ministry of Defence (MOD) for relevant frequency assignments⁷;
 - assess and submit EPFD (equivalent power flux density) masks for relevant non-GSO filings.
- Managing the filing – this is an ongoing part of our satellite filing work following the initial submission until the filing is ready to be notified (see below), which can take up to seven years⁸. The details we submit are circulated to other NRAs (via the fortnightly ITU publication, the BR-IFIC⁹), who we then engage with as necessary to coordinate the filing during that period. Specific activities we carry out here are:
 - handling correspondence between NRAs, the ITU and satellite operators/ organisations, arising from the publication of the filing in the BR-IFIC (our level of work varies depending on coordination requirements);
 - reviewing the BR-IFIC to consider impacts on active UK filings (pre-notification) and drafting of appropriate responses to NRAs;
 - international coordination meetings and ratification of coordination agreements between organisations, where required; and
 - due diligence meetings and information (including annual review of progress reports as well as information specified in table 1 of the Procedures) to ensure satellite operators remain on track with the project (against the original filing).

⁵ Section 28A of the Communications Act 2003 empowers Ofcom to require fees to be paid for doing ‘satellite filing work’, which is a defined concept in section 28A(3) – see annex 2 for further explanation.

⁶ Submissions also include modifications involving new characteristics i.e. where new technical assessment is required, which we refer to as ‘relevant modifications’ throughout this statement.

⁷ Frequency assignments identified as UK2.1 in the UK FAT (Frequency Allocation Table).

⁸ Or eight years for satellite services using planned bands under appendices AP30, 30A and AP30B of the Radio Regulations.

⁹ The BR-IFIC (BR International Frequency Information Circular (Space Services)) is published every two weeks by the ITU-BR in accordance with provisions 20.2-20.6 and 20.15 of the Radio Regulations. It is official acknowledgement of receipt of frequency assignments, as well as statutory publication of the particulars of frequency assignments recorded in the Master Register - see <https://www.itu.int/ITU-R/go/space-faq-brific/en>.

- Notifying the filing – once we are satisfied that all coordination (including sufficient measures to mitigate interference for APIs) is complete or carried out to the operator/organisation’s best efforts, we submit the notification information to the ITU. Once the satellite filing has been notified, it then obtains international recognition. This activity covers work we do, until the point that the filing is published as notified and recorded in the MIFR, to:
 - assess technical characteristics of the filing and check against required milestones;
 - liaise with the UK MOD for relevant frequency assignments;
 - analyse coordination and address any outstanding requirements, where required;
 - submit the notification to the ITU, and address their queries before the notification is accepted (including handling Return of Notices under Part III-S, and requesting Radio Regulation No. 11.41 (RR 11.41), where required);
 - review and submit Resolution 49 submissions where required, which contain information on the satellite filing, manufacturer and launch service provider; and
 - confirm the satellite has been brought into use (BIU) with the ITU and operator.
- Maintaining notified UK filings – in order to protect the operational characteristics of notified satellite filings from proposals for new/modified filings, we review the BR-IFIC, and draft responses as appropriate (between NRAs, the ITU and satellite operators/organisations). This activity may be ongoing in perpetuity following notification, as filings can remain in place indefinitely (subject to extensions), if occupied (and replaced) by a satellite capable of transmitting or receiving on the filed frequency assignments. This includes satellite filings which have been suspended and only ceases when a satellite filing is cancelled/suppressed. This activity is a limited proportion of our overall satellite filing work.

In addition, although most cases of interference to/from notified satellites are resolved directly by the satellite operators concerned:

- where interference originates in the UK, we may provide advice, investigate and resolve specific sources, and carry out any relevant enforcement action;
 - where interference originates outside the UK, we have the ability to pass issues to other administrations to investigate;
 - where interference arises between satellite networks, we have the ability to investigate and (if necessary and appropriate) request UK operators to stop interfering. For satellite networks filed with other NRAs we can liaise with those other NRAs in order to resolve the case.
- Ad hoc requests from organisations or NRAs which go beyond normal management of the filing (as set out above), for modifying a filing, transfers, suspensions, lodging an appeal to the Radio Regulations Board (RRB), cancellations/suppressions, and bringing a filing back into use.
 - Policy and project work – work we carry out to support satellite filings policy, e.g. international work on Agenda Item 7 at WRCs and updates to the Procedures.

- 2.15 These activities have been revised and updated for completeness since the 2018 consultation and are also illustrated in figure 2 in section 3 of this document.
- 2.16 To date, we have performed our satellite filing work at no charge to the organisations (often satellite operators) who request that we manage their satellite filings. The UK Government initiated legislation to give us new powers in 2017 (under section 28A of the Communications Act 2003, see annex 2) to recover our costs for this work from the organisations that request it.
- 2.17 The charges we are now introducing as a result of this statement, seek to recover our costs for performing the range of satellite filing work set out above (subject to charges for exceptional cases as explained in paragraph 3.58). The range of work may vary from time to time, for example if new activities result from decisions at a WRC. If we need to carry out such new activities in performing our satellite filing work in the future, we intend to include them within our satellite filing activities and cost base.
- 2.18 Throughout this document, we use the term ‘API filing’ to refer to a filing not subject to coordination and ‘CR/C filing’ to refer to a filing subject to coordination.

Overview of satellite filing costs

- 2.19 We explained our cost allocation methodology in section 3 of the 2018 consultation (from paragraph 3.27). Ofcom’s total costs, covering 893 employees (at 31 March 2018), are allocated to regulatory sectors, and are forecast, and then reconciled against actual costs annually. Our model is audited annually and our annual reports¹⁰, which are publicly available and set out the breakdown of our total costs to regulatory sectors, must be laid in front of Parliament.
- 2.20 In addition, our spectrum management cost allocation methodology, developed in 2012, works alongside our Ofcom-wide cost allocation methodology for allocating costs to regulatory sectors. It allocates our spectrum management costs to all of the spectrum sectors and licence classes we manage, and attributes costs only to the sector(s) that benefit from the work that we do. This ensures a fair allocation of costs to each particular spectrum sector or licence class, including for satellite filings. We also publish the breakdown of our spectrum management costs¹¹. The last three years of our spectrum management costs versus our total operating costs are shown in table 3 below.

¹⁰ <https://www.ofcom.org.uk/about-ofcom/annual-reports-and-plans>. The annual report contains (usually in Note 2 to the accounts) a breakdown of Ofcom’s costs into regulatory sectors.

¹¹ <https://www.ofcom.org.uk/about-ofcom/annual-reports-and-plans/spectrum-management-costs-and-fees>. We carry out this exercise retrospectively against actual costs. It was last carried out for 2016/17.

Table 3: Ofcom's spectrum management and total costs – 2015/16 - 2017/18

	2015/16 (m's)	2016/17 (m's)	2017/18 (m's)
Ofcom's total operating costs, of which:	114	115	122
Spectrum management costs	51	48	51

2.21 By applying our spectrum management cost allocation methodology, we identified average spectrum management costs for satellite filings of around £1.07m per year in the 2018 consultation (for the six-year period 2011/12 to 2016/17 – see table 4 below).

Table 4: Annual satellite filings costs since 2011/12

	2011/12 (m's)	2012/13 (m's)	2013/14 (m's)	2014/15 (m's)	2015/16 (m's)	2016/17 (m's)	Average (m's)
Satellite filing costs	1.05	0.98	1.11	1.17	1.11	0.97	1.07

2.22 There are a number of satellite-related spectrum sectors or licence classes (i.e. 'satellite technically assigned', 'satellite light', and 'satellite licence exempt'), of which satellite filings is one. Costs for the satellite filing sector are distinct and calculated separately from other spectrum sectors/licence classes, and represent around 2% of our spectrum management costs.

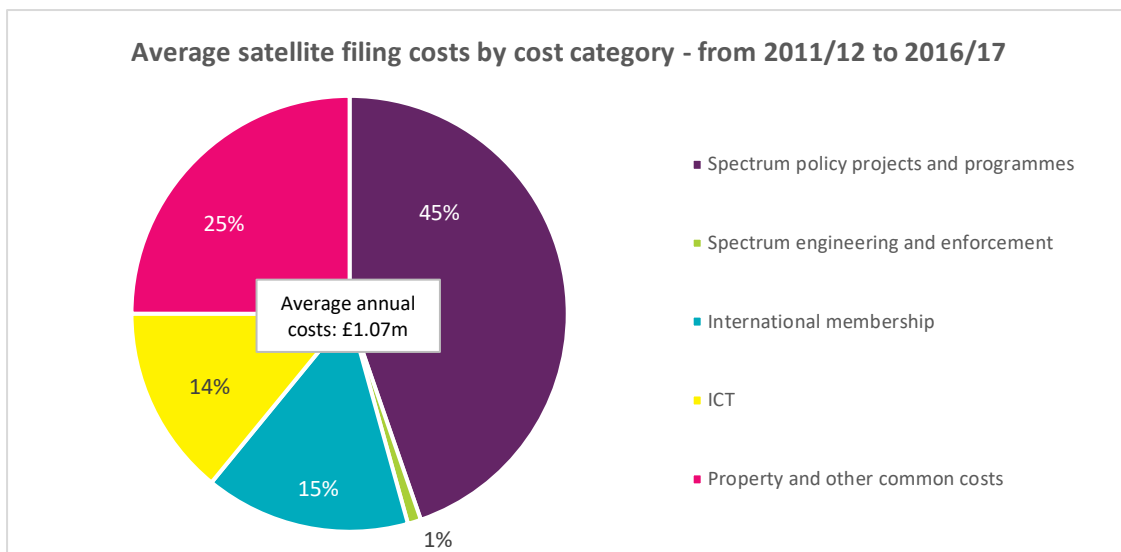
2.23 Satellite filing costs comprise a number of relevant cost categories, the relevance of each is summarised below:

- Spectrum projects and programmes – the majority of costs in this category comprise the FTE costs of staff (plus associated direct costs) supporting the satellite filings process. This category also includes a proportion of staff effort and direct costs from relevant projects/programmes which support our satellite filing work. For example, it includes a share of the costs of our satellite international work, as some of that work supports Agenda Item 7 at WRCs. Other relevant projects can vary from year to year,¹² for example we previously ran a project to update our satellite filing procedures.
- Spectrum technology, engineering and enforcement (STE&E) – not frequently applicable to satellite filings but can occasionally be required. For example, investigation of cases where a UK notified satellite suffers interference.
- International – relevant proportion of memberships for the ITU and CEPT.
- ICT and Property and other common costs – both apportioned based on the number of FTEs providing satellite filing effort.

2.24 The average cost breakdown for each cost category for satellite filings (for the same six-year period since 2011/12) were included in our 2018 consultation, as shown in figure 1.

¹² We set out our forthcoming projects for the year in our Annual Plan. By their nature, these costs change from year to year depending on the work we do, so providing a breakdown here is not practicable.

Figure 1: Breakdown of average annual satellite filing costs by type



- 2.25 By applying the same spectrum management cost allocation methodology, our forecast satellite filing costs for 2019/20 are £1.05m, a small reduction to the average cost we consulted on.
- 2.26 The charges we set for the 2019/20 year will reflect this revised cost figure, as set out in section 4 and summarised in table 7, and also published in our Notice of Charges¹³.
- 2.27 We will also reconcile against actual costs for 2019/20 in accordance with paragraph 4.15, and as required by s28A(6) and (7) of the Communications Act 2003 (the 2003 Act) (see annex 2 for a more detailed overview of this legal requirement).

¹³ See <https://www.ofcom.org.uk/spectrum/information/satellites-space-science/satellite-filings/notice-of-charges-satellite-filings> and annex 4.

3. Summary of consultation responses and our decisions

3.1 This section provides an overview of our proposals, summarises the responses we received to our consultation questions, and sets out the decisions we have reached on recovering our costs for doing satellite filing work.

The consultation

3.2 Our Satellite Filings Cost Recovery consultation (the 2018 consultation)¹⁴ was published on 14 June and closed on 6 September 2018.

3.3 We received 18 responses (two fully confidential) to the 2018 consultation from satellite operators and others integrally involved in the satellite filing process (i.e. consultants and industry bodies supporting satellite organisations), as well as from jurisdictions (i.e. BOTs and CDs) who file in the ITU through the UK.

3.4 We asked eight questions covering our charging approach, our preferred charging option, and how we proposed to implement the charges. We note that many responses repeated similar points under several questions, and these have been grouped together under the most relevant question to improve the readability of this section.

3.5 In general, we received most support for our preferred charging option (option 3), with some refinements suggested. Having carefully considered all responses, we discuss the main points raised and our response to them in the rest of this section. A detailed summary of responses and consideration of points not covered in section 3 is at annex 1.

3.6 We also hosted a stakeholder workshop on 20 July 2018, and some questions and points of clarification raised at it are also included in this statement.

Charging principles and cost drivers (questions 1-2)

What we proposed

3.7 Our approach to charging for our satellite filing work is framed by the legislative constraints we must operate under; our legal framework is summarised in annex 2. We therefore proposed to adopt three core principles, which reflect our general duties, for our charges. That they should:

- reflect our costs in a transparent and proportionate way. We considered the most significant drivers of our costs to be:
 - type of filing activity – such as submitting, modifying, managing and notifying a filing.

¹⁴ https://www.ofcom.org.uk/_data/assets/pdf_file/0027/114966/Satellite-Filings-Cost-Recovery.pdf

- filing coordination requirements – that is, whether the filing requires coordination or not, or if the coordination is for a geostationary orbit (GSO) or non-GSO filing.
- filing period - the length of filing process, which can take up to seven (in some circumstances eight) years.
- be practicable and easy to implement, achieving our aims with the simplest possible approach, and be relatively straight forward and cost effective to introduce.
- provide clarity and certainty to stakeholders, so far as is practicable. We sought to ensure stakeholders understood what they would be required to pay and when, so that they could plan for the charges. We also looked to provide a degree of certainty about the level of charges, so far as it is practicable to do so.

3.8 We asked two questions relevant to our charging principles and cost drivers:

Question 1: Do you agree we have identified the most relevant cost drivers to take account of in our charging approach?

Question 2: Are there any other factors you consider we should take account of in our charging approach? Please explain why in your response.

Summary of responses to question 1

3.9 Most respondents (13 of the 16 who responded) agreed that we had identified the most relevant cost drivers, with one respondent acknowledging that we have the best understanding of what is driving our costs. One respondent disagreed, but indicated that an additional cost driver of size/scope of filings was needed. Across all questions, four respondents said they did not support charging at all, though one of these agreed we had identified the most relevant cost drivers.

3.10 Additional cost drivers suggested across stakeholders' responses were:

- most commonly (five respondents), that we take the filing complexity (i.e. the number and type of frequency bands) into account because it impacted the time and effort the filing required. A suggestion was made to use the same approach as adopted by the ITU, who base charges on the number of 'units'¹⁵ per filing; and
- length of satellite missions.

3.11 Three respondents disagreed with the weighting given to the annual management of non-GSO filing types, given that the only difference between GSO and non-GSO filings is that some non-GSOs have EPFD assessments which are carried out once, at the start of the process. The weighting differential was therefore not considered justifiable.

¹⁵ ITU cost recovery units are calculated from the technical characteristics of a filing. They are determined by the product of the number of frequency assignments, number of classes of station and the number of emissions, summed up for all frequency assignment groups.

Our response

3.12 Having reviewed the responses, we have further considered the cost drivers suggested. In the 2018 consultation, we found that the remaining factors we listed¹⁶ affected our effort in a less significant way, and we considered that the complexity of accounting for these more granular differences in our charging approach would be disproportionate. In other words, any additional benefit from charges being more closely aligned to underlying costs would not be worth the additional complexity, and corresponding administrative overhead, introduced.

Size and complexity

3.13 With regard to the size and complexity (i.e. number and type of frequency bands) of the filing, we considered these factors for the 2018 consultation, but discounted them because accounting for such differences was likely to take more time to calculate and add cost.

3.14 Nonetheless, we accept that our effort is affected to some degree by the complexity of the filing submitted – a larger number of frequencies does generally take longer to coordinate. In addition, the suggestion to adopt the number of ITU units does appear to be a straightforward way to factor in this complexity, and this information is readily available so does not require additional work to calculate. Therefore, we consider it appropriate to adopt a fourth cost driver which takes filing complexity into account. As with the ITU's process, we will make a distinction between filings with less than 100 ITU units, and 100 or more units.

3.15 However, we maintain our position that the difference in effort for application activities (i.e. for submissions, relevant modifications and notifications) for more complex filings is not significant, particularly given our total effort for application activities is a relatively small proportion of total activity.

