Motorola's Response to the CMA's Provisional Decision Report – Annex

Supplementary Comments on the CMA's Profitability and Remedies Assessment[1]

This Annex contains some more detailed observations on the CMA's profitability as well as proposed remedy analysis (Chapter 6 and Appendices G, J and K of the Provisional Decision), to support Motorola's position that the CMA's assessment in the Provisional Decision is factually flawed, devoid of rational reason and apparently biased. The CMA's proposed remedy would radically change the economic bargain struck by the well-advised parties[2] without fair compensation, and is grossly disproportionate.

Chapter 6 – Outcomes: Profitability Analysis

Paragraph	CMA position	Motorola Comment
6.6	The rationale for benchmarking return on capital with the opportunity cost of capital is that, in a competitive market, if firms persistently earned in excess of the return required to compensate investors for the risks taken, we would expect entry and/or expansion. This entry/expansion would serve to compete away profits in excess of the cost of capital up until the point where firms cover their total costs, including a market-based cost of capital and no more. Where firms persistently earn in excess of a normal return, this therefore signals that there may be limitations in the competitive process.	The analogous application in markets where competition takes the form of competition for the market would be that firms across a range of projects persistently earned returns in excess of the cost of capital. Here, there is no basis for a comparison of individual contractual performance with a firm WACC.
6.30	The Home Office told us that the Ambulance Bundle 2 services were provided together with the core Airwave Network services, there was a significant proportion of common costs between the Ambulance	The CMA appears to take the Home Office position without any question or requiring evidence to support the claim that there are common costs.

[1] While a short extension was granted, the CMA did not allow the time requested by Motorola to prepare its comments on the Provisional Decision and the Appendices. These comments are provided to assist the CMA, but should not be taken as an exhaustive set. Should the CMA wish to take account of, or otherwise engage with, any of the points herein, Motorola is ready to assist.
[2] The parties never contemplated, and any remedy does not require, a full-blown regulatory apparatus.

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	Bundle 2 contract and other services offered by Airwave Solutions to the Home Office, and identifying all the relevant costs could be challenging. As such, it considered that it would be more robust to include both revenues and costs associated with the Ambulance Bundle 2.	
6.33 a	For Ambulance Bundle 2, we are not minded to treat the outsourcing of a contract as sufficient reason to exclude it, and consider that the common costs showed that it was not a separate activity. Therefore, we have included it in our provisional analysis. We also noted the potential complications of allocating common overhead costs between these services and those of the core network	This makes no sense. The very fact that the service is completely outsourced to a third party must by definition mean that it can be provided by the third party independently, so must not be treated as an integral part of the Airwave service. The CMA has not offered any evidence to support its claim that there are "common costs" other than the Home Office's assertion. As far as the CMA's insistence on allocating a portion of administrative costs to Ambulance Bundle 2, this is not evidence of common costs; as Motorola has explained, an outsourced contract would not cause many, if any, administrative costs.
6.38 b	We are primarily interested in recent and current competitive conditions in the market, rather than those which may have been present more than twenty years ago.	The notion of "competitive conditions" only makes sense in relation to competition at the point at which the fixed contractual terms are agreed or at the point when the contract ends and the buyer has the option of selecting a different supplier. The CMA's reference to "recent and current competitive conditions in the market" is therefore meaningless and irrational.
6.45 b	There are good reasons provisionally to conclude that conditions of competition are likely to have been different when the extension was negotiated than when the original PFI Agreement was negotiated due to, inter alia, the incumbency of the Airwave Network and the limited expected further time requirement for use of the Network given the development of ESN	The incumbency of the current provider is a universal feature of any negotiation of a contract amendment or extension. The reality of the 2016 agreement, and what the Home Office sought, given that it had just procured the replacement for the Airwave network was that the Home Office did not want, and so did not procure, a service for a well-defined extension period, but the right to require the service to be provided for as long as it needed at an agreed

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		price, leaving Motorola without the right to terminate (except in very limited conditions) while giving the Home Office sole control over the duration of service provision.
6.45 c	The uncertainty over how long the Airwave Network will be required is not relevant to the question of whether there has been an extension	But it is clearly relevant to the terms on which the parties would agree, which is the point made by Motorola and which the CMA ignores. The uncertainty as to term is also relevant to the required return.
6.45 d	The risks and costs of the uncertainty over the length of the extension are reflected in our analysis in both the WACC used and the operating and capital costs of Airwave Solutions. That is to say, we consider that the full costs of the 'insurance' Motorola submits was provided by Airwave Solutions to the Home Office is reflected in our analysis.	This is not the case: • The WACC calculations do not take account of the uncertain revenue (using as comparators utilities with an ongoing, guaranteed revenue stream) and without the risk profile of Airwave, which is linked to having to maintain an ageing infrastructure for a limited, but uncertain period of time. • WACC is used instead of a hurdle rate that would reflect these risks (in the absence of an adjustment such as Deloitte has made). • The adjustments to capex forecasts are without justification and do not reflect risks. • There is no reflection of uncertainty over opex development. The CMA's own treatment of capex and depreciation in the charge control remedy shows that the risks have not been fully reflected. There, the CMA provides for termination of the service before the predicted end of the charge control by allowing one-off adjustments in the last period (should the service terminate earlier and the value of assets has not been fully recovered). Such a terminal payment was not included in the Airwave contract, which weighs more heavily as the uncertainty over the likely duration was

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		much greater prior to the Home Office having served a National Shutdown Notice.
6.47 d	Absent this further [2016] negotiation, either party, Airwave Solutions or the Home Office could, in theory, have ceased to trade with one another after early 2020 and neither side would have had any basis to seek compensation from the other for such a course of action since there would have been no contractual commitment in place.	The initial duration is only one of the terms of the contract, which can be (and was) modified through mutual agreement (as could prices, and were), so the 2016 negotiations must be seen as part of, and within the framework of, the original PFI Framework Agreement (the "PFI Agreement"). The CMA's insistence on the initial end date being set in stone makes no sense when it is not what in fact happened: in fact, well before expiry, the parties converted the agreement into one of unlimited duration. It is nonsense for the CMA to suggest that in a well-functioning market the Home Office would not have done this, since this is precisely the insurance that the Home Office wanted. The entire framework for the CMA's analysis therefore makes no sense, quite aside from the CMA's notion that a "post-PFI" period would really be characterised with pricing that the parties would treat as less binding, when the Home Office wanted the opposite. The only issue is whether the CMA has a proper basis to intervene to reset the pricing agreed in 2016, and the IRR analysis over the lifetime of the contract clearly confirms that such intervention would be egregious.
6.47 e	The PFI Agreement makes provision for the transfer of assets to the Home Office or an alternative service provider at the end of the contract (with Airwave Solutions being required under the PFI Agreement to prepare a Service Transfer Plan) at fair market value; and under the Public Contracts Regulations 2015, the underlying assumption is that such a contract would be competed at the end of	Provisions for the transfer of assets at the end of a contractual period do not provide any information about the point in time at which the contract would end. The CMA does not properly explain the relevance of the 2015 Public Contracts Regulations, given that the Home Office commissioned ESN and negotiated the right to continue to use the Airwave network post 2019 rather than re-competing the contract, regardless of what assumption would flow

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	the term, unless exemptions applied (i.e. not simply extended as a matter of course).	from the Public Contracts Regulations. There is no need to assume anything here. As for fair value, the CMA itself acknowledges (and struggles with) the fact that investments made post 2016 were not simply made with a view of the network being shut down at the end of 2019. This means that there was capital expenditure that was not expected to be written off by the end of 2019 and would contribute to the fair value of the assets regardless of the starting point chosen (discussed further below).
6.49	In light of the available evidence, our provisional view is that any continuation after late 2019 / early 2020 was an extension to the original fixed 19 year PFI Agreement period, and that separate profitability analyses of the pre- and post- extension time periods is informative in assessing the competitive conditions in which Airwave Solutions operated over these time periods.	The terms of the extension were agreed in 2016, at which point *the new prices applied*, and whatever was specified in the original agreement (including the end date) was no longer relevant. So if any meaningful split can be made (and it obviously cannot since the contract was not recompeted at that point and so would be utterly artificial) it would have to be in 2016 and reflect the terms on which the acquisition was made. The CMA has ignored entirely Motorola's points on the probability weighted IRRs.
6.50	The purpose of profitability analysis is to understand outcomes in the market, which may give insight into competitive conditions. In this context, the specific date on which various terms were negotiated is not relevant: our main concern is to identify the time period over which the results of those negotiations can be observed in profitability. Our provisional view is that this can most reliably be done from 2020 onwards.	Surely, the terms are affected by the nature of competition in 2016 when the terms were negotiated, so that again would suggest a 2016 split, without prejudice to the fact that this makes no sense from a market standpoint (see above). Moreover, the CMA investigated and approved Motorola's acquisition of Airwave (the "Airwave Acquisition") in 2016.
6.51	We are primarily interested in recent and current competitive conditions in the market, rather than those which may have been present more than twenty years ago. A backward-looking profitability analysis for the original 2001-2019 time period does not necessarily	As explained above, there is no meaningful notion of "recent and current competitive conditions" given the way competition works in this market (i.e. for the market) and the CMA's invention of "competitive interactions" does not assist it.

