Question	Your response
Question 1: Do you agree we have identified the most relevant cost drivers to take account of in our charging approach?	Confidential? – N We agree that the cost drivers identified by Ofcom in § 5.9 are some of the most significant drivers of Ofcom's costs. However, we believe that most significant cost drivers are not limited to those identified in § 5.9 but other drivers such as "type of spectrum frequency band" and "number of spectrum frequency bands" (as listed in § 5.7) do have a measurable effect on Ofcom's costs. For example, in the case of a CR/C for a GSO or NGSO filing with a minimal number of frequency bands, the workload on Ofcom when submitting and managing such filings could be much less compared with another filing that carries a greater number of frequency bands or involves EPFD assessment (in the case of NGSO). Similarly, we would expect an API for a small satellite (cubesat) project to involve only a minimal amount of work when submitting it to the ITU and in its annual management. We would also like to explore further the possibility of making certain concessions to new entrants, who are likely to be small or stat-up businesses. This could be linked to the UK Government's objective to grow the space sector and capture 10% of the global market by 2030. In such cases Ofcom could consider limiting its work carried out for such entities to international work (i.e. relaxing on national due diligence activities etc.) thereby reducing costs.
Question 2: Are there any other factors you consider we should take account of in our charging approach? Please explain why in your response.	Confidential? – N ManSat believes that a separate cost recovery regime is required for small satellite operators with API filings and missions of short duration. Ofcom could take note of the developments under Issue M of Agenda 7 for WRC-19, in which a new WRC Resolution to introduce a simplified regulatory regime for NGSO satellite systems with short duration missions not subject to coordination under Section II of RR Article 9 is considered. In § 5.30 of the Consultation document, Ofcom stated that its charges will be "a small proportion of overall satellite costs" as justification of its approach. Ofcom also suggested its charges are less than 1% for most

	commercial projects and less than 4% for a "low-cost cubesat project", with a definition of "low cost" being "around £200,000". We believe that such charges will be a barrier to innovation for small entities (such as schools and universities) embarking on small-scale space projects. Ofcom's definition of £200,000 as "low cost" is at odds with most typical low- cost small satellite projects (as a quick check of a small satellite provider's products will show e.g. Clyde Space https://www.clyde.space/products).
	Other jurisdictions: Ofcom stated in its 2005 Statement on Procedures for Authorisation of Satellite Networks that fees could be lower if a UK- represented territory relieved Ofcom of certain responsibilities and functions. However, Ofcom dismissed the concept in this Consultation citing that it must continue to be responsible for international work, and that work carried out by these jurisdictions does not result in any reduction in its workload (§ 5.32). While we agree with Ofcom that any international activity, such as submission of filings and correspondence with other administrations, should be carried out by Ofcom, numerous other 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, thereby reducing Ofcom's workload. We propose that Ofcom continues to engage with these jurisdictions before concluding on this matter.
Question 3: What comments, if any, do you have on our charging options 1-4?	Confidential? – N On the face of it, Option 4 is the fairest way of recovering fees by charging operators for the actual work done. However, Option 3 provides a good workable arrangement.
Question 4: What other charging options, if any, do you believe we should consider?	Confidential? – N As we suggested in our response to Question 2, a separate charging regime for small satellite missions may be required. For instance, a simplified regime under a separate pro forma application process, taking note of any likely changes to the international regulatory framework that may be established by the WRC-19, could be established.

commercial projects and less than 4% for a

Question 5: Do you agree that our preferred	Confidential? – N
charging option, option 3, is the best way to	We appreciate Ofcom's efforts to assess the
meet our objectives? If no, please state your	charging options in terms of transparency,
preferred charging option and explain why.	simplicity, and clarity. We agree that option 3
	provides a good workable arrangement.
Question 6: Do you have any comments on our proposed charging approach (as set out	Confidential? – N We offer detailed comments under three sub-
above)?	headings:
	a) Comments on satellite filing charges
	illustrated for 2018/19
	 b) Need for further refinement of "satellite filing activity"
	c) Need for reconsideration of "weighted
	units"
	d) Comparison with satellite filing charges
	of other administrations
	a) Comments on satellite filing charges illustrated for 2018/19:
	The way in which Ofcom arrived at the
	proposed charge for 2018/19 given in Table 6 is
	not well understood. Our interpretation is that
	Ofcom assessed what proportion of their total
	costs (£1.07m) would be taken up by work on
	new filings (based on filing volumes for the last few years) and used that number to reach the
	Table 6 figures. However, Ofcom's statement
	in §5.15 that "non-recoverable costs will be
	excluded from the total costs we recover
	(£1.07m) through our charges in a given year" is
	confusing because it implies that it is the full £1.07m to be recovered.
	We propose that Ofcom provides clarity by
	explaining its methodology for determining the
	"proposed charges" – possibly in the Statement
	to be issued for this Consultation.
	b) Need for further refinement of "satellite
	filing activity": As discussed above, Ofcom should carefully
	consider the need to include additional "cost
	drivers" for recovery of costs (see answer to
	Question 1 above). These additional cost
	drivers would allow Ofcom to refine the cost
	recovery regime by taking account of different
	categories of filings, leading to additional classifications of "satellite filing activity/type"
	and corresponding proposed charges.
	Additional satellite filing activity that may be
	considered include: small satellites (cubesat)

	APIs seeking access to UHF frequencies in the amateur-satellite service, GSO/NGSO CR/C filing containing only a few frequency bands requiring coordination, EPFD assessments in the case of NGSO, and MoD approval. We recognise some of these aspects could be considered as "exceptional cases" referred to in § 5.25.
	 c) Need for reconsideration of "weighted units": If our above proposal for the refinement of "satellite filing activity" is considered favourably, Ofcom may wish to re-examine the weighted units currently assigned in Table 5 of the Consultation document.
	 d) Comparison with satellite filing charges of other administrations: We appreciate Ofcom's comparison of the charging regimes of other administrations (Table 8 of the Consultation document). However, unless we know the precise regime under which the charges are applied (for instance, whether it is for cost recovery or revenue generation) it is difficult make direct comparisons. We do not find the comparison to ITU charges helpful because Ofcom and ITU do not do comparable work.
Question 7: Do you have any comments on our proposals for implementing our charging approach?	Confidential? – N We have no specific comments about the implementation of proposed charges, but we urge Ofcom to publish the methodology used for the assessment of "proposed charges" that apply to different filing activity/task.
Question 8: Do you have any other comments on matters arising from this consultation?	Confidential? – N The filing activity undertaken by Ofcom is well managed and the service offered to stakeholders is highly appreciated. With the introduction of charges, we would urge Ofcom to ensure that adequate resources are assigned to satellite filing activity, and to publish annually (at the same time as the proposed charges are published) such resources made available to satellite filing activity (in terms of post holders/FTE).