Length of satellite missions

3.16 We did not specifically consider in the 2018 consultation the length of mission within the factors we listed, but having considered it now, we do not agree that shorter missions should be charged less than for the activities we charge other filings. These filings require the same activities (submission, annual management and notification) as other filings and do not typically take less time to manage. Accordingly, it would not be fair to reduce charges on this basis alone. However, we note that short-duration missions may reach notification stage quicker, and if so, charges incurred would be lower under our annual charging approach.

¹⁶ As set out in paragraph 5.7 of the 2018 consultation – the remaining factors were: size of satellite, type and number of spectrum frequency band(s), number of orbital planes (non-GSO) or orbital locations (GSO, 'batch' submissions, type of satellite service, intended coverage area, and size of business/turnover.

GSO and non-GSO weightings

- 3.17 With regard to filing type, we agree with comments that the main area of difference for non-GSO filings relates to EPFD assessments, and that these only affect some filings. Having considered the responses, and given this activity is only carried out once in the early stages of the filing but is a significant driver of our effort, we will now charge for this activity as part of the submission application for relevant non-GSO filings, rather than as part of the annual management charge.
- 3.18 As a result of these refinements, we no longer consider the distinction between GSO and non-GSO filings to be necessary under the ‘filing coordination requirements’ cost driver – although any filing that requires coordination remains relevant under it. Therefore, there will no longer be a separate annual management charge for non-GSO filings.
- 3.19 Instead, filing complexity (the additional cost driver as explained above) will apply to all GSO and non-GSO filings. This approach also means that large non-GSO constellations which can require significant coordination are still weighted higher than simpler filings. Accordingly, non-GSO filings without EPFD assessments will be weighted the same as for GSO filings of similar complexity.

Summary of responses to question 2

- 3.20 Of the 15 stakeholders who responded about the factors we should consider in our charging approach, most of the comments received related to the proposals more generally, rather than specific charging factors, and are dealt with in annex 1.
- 3.21 Specific factors identified for further consideration under question 2 included:
- business value of the project/mission;
 - the relative scale of our charges compared to the ITU charges; and
 - the wider economic benefits of the sector.

Our response

- 3.22 After considering the responses to question 2, we do not agree that the value of a business or project is aligned to the costs we incur for managing a particular filing. Our costs are entirely linked to the nature of the filing and the work it requires. Therefore, we do not propose to make any amendments to our approach based on business value.
- 3.23 Further, we do not consider that the ITU’s cost recovery model is an appropriate basis for our cost recovery model. As other respondents pointed out in their responses, the work we each do to support satellite filings is different, so it follows that our charges are not necessarily the same even though both are set on a cost recovery basis. We provided example comparison charges by the ITU and other NRAs in our 2018 consultation simply to indicate what a filing would be charged under other regimes, not as a direct comparison or assessment of the work that any particular body carries out.

3.24 A small number of respondents were critical of the 2018 consultation because they argued that we did not take the wider economic benefits of the sector into account in our assessment. We do not consider that the wider economic benefits of the sector are directly relevant in this context, as all sectors we regulate generally contribute to the UK economy. In the impact assessment in the 2018 consultation, we looked at groups of stakeholders and how our proposed charges might impact them. Furthermore, we are satisfied that our impact assessment for the 2018 consultation (and as set out in this statement), satisfies our Better Policy Making guidelines¹⁷, i.e. to weigh up the costs and benefits of each charging option we proposed.

Our conclusions on questions 1 and 2

3.25 We have decided to take account of an additional cost driver, filing complexity, in our charging approach. We have therefore concluded that the most significant drivers of our costs are:

- type of filing activity – such as submitting, modifying, managing and notifying a filing;
- filing coordination requirements – whether the filing requires coordination, including EPFD assessment;
- filing complexity – the complexity of the technical characteristics of a filing, as defined by ITU units (<100 or ≥100); and
- filing period - the length of filing process, which can take up to seven (in some circumstances eight) years.

3.26 We have not made any other changes to our three charging principles:

- to reflect our costs in a transparent and proportionate way;
- to be practicable and easy to implement; and
- to provide clarity and certainty to stakeholders, so far as is practicable.

3.27 The application of the four cost drivers to our charging approach is addressed under question 6 below, including the reassessment of weightings for non-GSO filings.

Our charging options (questions 3-5)

What we proposed

3.28 We identified and assessed four potential charging options in light of the legislative constraints, and core principles we identified. We noted that the total costs recovered would be the same under all options:

- **Option 1: One-off charge per filing** - lifetime cost of filing is charged upfront in a one-off payment.

¹⁷ https://www.ofcom.org.uk/data/assets/pdf_file/0026/57194/better_policy_making.pdf. See especially section 5 and paragraphs 5.18ff

- **Option 2: Application fee plus flat annual fee per filing** - charge an application fee for new submission (including modifications) and notification requests, plus an annual management charge per filing until notification. Same annual charge for all filings.
- **Option 3: Application fee plus weighted annual fee per filing type** - as for option 2, but the annual management charge differs for each type of filing (weighted for effort).
- **Option 4: Hourly rate** - charge a fixed hourly rate based on average, fully loaded FTE (full time equivalent) resource costs, only for work we do.

3.29 Of these four charging options, we favoured adopting option 3 – an application fee plus a weighted annual management charge per filing type – because we considered that this option:

- takes account of the constraints of section 28A and provides the best overall fit against our three core principles;
- better reflects the costs incurred as it is closer to the drivers of our costs than an upfront charge (option 1);
- is the best way to smooth variability in charges over time, which is more difficult to do under an upfront charge given the number of filing requests we receive changes from year to year;
- is consistent with our existing charging processes for other sectors, so would be relatively simple and cost effective to implement and administer;
- provides the best understanding of estimated total charges in advance; and
- is the most appropriate option when considered in the context of our general duties, as discussed in annex 2.

3.30 In the 2018 consultation we asked:

Question 3: What comments, if any, do you have on our charging options 1-4?

Question 4: What other charging options, if any, do you believe we should consider?

Question 5: Do you agree that our preferred charging option, option 3, is the best way to meet our objectives? If no, please state your preferred charging option and explain why.

3.31 We address questions 3 and 5 below, before turning to question 4, given the overlap in the issues raised under these questions.

Summary of responses to questions 3 and 5

3.32 Overall, most stakeholders (of the 15 who responded to question 3) provided comments consistent with our assessment of the four options. One respondent acknowledged that it was reasonable for us to implement charges, and another noted that charges appear modest by international standards and were reasonable as a proportion of our total operating costs (and given they end after notification). One further respondent also agreed that ‘effort weightings’ were a fair and proportionate way to scale charges.

3.33 Many of the 17 stakeholders who responded to question 5, repeated comments which are addressed under other questions, so these are not considered again below.

- 3.34 Most respondents considered that option 3 was the best way to meet our objectives, providing more certainty of charges and the option which best balances our principles of certainty, simplicity and transparency. One respondent thought either option 2 or 3 could achieve the best balance. No respondents supported a one-off upfront charge (option 1). Four respondents said that an hourly rate (option 4) would be the fairest way to allocate costs, but requested additional information to give a definitive answer. Stakeholders disagreed over whether option 4 would be more costly to implement (some argued that software was readily available to support this kind of approach).
- 3.35 Of the ten respondents who agreed with our preferred option 3, four of these applied conditional support, provided that we consider further:
- the complexity of filings (our response to this is covered under question 1 and its implications for charging under question 6);
 - equitable annual charges for GSO/non-GSO filings (our response to this is covered under question 1 and its implications for charging under question 6);
 - treating charges for uncoordinated filings or smaller missions in a nominal way, such as for light licensing;
 - a different approach for new entrants, non-commercial operators or academic institutions, who may find it more difficult to pay, such as allowing different payment terms or a simplified charging option (e.g. reducing our due diligence work); and
 - the Government's objective to grow the UK's space sector alongside the new charges.
- 3.36 One respondent did not support a reduced fee for non-commercial operators, particularly where they would be seeking to share spectrum used by commercial operators. They noted that it is becoming increasingly difficult to draw a line between commercial and non-commercial projects. It was suggested that grants/funding could better address concerns.

Our response

Preferred charging option

- 3.37 We reviewed the responses we received on charging options 1-4. Given we received no support for option 1, and very limited support for option 2 (one respondent who supported either option 2 or 3), we have concluded that these options are not appropriate.
- 3.38 As we noted in the 2018 consultation (paragraph 5.41), although option 4 (hourly rate) may be seen as more transparent and proportionate, we did not consider it would be as simple or cost effective to implement as other options because a significant proportion of costs are shared and are not organisation specific, and therefore would be difficult to split across filings on an hourly basis. We also considered that it would be likely to lead to increased administrative costs (including set-up costs) given we did not currently manage our work in this way. We are aware that software packages are available to support hourly charging against individual stakeholders, but this is not how any other part of Ofcom currently recovers the costs of its work, and the cost of purchasing and implementing a regime just for this activity would be disproportionate. It would also mean additional administrative costs to oversee and manage a more regular invoicing process, when we

generally only invoice charges and fees once per year (or less frequently). While these recurring costs have not been quantified, we consider that the scale of them would not be insignificant.

- 3.39 Furthermore, we considered that option 4 provided limited certainty of overall filing charges for stakeholders, which respondents agreed was an appropriate and important principle for charging. At the beginning of a project, it would be critical for some stakeholders (in particular, for new entrants, academics and smaller operators) to have clarity on the likely total charges they may face.
- 3.40 We note that the majority of respondents agreed that option 3 best met the objectives of our three charging principles and supported it as the basis for future charging.

Simplified or nominal charges

- 3.41 We have determined that costs should be apportioned fairly based on effort, and have developed a set of criteria to apply this; we consider that this is the fairest way to pass on our regulatory costs. Therefore, it would not be reasonable or proportionate to charge filings a nominal or simplified fee (such as for other 'light' licence classes or reducing the due diligence work we carry out) which is not linked to the effort they require to manage because the filing was made by a particular stakeholder group or filing type, including filings for shorter missions (discussed earlier under paragraph 3.16). To create a different approach for particular stakeholders or filing types which are not based on effort would lead to a cross-subsidy on other organisations which we consider unreasonable.
- 3.42 However, under option 3, our cost drivers will take account of whether filings require coordination, which would result in lower charges. We have also made refinements to our cost drivers to recognise that some filings are simpler than others, which would also result in lower charges. These changes may benefit some of the innovative new projects being developed by the sector.

An organisation's ability to pay and payment terms

- 3.43 We consider that our approach of spreading charges over each year of the filing will assist organisations to manage the charges we are implementing. We do not consider that the scale of our charges are prohibitive such that they could create a barrier to entry. Furthermore, the charges are not of such magnitude that would typically require adjusted payment terms (our standard payment terms as set out in our Statement of Charging Principles¹⁸ allows annual charges of £75K or higher to be paid in monthly instalments). We are therefore not persuaded that different payment terms are necessary for these charges.
- 3.44 We understand that regulatory costs can be significant for some stakeholders, and the introduction of new regulatory fees might appear burdensome for them. However, provided we do so reasonably and proportionately, it remains the case that they are a requisite component of operating in an effectively regulated industry. The UK's regulatory

¹⁸ https://www.ofcom.org.uk/_data/assets/pdf_file/0019/51058/charging_principles.pdf

authorities devote significant resources to ensuring operators receive the benefits of a safe and transparent environment. As a result, the UK is viewed as an attractive regulatory environment, with world leading space regulators.

3.45 With regard to an organisation's ability to pay, there are a number of bodies that provide funding / grants to the UK space sector, and we have engaged with a variety of funding bodies to ensure they are aware of our charges. For example, space agencies such as the European Space Agency and UKSA, innovation grant funders, science bodies (such as the Science Technology Funding Council), and private venture capitalists.

Government's objective for space sector

3.46 We do not consider that recovering our costs for this work in any way undermines the UK Government's support for the space sector. As we set out in paragraph 5.52 of the 2018 consultation our charges over the filing's lifetime are mostly lower than comparable NRAs' charges. UK satellite filings continue to attract international space companies to the UK and our credibility internationally reassures investors looking to invest in UK space missions. We also consider that a cost recovery approach to charges, as granted under our new powers, supports the UK Government's objective to ensure that public money is managed appropriately.

Summary of responses to question 4

3.47 Few alternative charging options to the four we proposed were put forward. Eight respondents offered no response or suggestion. Of the ten responses we received, four of these respondents repeated an earlier call for no charge at all as their preferred option, although conversely a few respondents acknowledged it was reasonable that we were setting charges.

3.48 Four respondents supported an add-on or refinement of an existing option:

- Option 3 with the additional cost driver of complexity to scale the effort involved (our response to this is covered under question 1 and its implications for charging under question 6).
- A combination of options 3 and 4, subject to receiving more information so that they could complete further analysis on how it might work in practice.
- A combination of options 1 and 4, where additional tasks are charged by the hour, above a fixed fee (as the Government of Bermuda currently charge for their filings).
- They considered that the fairness and practicality concerns would be addressed over time through annual refinement.
- Hourly charges for ad hoc activities.

Our response

3.49 We noted in paragraph 2.2 of the 2018 consultation, that we were expressly given new powers to introduce these charges to recover the cost of our satellite filing work. We therefore do not consider it appropriate to make no charges at all.

- 3.50 With regard to options which combine an element of hourly charging, we noted our reasons in paragraph 3.38 above as to why this is not a favoured approach, and we do not think these concerns are resolved or reduced through combining options. Instead, it is likely to make administering the charges more complicated because it creates additional layers of charging to manage.
- 3.51 This argument extends to charging hourly for ad hoc activities, as we consider it disproportionate to implement a separate charging approach for such a limited part of our activities. As explained in paragraph 5.21 of the 2018 consultation, we proposed to treat ad hoc activities (except relevant modifications and exceptional cases) as part of ‘managing a filing and its coordination’ and the charge we set for it, and continue to consider that this is the most appropriate way to charge for these irregular and one-off activities.
- 3.52 Furthermore, given that stakeholders did not favour a one-off upfront charge (option 1), because it places a heavier funding burden on organisations at the start of the process, we believe that other options which combine a significant upfront element would also not be supported.

Our conclusions on questions 3-5

- 3.53 Having considered the responses, including that a majority of stakeholders supported option 3 as the best way to meet our objectives, we have decided to proceed with a charging approach based on option 3 – application fees plus a weighted annual management charge based on filing type.
- 3.54 Apart from including filing complexity as an additional cost driver (see paragraph 3.25), we were not persuaded that further conditions or refinements to our charging options would better meet our objectives. We have however decided to revise the details of our charging approach under option 3, and the effort weightings for different filing activities, based on our conclusions for questions 1 and 2. This is discussed under question 6 below.

Our charging approach under option 3 (question 6)

What we proposed

- 3.55 Our proposed charging approach for option 3 was based on an application fee plus an annual management charge for each filing between submission and notification (unless suspended or cancelled). Our proposal took account of the three cost drivers outlined at paragraph 3.7, with charges made per filing, for the following filing activities or types:
- An upfront application fee for new submission (and modification) requests received after the implementation date.
 - A notification request fee (where the request relates to a filing also received after the implementation date).
 - An annual management charge between the initial request and notification (incurred on 1 April annually), for filings received after the implementation date (unless suppressed or cancelled), with different charges for the following types of filing:

- API – filings not subject to coordination;
- CR/C GSO – filings for GSO satellite networks subject to coordination; and
- CR/C non-GSO – filings for non-GSO satellite systems subject to coordination.

3.56 The charges proposed in the consultation for the 2018/19 financial year are summarised in table 5.

Table 5: Proposed satellite filing charges by filing activity/type (for 2018/19)

Filing activity/type	Effort weighting	Payment due	Proposed charge (2018/19)
New submission/modification request	1.0	On date of request	£1800
API filing annual management	1.0	Q1 annually (May)	£1800pa
CR/C GSO filing annual management	3.0	Q1 annually (May)	£5200pa
CR/C non-GSO filing annual management	4.5	Q1 annually (May)	£7800pa
Notification request	1.3	On date of request	£2300

Based on 2017/18 cost and filing volume data. Figures have been rounded up to nearest £100

3.57 The relative size of the charges proposed reflected our estimate of the average level of effort for different activities and types of filings (measured through an ‘effort weighting’ based on our best judgement). Total costs are then apportioned based on that effort weighting.

3.58 We also proposed to charge a fee for exceptional cases where a significant cost arises from a specific organisation’s request to perform satellite filing work that is directly and solely applicable to that organisation, and which requires work which goes beyond the typical and usual satellite filing activities as described in paragraph 2.14. The charge would be based on cost recovery, determined on a case-by-case basis, and notified to the organisation before undertaking the requested work.

3.59 Lastly, we noted we are required to reconcile aggregate fees against actual costs at the end of each financial year. As a result, we expect the actual charges organisations pay to vary year by year from our proposed charges to reflect actual volumes and costs (changes in filing volumes can affect per filing charges because many of our costs are fixed), such that:

- Charges could increase as a result of increased costs or if volumes reduced whilst costs remained relatively constant.
- Conversely charges could decrease where costs reduce, or volumes increase.