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	provide a good indicator of potential market power and potential to extract supernormal profits at the time that the extension was agreed. Similarly, the profitability of the business over the whole 2001 to 2026 period would mix the picture from across the PFI and post-PFI periods and would risk masking the degree of profitability and market power enjoyed post-extension. That, it appears to us, would not provide insight into conditions of competition either during the original PFI period or during the extension period. Therefore, we are not minded to pursue this analysis further.	The 2016 negotiations simply amended the PFI Agreement and the correct approach must therefore be to look over the entire life of the project. The argument about "mixing the picture" is hopeless. There is no more rational argument for looking at the whole contract period than the fact that the parties amended the contract (without changing the target IRR).
6.56	In our profitability working paper, we set out the emerging view that, in a well- functioning market, the value to the business of Airwave's assets at the end of the original PFI period and the start of the extension period would reflect their recoverable amount (specifically, the net realisable value (NRV)) rather than their (new) replacement cost, as the former would be lower than the latter. Therefore, in our analysis, our base case profitability estimates were based on this NRV, which Motorola had estimated at £[✂] million. However, we also considered a sensitivity based on the assets' (depreciated) replacement cost, which we based on the Deloitte Report and adjusted for subsequent capex and depreciation to give a valuation of £[✂] million.	The fact that one (incorrect) measure is lower than another is not a rational basis for its use. Moreover, this analysis ignores that the value in use, (measured as the discounted value of the stream of future revenues) is greater than the net realisable value whenever we have specific assets with a remaining economic life. When revenues are assumed to be at the competitive level, one would then simply use this discounted revenue stream. However, when the question is whether revenues are at the competitive level, one cannot use this discounted revenue stream because the revenues might include elements of economic profits. Any analysis would be circular. For the same reason, one cannot use the discounted value of revenues one considers to be competitive, as this is exactly what needs to be checked. For this reason, the *<u>only</u>* option of checking whether revenues are above their competitive level is to use replacement cost (MEA), as

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		Oxera very clearly states. This point is so obvious that it does not require further discussion, and for the CMA not to understand and apply this most basic point of economic analysis would be a material omission of the highest order.
6.57	In coming to that emerging view, we considered the following points to be of particular relevance: (a) The natural monopoly nature of the Airwave Network and the fact that it was provided under a PFI Agreement made following a procurement exercise, which provided guaranteed revenues set at a level to allow the supplier of these services to cover its investment in the network and operating costs, as well as to earn a reasonable return, over the period to 2019; (b) the natural corollary to the significant level of protection offered to the supplier of LMR network services (in the form of guaranteed revenues) in a well-functioning market would be material protection offered to customers in the case of an ongoing need for the network beyond its original end date. In the case of the Airwave Network, this was intended to be provided by the contractual provisions relating to asset transfer at the end of the original fixed period of the PFI Agreement, which indicated that the value of the Airwave Network assets should be limited to their 'fair market value'; and (c) as highlighted in the Byatt Report, the value of existing assets to a business should be equal to the amount a competitor would be prepared to pay for them in a competitive market. We considered this referred to what a competitor would pay for such assets in a situation in which the market for LMR services was competitive.	Taking these points in reverse order: • The replacement value is precisely how much a competitor would be prepared to pay in a competitive market (with adjustments for the fact that the existing assets may not be in the same state as newly constructed ones). In a tender for the continued provision of an Airwave-like service post 2020 (if such a tender had taken place) with free entry, bidders could have built their own new network or acquired Airwave's assets at a discount that reflected the ongoing capital expenditure that would be required to operate the ageing rather than a new network. • The replacement value is <u>entirely unaffected</u> by how the assets have been depreciated in the books and how depreciation charges have fed into past revenues. So if the customer has been paying prices over a period of time that included the total value of assets through a depreciation charge that assumed a certain NRV at the end of the contract, but the assets actually continue to have an economic life and thus a value in use that is greater than NRV, then one might argue on grounds of fairness that the customer should be entitled to acquire the assets at NRV. However, that has <u>nothing</u> to do with the value of assets in a competitive market. • As a matter of record, the charges were set so that Airwave would recover the <u>expected capital expenditure</u> – actual capex

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		was much higher and the CMA is therefore wrong to claim throughout the Provisional Decision that that all of Airwave's assets had been paid for under the terms of the PFI Agreement (and raise the point about "paying twice", which has no economic basis at all). This is evident from the fact that the actual returns over that period (as calculated by the CMA) were well below those implied by the revenues and costs in the PFI model. Even though there was no guarantee that Airwave would earn a return of 17% (or any number specified in the model), the fact that actual returns were much lower clearly invalidates the claim that all of Airwave's assets have been 'paid for' over the period from 2000 to 2019. In any case, there was no clear specification that "fair market value" would be determined with reference to NRV or net book value (for example).
6.58	In this context, we had the view that the sunk costs of the network, which have already been paid for by customers, should not influence pricing during an extension period that was not planned for. Put another way, we were not minded to consider that in a well-functioning market customers would, in effect, pay twice for the same assets if the life of the network were extended beyond the term originally envisaged when the LMR network was commissioned. We noted that the (new) replacement cost approach, which Motorola put forward as the appropriate benchmark, would result in such an outcome.	The fact that the CMA wants a reduced price for the Home Office does not entitle the CMA to characterise this objective as being justified on the grounds of economic analysis. Whatever the CMA may think, the notion of paying twice for assets (which Motorola rejects as a rational way to characterise *any* service contract that is extended) has nothing to do with a well-functioning market. In economic terms, the following points are relevant: • The ability to continue using assets for longer than expected clearly creates a gain. • As these assets are specific, for this gain to be realised, <u>it is necessary</u> that the assets are operated for longer. Put differently, if the Airwave network could provide services

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		beyond 2020, it should have been used instead of being replaced by ESN (the CMA appears to be saying that much in some places, but that is at best an argument for saying that the Home Office should not have procured ESN). • A separate question is how this gain would be shared between the parties. This would be influenced by who can claim ownership of the assets at the end of an initially agreed period. If the assets remain in the ownership of Airwave, the gains would in the first instance accrue to Airwave, though one could imagine a bargaining outcome where the Home Office threatens to switch to a replacement rather than carry on, thus eliminating the gains that flow from continue use which Airwave would otherwise enjoy, and the parties split the difference somehow. Alternatively, there could be provisions for transfer of ownership of the assets to the Home Office after a specified period (note, not "at the end of the contract", because that would be extended) at a price equal to the NRV. In this case, the gains would in the first instance accrue to the Home Office, which could invite competition for the continued operation of the assets. This is of course purely hypothetical given that the Home Office had decided to procure a replacement, which – if it had become available on time – would have meant completely sacrificing the difference between the value of the Airwave assets in its continued use and their scrap value. • If the view is that the asset transfer provisions in the PFI Agreement clearly were not fully specified ("at the end of the contract", "at fair market value", etc), and there was scope for

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		interpretation and dispute between the parties, the obvious way to resolve this would have been solved through the contractual dispute resolution provisions. As the CMA is aware, the Home Office has actively enforced its contractual rights and there is no reason to suppose it would not do so in this case. Such a process would then determine how the gains would be shared. The CMA's assumption that such a process would have resulted in all assets to the Home Office at NRV is untenable, and in any case not a matter of competition law. From this implicit presumption about the outcome of a process that was never sought and never took place, the rest follows. • In this regard, the notion of assets retaining economic value beyond the initially contracted period cannot be taken as a given – it is not the 'manna from heaven' but depends on the investments made by Airwave, which would have driven the determination of the "fair market value". For example, conscientious capex undertaken after 2016 was driven by Motorola's expectation (as disclosed to the CMA) that the Airwave network would need to work beyond 2020 and would therefore be included in whatever might have been determined as a fair market value. It makes no sense that the CMA includes this spend in its sensitivity, and some of it in its calculation of the opening value of the Regulatory Asset Base ("RAB"), but not in its base case for the profitability assessment where the "fair market value" is NRV corrected for liabilities associated with the obligations to decommission the network, allegedly paid for by the Home Office over the course of the PFI Agreement.