3.60 In the 2018 consultation we asked:

Question 6: Do you have any comments on our proposed charging approach?

Summary of responses

- 3.61 All stakeholders responded to this question. They raised a range of comments including some which have been addressed under earlier questions, or that relate to implementation issues covered under question 7. Comments are also addressed in annex 1.
- 3.62 One respondent requested that we clarify the satellite filing activities we are charging for, looking at how our cost drivers – in particular, whether filing complexity – may lead us to identify additional filing activity/types.
- 3.63 Several respondents did not understand why non-GSO filings were weighted 50% more heavily for coordination work than GSO filings, given they considered the only significant difference to be EPFD mask assessments.
- 3.64 Several stakeholders remarked that the rationale for effort weightings needed greater justification. In particular, one did not see any rationale to justify the higher workload for notifications over submissions, so considered the weightings should be the same.
- 3.65 Some respondents also commented on how we allocated international costs, suggesting:
- that they should be split per filing and not weighted; and
 - that weightings should take account of the current year’s international agenda, given that the CEPT/ITU focus can vary between meetings for different filing types.
- 3.66 One operator also queried whether, if operators are required to equally share the costs of our ITU membership, they should receive equal international representation.

Our response

Activities we are charging for

- 3.67 As noted at paragraph 3.25, following feedback from stakeholders we have decided to take account of an additional cost driver, filing complexity, and also charge for EPFD assessments as part of the submission request for relevant non-GSO filings (rather than charge non-GSO filings a higher rate annually).
- 3.68 These refinements to our cost drivers have led us to amend the filing activities/types for charging, with several new filing activities/types created, as we now discuss and summarise in table 6 (and illustrate in figure 2) below.

Submission (and relevant modification) filing types

- 3.69 Submissions (and relevant modifications) typically require us to carry out similar activities for most filing activities/types. Filing complexity and filing period are not significant drivers of our effort for submissions and relevant modifications. However, as stakeholders noted and as discussed earlier (see paragraphs 3.17-3.19), filings which require EPFD assessments do take significantly longer to analyse during their submission. Therefore, we will now have charges for two types of submissions (and relevant modifications):
- Submission requests for non-GSO filings with EPFD assessments; and

- Submission requests for all other filing types (i.e. other than non-GSO with EPFD assessments).

Annual management filing types

- 3.70 We consider that coordination requirements, filing complexity and the length of the filing process all affect our effort for managing a filing. As noted earlier (see paragraphs 3.17-3.18), we accepted stakeholders' position to have the same annual management fee for GSO and non-GSO filings. We remain of the view that filings not subject to coordination (i.e. API filings) should be charged differently to filings which are coordinated.
- 3.71 For coordinated filings, as explained at paragraph 3.14, we are adopting the method the ITU uses to calculate complexity (i.e. ITU units). To maintain the simplicity of our charging approach these are broken down into two categories: <100 ITU units and ≥100 units. Therefore, for each year the filing is being managed, one of the following charges will be applicable, depending on the nature of the filing:
- API filing annual management;
 - CR/C GSO and non-GSO filing (<100 ITU units) annual management; and
 - CR/C GSO and non-GSO filing (≥100 ITU units) annual management.

Notification filing types

- 3.72 We consider that coordination requirements do affect our effort for notifying a filing. Having reviewed the different tasks required for submissions, relevant modifications and notifications, we accept the view put forward by stakeholders that filings which are not subject to coordination do not require the same level of effort to notify as coordinated filings (and this is illustrated in figure 2). We do not consider that there is a material difference in our effort for notification based on the filing period or filing complexity. Therefore, we will now have separate charges for two types of notification:
- API notification requests; and
 - CR/C GSO and non-GSO notification requests.

Revised effort weightings

- 3.73 Following the refinements to filing activities/types, which take account of feedback we received from stakeholders, we have reviewed the effort weightings we proposed in the 2018 consultation. The proposed and revised weightings, comparing the 2018 consultation with the decisions taken in this statement, are summarised in table 6 below.
- 3.74 Most weightings remain the same for similar kinds of activities, as set out in the 2018 consultation. However, there are new weightings for the new filing activities/types we have decided to charge for:
- Submission (and relevant modification) requests for non-GSO EPFD filings – weighting of 3, as we estimate that EPFD mask assessments take three times as long to process as other submissions.
 - Annual management of coordinated GSO and non-GSO filings (<100 ITU units) – weighting of 2, to take account of the increased complexity compared to a non-

coordinated API filing, but noting it requires less effort than more complex filings with ≥ 100 ITU units. The category combines both GSO and non-GSO filings.

- Annual management of coordinated GSO and non-GSO filings (≥ 100 ITU units) – this now combined category remains a weighting of 3, as for coordinated GSO filings in the 2018 consultation. This is because most of the filings we manage (around 75% of our active filings) are coordinated GSO filings with ≥ 100 ITU units and as our effort assessment remains the same, the weighting for this category has not changed.
- API notification requests – weighting of 1, recognising the reduced effort to notify non-coordinated filings.

3.75 For completeness, we note again that the annual management charge for non-GSO filings has been removed (with its higher weighting of 4.5).

Table 6: Comparison of proposed vs revised satellite filing activity/types and effort weightings

2018 consultation		Our decision in this statement	
Filing activity/ type	Effort weighting	Filing activity/ type	Effort weighting
Submissions (and relevant modifications)			
New request (all filings)	1.0	New requests (except non-GSO EPFD filings)	1.0
		New non-GSO EPFD filing requests	3.0
Annual management			
Non-coordinated API filings	1.0	Non-coordinated API filings	1.0
		Coordinated GSO and non-GSO filings (<100 ITU units)	2.0
Coordinated GSO filings	3.0	Coordinated GSO and non-GSO filings (≥ 100 ITU units)	3.0
Coordinated non-GSO filings	4.5		
Notifications			
Notification request (all filings)	1.3	Non-coordinated API requests	1.0
		Coordinated (GSO and non-GSO) requests	1.3

3.76 With regard to our international costs, as we explained at paragraph 3.34 of the 2018 consultation, our international membership cost category relates to a proportion (for satellite filings) of our ITU and CEPT membership fees. Our satellite filing work requires membership of the ITU in order to submit the filings, and this is the biggest component of that cost category. Satellite filing organisations also benefit in general terms from our ongoing membership of the CEPT – our work is not typically linked to a specific filing or organisation or international meeting. Further, these international membership costs are

fixed and similar in many respects to our overheads, so it is reasonable that they are apportioned on the same basis, i.e. according to our effort.

- 3.77 As also explained at paragraph 3.34 of the 2018 consultation, costs relating to our international representation work are captured under our ‘projects and programmes’ cost category. This category includes a share of the costs of our international satellite work, as some of that work supports Agenda Item 7 at WRCs. This work is not generally attributable to specific filings and can create benefits for a wide range of organisations in respect of current and potential future filings.
- 3.78 In addition, our international role is to represent the UK, rather than specific industries or organisations. In developing the UK positions on international satellite issues, we consult with a wide range of stakeholders through the International Frequency Planning Group (IFPG) and its Working Groups. The IFPG process is open to UK stakeholders¹⁹ regardless of whether they have filings through the UK or are paying fees.
- 3.79 Therefore, we do not consider it appropriate to revise the effort weightings further.

Rationale for our effort weightings

- 3.80 The effort weightings we are now adopting (see table 6 above) have been determined using our best judgement, and this calculation includes taking account of the effort required for each task.
- 3.81 As part of this analysis, we have reviewed all of the tasks and activities that we carry out as part of our satellite filing work, as listed in paragraph 2.14. We assigned tasks against each filing activity/type, noting where tasks are the same and where they are different. Higher weightings reflect additional tasks and/or that some tasks require significantly more effort than others (i.e. all tasks are not equally weighted). For example, coordination agreements for GSO or non-GSO filings are listed as one task but are a significant recurring element of annual management charges for those filings.
- 3.82 We noted under paragraph 5.32 of the 2018 consultation that applications typically required only a few days of work. The weighting for this activity was used as a baseline and other weightings were scaled against this. In our revised weightings above, this activity (for submission applications, with no EPFD assessment) remains weighted at 1.
- 3.83 We summarise the tasks for each filing activity/type in figure 2 below to make the rationale behind effort weightings clearer for stakeholders and to address their specific concerns about the weightings for notifications and non-GSO filings, including clarifying that:
- notifications have a higher weighting than submissions because they require us to assess completed coordination requirements and address Return of Notices²⁰ which are not required for submissions. However, we accept that this is not typically the case for API (non-coordinated) filings.

¹⁹ <https://www.ofcom.org.uk/about-ofcom/international/engagement/briefing-groups>

²⁰ We assessed the last four years of notification applications – around 75% of these received a Return of Notice from the ITU which required us to carry out further work on the filing.

- GSO and non-GSO filings of similar complexity are subject to similar activities, apart from some non-GSO filings which are subject to EPFD assessments.

Figure 2: Satellite filing activities/types by tasks and weightings

INITIAL SUBMISSION	Filing Type/ Activity	API and CR/C (GSO/NGSO)	NGSO (EPFD)		
	Weighting	1	3		
	Tasks	Meeting with operator to discuss project	Meeting with operator to discuss project	Meeting with operator to discuss project	
		Logging of submissions and data	Logging of submissions and data	Logging of submissions and data	
		Assessment of business plan	Assessment of business plan	Assessment of business plan	
		Assessment of technical data	Assessment of technical data	Assessment of technical data	
		Clarification sought (if required)	Clarification sought (if required)	Clarification sought (if required)	
		Discussion with MoD (if required)	Discussion with MoD (if required)	Discussion with MoD (if required)	
Submission to ITU	Submission to ITU	Submission to ITU			
			Assessment of EPFD Masks		

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ANNUAL MANAGEMENT	Filing Type/ Activity	API	CR/C (GSO/NGSO) <100 ITU units	CR/C (GSO/NGSO) ≥100 Units	
	Weighting	1	2	3	
	Tasks	Handling of correspondence between NRAs, ITU and UK operator (in response to UK filings)	Handling of correspondence between NRAs, ITU and UK operator (in response to UK filings)	Handling of correspondence between NRAs, ITU and UK operator (in response to UK filings)	
		Review fortnightly BR-IFIC's, and draft responses (per NRA) on behalf of our satellite operators	Review fortnightly BR-IFIC's, and draft responses (per NRA) on behalf of our satellite operators	Review fortnightly BR-IFIC's, and draft responses (per NRA) on behalf of our satellite operators	
		Annual due diligence meetings with operator	Annual due diligence meetings with operator	Annual due diligence meetings with operator	
		Handling of correspondence from ITU	Handling of correspondence from ITU	International coordination meetings (once or twice pa)	
			Review and ratification of coordination agreements		

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NOTIFICATION	Filing Type/ Activity	API	CR/C (GSO/NGSO)		
	Weighting	1	1.3		
	Tasks	Logging of submissions and data	Logging of submissions and data	Logging of submissions and data	
		Assessment of technical data	Assessment of technical data	Assessment of technical data	
		Met all required milestones	Met all required milestones	Met all required milestones	
				Review and analysis of coordination requirements	
		Clarification sought (if required)	Clarification sought (if required)	Clarification sought (if required)	
		Discussion with MoD (if required)	Discussion with MoD (if required)	Discussion with MoD (if required)	
		Submission to ITU	Submission to ITU	Submission to ITU	
Confirm satellite has been brought into use	Confirm satellite has been brought into use	Logging and assessment of ITU's Return of Notice			
		RoN issues clarified and managed with operator			
		Request ITU apply No. 11.41			
		Review and submit Res49 information			
		Confirm satellite has been brought into use			

Our conclusion

3.84 We have refined the filing activities/types we will charge for to take account of our revised cost drivers. We identified four new or amended types of filing activities:

- Submission (and relevant modification) requests for non-GSO EPFD filings;
- Annual management of coordinated GSO and non-GSO filings (<100 ITU units);
- Annual management of coordinated GSO and non-GSO filings (≥100 ITU units); and
- API notification requests.

3.85 These changes have also led us to review the effort weightings for each filing activity/type. The effort weightings and new charges for each filing activity/type are summarised in table 6 above.

Implementing the charges (question 7)

What we proposed

- 3.86 We indicated in the 2018 consultation that our **charges would apply from the 'implementation date'**, after publication of this statement.
- 3.87 Charges would **apply only to new filing submissions** (and activities related to those new submissions) received from the implementation date. Existing filings and those received prior to our implementation date would not incur charges.
- We explained that this means a proportion of our costs will be attributed as legacy, *non-recoverable costs*, although this will reduce over time as new satellite filings are submitted and existing (legacy) filings complete the ITU process.
 - We noted that non-recoverable costs would be excluded from the charges we make in a given year and funded through retention of WT Act receipts.
 - Filings which are suppressed or cancelled no longer incur charges, from the date of such suppression or cancellation (but would do so again if no longer suppressed).
- 3.88 Charges would **apply to any organisation requesting that we perform satellite filing work** for a filing submitted to us on or after the implementation date. This includes organisations registered (or headquartered) in the UK, BOTs, the Channel Islands or Isle of Man. Liability to pay for charges should fall to the organisation to whom the satellite filing is authorised.
- 3.89 We noted that charges would be **based on forecast costs and volumes for the year ahead**, adjusted against actuals for the previous year (following an **annual reconciliation process**). We also noted the legal requirement to adjust charges following end of year reconciliation, to ensure we do not recover more than the total costs to us in any given year of carrying out our satellite filing work. We indicated that we would adopt the cost reconciliation process carried out as part of our annual reporting process to meet this requirement. This means charges would always reflect the current status of costs and volumes, and we expected adjustments to charges on a year by year basis.
- 3.90 We advised that the **formal notice of charges for satellite filings would be published on our website**, on or before 31 March annually from 2019 (with our first notice for 2019/20 published alongside our statement). The notice would apply to charges for the financial year following publication and:
- For new submissions, modifications and notifications - these would be payable on application.
 - For annual management charges - organisations would receive one invoice annually for their total charges for all active filings in the coming year. These would be issued in the first quarter of the financial year (with liability incurred on 1 April annually).

- 3.91 We signaled that **payment would be due in advance**, and that we did not anticipate processing application or notification requests until payment was received. We also noted that non-payment of annual charges may ultimately result in Ofcom cancelling the filing(s).
- 3.92 We intended to meet the **reporting requirements of section 28A(6)** of the 2003 Act (publishing a statement of our total costs, fees received and fees outstanding each year) in our annual report (the information will be provided in Note 2 to the accounts).
- 3.93 We did not expect to regularly **review the charging approach** but noted that, where a significant change to the ITU's procedures occurs, it may require us to review our satellite filing charges to take account of it. We proposed to notify stakeholders of any change to our satellite filing charges.
- 3.94 Lastly, we indicated that the **Procedures** would be updated to ensure they reflect our charging approach.
- 3.95 In the 2018 consultation we asked:

Question 7: Do you have any comments on our proposals for implementing our charging approach?

Summary of responses

- 3.96 A total of seven respondents either agreed with our approach for implementing the charges or did not comment on question 7. Two respondents reiterated that they did not agree with implementing any charges.
- 3.97 Comments on our implementation approach were provided by 12 respondents. Many address issues of clarification as to how the charges would work in practice. We were also asked a number of implementation queries during our stakeholder workshop. We have considered the following issues in some detail below:
- Whether to start charging from the 2019/20 financial year, rather than end of 2019;
 - Seeking assurances that non-recoverable (legacy) costs will not be passed on to stakeholders through charges;
 - Clarifying the 'notification' period and process under our proposals (i.e. when annual charges end and how part notified filings are treated), and providing assurances that annual management charges do not apply once the filing has been notified;
 - Whether the scheduling of payments around specific dates could lead to 'gaming' to maximise time covered or avoid payment. Specifically, that operators could seek to notify ahead of the regulatory deadline to avoid paying charges using RR 11.41; and
 - Clarifying whether all modifications would be charged for, given some modifications simply remove frequencies which would not typically require a resubmission.

Our response

Implementation date

3.98 Having considered the practicalities of implementing our charges, and the date of publication of this statement, we have decided that charges should start from (and including) 1 April 2019. Satellite filings received by us up to and including 31 March 2019 will not incur charges, whether or not they have been submitted to the ITU.

Separating recoverable and non-recoverable costs for charging

3.99 As we noted in the 2018 consultation (paragraph 5.14), because we are unable to charge for our satellite filing work for the filings we are already managing, we will not be able to recover all of our costs in the initial years following implementation. These costs are non-recoverable and will be met through the retention of amounts paid under the Wireless Telegraphy Act 2006 (the WT Act).²¹

3.100 To ensure that non-recoverable costs are not passed on to chargeable filings, our charges are calculated by allocating total costs across all filings (recoverable and non-recoverable, as separate categories) in accordance with the filings activities/types and effort weightings set out in table 6 above. However, charges are only payable for those filings for which fees are legally recoverable (i.e. filings submitted on or after 1 April 2019).