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		• Under provisions that transferred the assets to the Home Office at the end of the initial period, Airwave would not have had to incur decommissioning costs, so the shifting around of decommissioning costs in the profitability analysis and the design of the charge control is wholly unfair.
6.77	Our provisional assessment is that, in a well-functioning market, in the situation where a supplier is provided with a guaranteed level of revenues to ensure it is able to recoup the significant outlay required to develop a network, we would expect customers to enjoy material protection with respect to the pricing of LMR services in the event of requiring an extension of services beyond the period originally envisaged.	This is pure supposition, and the CMA is not entitled to ignore the fact that the parties were well resourced and advised by external advisers when the PFI Agreement was converted from a fixed term contract to one of unlimited duration. That aside, any need to rely on such protection is driven entirely by the emergence or otherwise of the alternative network. The CMA refuses to engage with these points, but it is glaringly obvious that the absence of any material protection that the CMA would like to see is not a market failure issue (if it had been, the CMA would presumably have imposed appropriate conditions at the time of its approval of the Airwave Acquisition in 2016).
6.78	Specifically, we would expect pricing during such an extension period to be constrained at a level at which the supplier was, broadly, only able to recover the incremental investment in the network required to extend its life, its (efficient) operating expenses, and a reasonable return on its capital, taking into account the risks assumed by the supplier over the extension period. This result could be achieved via different mechanisms, including, for example the contract providing effectively for the transfer of the network assets at the end of the contract period. This would allow for the re-tendering of the provision of services using that already built-and-paid-for network.	The CMA regards the asset transfer provisions as central, without providing any evidence that the Home Office would have been seriously interested in acquiring the assets. The lack of serious interest in acquiring the assets is unsurprising since the Home Office had decided to commission a replacement (ESN). The CMA has in any event not shown that the Home Office would have failed to acquire the assets if it had made any serious attempt.
6.79	We note that rather than being 'fictitious', as Motorola has asserted, this well- functioning market benchmark closely mirrors the contractual	Presumably the reference to "some of these provisions…" relates to the asset transfer provisions. As noted above, the CMA has only

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	provisions and expectations at the time that the original PFI Agreement was signed, although we observe that some of these provisions have not been effective. For example, we note statements made by Motorola during our site visit about the original pricing of the network and the assets employed therein: ([✂]) The original PFI contract will have assumed the shutdown at 2019 and then network decommissioning taking place thereafter? The pricing for that contract will have built in that assumption? ([✂]) Yes. ([✂]) So, it will have assumed a complete amortised cost of everything by the end of the PFI contract? ([✂]) Yes …	asserted but never shown with reference to any evidence that the Home Office was interested in exercising its option to take over the Airwave assets or – equally importantly – would have failed to do so if it had tried. Acknowledgement of the assumptions underpinning the PFI Agreement must not be construed as agreement with the validity of these assumptions, especially since the actual investment volume by far exceeded what was assumed in the financial model accompanying the PFI Agreement.
6.80 a	First, the PFI Model, which was submitted to us as providing the basis on which PITO and BT originally contracted in the PFI Agreement. This suggests that the original pricing agreed between PITO and BT was considered sufficient to fully compensate BT/Airwave Solutions for its investment in the network	This interpretation might be valid if actual capex had been as expected, which it has not. The CMA ignores the fact that the actual investment was much larger than envisaged in the model, which is clearly evident in actual returns over the period to 2019 (and indeed, over the entire contract period) being lower than those generated by the charges in the PFI model (which have not changed). This is a material omission that infects the CMA's entire profitability analysis.
6.81	These contract terms suggest that, at the end of the original agreements, the Home Office and other relevant authorities should have the opportunity to purchase the Airwave Network at its residual value. We note that such a value – described as 'fair market value' – is that of the assets on the open market absent the contract with the Home Office. To ascribe a higher value to them, as Motorola seeks to do, would in our provisional view allow it to capitalise the value of its incumbent position in serving the Home Office and other relevant	By this paragraph the CMA attempts a reconstruction of what the parties intended to achieve through the provisions in the original contract. Of course, any construction matters are for the dispute resolution provisions of the PFI Agreement, not the CMA. Motorola would expect dispute resolution proceedings to fairly weigh evidence in order to work out what the parties intended.

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	authorities, in effect charging its customer twice for the Airwave Network due to the need for an unexpected extension.	
6.82	In this context, we are not minded to agree with Motorola's submissions on both the Oxera paper and the Byatt Report. The former constitutes general guidance which is not tailored to the specific circumstances of this (or any other particular) case. As Motorola acknowledges, the report does not provide any further discussion of its recommendation to use the MEA basis. We agree that, in most competition cases, the MEA will be the appropriate basis but not, in our provisional assessment, in the circumstances of this case for the reasons set out in paragraph above. Our provisional view is that, in a well-functioning market, a customer should not be required to pay twice for the same assets, in particular, where that customer originally committed to a long term contract which provided a guaranteed level of revenue to cover the cost of investing in those assets in the first place.	The CMA does not explain why "general guidance" should not apply in this case, and it is wrong to ignore such guidance without good reason. Moreover, it is also wrong to arrive at outcomes that are contradicted by "general guidance", without clear and rational explanation. It is not fair for the CMA to regard general guidance as being something that it can drop when it does not support the outcome that the CMA is looking to achieve. Of course, the CMA is very happy to rely on general guidance in other instances (e.g. by general reference to the Public Contracts Regulations, which may work very well in cases where assets at the end of the contract do not have much residual economic value). As far as the reason why the conclusions about MEA should not apply, it is only because the CMA believes that Airwave should have been obliged at the end of 2019 to hand over the assets to the Home Office at NRV in a well-functioning market. This is a question about the provisions in the original contract and what they would have meant in practice, not a competition question.
6.83	The key insight, it appears to us, from the quoted section of the Byatt Report is that assets should be valued at the level at which they would be traded in the absence of the existence of market power for any party which controls those assets. We note that this would be the fair market value of the assets employed by the Airwave Network in their state as of the end of 2019, ie their scrap value. The use of (an undepreciated) MEA as the benchmark in this case would seem to us to allow Motorola to capitalise on its incumbent position as owner of Airwave Solutions	There is no market power for the party who controls the assets if competition for the market is possible, as is the case here. If Motorola had to compete for a renewed contract at the end of the PFI period having retained asset ownership, we would be exactly in the free entry situation described by Byatt, and the pricing would have been determined by what a competitor would have to do replicate the assets. It would not be the scrap value if we look at

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	to realise a windfall gain on the value of its assets (the windfall being the difference between the scrap value of the assets which it would have recovered in the absence of the contract extension and their replacement value). As set out above, we are minded to regard the approach set out in the Byatt Report as more appropriate given the circumstances of this case.	competition for an extension as the assets would have economic value in this case. The gain that arises from the difference between the value of the assets in their continued use and their scrap value would have accrued to Motorola, but that would be the case under the Byatt formula as well. The CMA's analysis of how to read the Byatt Report makes no sense.
6.85 c	Third, it is likely that a large amount of capex spent in the final years of the PFI Agreement period was actually with a view to ensuring the longevity of the network for the extension period, and therefore it would not have been written off by the end of 2019 because it was expected to be 'paid for' via revenues collected during the 2020 to 2026 period.	As there was a continued need to provide services on an as-needed basis, this investment is entirely appropriate and would contribute to 'fair market value' in a proper application of the asset transfer provisions.
6.86	Our provisional conclusion therefore is that in a well-functioning market, the value to the business of Airwave Solutions' assets would reflect their net realisable value (NRV) rather than their (new) replacement cost. The NRV reflects the value to Airwave Solutions of the assets in the absence of the market power which it may derive from its position as incumbent supplier of the Airwave Network to the emergency services in Great Britain. As set out in Appendix I, the NRV of the Airwave Network as estimated by Motorola was £[✂] million	This provisional conclusion is irrational since this is not the value that would have been attributed to the assets in any tender for re-procurement. In any case, investments that have been made after 2016 in view of the continued need for the Airwave services would have to be included in the asset value, as is done in the sensitivity and the calculation of the opening value of the RAB (albeit from the wrong starting level). Moreover, the opening asset value in the CMA's profitability analysis is obtained by subtracting net current liabilities (see the details in Appendix G), arriving at a negative opening asset value, i.e. the post-2020 incarnation of Airwave would have had to be

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		paid by its pre-2020 incarnation in order to run the service. This is absurd.
6.87	We note that the analysis we carried out in Appendix I, using the purchase price of Airwave Solutions in 2016 as a proxy for the VTB of the business' assets as of that date, indicates that Motorola had recovered the large majority of its investment in Airwave Solutions (plus a reasonable return) by the end of 2019 (a shortfall of c.£[✂] million to £[✂] million) and had more than recovered its investment plus a reasonable return by the end of 2020. We note that this is consistent with a minimal asset value as of the end of 2019.	The analysis in Appendix I uses adjusted cash flows after (unspecified) CMA corrections rather than the actual cash flows obtained by the business (there is no explanation for the cash flow numbers used in Table I-2) and assumes an estimate of WACC rather than the hurdle rate that Motorola would have applied. In other words, if the CMA uses the wrong calculations, it should not be surprised to see the wrong outcomes. Of course, the CMA completely ignores (again) the information about probability-weighted IRRs provided by Motorola. A rational assessment would ask why, if the business offered almost full pay-back over the shortest period for which it could operate and a return in excess of WACC with only one additional year, there was not more interest in acquiring Airwave from Macquarie. The CMA's position on this is hopeless as it is completely divorced from both business reality and financial logic.
6.88	We also note that, even if it were appropriate to adopt the replacement cost approach, the most reliable approach in our provisional view would be to use the replacement cost of the existing assets in their current condition, ie the depreciated replacement cost (DRC) together with existing opex and capex forecasts, since this most closely reflects the performance of the existing Airwave Solutions business, ie the actual timing of cash flows into and out of the business (which is essential for a meaningful IRR estimate). As set out in Appendix I, we are minded to consider that the most reliable estimate of the DRC of	Motorola has explained to the CMA why it considered that the Deloitte numbers did not provide a reliable basis for establishing MEA replacement costs and continues to consider that the Analysys Mason work, adjusted for the additional investment requirements associated with the actual Airwave network, provides the most reliable guidance as to the economic value of the assets for assessing profitability if a truncated analysis were to be undertaken (which, as noted repeatedly, Motorola considers to be entirely inappropriate).

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	the Airwave Network is approximately £[✂] million, a figure taken from the Deloitte (2016) Report prepared for Motorola on acquisition of Airwave Solutions and adjusted by us to reflect subsequent capex and depreciation of the assets.	
6.110	The documentation created at the time of the renegotiation that Motorola provided us did not, in our assessment, provide evidence of increased activity levels which would justify the higher level of charge. We gave Motorola an opportunity to make further submissions presenting any additional evidence or analysis that supported the higher level of internal charging. We received no response.	Motorola has explained the reasons for the adjustment, namely the reversal of a substantial discount given in 2014 and there was no further information that was needed. Such gratuitous comments from the CMA do not assist the market investigation process.

Appendix G – Profitability

Paragraph	CMA position	Comment
46	We provisionally agreed with the Home Office that the decommissioning costs (at least partially) had been paid for by the Home Office as part of the original PFI Agreement, and that they were factored in, even though Airwave Solutions had not paid any of these costs yet. We considered that an extension was not likely to change decommissioning costs other than by timing of cashflows and the effect of inflation. We considered that, to the extent that there were no incremental decommissioning costs associated with the extension, all the costs should be allocated to the PFI period. If there were incremental decommissioning costs associated with the extension period, these should be allocated to the extension period.	The claim that decommissioning costs would be included in the charges set in the PFI Agreement is inconsistent with the view that assets would have transferred to the Home Office or a third party at the end of the contract. The CMA should consider this point properly instead of agreeing, as it does in the majority of instances, with the Home Office.
47	We inflated the figures 2026-2029 to real terms for each of the years 2026- 2029 using an assumed inflation rate of [✂]%, then discounted to the end of 2019 which resulted in a cost, in December 2019 terms, of £[✂] million.	Certainly in the truncated model used by the CMA, it makes little sense to include the cost of decommissioning a network in 2019 which is considered to be fully functional and working in 2020. It seems that the profitability analysis of the 2000 to 2019 Airwave operation includes the cost of decommissioning a network in 2019 that would be in continued use afterwards. At the same time, there would be no decommissioning costs included for the second period even though they had to be incurred there. The CMA's reasoning makes no sense.
53	We discounted the full amount of £[✂] million redundancy costs to the end of 2019 which resulted in a cost, in December 2019 terms, of £[✂] million.	Similarly to the treatment of de-commissioning capex, there is no justification for shifting redundancy costs into 2019. There were no redundancy costs in 2019 and including redundancy costs while assuming the operation carries on 'as is' from 2020 onwards lacks any rationale.

Paragraph	CMA position	Comment
64	However, even when the possibility of the life of the Airwave Network extending beyond 2026 is taken into account, the possibility that the duration of the benefits associated with relevant capex may be limited remains an important consideration. In particular, given this context, we would expect an efficient operator in a well-functioning market to consider carefully the scope for maintaining the capabilities of the network in less costly ways. We therefore consider evidence that Motorola has submitted regarding its forecasts, and the weight we should attach to that evidence, in this context.	This is an astounding position to take in relation to a mission-critical network where availability is probably valued above the level of compensation that is reflected in potential service credits. The CMA has taken no expert advice on how Motorola's evidence is unreliable, but seems to be inviting Airwave to plan its operation on the basis of weighing cost savings against the potential penalties that have to be paid if something goes wrong.
72	In line with our comments in paragraphs 64 to 65 on factors relevant to the weight we should give different evidence provided by Motorola, we have taken the May 2021 forecast – which was developed for internal purposes in the ordinary course of business and ahead of the opening of this market investigation – as our starting point	The May 2021 forecast was also prepared without knowing in full the implications of COVID restrictions and supply chain issues on the ability to complete the planned 2021 upgrades. A proper market investigation would take due account of that.
73 and 74	We understand that to mean that Motorola treated the observation of significantly lower capex than it had forecast in 2021 as justifying an increase to the capex levels that had previously (ie in the May 2021 forecast) been estimated as required in 2022-26. … we note that evidence of actual capex for 2021 being materially lower than the level Motorola had forecast almost halfway through 2021 could also be viewed as casting doubt on the reliability of the level of capex requirement that had been forecast and raising questions over the extent to which that forecast should be viewed as having been unreasonably high. Our provisional view is that the observation of materially lower than forecast capex in 2021 should not be treated as justifying an increase in forecasts of capex in 2023 onwards to include in the profitability analysis.	The wording is very judgmental – the lower 2021 actuals are reflected in substantially higher 2022 and 2023 forecasts, with difference then becoming negligible and reversing. In fact, the capex not spent by Airwave in 2021 because of supply chain issues was shifted into 2022. This is not fully reflected in 2022 actual spend number as a substantial amount of non-discretionary investments planned for 2022 have been delayed and will need to be pushed forward into 2023 and 2024 (£[✂] million for dealing with the withdrawal of Megastream and the expiry of the 1.4 GHz licence, £[✂] million for the Firelink terminal refresh). If this deferred expenditure, that will need to be incurred over the next one or two years, had fallen into 2022, total capex would have been substantially higher than in the April