Dealing with notifications and the notification period

3.101 With regard to the notification period and when annual management charges end, we noted in the 2018 consultation that annual management charges are incurred on 1 April every year that the filing remains active, before it is notified (or suppressed or cancelled). A filing is not deemed notified until it is published as such by the ITU, however, liability for charging will cease at the point we submit the notification to the ITU (or it is suppressed).

3.102 We would expect all annual management charges due against the filing to have been paid before we will accept and process a notification request. Under the list of filing activities (see paragraph 3.14 of the consultation), we also noted that we would not submit a notification to the ITU until we are satisfied that all coordination (including, in the case of APIs, sufficient measures to mitigate) is complete or carried out to the operator/organisation's best efforts. Until we are assured that appropriate steps have been taken to reach notification, the annual management charge would continue to be incurred (unless the filing is suppressed/cancelled). We monitor the status of filings, including those nearing notification, through our annual due diligence meetings as set out in the Procedures.

3.103 In cases where a notification fee is paid but we are not yet satisfied that the filing is complete, the notification fee would still be logged by us as paid and a further fee would not typically need to be paid at a later date. This is because we expect any additional work

²¹ For our principles under which we may retain certain amounts which have been paid to it under the WT Act, see https://www.ofcom.org.uk/_data/assets/pdf_file/0017/107702/statement-principles-wta.pdf.

to be limited and similar to a Return of Notice. However, we reserve the right to charge a second notification fee where we are required to carry out the notification work twice, for example, where the filing was submitted vexatiously to avoid incurring charges.

- 3.104 Since notification requests, including RR 11.41 requests, are not submitted to the ITU unless we are satisfied, it is unlikely that organisations would wish to incur this charge earlier than necessarily, or twice in vexatious cases, especially as it is due on application and the annual management charge would continue to apply (unless the filing is suppressed/cancelled). We will however monitor behaviour and consider further action if problems do arise.
- 3.105 We also note the special case where only part of a filing is notified, and how this will affect charges:²²
- An application fee applies for the notification request for the frequencies which are being notified.
 - Annual management charges would continue to be incurred on 1 April every year that the filing remains active, for the remaining frequencies. Annual management charges would cease when the remaining frequencies are notified, or where we are informed that the remaining frequencies are suppressed/ cancelled and/or will not be BIU.
 - Another application fee for the notification request would apply when/if the remaining frequencies are notified.
- 3.106 We understand that this aligns with how part-notified filings are dealt with by the ITU under their charging regime.
- 3.107 For partial notifications, where it reduces the number of ITU units to less than 100, then the next annual management charge incurred would take account of this, and the filing would be charged at the lower rate.

Submissions and relevant modifications

- 3.108 Although new submission application fees must be submitted along with the new filing, the filing submission date remains the date the filing is submitted by us to the ITU. For the avoidance of doubt, as the filing submission date is the basis for all ITU regulatory rules, we will use this date to determine when annual management charges will apply (i.e. from the first 1 April following the submission date).
- 3.109 Where an application includes both coordinated and non-coordinated frequencies for the same filing and it is made on the same date, we will treat it as a single application and the charge that applies is the higher rate based on the filing activity/type. This also applies to future annual management charges.²³

²² Following the satellite filings cost recovery workshop on 20 July 2018, we published a specific note to this effect in order to clarify our proposals as to what charges would apply where only part of the filing is notified: see <https://www.ofcom.org.uk/consultations-and-statements/category-1/satellite-filings-cost-recovery>.

²³ In other words, we will not treat them as two filings as is the case in the ITU.

- 3.110 With regard to charging for relevant modifications, where a modification request adds new characteristics, such that new analysis is necessary (e.g. frequency assignments), then a new application fee would be charged. However, the satellite filing which the modification relates to would only incur one annual management charge and would continue to do so while the filing remains active, up until the point of notification (as defined from paragraph 3.101 above).
- 3.111 Similar to paragraph 3.107 above, in cases where the modification reduces or increases the number of ITU units to less than or greater than 100, the next annual management charge would take account of this, and the filing would be charged at the lower or higher rate.
- 3.112 For the avoidance of doubt, modifications which do not lead to new analysis of the filing will be accepted and dealt with as part of our normal management of the filing. Consequently, no charges apply for these 'simpler' modifications.

Basis for cost and volume data

- 3.113 We stated in the 2018 consultation that our costs and volumes would be based on forecast data. We will continue to base our costs on forecasts for the upcoming financial year, but our volumes will be based on the number of filings during the previous calendar year. We consider current volumes are the best predictor of future filing volumes and will capture increasing or decreasing volume trends. For practical reasons, we have decided to use volume data for the preceding calendar year. This is so that we can publish the Notice of Charges in advance for stakeholders (expected to be in January or February annually), in good time ahead of the charges taking effect.

Our conclusion

- 3.114 We consider that the explanations we have given in the decisions reached above should address stakeholder requests for clarification on the implementation of our charges.
- 3.115 Therefore, we have decided that charges will apply to satellite filings submitted to us on or after 1 April 2019. Otherwise our approach to implementation remains unchanged, although take into account the clarifications set out in paragraphs 3.101-3.113 above.

Other issues

- 3.116 We also asked for any general comments about our proposals:

Question 8: Do you have any other comments on matters arising from this consultation?

Summary of responses

- 3.117 A wide range of issues were raised, many of which have been discussed elsewhere above. All responses to this question are addressed in annex 1.
- 3.118 The impact of our charges on the BOTs and CDs was additionally raised by several respondents. Concerns were raised that due diligence work carried out by them had not

been taken account of, and that it warranted a reduction in our charges. Otherwise, they considered that our charges would amount to double charging for operators who choose to file through those jurisdictions.

Our response

- 3.119 With regard to the application of our charges to the BOTs and CDs, we set out our position in the 2018 consultation at paragraphs 5.31-5.34. The fact that such regulators may charge their own fees does not of itself remove the need for us to carry out our satellite filing work and thus does not prevent us from incurring (and therefore needing to recover) our own costs in doing the requested satellite filing work.
- 3.120 We have carefully considered the arguments put forward by these jurisdictions and while there may be some work which both they and we carry out, it typically relates only to part of the filing's application, and which is only a small proportion of our overall work. At this point in time, we will continue to do that small element of the work. Making alternative arrangements would introduce some administrative overheads, such as putting in place specific governance and billing arrangements for each jurisdiction. Consequently, given the low volumes of filings involved and the limited amount of work avoided for each filing, we do not believe it would be appropriate to implement such arrangements at this time. However, we will continue to engage with these jurisdictions on this matter.

Our conclusion

- 3.121 We have decided to proceed with charges for all stakeholders and not to introduce different charges for BOTs and CDs at this time, but we will continue to engage with these jurisdictions on this matter.

4. Our charges and next steps

Summary of our decisions

- 4.1 We have decided to add a fourth cost driver, filing complexity, to our charging methodology. We have decided that the most significant drivers of our costs are:
- type of filing activity – such as submitting, modifying, managing and notifying a filing.
 - filing coordination requirements – whether the filing requires coordination or not, including EPFD assessment.
 - filing complexity – the complexity of the technical characteristics of a filing, as defined by ITU units (<100 or ≥100).
 - filing period - the length of filing process, which can take up to seven (in some circumstances eight) years.
- 4.2 We have decided not to make any other changes to our three charging principles:
- To reflect our costs in a transparent and proportionate way;
 - To be practicable and easy to implement; and
 - To provide clarity and certainty to stakeholders, so far as is practicable.
- 4.3 Having considered the responses, including that a majority of stakeholders supported option 3 as the best way to meet our objectives, we have decided to proceed with a charging approach based on option 3 – application fees plus a weighted annual management charge based on filing type, to reflect the different levels of effort they require to manage. We were not persuaded that further conditions or other refinements to our charging options would better meet our objectives.
- 4.4 We have however decided to revise our charging approach under option 3, and the effort weightings for different filing activities/types, to take account of our four cost drivers. We have identified four new or amended filing activities:
- Submission (and relevant modification) requests for non-GSO EPFD filings;
 - Annual management of coordinated GSO and non-GSO filings (<100 ITU units);
 - Annual management of coordinated GSO and non-GSO filings (≥100 ITU units); and
 - API notification requests.
- 4.5 The implications of these decisions for the charges we are now introducing, are set out in the rest of this section.

Overview of our charging approach

- 4.6 Our approach to recovering the costs of our satellite filing work is summarised below:
- **When do charges apply?** - charges will be introduced from (and including) 1 April 2019.
 - **What do our charges apply to?** - charges apply to new filing submissions (and activities related to those new submissions) received on or after 1 April 2019. Existing filings received on or before 31 March 2019 will not incur charges for any part of their

management. Filings which are suppressed or cancelled no longer incur charges, from the date of such suppression or cancellation.

- **Who do our charges apply to?** – liability for charges applies to any organisation requesting that we perform satellite filing work for a filing submitted to us on or after 1 April 2019. This includes organisations registered (or headquartered) in the UK, BOTs, the Channel Islands or Isle of Man. A third party may submit filings on behalf of the relevant satellite filing organisation, provided they have the necessary authority to do so. In such cases, the liability for payment will still fall to the organisation to whom the satellite filing is authorised.
- **What are the charges?** – the types of charges are:
 - An upfront application fee for new submission (and relevant modification) requests received after the implementation date.
 - Non-GSO filings with EPFD mask assessments will be charged a higher upfront fee than submissions for all other filing types.
 - An annual management charge between the initial request and notification (incurred on 1 April annually) for filings received after the implementation date (unless suppressed/cancelled), with different charges for different types of filing:
 - API filings;
 - coordinated GSO and non-GSO filings (<100 ITU units); and
 - coordinated GSO and non-GSO filings (≥100 ITU units).
 - A notification request fee (where the request relates to a filing also received after the implementation date).
 - Coordinated and non-coordinated filings will be charged different fees

Fees and charges are non-refundable. We encourage operators to review their filings annually before 1 April to ensure they only incur charges for filings they still require.

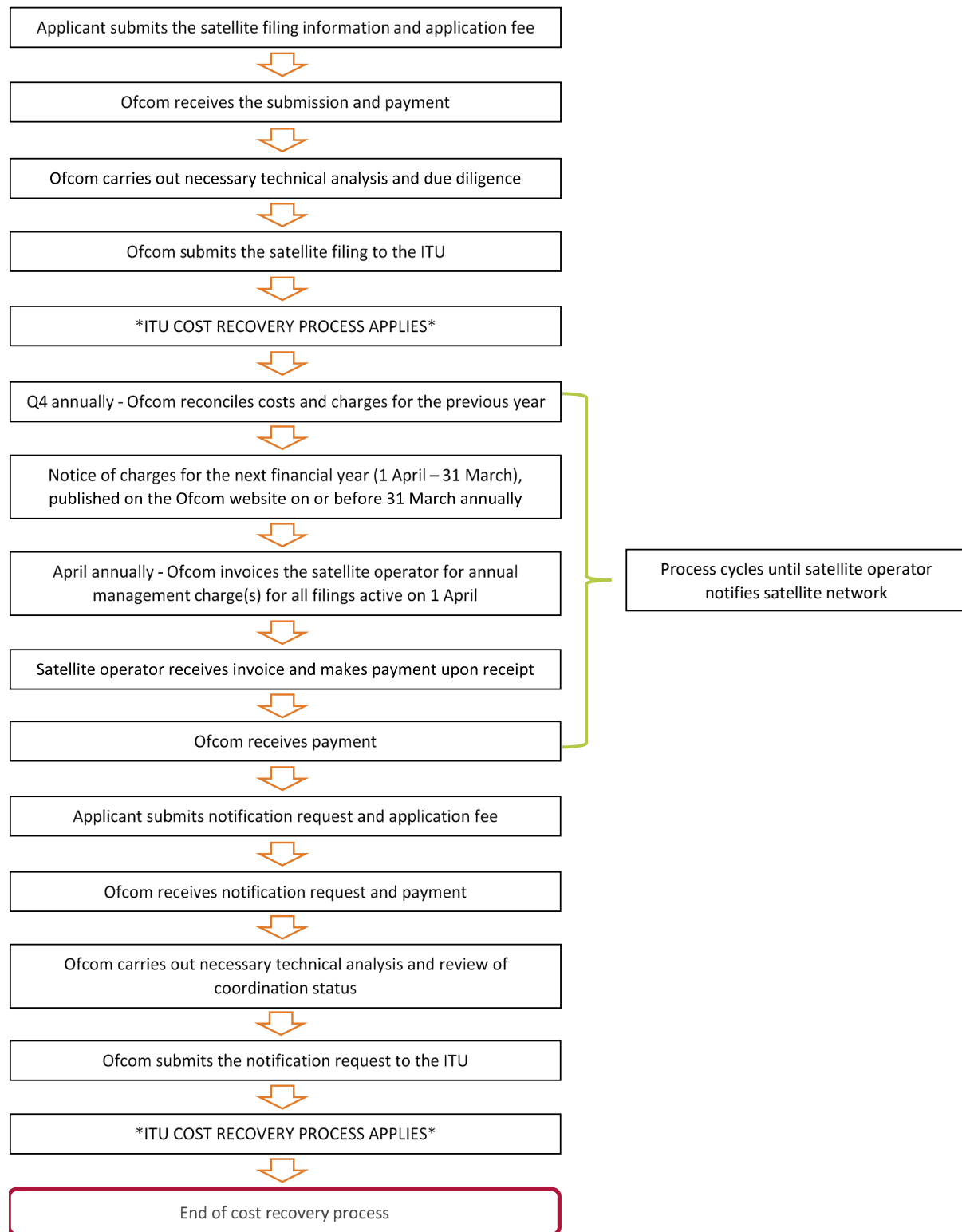
- **How will we give notice of satellite filing charges?** – formal notice of our charges will be published on our website, on or before 31 March annually from 2019 (our first notice for 2019/20 is being published alongside this statement and is at annex 4). The notice applies to charges for the financial year following publication.
- **How are charges revised?** - actual charges will be revised annually to reflect changes arising from the annual reconciliation process (as we explain below from paragraph 4.14) and published in our Notice of Charges.
- **What happens if charges are not paid/received?** – payment is typically due in advance - when the request is made (for application or notification requests), or on receipt of invoice (usually in April/May each year) for annual management charges, with liability incurred on 1 April annually. We do not anticipate processing application or notification requests unless payment is received, including where annual management charges remain outstanding. Non-payment of annual charges may ultimately result in Ofcom cancelling the filing(s).

4.7 Our charges do not change how we undertake our satellite filing work, and we remain committed to delivering it efficiently and to a high standard. In addition, as Ofcom’s budget

is limited by an overall spending cap, introducing charges simply changes the source of funding for this work, rather than making additional funds available for satellite filing work.

4.8 A process map shown in figure 3 below provides an overview of the cost recovery process.

Figure 3: Satellite filing cost recovery process



Notice of Charges for 2019/20

4.9 Our Notice of Charges has been published alongside this statement (also see annex 4).²⁴ These charges apply to the 2019/20 financial year (from 1 April 2019 to 31 March 2020 inclusive).

4.10 We noted earlier that our forecast costs for 2019/20 are £1.05m (see paragraph 2.25) and that we are currently managing 219 active filings (see paragraph 2.13). We have updated our charging methodology to take account of this updated data (how we use this data to arrive at our charges is explained in annex 3). The charges that apply for 2019/20 for each filing activity/type are summarised in table 7 below.

Table 7: Satellite filing charges by filing activity/type (for 2019/20)

Filing activity/type	Effort weighting	Payment due	Charges (2019/20)
Submissions (and relevant modifications)			
New requests (except non-GSO EPFD filings)	1.0	On date of request/application	£1800
New non-GSO EPFD filing requests	3.0		£5400
Annual management			
API filing	1.0	Q1 annually (on receipt of invoice)	£1800pa
CR/C GSO and non-GSO filing (<100 ITU units)	2.0		£3600pa
CR/C GSO and non-GSO filing (≥100 ITU units)	3.0		£5400pa
Notifications			
API requests	1.0	On date of request/application	£1800
CR/C GSO and non-GSO requests	1.3		£2350

Figures are rounded to the nearest £50²⁵

4.11 We will only pass on charges where activities are chargeable. That is, in the first year of satellite filing charges (2019/20), no charges will apply in practice for annual management and notification requests because any such work will relate to existing filings received before 1 April 2019 and will therefore not be recoverable/chargeable.