Paragraph	CMA position	Comment
		2022 forecast (around £[✄] million instead of the forecast £[✄] million in April 2022). This clearly indicates that the explanation for the 2021 underspend is valid.
84 (and preceding discussion)	The costs associated with the full IP migration option (including the £[✄] million assumed Megastream-driven base station upgrade costs) were included in a separate slide of the 4 June 2021 presentation to the Home Office, but the overall levels of cost forecast for the other options were not specified, and – notably – the forecast costs associated with using a conversion solution for base stations (which – as shown in Table G-7 – had been forecast in the internal Motorola 11 May 2021 slides prepared in the ordinary course of business as costing £[✄] million less than the upgrade approach assumed in the May 2021 forecast), was not identified. Our provisional view is that the capex forecasts to be included in the profitability analysis should be determined based on the capex assessments shown in the internal 11 May 2021 slides, and that – given the context in which they were developed (ie for presentation to the Home Office) we should not put weight on the assessments included in the 4 June 2021 presentation to the Home Office that the full IP migration option is required, and that it would cost £[✄] million to provide for remaining base station upgrades if the use of that option was identified as appropriate	The difference between the figures can be explained by the net view having been used for internal discussions and a gross view having been presented in the documents for external use. Despite having examined the difference between the ABU perspective and AWS perspective in many instances, the CMA appears not to have fully understood the nature of the different presentations on which it relies.
88 and 89	Given the above points, our provisional view is that the forecast of Megastream driven costs to be included in the profitability analysis should be £[✄] million lower than that included in the May 2021 forecasts, in line with the costs of £[✄] million identified under the third option ('Full IP transmission. Mixed Base Stations') presented in the 11 May 2021 slide shown in Figure G-2. This involves allowing for £[✄] million overall for Megastream-driven capex.	The CMA is simply wrong to remove the cost of replacing the full base station estate. A refresh of some, if not all of the base station estates will become necessary if the network needs to run beyond 2027 (as is currently envisaged) in any case.

Paragraph	CMA position	Comment
		Given this, it would be entirely reasonable to undertake the refresh sooner rather than later to reap the added benefits in relation to the Megastream replacement. It is worrying that the CMA appears to be happy to set aside operational decisions that have been made and need to be made on an ongoing basis in full view of the risks and opportunities and replace it with its own assumptions based on its understanding and interpretation of materials that have been prepared for internal decision making. More importantly, the CMA is wrong to use the "Full IP – Mixed base stations" option for the replacement of Megastream that was discussed in May 2021 but then not further pursued as the relevant base line. It was pursued to the next level with a prospective vendor but closed down after it became apparent that it would be too risky to be a viable option. Even if the CMA and the Home Office were to decide now that the risk that Airwave was not willing to take is acceptable, it would no longer be possible to implement such a solution as it requires a highly bespoke product with a design and realisation lifecycle that could not be accommodated within the remaining time (given the hard stop in November 2025).
89	Motorola told us that its forecasts provided a high-level view that gave a rough order of magnitude of investment requirements, such that some items would be missed, overlooked or simply unknown and therefore would not be taken into account. Motorola said that, given this, it was appropriate to allocate a risk budget and that the [✂] per	Motorola would re-emphasise that this approach is fully justified, contrary to what the CMA might believe. For example, the detailed 2023 bottom up capex budget plan has 2 projects where, owing to unforeseen complications, a total of approximately £[✂] million will have to be spent against a May 2021 estimate

Paragraph	CMA position	Comment
	cent provision included in its forecasts was not an unreasonable amount to allocate to projects that had yet to even be scoped.498 Motorola said that this [✂] per cent risk provision was not applied to well understood spend areas (such as more general service continuity capex) for which it had longer term trends to inform its estimations, and we note that the spreadsheet underpinning the May 2021 forecast shows the [✂] per cent risk budget as having been applied to [✂] of forecast capex from 2023-29 (around £[✂] million). As was shown in Table G-5, Motorola's [✂] per cent capex risk provision has the effect of increasing forecast capex from 2023-29 by £[✂] million (with the uplift all occurring in the period to 2026).	of £[✂] million. As such in normal planning this "new spend" would have come off the risk line (as has happened on many occasions in compiling the April RFI submission when reconciling against the May 2021 forecast).
91	While we consider it appropriate to take account of relevant uncertainties when forecasting capex, we note that Motorola's May 2021 forecast can be understood as having included all three of the above types of risk-based adjustments, and we have identified a number of factors as casting material doubt on the appropriateness of using Motorola's 'capex risk' provision for inclusion in the profitability analysis. …	The remove of a risk uplift is entirely inappropriate and the claim that the May 2021 forecast already includes all three types of risks is factually incorrect. The numbers from the May 2021 forecast do not fully capture all of the risks, as the CMA itself implicitly acknowledges given that the uplift is only applied to a portion (two thirds) of the capex forecast. It therefore properly reflects risks that are not covered in the individual capex forecasts (and cannot be covered given the time periods involved), which means that the inclusion of a buffer is entirely appropriate, not least given the requirements on the robustness and reliability of the services. Even in relation to the Megastream replacement, to which most of the explicit risk corrections apply, there are unforeseen and unforeseeable developments that require additional expenditure. There are many examples of capex requirements that become apparent only over time. For example, the replacement of copper

Paragraph	CMA position	Comment
		links will by default require connecting base stations to fibre. After the May 2021 capex forecasts had been prepared, Airwave identified a large number of base stations for which currently no fibre connection is readily available and where therefore excess construction charges will have to be incurred. As is typical, these are moderate for a large proportion of base stations, but increase sharply as the most difficult to reach base stations are included. On current estimations, it would cost around £[✂] million to connect the 120 most difficult to reach base stations to fibre. Airwave is exploring alternative options (e.g. radio links) which would reduce this cost, but whether such options are workable is entirely uncertain. This means that in the worst case scenario there will be significant capex in addition to the numbers identified in the May 2021 forecast required to deal with the retirement of copper connections. Similarly, the contract with NEC for the provision of the microwave network on which Airwave currently relies will end in 2027 and Airwave expects to have to pay substantially higher charges, not least as NEC has already stated that a full technology refresh will be required for provision of services beyond that date. Finally, the decision by BT to terminate the arrangements for the use of switch sites will have not only opex implications (as explained below), but may ultimately also require a large scale data centre migration, which in turn will require equipment

Paragraph	CMA position	Comment
		refreshes as the network needs to remain operational throughout. These risks need to be captured and this is done through the capex risk provisions. In addition, Motorola strongly rejects the CMA's attempt to cast doubt on the [✂]% risk provision by claiming that out of five Excel workbooks only one included a [✂]% uplift whilst the other four included a [✂]% uplift. The four workbooks showing a [✂]% uplift are iterations of a work undertaken to support the April 2021 presentation which were created within a period of 25 hours. It is simply misleading to portray these workbooks as separate independent instances to support the view that a [✂]% uplift is typically applied, with a [✂]% uplift only appearing in a version prepared in the course of the investigation.
97	We deducted net current liabilities of £[✂] million from our estimate of the opening asset valuation, which results in a negative opening asset value (equivalent to a cash inflow) of £[✂] million in our base case. In the scenario in which the NRV of the network's assets is £[✂] million, this results in an opening asset value (equivalent to a cash outflow) of £[✂] million.	This essentially implies that Airwave would have had to pay £[✂] million to have the Home Office take over the assets. While it would be appropriate in a normal acquisition context to consider working capital as part of the purchase price and the liability will need to be assumed by the new owner, the purchase price also includes consideration of the value the assets taken over can generate and value it accordingly. There is no justification for combining a 'scrap' value of £[✂] million with a take-over of net current liabilities that are linked to the continued operation.

Paragraph	CMA position	Comment
114	There were three adjustments we needed to make to the closing asset valuation. First, we deducted net current liabilities of £[✂] million. Second, we deducted decommissioning costs of £[✂] million which are costs necessary to decommission the Airwave Network once customers have switched to ESN. Third, we deducted redundancy costs of £[✂] million. We discuss decommissioning and redundancy costs from paragraph 38.	See above – there was no de-commissioning or redundancy in 2019, these costs are incurred when the network is actually shut down. The CMA simply moves these costs into the PFI period and takes them out of the second period, for which there is no justification.

Appendix J – Cost of Capital

By way of a general comment, Motorola wishes to re-iterate that the use of WACC rather than a hurdle rate is entirely inappropriate for assessing returns on a specific project such as Airwave. It is not uncommon for returns promised by the public sector for large infrastructure projects to lie in the range of 10 to 20%[3], i.e. far in excess of the WACC that prospective bidders for such projects might face. It would be ludicrous to claim that such projects, if they achieve a return that is close to the return that has been promised, could be classified ex post as having yielded excess profits. Yet this is precisely the claim made in respect of Airwave, which did not achieve the IRR that parties considered appropriate when entering into the PFI Agreement.