4.12 We may also charge a fee for exceptional cases where a significant cost arises from a specific organisation's request to perform satellite filing work that is directly and solely applicable to that organisation, and which requires work which goes beyond the typical and usual satellite filing activities as described earlier in paragraph 2.14.

- The charge would be based on cost recovery and determined on a case-by-case basis.
- Before we undertake the requested work, the charge would be notified to the organisation, and agreed to by them.

²⁴ <https://www.ofcom.org.uk/spectrum/information/satellites-space-science/satellite-filings/notice-of-charges-satellite-filings>

²⁵ We have now decided to round charges to the nearest £50, rather than rounding up to the nearest £100 as proposed in the 2018 consultation.

Illustrative examples of lifetime charges

4.13 To assist stakeholders with budgetary planning, figures 4-7 provide *illustrative examples* of estimated charges over the lifetime of the filing for four typical cases, based on charges for 2019/20 as set out in table 7 above, and average time taken to notify for that type of filing. Actual total charges will vary due to annual reconciliation, as explained at paragraph 4.15.

Figure 4: Estimated charges for a non-coordinated API filing, 5yrs to notify

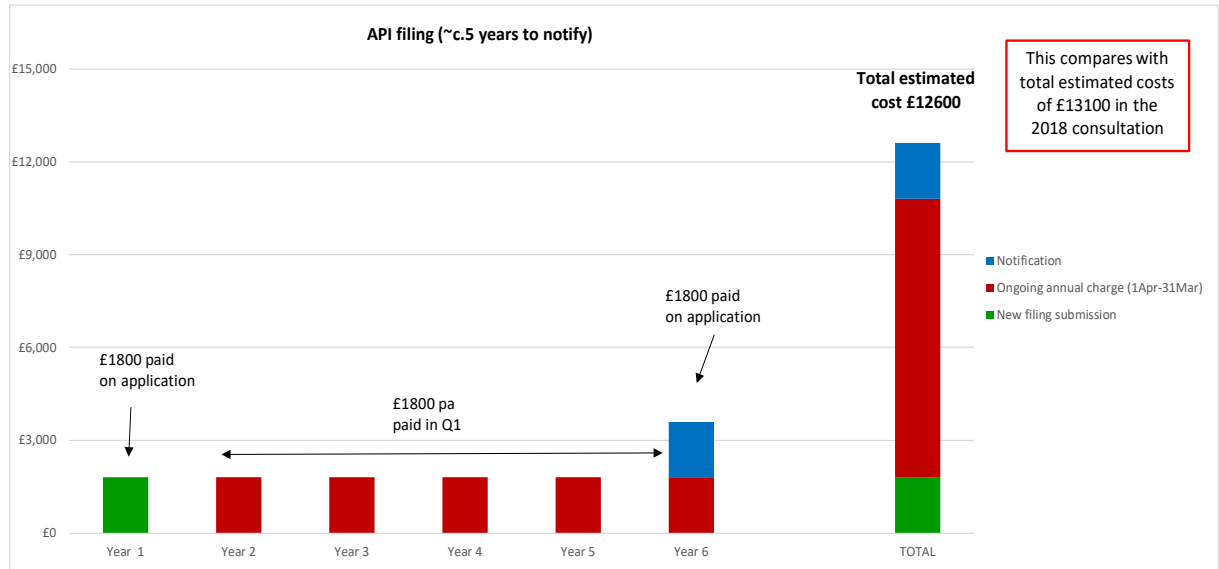


Figure 5: Estimated charges for a coordinated GSO/non-GSO filing (<100 ITU units), 6yrs to notify

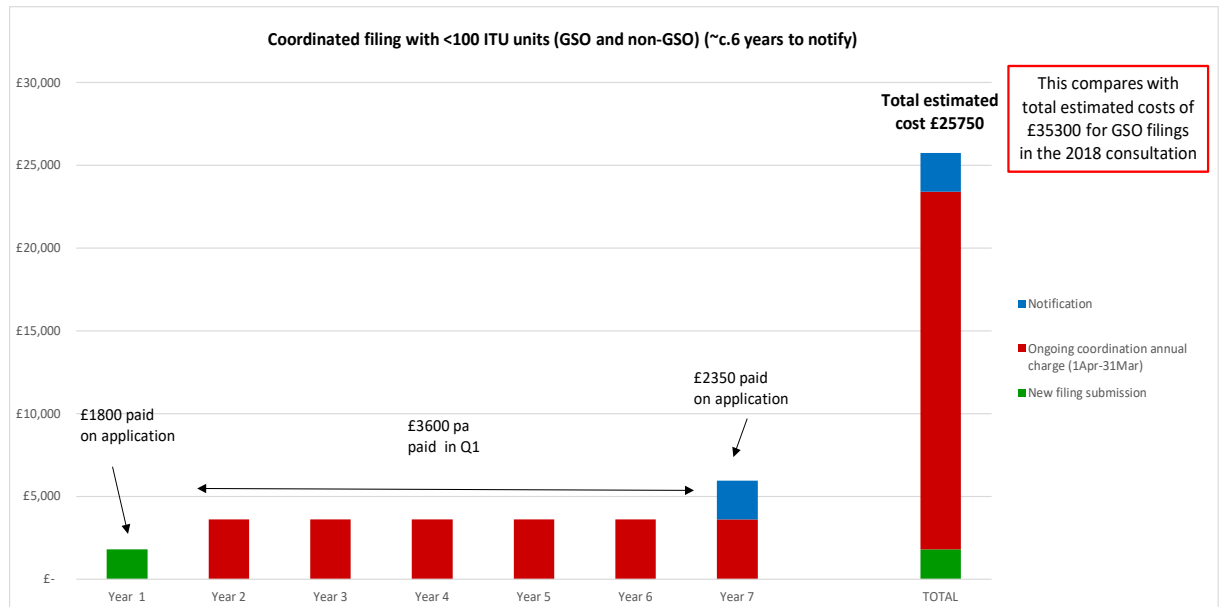


Figure 6: Estimated charges for a coordinated GSO/non-GSO filing (≥100 ITU units), 6yrs to notify

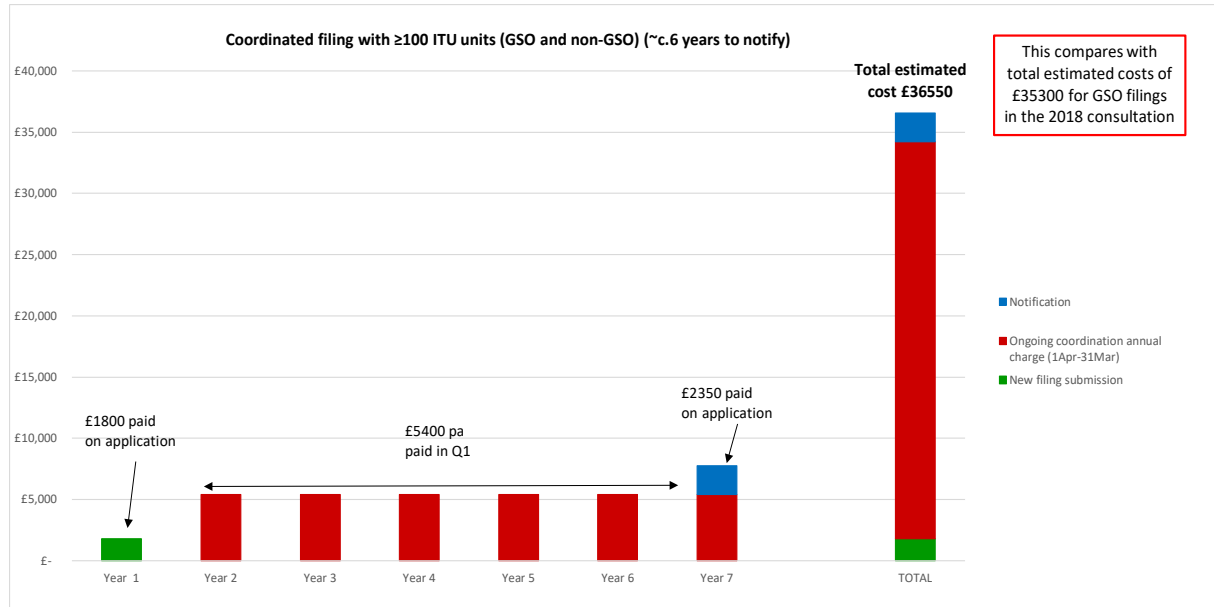
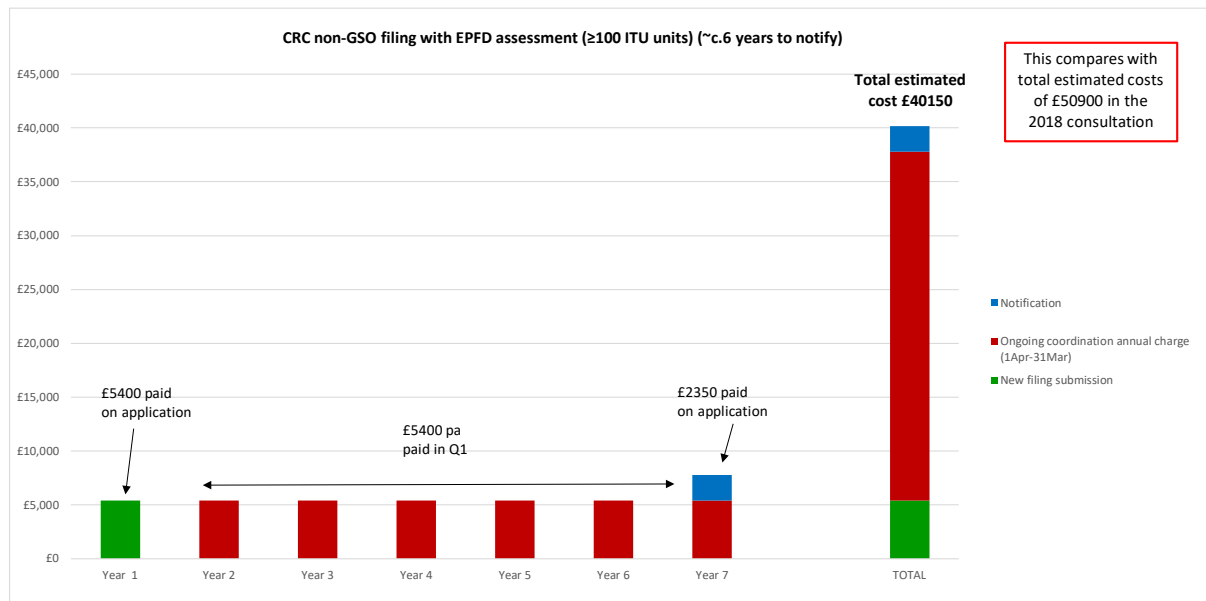


Figure 7: Estimated charges for a coordinated non-GSO filing with EPFD assessment (≥100 ITU units), 6 yrs to notify



Records, reporting and review

Reporting and reconciliation process

4.14 We will meet the reporting requirements of section 28A(6) of the 2003 Act (i.e. publishing a statement of our total costs, fees received and fees outstanding each year) in Note 2 to our Annual Report, which is usually published in July annually.

- 4.15 We will also make adjustments to our charges following end of year reconciliation, to ensure we do not recover more (or less) than the total costs to us in any given year of carrying out our satellite filing work. This annual reconciliation process is a requirement of s28A(7) of the 2003 Act as explained in annex 2, and we will adopt the cost reconciliation process carried out as part of our annual reporting process to meet this requirement.
- 4.16 This means charges would always reflect the current status of costs and volumes, and we expect adjustments to charges on a year by year basis. As s28A(7) stipulates, adjustments will be reflected against the cost apportioned in the following year.

Review of our charging approach

- 4.17 We do not expect to regularly review our charging approach or adjust these effort weightings, but will monitor its implementation to ensure that it continues to work as intended. In addition, as noted in paragraph 6.20 of the 2018 consultation, where the ITU makes a material change to their procedures, we may need to review our satellite filing charges to take account of it – i.e. through a new or revised filing activity/type and/or adjusted weightings. We will await the outcome of the WRC decision before taking a view and would do so on a case by case basis. We will notify stakeholders of any change to our charging approach.

Application form

- 4.18 To aid the satellite filing submission process, we have created an application form for stakeholders, which is available from our satellite filings webpages²⁶. The signed declaration on the application form must be submitted alongside all satellite filing applications as set out in paragraph 4.7 of the Procedures. As is currently the process, satellite filing applications should be sent to the International Frequency Coordination Team (the IFC Team) at ifc.enquiries@ofcom.org.uk.

Updating the Procedures

- 4.19 We have also published updated Procedures²⁷ alongside this statement today. The Procedures now reflect that we have introduced charges for our satellite filing work.
- 4.20 Given the changes made are minor and simply reflect the matters we consulted on in the 2018 consultation, we no longer consider it necessary to consult on the changes to our Procedures.

²⁶ <https://www.ofcom.org.uk/spectrum/information/satellites-space-science/satellite-filings>

²⁷ https://www.ofcom.org.uk/_data/assets/pdf_file/0027/63495/new_procedures1.pdf

A1. Detailed summary of responses

- A1.1 This annex summarises the submissions we received in response to the 2018 consultation, together with our responses to them. Two respondents submitted wholly confidential responses. One respondent included confidential material, which we have taken into account. All non-confidential responses are published on our website.
- A1.2 The summary follows the structure of the eight questions we asked in the 2018 consultation. Where stakeholders have raised similar topics in response to different questions, we reflect these only under the question to which they have the greatest relevance. Comments are grouped to reflect the main themes raised by respondents.

Question 1: Do you agree we have identified the most relevant cost drivers to take account of in our charging approach?

Stakeholder comments	Our response
<p><i>Proposed additional drivers</i></p> <p>13 respondents (MOD, Kepler Communications Inc (Kepler), Inmarsat, Space Growth Partnership, Hughes EchoStar, Telesat, SES, Government of Bermuda, OneWeb, ViaSat, ManSat and two confidential respondents) agreed that we had identified the most relevant drivers.</p> <p>A number of respondents suggested other drivers:</p> <ul style="list-style-type: none"> • ManSat and a confidential respondent suggested ‘type of spectrum frequency and ‘number of spectrum frequency bands’; • Inmarsat, Kepler and Effective Space said that our proposals did not take into account the size and complexity/scope of the filing. Effective Space suggested the ‘total number of units’ used by the ITU in its own cost recovery methodology was the best way to ‘scale’ fees by filing size/scope, and that we charge a ‘per unit’ fee based on this. <p>ManSat suggested we create additional charging categories including: small API satellites (cubesat) which access UHF frequencies in the amateur satellite service, GSO/non-GSO filings containing few frequency bands requiring coordination, non-GSO’s with EPFD assessments, and MOD approval.</p>	<p>We set out at paragraph 3.14 that we have introduced a new cost driver to take account of the size and complexity of filings. To maintain the simplicity of our charging approach, we have chosen to create two categories of filing complexity (< or ≥ 100 units), rather than a more complicated scale or per unit charge.</p> <p>Regarding ManSat’s suggested categories:</p> <ul style="list-style-type: none"> • use of amateur satellite frequencies does not affect the amount of effort required for us to manage the filing compared to other non-coordinated filings; • number of frequency bands is one element of our new complexity driver (i.e. ITU units); • EPFD assessments are now reflected in the submission application fee (see 3.17); and • the work carried out in liaising with the MOD for spectrum identified as UK 2.1 in the UK FAT is only applicable to a small portion of satellite filing applications in a given year. Where the work is required it usually requires a limited amount of effort. Accordingly, we do not consider the work is a significant cost driver and does not therefore not incur any additional charge.

Stakeholder comments	Our response
<p><i>Charges for non-GSO filings</i></p> <p>OneWeb, Azzurra and AB5, and Telesat International disagreed that coordinated non-GSO filings typically generate greater Ofcom effort and costs than GSO filings and said that these should be weighted equally.</p> <p>In particular, OneWeb and Azzurra and AB5 argued that the burden that coordination of a non-GSO filing imposes on Ofcom may be similar if not less than that of GSO filings. They both noted that in bands subject to EPFD limits for protection of GSO networks, the non-GSO systems are not subject to coordination and therefore no coordination efforts are required by Ofcom. OneWeb added that EPFD mask assessments is generally only required once in the lifetime of a non-GSO filing, and that the effort required for this submission, averaged over the lifetime of the filing, would be offset by the greater effort that the coordination of GSO filings require.</p> <p>OneWeb and Azzurra and AB5 did not agree with footnote 19²⁸ in the 2018 consultation. OneWeb noted that the cost recovery review of non-GSO filings at the ITU is related to the work that the BR has to perform when processing non-GSO filings and is unrelated to coordination requirements.</p>	<p>As explained in section 3 (see 3.17-3.18), we have adjusted our approach to the weighting of non-GSO filings:</p> <ul style="list-style-type: none"> • to take account of costs related to assessment of EPFD masks during the application process, in recognition that this work is one-off rather than recurring; and • to apply equal annual management charges to non-GSO and GSO satellite filings. <p>We consider that coordination requirements still apply for non-GSO filings with EPFD assessments. Although it is removed for GSO filings in specific bands, it remains for other non-GSO filings, and the filing typically contains other frequencies where coordination is still necessary.</p> <p>With regard to footnote 19 of the 2018 consultation, we accept that the satellite filing work undertaken by the ITU and Ofcom are different, and that revision of the ITU’s charges is not directly relevant to our cost recovery.</p> <p>As shown at 3.17-3.18 and 3.25illus, we have decided not to make a distinction between GSO and non-GSO filings in our ‘filing coordination requirements’ cost driver (other than where an EPFD assessment is required).</p>
<p><i>Recovery of fixed costs</i></p> <p>Government of Bermuda responded that if Ofcom is performing this role as the UK’s delegate, it would be appropriate that fixed costs of staff, ICT, accommodation etc. – which in their view are inescapable and ‘sunk’ rather than ‘fixed’ – should be met by the UK, as these costs stem from Ofcom having the capability to perform the role at all, and are not related to how many UK satellite operators Ofcom represents, or whether Ofcom represents the BOTs and CDs as well as the UK itself.</p>	<p>The fixed costs referred to are overheads, and although these are indirect costs they are necessary to support the team which provides satellite filing work. Therefore, it is appropriate, reasonable and proportionate that the relevant proportion of these (based on satellite filings FTEs, as explained in paragraph 2.23), is apportioned to our satellite filing work.</p>

²⁸ In footnote 19, we stated: “Noting that non-GSO satellites typically require an additional level of coordination above GSO (and is something the ITU are currently considering revising their charges for).”

Question 2: Are there any other factors you consider we should take account of in our charging approach? Please explain why in your response.

Stakeholder comments	Our response
<p><i>Ofcom should not charge for satellite filing work</i></p> <p>OneWeb, Azzurra and AB5, Alba Orbital Limited, and the Space Growth Partnership argued that Ofcom should not charge for satellite filing work. Space Growth Partnership suggested that alternatively Ofcom should not charge SMEs.</p> <p>Alba Orbital Limited said that these costs should not be passed on as there are already incredibly large costs put on satellite operators in the UK.</p>	<p>As set out at 3.49, we were expressly given new powers to introduce these charges to recover the cost of our satellite filing work. We therefore do not consider it appropriate to make no charges at all.</p>
<p><i>Consideration of the economic benefits of the space sector</i></p> <p>Satellite Applications Catapult (Catapult) and Kepler objected that the 2018 consultation neither identifies, nor considers, any of the wider benefits to the UK economy from satellite filings.</p> <p>OneWeb and Azzurra and AB5 also argued that the contributions to the UK economy of the UK space sector already cover the costs of satellite filing work. Kepler said this factor could be used to justify the offset of some of Ofcom’s fixed costs.</p>	<p>We discuss respondents’ points that the wider economic benefits of the sector should be taken into account at 3.24.</p>
<p><i>Charges for non-coordinated filings</i></p> <p>Azzurra and AB5’s view was that the effort weighting of 1 for a non-coordinated API is extremely high, or conversely the one for GSO and NGSO is extremely low in comparison, and urged Ofcom to provide additional analysis as to why this is the case. They also asked Ofcom to consider three additional drivers for non-coordinated filings:</p> <ul style="list-style-type: none"> • Business value of the project/mission: small missions such as cubesats will have project values that are far lower (e.g. £10k - £200k) than standard GSO and non-GSO constellations of much larger satellites. As such the cost recovery charge of such filings has a very large impact on the mission; 	<p>The rationale for our effort weightings is explained from paragraph 3.80.</p> <p>We do not agree that the additional drivers suggested by Azzurra and AB5 are drivers of our costs:</p> <ul style="list-style-type: none"> • As noted at 3.22, we do not agree that the value of a business or project is aligned to the costs we incur for managing that filing. • As set out at 3.23, the work that we and the ITU do to support satellite filings is different, so it follows that our charges are not necessarily the same even though both are set on a cost recovery basis. However, in response to the points made by Azzurra and AB5 and Kepler, we note that the 570 CHF fee relates to the charge for

Stakeholder comments	Our response
<ul style="list-style-type: none"> • Charges made by the ITU: for non-coordinated missions the ITU charges a one-off fee of 570 CHF, while other filings are charged 25000 CHF or higher. Azzurra and AB5 argues that this comparison shows Ofcom’s proposed fees for uncoordinated filings are disproportionate. They propose that fees be waived, or that there should be a one-off fee proportionate to the ITU charges or lower (e.g. £200, equivalent to light touch licensing charges in some satellite bands). • UK space growth agenda, which aims at attracting foreign direct investment in the UK. <p>Kepler also compared Ofcom’s proposed submission fee to the ITU’s 570 CHF fee for an API, and asked that Ofcom clarify the effort involved in this task and how it justifies that weighting.</p>	<p>submission, but the ITU also charges a 7030 CHF fee for notification for API filings (and this may reflect where their costs are mostly incurred). As we set out in annex 5 to the consultation (updated²⁹ on 25 July 2018) the total ITU cost recovery fees for API filings were equivalent to £5802 (based on currency exchange at the time). We therefore consider that our estimated charges over the lifetime of the filing for APIs are broadly comparable with the ITU, with our charges being spread over years as the work is done and based on the effort we require to carry out work on each filing.</p> <ul style="list-style-type: none"> • We address the UK Government’s objective to grow the space sector from 3.46. <p>We address the proposal that we charge a nominal fee, or fees equivalent to light licensing, at 3.41.</p>

Question 3: What comments, if any, do you have on our charging options 1-4? *and*

Question 5: Do you agree that our preferred charging option, option 3, is the best way to meet our objectives? If no, please state your preferred charging option and explain why.

Stakeholder comments	Our response
<p><i>Option 3: Application fee plus weighted annual fee per filing type</i></p> <p>MOD, Inmarsat, SES, Mansat, Hughes EchoStar, Kepler, Catapult and a confidential respondent agreed with option 3, sometimes subject to addressing specific concerns (including addressing size and complexity and the impact on new entrants and small businesses). Space Growth Partnership agreed this is preferred of the four options presented, but opposed charging at all.</p> <p>Inmarsat agreed Option 3 gives greater clarity on costs which would aid budgeting.</p>	<p>As set out from 3.53, we have decided to proceed with a charging approach based on option 3.</p> <p>The changes that we have made regarding non-GSO filings (see 3.17-3.18) and the addition of a new cost driver for filing complexity (see 3.14) are relevant to the objections raised by OneWeb and Effective Space.</p>

²⁹ See: <https://www.ofcom.org.uk/consultations-and-statements/category-1/satellite-filings-cost-recovery>

Stakeholder comments	Our response
<p>SES was supportive of option 3 on the basis that the proposed charges are modest by international standards; appear reasonable as a proportion of Ofcom’s total operating costs; are finite, since no further fees would normally be chargeable after notification; account for shorter duration missions; and creates an incentive for early deployment, as no fees are incurred after notification of the ITU filing.</p> <p>OneWeb opposed option 3 on the basis that it introduces disproportionate costs on non-GSO operators. Effective Space also opposed option 3, because it fails to capture that within filing classes there are still likely to be major differences in workload depending on size/scope. However, they agreed that incorporating an additional cost driver for filing size/scope in option 3 could provide an alternative option (but they preferred option 4).</p>	
<p><i>Option 4: Hourly rate</i></p> <p>ViaSat, ManSat, Effective Space and the Government of Bermuda considered option 4 to be the fairest charging option. However, ManSat preferred option 3 when considering our objectives. Effective Space strongly supported option 4, because it ensures each operator pays only for work on its own filings.</p> <p>The Government of Bermuda and ViaSat disagreed that this option would be significantly more costly or complex to implement with current project management software. Viasat found it difficult to determine whether the potential savings associated with option 4 could be offset against the greater certainty of likely annual costs under option 3 (with the information provided), and requested that Ofcom provide greater granularity into how each option was investigated.</p> <p>Hughes EchoStar and a confidential respondent disagreed with this option noting it could be administratively burdensome and would reduce the predictability of the filing cost considerably.</p>	<p>We address our view on option 4 at 3.38-3.39.</p> <p>Regarding ViaSat’s point about potential savings with option 4, the total costs recovered would be the same under all options. It is difficult to estimate accurately whether an individual filing would use fewer hours than the average and hence pay a lower charge under an hourly rate.</p>

Stakeholder comments	Our response
<p><i>Option 2: Application fee plus flat annual fee per filing</i></p> <p>A confidential respondent said options 2 and 3 offer a good balance between transparency and clarity of costs and implementation simplicity. No other operators preferred this option.</p> <p>Hughes EchoStar, Effective Space and Inmarsat responded that this option does not consider differences between filings (and their associated workload), and that this could be unfair.</p>	<p>We explained why we did not favour option 2 in the 2018 consultation (see paragraph 5.44 and annex 6). Given that we received very limited support from stakeholders for this option, and did not receive new information that would lead us to reconsider our initial assessment, we have concluded that it is not appropriate to implement this option.</p>
<p><i>Option 1: One-off charge per filing</i></p> <p>No operators preferred this option.</p> <p>Effective Space and Inmarsat responded that this option does not take into account differences between filings (and their associated workload), and that this could be unfair.</p> <p>A confidential respondent said that making a full payment upfront may cause difficulties to companies, especially small operators. Effective Space also noted this option puts a heavy loading at the start of the filing process, and does not allow for filings which never complete the process.</p> <p>Hughes EchoStar said charges would be difficult to estimate as costs will vary greatly between filings.</p>	<p>We explained why we did not favour option 1 in the 2018 consultation (see paragraph 5.42 and annex 6). Given that we received no support from stakeholders for this option, and did not receive new information that would lead us to reconsider our initial assessment, we have concluded that it is not appropriate to implement this option.</p>
<p><i>Non-commercial and academic missions</i></p> <p>MOD and Space Universities Network (SUN) asked Ofcom to consider a fee waiver for educational / charitable organisations, and that Ofcom’s proposed fees could be a significant percentage of a small educational or similar project.</p> <p>SUN said that many university CubeSat projects have a budget of under €50K, and that most will not be paying for a launch but rather using, for example, US university free schemes or the ESA</p>	<p>Having considered the point raised by SUN, we recognise that project costs for academic missions may be lower than we anticipated in the 2018 consultation (see 5.30)³⁰ where such missions do not pay for a launch, and that our charges may be a higher proportion of their total costs than previously stated.</p> <p>We explain at 3.41 why we do not think it is reasonable or proportionate to charge filings a nominal or simplified fee which is not linked to</p>

³⁰ For reference, we said that in the vast majority of cases, our proposed charges would be a small proportion of overall satellite project costs, typically less than 1% for most commercial projects, and less than 4% for a low cost cubesat project. This assumed a low cost cubesat project is around £200,000 and our total regulatory charges under the consultation proposals would be around £7,700 for non-coordinated filings if notified after 2 years.

Stakeholder comments	Our response
<p>'Fly Your Satellite' programme. They considered that our charges would be a hurdle to launch satellites for this sector, particularly as many groups gather funding as they go. SUN noted that few CubeSat launches come through Ofcom from UK Universities currently, due to a lack of free launches and UK insurance regulations.</p> <p>Similarly, ManSat disagreed with Ofcom's assumed cost of £200k for low cost satellite project. They said charges will be a barrier to innovation for those embarking on small-scale space projects, such as schools and universities.</p> <p>SES did not support lower fees for non-commercial ventures, noting that the line between non-commercial and commercial ventures is not always clear. They argued that the proposed charges are modest by international standards, can be built into funding or grant requests, and that equal charges are appropriate where non-commercial ventures seek to operate in spectrum also used by commercial operators.</p>	<p>the effort they require to manage because the filing was made by a particular stakeholder group or filing type. At 3.43-3.45 we further discuss an organisations' ability to pay and the funding bodies that provide funding/grants to the UK space sector.</p> <p>Our cost drivers take account of whether filings require coordination, which would result in lower charges. We have also made refinements to our cost drivers to recognise that some filings are simpler than others, which would also result in lower charges. As we state at 3.42, these changes may benefit some of the innovative new projects being developed by the sector.</p> <p>We agree with SES that in some cases the line between non-commercial and commercial ventures is not always clear due to increasing collaboration on projects.</p>
<p><i>Small satellite missions</i></p> <p>ManSat and Azzurra and AB5 said that they would expect an uncoordinated filing for a small satellite project to involve a very limited amount of work.</p> <p>ManSat suggested that a separate charging regime may be required for small satellite missions. For instance, a simplified regime under a separate proforma application process (e.g. with less due diligence requirements), taking note of any changes to the international regulatory framework that may be established by the WRC-19. They urged Ofcom to take note of developments under Issue M of Agenda 7 for WRC-19, in which a new resolution to introduce a simplified regulatory regime for non-GSO satellite systems with short duration missions not subject to coordination under Section II of Radio Regulation Article 9 is considered.</p>	<p>We set out above that our total charges and the ITUs are comparable for uncoordinated filings (despite us carrying out different work). By charging annually, shorter missions will only pay for each year the filing is active.</p> <p>We undertake satellite filing work to the extent that we consider is necessary to meet ITU standards. As such, we do not consider we are able to relax due diligence or drop requirements for some filings. As set out at 4.17, if the ITU make a material change to its procedures, we may undertake a review of our satellite filing charges. However, we will await the outcome of WRC decisions before taking a view, and would do so on a case by case basis. We are following the discussions under Issue M, but it is not clear that the changes discussed so far would impact the amount of work that we do for these filings.</p>

Stakeholder comments	Our response
<p><i>Start-ups / new entrants / impacts on competition</i></p> <p>Catapult said Ofcom should consider the means of filing entities to pay the fees, which could provide barriers to entry to start-ups, new entrants and non-commercial entities. They argued that there should be scope within Ofcom’s duties for adjusting charges to enable new entrants, new services and competition, for example by including an element of allowances for means testing the fees, or options for deferment of payment, or more favourable payment terms.</p> <p>ManSat suggested that Ofcom could consider limiting work carried out for new entrants to international work (i.e. relaxing on national due diligence activities etc.) thereby reducing costs.</p> <p>Kepler argued that a growing class of start-up operators are attempting to deliver innovative satellite services on a fraction of the budget of traditional satellite operators, and that Ofcom should do whatever it can to promote the health of these operators and their respective projects.</p>	<p>As part of our impact assessment, we have assessed the risk of options having a detrimental effect on the operation of markets and factored this into our decision-making process. Overall, we do not consider that the scale of our charges are prohibitive such that they could create a barrier to entry and from 3.43-3.45 we further discuss payment terms and an organisation’s ability to pay our charges.</p> <p>We undertake satellite filing work to the extent that we consider is necessary to meet ITU standards. As such, we do not consider we are able to relax due diligence or drop requirements for some filings. We have an obligation to protect incumbent operators from interference; new operators would expect us to do the same for them. We always welcome new operators to talk to us at the earliest opportunity to help them understand the satellite filing framework (and do not charge for such discussions).</p> <p>We have refined our cost drivers to recognise that some filings are simpler than others, which results in lower charges. As stated at 3.42, these changes may benefit some of the innovative new projects being developed by the sector.</p>
<p><i>Investment incentives and government targets for growth</i></p> <p>Catapult, Kepler, Alba Orbital Limited, the Government of Bermuda and OneWeb argued that introducing charges for satellite filing work could discourage investment and be detrimental to the Government’s aim to grow the UK space sector to achieve 10% of the global market by 2030.</p> <p>Kepler said that fees will introduce a barrier for operators, particularly small operators including start-ups with limited access to funds, especially when combined with ITU and other regulatory fees. Similarly, Alba Orbital Limited said that the cost of filing a small satellite in the UK is</p>	<p>We address the UK Government’s objective for the space sector at paragraph 3.46. As we said in our 2018 consultation (see 5.52-5.53), having considered the estimated charges of our proposals per filing/activity type over the filing’s lifetime, they are mostly lower than comparable NRAs charges, and some NRAs charge fees that are considerably higher. We have engaged with the UK Government, including the Department for International Trade (DIT) about our charges and how they compare to those of other NRAs, and they are content with our approach.</p> <p>We understand that regulatory costs can be significant for some stakeholders, and the introduction of new regulatory fees might</p>

Stakeholder comments	Our response
<p>prohibitively expensive (mainly due to the £60m insurance requirement), and that adding additional cost is unlikely to make the UK attractive to build, launch and operate spacecraft.</p> <p>OneWeb referenced the UK’s “Space Innovation and Growth Strategy 2014-2030 Space Growth Action Plan” (SGAP), and noted that SGAP Action 2.3 directed that “Ofcom should prioritise the interests of UK satellite operator companies creating wealth, employment and taxes in the UK, in matters related to access to international space spectrum allocated by the ITU, treatment of satellite network filings by the UK to the ITU and to framing of international satellite regulations at the ITU”.</p> <p>The Government of Bermuda argued that the impact on Bermuda’s space sector would be disproportionate compared to the UK, because their ability to attract new satellite operators and grow their space sector depends heavily on their ability to offer competitive and responsive satellite filing services.</p>	<p>appear burdensome for them, and we discuss an organisations’ ability to pay from 3.43.</p> <p>While we take note of the SGAP³¹ we do not accept that this recommendation from industry as set out in the SGAP restricts our ability to recover our costs for managing satellite filings, as its recommendations are not binding on Ofcom. In the UK Government’s 2014 response,³² it acknowledged our role with filings in the ITU and that we would continue to perform our role in consultation with the industry, which we continue to do.</p> <p>Subsequently Parliament gave us new powers in the 2017 Digital Economy Act to recover the costs of our satellite filing work.</p> <p>Regarding the Government of Bermuda’s specific point about a potential disproportionate impact on them, our analysis considered that given stakeholders already paid an additional charge to file in Bermuda (when they could have submitted for free elsewhere), this was likely to mean that they saw value in filing through Bermuda for other reasons, and we would expect this to continue.</p>

Question 4: What other charging options, if any, do you believe we should consider?