Paragraph	CMA position	Comment
5	However, regardless of the appropriateness of such an uplift in the historical period, it is our provisional view that no such uplift should be applied to the extension period since all the initial uncertainties and risks associated with the Airwave project, which might have merited such an uplift, had long been resolved	This completely ignores revenue uncertain in combination with significant investments required post 2019. Under the terms agreed for the continued provision, Airwave would not have been able to recover its investments by asking for compensation for unrecovered capex at the point at which the network would be switched off (unlike the CMA envisages under its charge control) and there was less certainty over the required period than there is now, after the National Shutdown Notice has been served. There is also uncertainty over what specific investments are needed to keep the network operational in the face of technological obsolescence and the withdrawal of third party products. Airwave cannot be treated like a utility with a

[3] See the HM Treasury and UK Trade & Investment Pitchbook, 'Investing in UK Infrastructure', <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/357135/infrastructure_pitchbook_28072014.pdf>.
Even infrastructure funds investing in a broader portfolio of projects have IRR targets of 12% to 14%, with portfolios typically perform at or above that target (see Deloitte publication, 'Where next on the road ahead? Deloitte Infrastructure Investors Survey 2013', <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Financial-Services/gx-fsi-uk-icp-infrastructure-investors-survey-2013-11.pdf>).

Paragraph	CMA position	Comment
		guaranteed revenue stream over the lifetime of the assets in a known technological environment.
Table J-1 and paragraphs 8 to 12		The calculations appear to apply tax to the real cost of equity rather than the nominal cost of equity. As tax is paid on nominal profits, there is no justification for this.
16	We are analysing the profitability of the Airwave Network over the period between 2001 and 2026,…	This is misleading. Despite having initially announced that it would assess the profitability of the Airwave network over the full period, the CMA does not analyse the full period, but rather artificially splits the period into two separate periods (2000 to 2019 and 2020 to 2026).
17	We note that there is some uncertainty regarding the "end date" of the analysis as the Home Office has the right to require an extension of the life of the Airwave Network by providing appropriate notice to Motorola.	Whilst the CMA notes this uncertainty, it is only concerned about the uncertain end date in relation to the complications this creates in forecasting the relevant parameters, completely ignoring the risks that this uncertainty creates for the Airwave business.
43	We consider, therefore, that it is reasonable to have reference to gilts with maturities of at least 7 years – since the network will not be shut down before the end of 2026. While we do not seek to make predictions regarding the actual useful life of the network, we have considered gilts with maturities of between 7 and 15 years. As of late 2019/early 2020, such gilts had yields of between -2.3% and -2.6%.	This is another instance of the CMA making assumptions based on hindsight ("the network will not be shut down before the end of 2026") that do not at all reflect the uncertainty to which Airwave was exposed.
58	We set out our preliminary view that most weight should be placed on the UK utilities as comparators due to the following similarities with the Airwave Network: (a) First, they are largely natural monopoly / network businesses with the accompanying barriers to entry and therefore faced limited or no competition;	This comparison is deeply flawed. Airwave is not a natural monopoly – there has been and there can be competition for the market, unlike in the case of the typical utility. If the CMA's approach were right, any long-term contract would turn a supplier into a utility (there is no competition during the

Paragraph	CMA position	Comment
	(b) Second, they benefit from revenues which are inflation-indexed, with limited exposure to changes in customer demand across the economic cycle due to the essential nature of the products/services they provide; and (c) Third, the main risk faced by these businesses is managing costs in developing and operating their networks over time and ensuring that certain levels of service are maintained (in order to avoid penalties).	term of the contract, revenues are contracted, and the supplier needs to meet its obligations). Utilities do not have a finite life of uncertain duration and do not make investments they may not be able to earn back because the service terminates (this is something that the CMA implicitly acknowledges when it sets up the price control remedy). Utilities also do not face revenue uncertainty in terms of the duration of the period over which revenues can be earned. Lastly, the CMA underestimates the risks associated with having to maintain an ageing network without being able to gradually go through a complete refresh owing to the finite life of the contract. It is worth noting that the UK Government itself considers the risk of public contract/concession contracts for service such as PPP social infrastructure projects to be above the risk associated with electricity, gas and water transmission and distribution networks, even ignoring the specific technology risks surrounding the maintenance of an ageing but mission-critical network.[4]
61	The Deloitte Report, which Motorola submitted we should place weight on, included a large number of additional companies with a greater focus on technology firms. Motorola did not put forward, and the Deloitte Report did not contain, any reasoning to support the inclusion of these firms.	This is incorrect; Motorola did put forward the reason for inclusion of these firms. As stated in the comments to the Cost of Capital putback text dated 22 July 2022, the first thirteen companies listed are filed as MSI comparator group companies in

[4] See the HM Treasury and UK Trade & Investment Pitchbook, 'Investing in Infrastructure', <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/357135/infrastructure_pitchbook_28072014.pdf>.

Paragraph	CMA position	Comment
		Motorola's 2015 public proxy filing.[5] The last three companies – BT, Airbus and Vodafone – were included to provide a more direct/regional comparator for Airwave.
67	As discussed in paragraph 29 …	It is unclear to which paragraph the CMA wishes to refer, but paragraph 29 does not contain any discussion in relation to the weight that ought to be placed on utility comparators.
77	The key theoretical premise of the CAPM is that investors are able to diversify their risk and therefore only require an additional return to the extent that the returns expected from investing in a given business are correlated with those of the broader market, ie systematic risk. (This is accounted for via beta, as discussed above.) They do not require compensation for company- specific risks since these can be diversified away.	This is precisely why WACC is not a suitable metric for assessing specific projects, as Motorola has repeatedly pointed out.
78	We observe that the Goldman Sachs report undertook a valuation of Airwave Solutions which adopted this approach, ie considered different potential periods over which cash flows would be received and the probability of each of those being realised. We provisionally consider that this is the methodologically correct way to adjust for such uncertainties over cash flows.	While Goldman Sachs have undertaken a probability-weighted analysis, the CMA has not. There is no reflection of the uncertainty over revenues in the CMA's profitability assessment, nor any attempt to calculate a probability-weighted NPV. The CMA analysis proceeds as if the continued operation of Airwave to 2026 and beyond would have been a certainty when the terms for the service provision were agreed in 2016.
87 b	The PFI model and therefore the "hurdle rate" that it contained only related to the initial investment in the network to provide services to the police forces. It did not cover subsequent investments to provide additional resilience to the police forces, or to provide services to the ambulance or fire and rescue services, or to any other sharer	The CMA ignores that there was a substantial degree of uncertainty over the scope for signing up additional sharers, which BT considered to be critical for overall profitability. This was a potential upside where Airwave took the risk and would also be entitled to the compensation. The fact that sharers would

[5] 2015 Annual Meeting of Stockholders and Proxy Statement dated 31 March 2015
<https://www.sec.gov/Archives/edgar/data/0000068505/000119312515112953/d855818ddef14a.htm>

Paragraph	CMA position	Comment
	organisations. We observe that the risks of extending an existing network to provide such services, including an extension to the originally-agreed lifetime of the network, are significantly lower once the original network had been developed. Therefore, we provisionally find that these activities would be more appropriately remunerated at the standard WACC of the business.	provide a higher overall return, which should be protected was also reflected in the additional 2.5 percentage points on top of the IRR specified in the financial model to which Airwave would be entitled if it lost sharer business as a result of the termination of the main contract.
88	In summary, our current view is that it is unclear whether or not a hurdle rate should be used as the benchmark against which to assess the profitability of Airwave Solutions over the 2001 to 2019 period. Given that we are not focussing on this period for the purposes of our analysis, we do not consider that we need to come to a firm view on this point. However, our provisional conclusion is that it is not appropriate to apply a hurdle rate to any “extensions” to the original network, either in terms of extending services to additional customers, or extending the original life of the network. Once the Airwave Network had been rolled out and was functioning effectively, meeting the needs of the original customers (ie police services), it is clear that the risks of failure were substantially mitigated. Therefore, we provisionally find that the appropriate benchmark for our assessment of profitability between 2020 and 2026 is the WACC, as set out in Table J-6 above, ie 4.3% to 6.8%, with a mid-point of 5.5%.	As noted above, the CMA has not captured the uncertainty over revenue streams at all and simply ignores the risks taken on by Airwave when it committed to operate the Airwave network at the required service levels until it was no longer needed by the Home Office, at which point it would be turned off and decommissioned.