Stakeholder comments	Our response
<p><i>Charges for other filing activities</i></p> <p>OneWeb argued that we should charge an hourly rate for ad hoc requests, maintenance of filings after notification, and policy work. Even though Ofcom believes that such work is minimal, it is still an activity requiring a percentage of FTEs and fixed costs associated with it, and should be in addition to the other proposed fees.</p>	<p>We address charges for ad hoc activities at 3.51.</p>

³¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298362/igs-action-plan.pdf

³² <https://www.gov.uk/government/publications/government-response-space-growth-action-plan>

Stakeholder comments	Our response
<p><i>Combinations of charging options</i></p> <p>Government of Bermuda said that the model they adopted for their own fees was in effect a combination of options 1 and 4, with a fixed fee and the possibility of charging an hourly rate for additional tasks to be determined after discussion with the operator.</p> <p>ViaSat responded that the fairest, most cost effective, and least complex option to implement, providing clarity and certainty for stakeholders, could be either option 4, option 3, or a mixture of options 3 and 4, depending on the outcome of analysis they would like to perform based on further information they requested (see Q3).</p>	<p>We address combinations of options at 3.50-3.52.</p>

Question 6: Do you have any comments on our proposed charging approach (as set out above)?

Stakeholder comments	Our response
<p><i>Justification for weightings</i></p> <p>A number of stakeholders requested that Ofcom justify the higher weighting for non-GSO filings (see question 1). Kepler requested that Ofcom clarify the factors involved in determining the effort weighting as listed in table 5 in the 2018 consultation. Hughes EchoStar think there is no rationale to justify that a notification request will generate more workload than a submission. They suggest using a factor of 1.0.</p>	<p>We explain the rationale for our effort weightings from 3.80, and in figure 2 and in annex 3.</p>
<p><i>Allocation of international costs</i></p> <p>Government of Bermuda requested clarity on how Ofcom estimates the effort spent on cross-cutting spectrum management activities at the international level (primarily CEPT and ITU), and how this is split, e.g. between effort on the space sector versus effort on the terrestrial sector, and the different degrees of engagement on specific matters, which will change between WRCs.</p>	<p>We discuss allocation of international costs at 3.76-3.79.</p>

<p>ViaSat said that in any given CEPT or ITU cycle the amount of project work required by Ofcom to support a specific type of satellite filing can vary significantly, and that it would be fairest if Ofcom applied annual fees directly related to the amount of work undertaken for each filing, or at least filing types. They said that this level of granularity is easily provided by almost all project management and billing platforms, and so the increased cost and complexity should be minimal.</p> <p>Kepler queried whether, if operators are required to equally share the costs of Ofcom’s ITU membership, all operators will receive equal representation when the UK is making spectrum policy decisions (e.g. at WP7 and WP4A)</p> <p>OneWeb suggested that the costs of international work in support of AI7 should be allocated equally to all filings and not weighted. While the FTE cost of staff and ICT/property could be directly pro-rated to the effort/time spent on a filing, they questioned why an NGSO filing would recover 50% more than a GSO of Ofcom’s international membership costs.</p>	
<p><i>Review mechanism</i></p> <p>MOD asked if effort weightings would be reviewed, as it is possible effort distribution will alter considerably in the next few years. They suggested a review after two years and then every three. Inmarsat said there should be a mechanism to review the weighting between the different categories occasionally, such as on the trigger of new rules from ITU which may impact the workload associated with a particular type of filing.</p>	<p>We discuss our approach to reviewing our charging approach or adjusting effort weightings at 4.17. Any adjustments we make in the future to effort weightings are likely to affect the charges paid to us, which will be set out in our annual Notice of Charges.</p>
<p><i>Exceptional cases</i></p> <p>SES asked for clarification (i) when Ofcom would impose additional cost recovery fees in exceptional cases; and (ii) the amount or method of calculation for such additional fees. They asked whether challenging another satellite filing, requests to preserve or defend a UK filing from challenge, or activity to rectify an Ofcom oversight would attract additional fees.</p>	<p>We set out generally what we consider to constitute exceptional cases at 3.58. Due to their exceptional nature, what we consider to be an exceptional case will need to be determined on a case by case basis. We would do so in discussion with the relevant stakeholder. As regards the specific scenarios referred to by SES, activities to ‘defend’ or ‘challenge’ filings can arise as part of our</p>

<p>SES and a confidential respondent commented that there should be an opportunity for the operator to decide not to proceed with the activity, having been informed of the estimated additional cost.</p>	<p>normal work to manage and maintain a UK satellite filing, although it is not possible to judge in advance whether a particular case will be exceptional. However, we can confirm that the holder of a filing would not have to pay for work carried out to correct an error we make.</p> <p>Cost recovery charges for exceptional cases are likely be based on the number of FTEs plus the relevant share of other cost categories and overheads for work done (plus any necessary external spend), with the amount calculated and notified before work is begun. Work would only be done if requested and agreed to.</p>
<p><i>Comparison with other NRA's charges</i></p> <p>Government of Bermuda noted that, while Ofcom's proposed fees are comparable to or lower than those of some administrations, they are higher than others and would make the UK less competitive compared with those administrations (e.g. France and Luxembourg). Space Growth Partnership said that fees will put the UK at a disadvantage against other administrations that do not charge.</p> <p>ManSat appreciated Ofcom's comparison of charging regimes, but said it is difficult to make direct comparisons unless we know the precise regime under which the charges are applied (e.g. cost recovery or revenue generation). They do not find the comparison to ITU charges helpful because Ofcom and ITU do not do comparable work.</p>	<p>As we said in our 2018 consultation (see 5.52-5.53), having considered the estimated charges of our proposals per filing/activity type over the filing's lifetime, they are mostly lower than comparable NRAs charges, and some NRAs charge fees that are considerably higher. There may also be reasons other than the cost of filings as to why an organisation might choose to file with one NRA over another, and that in most cases the fees are small compared to the overall cost of the satellite.</p> <p>We provided information on the charging regime of other NRAs' fees where this information was available to us. We agree that the satellite filing work we carry out is different to that done by the ITU, and provided a comparison to ITU charges to help illustrate the scale of our charges.</p>
<p><i>Annual reconciliation of fees</i></p> <p>Effective Space argued that any over or under-recovery of fees should be refunded or charged to the relevant operator rather than used to modify the following year's charges. Otherwise companies will receive the benefits of reductions, or will be forced to pay higher fees, based on payments made by others, i.e. there will be a cross-subsidy of one company by another. They say such an approach is not fair and reasonable.</p>	<p>To reconcile overpayments to individual operators would involve a significant increase in administrative burden. Given that satellite filings are active for multiple years, we consider that the effect of reconciliation is likely to balance out over time. As such, we do not think the additional burden is justified. Our proposed approach is also consistent with our approach to Ofcom's other sectors.</p>

Question 7: Do you have any comments on our proposals for implementing our charging approach?

Stakeholder comments	Our response
<p><i>Aligning charges with financial year</i></p> <p>Azzurra and AB5 recommended Ofcom postpone charging until the next financial year 2019-20, to make accounting matters simpler.</p>	<p>As set out at paragraph 3.98, we have decided to implement charging from (and including) 1 April 2019, i.e. from the 2019/20 financial year, as opposed to the date of our statement (as proposed in the 2018 consultation).</p>
<p><i>Clarifications regarding notification</i></p> <p>Telesat expressed concern that operators may seek to avoid annual management fees by notifying a filing well before the expiry of its regulatory deadline. For example, increased early notification under RR 11.41, even though RR 11.41 is likely to generate a similar amount of coordination work as for filings that are notified at the expiry of the ITU notification period. Failure to recover the costs of these activities from the relevant operator will mean that other operators with new filings bear these costs. They argued that the annual management fee should continue as long as the filing is notified under the provisions of RR 11.41.</p> <p>Inmarsat asked for clarification on the point at which Ofcom will consider a filing to be notified for charging purposes, and gave a number of examples.</p> <p>ViaSat requested confirmation that the notification charge includes both the initial notification request (Part1 S) and subsequent resubmissions as necessary.</p>	<p>We provide clarification on the notification process at 3.101-3.107.</p> <p>We can confirm that the notification request fee includes both the initial notification request and subsequent resubmissions (Return of Notices) as necessary.</p>
<p><i>Clarification on non-recoverable costs</i></p> <p>ManSat said it was not clear whether Ofcom’s total costs (i.e. £1.07m) would be recovered in full through our proposed charges.</p> <p>SES asked Ofcom to confirm that it cannot impose cost recovery fees on ITU filings submitted before the new fees are notified, including modifications and notifications made in relation to these filings that are made after the new fees come into force.</p>	<p>We clarify recoverable and non-recoverable costs at 3.99-3.100.</p> <p>As explained at 4.6, charges apply only to new filing submissions (and activities related to those submissions) received on or after 1 April 2019. Filings received on or before 31 March 2019 will not incur charges for any part of their management, including modification and notification.</p>

Stakeholder comments	Our response
<p><i>Charges for managing notified filings</i></p> <p>Telesat, OneWeb and Effective Space disagreed with our proposal not to charge for ongoing maintenance of notified filings. Telesat and OneWeb noted that, although non-recoverable costs will decline over time, there will be a residual amount of cost associated to such assignments/filings (until all have been suppressed). They said such costs should be recovered via retention of WTA receipts / the government purse. Telesat argued that this is necessary to ensure that new filings do not subsidise the non-recoverable costs of grandfathered filings.</p> <p>Telesat proposed that the formula for determining fees should be amended by adding a new filing activity/type for “ongoing costs of grandfathered filings” with an assumed volume and weighting factor that is representative of unrecoverable ongoing satellite filing costs generated by grandfathered filings.</p>	<p>We noted that one of the activities that falls within our satellite filing work is maintaining notified UK filings (see 2.14). We explained in the 2018 consultation (paragraph 5.23) why we did not propose to introduce a separate charge for maintaining notified filings:</p> <ul style="list-style-type: none"> • There are already a significant number of notified filings which we would not be able to charge for, creating a two-tier approach where some organisations would be charged in perpetuity while others are provided the same benefit at no charge. • We estimate the effort involved per filing per year relates to a very small proportion of our overall work in a given year (there may be no, or very limited activity such as one or two letters). It would increase the complexity of our approach considerably for a small cost per filing per year. <p>Having considered stakeholders’ responses, we have decided not to introduce a separate charge for the ongoing maintenance of notified filings for the reasons listed above.</p>
<p><i>Fees for modifications</i></p> <p>Inmarsat queried whether treating modifications the same as a new filing submission (with associated charges) simply means applying the submission fee, or whether we also intended to apply an annual charge. They believe no additional annual charges should apply.</p>	<p>Fees for relevant modifications are explained at 3.110-3.112.</p>
<p><i>Impact of fees on workload</i></p> <p>ViaSat said operators may time their submissions around the annual payment date to maximise the time before a first payment is due, or submit notification requests before the year end to avoid annual management fees for the following year. This may result in higher numbers of requests being submitted at certain times. They noted increases in workload should not impact quality of service.</p>	<p>The IFC team monitor their workload and will ensure that an appropriate level of resource is available for busy periods. The milestones submitted in applications and annual due diligence meetings with operators means that we have a good indication of when filings are likely to notify, and we take this into account for resource planning. We typically receive an average of ten notification requests per year (in 2018 we received five notifications).</p>

Stakeholder comments	Our response
<p><i>Invoicing</i></p> <p>Inmarsat and a confidential respondent said that, for accounting purposes, some operators will require an invoice from Ofcom in advance in order to be able to pay for any new submissions. Inmarsat said that they would prefer to see payment for new notices to be included in the annual invoices, rather than at the point of submission.</p>	<p>As set out in table 7, fees for new submissions, relevant modifications, and notification requests are payable on application. Where stakeholders experience difficulties with making payments without first receiving an invoice, they should contact us as soon as possible to discuss whether alternative arrangements may be possible. However, to be fair to all stakeholders, we will only accept a new submission as complete once payment has been received, and this includes filings where alternative arrangements have been requested. Delays in making payment could affect the order in which a new filing is submitted to the ITU.</p>
<p><i>Variability of charges</i></p> <p>SES suggests averaging the volume of filings and/or costs over the previous 3-5 years when setting charges for the upcoming year, to help “smooth out” the yearly fluctuations in Ofcom fees and improve predictability.</p> <p>Kepler expressed concern that a portion of the costing is effectively determined by chance – i.e. how many other operators decide to submit filings in the same period – and said that ideally charges should be based on what a filing is worth in resources required to process it. They said that the introduction of variable or random yearly fees creates undue risk in a business model, inevitably leading to a reduction in investor confidence.</p>	<p>While we understand SES and Kepler’s concerns, as we set out in the 2018 consultation (see 5.35-5.36), variable charges for satellite filings are unavoidable under the legal framework because of the requirement for us to reconcile our costs and charges annually.</p>
<p><i>Provision of additional information</i></p> <p>Effective Space proposed that Ofcom consider publishing:</p> <ul style="list-style-type: none"> • a list of all filings under Ofcom management and the charge associated with each filing; and • the detailed annual reconciliation and basis for the proposed adjustment in advance, allowing stakeholders a short period to review and comment. 	<p>We do not consider that publishing a list of filings and applicable charges would provide additional value to stakeholders. Information about UK filings is already available on the ITU website and BR-IFICs following submission.</p> <p>Our reporting and reconciliation process is described at 4.14-4.16. As our process for doing so is set out clearly in this document and meets the requirements of the legislation, we will not consult on this annually.</p>

Question 8: Do you have any other comments on matters arising from this consultation?

Stakeholder comments	Our response
<p><i>British Overseas Territories (BOTs) and Crown Dependencies (CDs)</i></p> <p>Several respondents noted that Ofcom had not taken into account due diligence work and other supporting work undertaken by the local administrations of the BOTs and CDs, which could reduce Ofcom’s workload.</p> <p>ManSat noted that Ofcom’s 2005 Statement on Procedures for Authorisation of Satellite Networks stated that fees could be lower if a UK-represented territory relieved Ofcom of certain responsibilities and functions. They suggested that some activities carried out nationally, such as national due diligence and checking the accuracy of filing material prior to their submission to the ITU, could be delegated to these jurisdictions.</p> <p>The Government of Bermuda said their regulatory framework was designed to ensure submissions meeting Bermuda’s requirements automatically meet those of Ofcom. They argued that this should result in a reduction in Ofcom effort, which could be addressed by a discount or rebate. They also drew parallels with the shipping and aviation sectors, where Bermuda maintains jurisdiction for ships and aircraft, rather than the UK.</p>	<p>We discuss our charging approach for the BOTs and CDs from 3.119.</p> <p>While we acknowledge Government of Bermuda’s point that other sectors may do things differently, we are aware that charges apply for work that UKSA does for Bermuda in the space sector.</p>
<p><i>International representation for BOTs</i></p> <p>Government of Bermuda said that most of the BOTs do not benefit from Ofcom’s participation in the work of CEPT, which is generally focused on Region 1 and is therefore irrelevant to those OTs located in Region 2. As such, they argue that it is not appropriate that BOTs should be made to contribute to the cost of Ofcom’s participation in the work of CEPT.</p>	<p>The CEPT is the UK’s regional engagement mechanism for spectrum regulatory matters (for Region 1). Whilst we are physically located in Region 1, the CEPT also discusses spectrum issues relevant for all ITU regions. For example, WRCs address spectrum allocations at a global level, and satellites are inherently global in nature. We also manage satellite filings that cover Regions 1, 2 or 3, or a combination thereof. The situations where issues only address Region 2 satellite allocations are very much in the minority, but even in those cases, the UK would be working to protect the</p>

Stakeholder comments	Our response
	<p>interests of all UK filed satellites that cover Region 2. Even on terrestrial matters, while the UK is within Region 1, we do support UK BOT interests in other Regions.³³ Therefore we do not consider that the specific cases where the UK is not involved in Region 2 spectrum considerations is consequential.</p>
<p><i>Delivery of satellite filing work</i></p> <p>A confidential respondent asked whether the changes will add new value for stakeholders, e.g. new mechanisms or additional transparency. With the implementation of cost recovery, ManSat urged Ofcom to ensure that adequate resources are assigned to satellite filing activity.</p>	<p>As set out at 4.7, these proposals do not change how we undertake our satellite filing work. As Ofcom’s budget is limited by an overall spending cap, the introduction of charges will simply change the source of funding for our satellite filing work.</p> <p>Nonetheless, while seeking to meet our obligations in recovering costs, we continue to look at ways to streamline our activities and operate in a more efficient manner. This includes introduction of a case management system to provide greater transparency and control of satellite filings to operators.</p>
<p><i>Engagement with stakeholders</i></p> <p>Alba Orbital Ltd said that it does not appear that the 2018 consultation was circulated widely.</p>	<p>We disagree. The 2018 consultation was published on our website (and notified to the relevant stakeholder distribution lists we hold) and was also highlighted to stakeholders at the Satellite Consultative Committee and Space Spectrum Advisory Committee. We also reached out to SMEs, academic and amateur operators, to ensure that the views of these groups were taken into account.</p>
<p><i>Requests for additional information on costs</i></p> <p>A number of stakeholders asked for more granular information on how the total satellite filings cost (£1.07m) and cost categories were derived. A confidential respondent noted that in 2007 these costs were noted to be approximately £400K.</p> <p><u>Common costs</u> - ViaSat requested that Ofcom provide further clarity on how international</p>	<p>Our cost allocation methodology is described in section 3 of the 2018 consultation (from paragraph 3.27) and further explained in section 2.</p> <p>As we explained in the 2018 consultation, our 2007 consultation was before we had the current level of granularity of our spectrum management costs (from the new methodology adopted in 2012). That figure did</p>

³³ <https://www.ofcom.org.uk/about-ofcom/international/spectrum/mou>

Stakeholder comments	Our response
<p>membership, ICT and property and other common costs are apportioned, and whether they are apportioned by group (e.g. Space, or Spectrum Group), or apportioned according to the number of employees working on the management of satellite filings. SES asked us to explain the ‘relevant proportion’ of international and overhead costs attributable to the satellite sector.</p> <p><u>Spectrum policy projects and programme costs</u> - SES asked for clarification that the programme and project costs attributed to the satellite sector are limited to those that benefit the satellite sector, i.e. they do not include proceedings that would re-allocate satellite spectrum for mobile. Catapult said it was unclear whether the total costs at 5.38 in the 2018 consultation includes general costs of work undertaken by the satellite filing team (e.g. policy work) which may or may not have a direct benefit to the filing entities.</p> <p><u>FTEs</u> - SES, ManSat and a confidential respondent requested that Ofcom publish the number of FTEs assigned to filing activity, in the statement and on an annual basis.</p>	<p>not capture all of the relevant cost categories and their associated overheads.</p> <p><u>Common costs</u> - ICT, property and other common costs are apportioned based on the number of full time equivalent (FTE) staff providing satellite filing effort.</p> <p><u>Spectrum policy projects and programmes</u> - We describe the spectrum policy projects and programmes cost category at 2.23. As we set out at 2.20, our spectrum management cost allocation methodology allocates our spectrum management costs to all of the spectrum sectors and licence classes we manage, and attributes costs only to the sector(s) that benefit from the work that we do. Any policy or project work related to satellite filings is apportioned to our satellite filing work costs.</p> <p><u>FTEs</u> - We do not provide FTE information for any of our other charges and do not plan to publish it annually for satellite filing work.</p>

A2. Legal framework

- A2.1 In this section, we set out the legal framework underpinning our new powers to set charges for our satellite filing work. In particular, we first explain what we can (and what we cannot) charge for under these new powers.
- A2.2 We then summarise our general statutory duties and matters to which we must have regard in exercising our functions. We conclude by drawing attention to our impact assessment, including equality impact assessment, as required under statute.

Our new charging powers

- A2.3 On 27 April 2017, the Digital Economy Act 2017 (DEA 2017) received Royal Assent. Its section 101(2) amends the 2003 Act by inserting as section 28A a new specific power to charge fees for our satellite filing work at the request of any person who so requires. That provision came into force on 31 July 2017.³⁴
- A2.4 Section 28A(1) sets out a precondition for these new powers to apply, namely that we have been conferred functions under section 22 of the 2003 Act to act as the administration of the UK under the ITU Radio Regulations. We explained above that such functions have been conferred on us by acting as the notifying administration in the ITU for the UK.³⁵ Thus, this precondition has already been satisfied enabling us to use our new charging powers.
- A2.5 Section 28A(2) of the 2003 Act lays down our new powers by stating that “*OfCOM may require any person to pay them a fee for doing satellite filing work at the request of that person.*” Pursuant to section 28A(3), we may also vary from time to time the amount of any fee set under section 28A.
- A2.6 The concept of “satellite filing work” for these purposes means, according to section 28A(3), “anything connected with obtaining or maintaining international recognition under the ITU Radio Regulations of assignments (or changes in assignments) of radio frequencies to stations in satellite systems or satellite networks.” In that regard, the reference to ‘anything connected with’ is broadly framed in relation to both ‘obtaining’ and ‘maintaining’ satellite filings. However, some further statutory requirements and limitations apply in our exercise of these new charging powers.
- A2.7 Firstly, we may not require a person to pay a fee under section 28A, unless we have taken such steps as we consider appropriate to bring the fact that we charge a fee, and the amount of the fee, to the attention of those persons who, in our opinion, are likely to be

³⁴ See the Digital Economy Act 2017 (Commencement No. 1) Regulations 2017, S.I. 2017 No. 765 (C. 60). Regulation 2 lists provisions which come into force on 31 July 2017, including our power to charge fees (see regulation 2(cc)).

³⁵ In January 2004, the Secretary of State and Ofcom entered into a Memorandum of Understanding relating to the Cabinet Official Committee on UK Spectrum Strategy and other matters. That MoU provides that the Secretary of State shall ensure that Ofcom is registered with the ITU as the UK “Administration” as defined in the annex to the ITU’s Constitution. Then, in October 2007, the Secretary of State and Ofcom entered into another Memorandum of Understanding. That MoU provides that Ofcom will represent the Crown Dependencies and the BOTs in the ITU.

required to pay it (see section 28A(5)). We explain in this statement (see, in particular, section 4) how we intend to give notice of our satellite filing charges.

A2.8 Secondly, section 28A(6) imposes on us the following reporting requirement:

“(6) As soon as reasonably practicable after the end of each reporting year, OFCOM must publish a statement setting out—

(a) the aggregate amount of the fees charged under this section that have been received by OFCOM during that year;

(b) the aggregate amount of the fees charged under this section during that year which remain outstanding and are likely to be paid or recovered; and

(c) the total cost to OFCOM of doing the requested satellite filing work they have done during that year.”

A2.9 For that requirement, the concept “reporting year” means the period beginning with the coming into force of this section and ending with the next 31 March or any subsequent period of twelve months beginning with 1 April. We explain in this statement (see, in particular, section 4) how we intend to meet these reporting requirements.

A2.10 Thirdly, section 28A(7) imposes the following limitation (the application of this annual reconciliation process is also discussed in this statement, in particular in section 4):

“(7) If the total of the amounts set out in a statement under subsection (6)(a) and (b) exceeds the total cost set out under subsection (6)(c), OFCOM must take this into account with a view to securing that the aggregate amount of fees charged under this section in the following reporting year does not exceed the likely total cost to them of doing requested satellite filing work during that year.”

A2.11 Fourthly, section 101(4) of the DEA 2017 provides that section 28A(2) and (6)(c) of the 2003 Act does not apply to any satellite filing work if we received the request to do that work before the coming into force of section 28A. In other words, our new charging powers do not apply to any satellite filing work in respect of requests received before 31 July 2017. Also, our total cost of doing the requested satellite filing work during a reporting year must exclude the costs of us doing satellite filing work, the requests for which we received before 31 July 2017. We explain in this statement (see, in particular, section 4) what our charges apply to, including that existing filings received on or before 31 March 2019 will not incur charges for any part of their management.

A2.12 Fifthly, paragraph 8 of the Schedule to the Office of Communications Act 2002 (the OCA 2002) imposes a specific duty on us in relation to our finances. It provides that it is our duty to conduct our affairs so as to secure that our revenues (so far as they derive from the exercise of powers to impose charges or fees in respect of the carrying out of particular functions and do not fall to be paid into the Consolidated Fund of the UK or of Northern Ireland), are at least sufficient to enable us to meet the costs of carrying out the functions to which the revenues relate.

A2.13 Sixthly, in carrying out our functions, we must comply with our general duties under the 2003 Act and, to the extent relevant in this context, our duties in the WTA 2006. We discuss these duties below.

Our general duties

- A2.14 In carrying out our statutory functions, our principal duty under section 3(1) of the 2003 Act is to further the interests of citizens and to further the interest of consumers in relevant markets, where appropriate, by promoting competition. This applies to any function conferred on us by or under any enactment, including our exercise of these new charging powers under section 28A.
- A2.15 Section 3(2) requires us to secure particular things in discharging our general duty including, where relevant, the optimal use of the radio spectrum and the availability throughout the UK of a wide range of electronic communications services. In performing our general duties, we are also required under section 3(4) to have regard to a range of other considerations, which appear to us to be relevant in the circumstances, such as having regard to the different needs and interests, so far as the use of the radio spectrum is concerned, of all persons who may wish to make use of it.
- A2.16 Pursuant to section 3(3), we must have regard, in all cases, to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed, and any other principles appearing to us to represent the best regulatory practice. In this regard, we also note our general regulatory principles, such as always seeking the least intrusive regulatory mechanisms to achieve our policy objectives.³⁶
- A2.17 We also have additional duties under section 3 of the WTA 2006 when we carry out functions under the enactments relating to the management of the radio spectrum. In so doing, we must have regard, in particular, to the extent to which the radio spectrum is available for use, or further use; the demand for use of the radio spectrum; and the demand that is likely to arise in future for the use of the radio spectrum. We must also have regard, in particular, to the desirability of promoting certain things, such as the efficient management and use of the radio spectrum; and the economic and other benefits that may arise from the use of wireless telegraphy.
- A2.18 We have borne these duties in mind in determining our charging approach, as discussed in this statement, including the charging principles we have adopted and applied to assess the options for charging in order to reach our decision on our preferred charging option.

³⁶ See <https://www.ofcom.org.uk/about-ofcom/what-is-ofcom>

General impact assessment

- A2.19 The analysis presented in the whole of this statement (read together with our additional information in the 2018 consultation) represents an impact assessment, as defined in section 7 of the 2003 Act.
- A2.20 Impact assessments provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making. This is reflected in section 7 of the 2003 Act, which means that generally we have to carry out impact assessments where its proposals would be likely to have a significant effect on businesses or the general public, or when there is a major change in our activities. However, as a matter of policy we are committed to carrying out and publishing impact assessments in relation to the great majority of its policy decisions. For further information about our approach to impact assessments, see our guidelines, *'Better policy-making: Ofcom's approach to impact assessment'*.³⁷
- A2.21 Specifically, pursuant to section 7, an impact assessment must set out how, in our opinion, the performance of our general duties (within the meaning of section 3 of the 2003 Act) is secured or furthered by or in relation to what we propose.

Equality impact assessment

- A2.22 In carrying out our functions, we are also under a general duty under the Equality Act 2010 to have due regard to the need to:
- eliminate unlawful discrimination, harassment and victimisation;
 - advance equality of opportunity between different groups; and
 - foster good relations between different groups.
- A2.23 This assessment is in relation to the following protected characteristics: age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex and sexual orientation. Such equality impact assessments (EIAs) also assist us in making sure that we are meeting our principal duty under section 3 of the 2003 Act discussed above.
- A2.24 We considered what (if any) impact the proposals in the 2018 consultation may have on equality. Having carried out this assessment, we are satisfied that our proposals in the 2018 consultation, and the decisions we have reached in this statement, are not detrimental to any group defined by the protected characteristics set out in paragraph A2.23 above.

³⁷ See <https://www.ofcom.org.uk/consultations-and-statements/better-policy-making-ofcoms-approach-to-impact-assessment>

A3. Calculation of satellite filing charges

- A3.1 Table 8 below shows satellite filing volumes for each filing activity/type for 2018. Applying the effort weightings taken from table 7 in this statement, our weighted units of effort currently total 585.5 (compared with 623.2 against the filing activity/types in the 2018 consultation). This difference is mainly due to the CR/C category for less complex filings, and because we no longer have the higher weighted category (4.5) for non-GSO filings.
- A3.2 The calculations behind the individual charges in our Notice of Charges (as set out in annex 4) take our annual satellite filings cost (forecast to be £1.05m in 2019/20) and divide this by the total number of weighted units of effort (585.5 in 2019/20, based on 2018 volumes) to provide a charge per weighted unit of effort.
- A3.3 For 2019/20, an activity based on one weighted unit of effort will be charged at £1800 (figure is rounded to the nearest £50).
- A3.4 Other charges are calculated from this baseline figure for one weighted unit of effort i.e. an activity with an effort weighting of 3 is charged 3 x £1800, so £5400.

Table 8: Satellite filing volumes and weighted effort by filing activity/type in 2018

Filing activity/ type	Volumes (for 2018)	Effort weighting	Weighted units of effort
New submissions (all except non-GSO EPFD) received during year	25	1.0 per request	25
New non-GSO EPFD submissions received during year	2	3.0 per request	6
API filings annual management, at 31 Dec	13	1.0 per financial year filing is active	13
CR/C GSO and non-GSO filings annual management (<100 ITU units), at 31 Dec	17	2.0 per financial year filing is active	34
CR/C GSO and non-GSO filings annual management (≥100 ITU units), at 31 Dec	167	3.0 per financial year filing is active	501
Notification requests (API) received during year	0	1.0 per request	0
Notification requests (CR/C GSO and non-GSO) received during year	5	1.3 per request	6.5
	224		585.5

A4. Notice of Satellite Filing Charges

STATUTORY NOTICE OF CHARGES FOR OFCOM'S SATELLITE FILING WORK FOR THE PERIOD BEGINNING ON 1 APRIL 2019 AND ENDING ON 31 MARCH 2020

1. The Office of Communications ("Ofcom") hereby gives notice, pursuant to section 28A(5) of the Communications Act 2003, to bring the fact that Ofcom charges the fees, and the amounts of these fees, specified in the table below for doing satellite filing work to the attention of all persons intending to make requests to Ofcom for such work.

2. The charges specified in the table below apply to requests received by Ofcom between 1 April 2019 and 31 March 2020 inclusive, for new filing requests (and any modifications adding new characteristics which require new analysis and are related to such requests) as well as notification requests. The table also specifies annual management charges depending on the type and complexity of filing they relate to, with charges incurred (unless suppressed or cancelled) on 1 April annually for filing requests received on or after 1 April 2019 until they are notified. If a filing is modified or part notified, the annual management charge is determined by the filing activity/type that applies to that filing on 1 April in any particular year.

For this first year of satellite filing charges (2019/20), no charges will apply in practice for annual management and notification requests for reasons explained in Ofcom's statement 'Satellite Filings Cost Recovery', published on 14 March 2019, and are included in the table for future illustration only.

Filing activity/type	Effort weighting	Payment due	Charges (2019/20)
Submissions (and relevant modifications³⁸)			
New filing requests (except non-GSO EPFD filings)	1.0	On date of request/application	£1800
New non-GSO EPFD filing requests	3.0		£5400
Annual management			
API filing	1.0	Q1 annually (on receipt of invoice)	£1800pa
CR/C GSO and non-GSO filing (<100 ITU units)	2.0		£3600pa
CR/C GSO and non-GSO filing (≥100 ITU units)	3.0		£5400pa
Notifications			
API requests	1.0	On date of request/application	£1800
CR/C GSO and non-GSO requests	1.3		£2350
Exceptional cases			
Determined on a case by case basis	TBD	On date request is accepted	To be notified and agreed

³⁸ Modifications are only chargeable where further technical assessment is required as the result of the request.