Appendix K – Charge Control

Paragraph	CMA position	Comment
13	For a charge control remedy to mitigate detrimental effects on customers resulting from the AEC as comprehensively as is reasonable and practicable, we consider that it should be applied to all those services where the supplier is likely to be able to price above competitive levels and thereby able to earn supernormal profits. Proportionality requires that it should not apply more broadly than is required to address the detrimental effects of the AEC, ie to any products or services where there (already) exists a reasonably effective competitive constraint.	The charge control will apply to all of Airwave services with the exception of Ambulance Bundle 2, Pronto, CCCRS, radio terminals and the new interworking solution. There has not been any assessment of the way in which contracts with sharers, for example, have been negotiated and how this is linked to the alleged competition failure.
17	However, we are inviting further views on the extent to which relevant CCCRS services can be procured from other parties such that users can switch to alternative providers over time. We will consider this matter further and will take the additional information we gather on competition in relation to CCCRS services into account when forming our final view.	In Motorola's view, it does not make any sense to include CCCRS services given that this is a software business where each contract is vigorously competed for and where Airwave is not in a leading market position.
24	Our provisional view is that the financial implications for Airwave Solutions of performance levels that fall short of those that are contractually defined should not be lessened by the introduction of a charge control. In line with this, our provisional view is that the service credits to be applied when Airwave Solutions' performance falls short of contractually defined target levels should continue to be set at levels equivalent to those that would have applied were the proposed charge control not to be introduced.	In this paragraph, the CMA is effectively acknowledging that at the prevailing terms for service credits in combination with the prices permitted under the charge control, Airwave would have an insufficient incentive to meet the agreed service levels. This in itself is clear evidence of the draconian and entirely disproportionate nature of the proposed charge control. On a purely practical level, it is difficult to imagine how service credits could be calculated on the basis of revenue/billing figures that no longer exist. By retaining the existing service credits at their absolute level, the CMA effectively rewrites another set of

Paragraph	CMA position	Comment
		contract terms, doubling the share of revenues that are at risk in the form of service credits for failure to meet performance targets.
30	In our Potential Remedies working paper, we said that the case for adopting a charge cap approach is likely to be heavily dependent on the extent to which a reliable view of future expenditure requirements can be formed when the level of the charge cap is being determined. We set out our 'current thinking' at the time that – given the challenges associated with assessing potential capex requirements – a charge cap would be unlikely to provide a reliable approach, in particular because there may be a significant risk that charges would be set at too high a level, and potentially on the basis of capex assumptions that exceeded those one might expect to observe in a well-functioning market, and exceeded the levels of capex that were ultimately undertaken. We said we considered there to be a significant asymmetry of information in terms of the assessment of likely future capex requirements, with this heavily dependent on the current state of the network, and available options to address reliability risks.	The CMA systematically ignores that the risks are two-sided: there is a risk that future expenditure estimates are overestimated and therefore charges would be too high, but also there is a risk that they are underestimated thus putting service provision at risk. This is not something that the CMA appears to have considered, in particular not in relation to the adjustments that it is making to key inputs, all of which are motivated by concerns about avoiding charges that are too high. This one-sided approach of ignoring the risks of setting an overly tight cap is of extreme concern and does not reflect the view that an objective regulator balancing the risks of over- and under- estimating costs would take. The blanket reference to what one might expect in a well-functioning market does not provide any justification for the CMA simply proceeding on the basis of what it believes the Airwave price ought to be, replacing proper analysis with its preconceived outcomes.
31	We noted, however, that the adoption of a 'cost of service' approach would raise other risks of adverse outcomes arising, including because: Such an approach can result in inefficient levels of cost being passed through into charges, including as a result of potential incentives for 'gold plating': that is, the undertaking of unnecessarily extensive capex enhancements in order to allow a return to be earned on a larger asset base.	Despite drawing a distinction, the CMA appears to be driven by the same concern under a cost-of-service and a charge cap, namely that Motorola may overstate capex requirements and use transfer pricing to inflate Airwave's cost. There is no justification for this. The main difference is that under a cost-of-service approach, Airwave would be protected from higher than

Paragraph	CMA position	Comment
	The extent to which Airwave Solutions sources inputs from Motorola, raises the concern that levels of reported cost (that may be passed through into charges) may be heavily affected by the transfer charging practices that are applied.	expected capital expenditure. This consideration appears to be entirely absent from the CMA's discussion.
33	It is common for charge controls to provide some degree of flexibility such that actual charge levels can deviate from the levels that would be implied by their mechanistic application. This flexibility is typically provided through the use of charge caps, or limits, such that companies retain flexibility to set charges that are below the level of the relevant cap.	The typical reason for using price caps is that they give the regulated firms some flexibility about the structure of charges. Unless we are talking about relatively generous safeguard caps, there is hardly ever an expectation that regulated firms would remain materially below the permitted charge levels. The proposed charge cap is not only prescriptive in terms of the revenues that Airwave will be permitted to earn, but also in relation to how the structure of charges will be set, with the reduction basically falling on core service charges only.
46 in combination with footnote 762	As set out in paragraphs 59 to 60 below, our provisional view is that requirements related to Airwave Solutions' information provision on the evolution of its capex programme should be introduced as part of the proposed charge control. However, this would not introduce a new requirement for Home Office approval of changes to capex plans. That is, the introduction of requirements on Airwave Solutions to make the Home Office, Airwave Network users, and the CMA aware of material changes to capex plans, to explain the basis for those changes and their likely impacts, and to respond to queries that may be raised, would not imply that key operational decisions were being taken out of the hands of Airwave Solutions and put in the hand of the Home Office. Rather, we consider that such requirements would reflect the relevance of understanding how and why material changes to capex plans were being made to the assessment of risks in future years associated with	Even if individual capex decisions do not depend on Home Office approval, the proposed approach exposes Airwave to considerable risks and creates substantial additional reporting burdens. Many of the investments that are needed to maintain service quality may be difficult to predict and the nature of the service requires pre-emptive actions. Airwave would have to make these decisions and incur these costs 'on trust' of being able to recover them, which will then be down to the CMA and the Home Office's assessment. For obvious reasons related to the way in which the CMA has proceeded so far, Airwave could not have any great confidence in such an assessment being conducted objectively and properly. The CMA's assessment of Motorola's decision on how to replace Megastream is a case in point – the CMA appears to know better than Airwave what the

Paragraph	CMA position	Comment
	service quality (given potential implications for network condition) and charge levels (if likely future investment needs were affected). As we highlight further below, this latter point may be highly relevant to any future review of the proposed charge control that may be undertaken.	right solution is, ignoring the risks that have been considered and have determined Airwave's choice of solution. Airwave would have serious concerns about doing what might be necessary to mitigate risks if it had to expect that the CMA or the Home Office would ex post, after the downsides had not materialised, and would disallow expenditure which it considered to be unreasonable. In addition, Motorola would like to note that the Home Office and its main users already receive regular, periodic updates on Airwave's capex plans and the status of those projects.
48 to 50	Our provisional view is that the inclusion of a charge control review in 2026 provides an appropriate means of taking account of the risks associated with such changes. As set out in paragraphs 94 and 96, our provisional view is that the charge control should set revenue allowances – and associated provisions for capex – through to 2029, but be subject to review in 2026. The 2026 review would assess whether relevant changes in circumstances were such as to justify changes to the charge control, but that question could be assessed in a context where the default would be that the control remained unchanged. Given this, as part of the review process, Airwave Solutions would be able to seek an adjustment to its revenue allowances where an exogenous change in circumstances had given rise to substantial additional capex requirements (relative to the overall level assumed within the charge control)…	This still exposes Airwave to the risk that capex it considers to be necessary to maintain the network will not be included in allowable revenue. In any case, it is unclear how this would happen, as "the detailed assessment of such a request would be a matter for the proposed 2026 review…" The claim that the capex allowance has been based "largely on Motorola's own assessment of capex requirements" rings hollow given that the capex allowance is substantially below Motorola's forecast over the period (£228 million over the period 2023 to 2029 instead of £[✂] million, i.e. [✂]% lower). In addition, the CMA completely ignores that opex forecasts are also subject to uncertainty. As submitted by Motorola and acknowledged by the CMA in paragraph 36 of Appendix K (but subsequently ignored), [✂].

Paragraph	CMA position	Comment
		[✂] BT [✂] is now proposing to raise rents [✂]. Again, this is only one example of the many risks facing Airwave in maintaining the service that has materialised. In any case, the process of cataloguing all changes from expected opex and capex forecasts on 2021 data, collecting evidence to demonstrate that Airwave has been trying to mitigate the costs to a hostile Home Office and a hostile CMA and seeking to review this in 2026 will require significant effort.
51 and following	Rejection of a cost of service approach because of risk that this would reimburse inefficient investment	Under the proposed charge cap, there is a risk that efficient investment could not be recovered. There is scrutiny of Airwave's cost for calibration and again in 2026 when the review process is undertaken, and the risk of forecasts that turn out to be too conservative lies entirely with Airwave. Given the adjustments the CMA has made (and will presumably be planning to make in the Final Decision) to Airwave's forecasts, this risk is material. Underpinning the discussion of the various approaches is also the assumption that Motorola-sourced inputs are overpriced, generating margins for Motorola that might distort incentives. The CMA has found no confirmation for this.
55 and following	To address the risk of poor asset stewardship, the CMA imposes stringent reporting requirements: In line with this, our provisional view is that the charge control should include requirements on Airwave Solutions to provide information to	These information requirements are entirely disproportionate and they do nothing to deal with the problem that actual expenditure may need to be significantly higher than forecast expenditure. Moreover, given that the allowable revenues include a capex allowance and the CMA points out that under the proposed measure Airwave's contractual obligations to 'get it done, no

Paragraph	CMA position	Comment
	the Home Office, Airwave Network users and the CMA in a clear and timely manner on: (a) Material changes to its capex plans: Airwave Solutions should explain why those changes have been considered appropriate and it should set out its assessment of what effects those changes may have on future service provision risks and cost requirements. (b) Material deviations between actual capex levels and: (a) those that were included its capex plans; and (b) those that have been specified within the charge control arrangements. This should include deviations between actual and forecast levels of capex that is Motorola- sourced, and that is on external (ie non-Motorola sourced) equipment. Airwave Solutions should explain the factors that have given rise to these deviations (including the extent to which they relate to price levels being different to those that had been assumed in capex plans, and associated cost forecasts), and should set out its assessment of the implications the deviations may have on future service provision risks and cost requirements. To support these information provision requirements, we consider that an obligation should be placed on Motorola to respond in full, and in a clear and timely manner, to Home Office, Airwave Network user and CMA queries and requests for further clarification and substantiation with respect to the information provided under (a) and (b).	matter the cost' do not change, there is no justification for requiring Airwave to provide detailed information about any changes to the capital expenditure programme that it considers necessary on an ongoing basis. This is just adding a layer of oversight that might be warranted under a cost of service approach to a charge cap approach without any clear reason as to how this would address the underlying problem. If a charge cap raises concerns about the incentives it creates for the business to deliver, it is by definition set at too low a level.
61 and following	The CMA has expressed concerns about transfer prices for Motorola-sourced capex spend being too high, but there is no firm evidence of	Motorola questions the justification for limiting the cost sharing mechanism (which in itself is problematic) to third party source

Paragraph	CMA position	Comment
	conclusion that this is the case. Therefore cost sharing mechanism is limited to third party sourced capex.	capex not having found firm evidence for transfer charges being inflated. The discussion in paragraph 66 supposes that Motorola could substitute third-party equipment for its own if it can recover overspend on third party capex. In reality, there is very limited possibility for such substitution. Paragraph 67 then states that "with Airwave Solutions bearing 75 per cent of third-party capex overspend, Motorola would only be expected to be better off from substituting third-party for internally sourced capex if its incremental costs of providing that capex were equal to more than 75 per cent of the total cost of the third-party supplier. In line with our provisional assessment of transfer charges, we note that the 'net cost' of Motorola-sourced capex identified by Motorola is well below 75 per cent of the overall level of Motorola-sourced capex Motorola has identified as appropriate." If this is the reason for loading 75% of the burden of overspend on Airwave, one would expect the CMA to provide evidence for the substitution possibilities the exploitation of which the proposed loading is supposed to address. No such evidence has been provided.
77 to 79	Motorola also identified police menu services and (existing) interworking services – which, in 2020, together accounted for a further [✂]% of overall relevant revenue – as not related to volume. …	This depends on what one considers to be 'volume' – menu service revenues would seem to depend on the usage of menu services, not on how intensely they are used, but the volume of

Paragraph	CMA position	Comment
	However, Motorola identified revenue associated with the Police Traffic Unit, the Amber Light Contracts and Catalogue/Growth sales (which together accounted for around [✂]% relevant revenue in 2020) as being affected by relevant volumes. Our provisional view is that charge caps should be applied to each of the services provided in these areas (ie services under the Police Traffic Unit, the Amber Light Contracts and Catalogue/Growth sales) based on our provisional assessment of the overall level of revenue that Airwave Solutions should be allowed to recover in relation to services covered by the charge control, and evidence on the forecast volume of those services over the charge control period.	menu services used and consequently the associated revenues may vary. This is the same for catalogue sales. This is important as the extent to which menu and catalogue services are used has no impact on the allowable revenue under the proposed control – the more menu services are being used, the lower the core charges must be to comply with the cap. If variable revenues/costs are entirely captured in the [✂]%, that is fine, but otherwise not. The fact that after the publication of its Provisional Decision, the CMA issued an RFI which appears to have been aimed at understanding the variation in volumes for these types of services suggests that the CMA has made a very detailed charge control proposal in its Provisional Decision without a full understanding of how revenues may vary. In any case the proposed mechanism, as set out later, does not obviously have separate charge caps as there is a single number for allowable revenue and the reduction in revenue would have to come from reduced charges for core services only (other than in relation to the reductions over time that run in line with the overall changes in allowable revenues).
81	Our provisional view is that the initial reduction in revenue that would result from the introduction of the charge control should be applied to core services only (which, as was noted above, in 2020, accounted for almost three quarters of overall revenue from services that would be covered by the proposed charge control). We note that this approach would avoid the adjustment of charge levels that might influence decisions concerning the volumes of different network services that are	This acknowledges that volumes of services could change (in this particular case in response to price changes). While demand for different types of services is perhaps not particularly price-elastic, as it tends to be driven by the underlying needs, it is inconsistent with the view that at least [✂]% of revenues are entirely unaffected by volumes.

Paragraph	CMA position	Comment
	used, and thus avoid the scope for unintended consequences to arise as a result of such an influence.	Moreover, it could give rise to complaints about discriminatory treatment of sharers and users who rely to a larger extent on menu and catalogue services.
91 b	… our charge control remedy would address consumer detriment resulting from the AEC we have provisionally found to arise from Airwave Solutions' unilateral market power, but it would not address the provisional AEC at source. Such an outcome would only be realised when the supply of communications network services for public safety is subject to competitive pricing arrangements. As set out in section 8, this could be brought about in a number of ways, eg: a new network offering enhanced functionality replacing the Airwave Network such as ESN; or a competitive process that may result in changes to the ownership and operation of the Airwave Network and / or its assets taking place.	In Motorola's view the CMA should have investigated how "such an outcome" can be realised, once the PFI Agreement expires in 2026. This would require the CMA to assess when (if ever) ESN will be fully operational and Airwave switched off. If this cannot be expected to be the case by 2026, the alternatives would need to be pursued as soon as possible. Any uncertainty about ESN does not justify the CMA seeking to impose a regulatory apparatus, since alternatives to price regulation after 1 January 2027 clearly do exist.
91 c	the Home Office, as the key customer of the Airwave Network and the Government Department responsible for procuring the replacement network, should by 2029 be in a position to address the AEC we have provisionally identified at source (for example, by ensuring that an alternative communications network is put in place), or to safeguard against the risk of anti-competitive outcomes resulting from a continuing monopoly position in the provision of all or part of the Airwave Network by taking other measures available to it (for example, putting in place a regulatory function).	There is no justification for the 2029 date. With the current contract expected to end in 2026 (as a result of the Home Office having served a National Shutdown Notice), any concern about the terms on which the Airwave service will be provided after this date (should this be required) should be addressed by competition for the market to work. There is certainly no justification for providing for the option of having a continued regulatory arrangement governing the period after 2029 in a market that has been and can be competed for.
95	We considered whether it would be appropriate to extend the charge control beyond 2029 given the potential for further delays to ESN. However, our provisional conclusion is that such an extended charge control would not be an effective and proportionate remedy because	Again, Motorola queries why the 2029 date is proportionate. The CMA does not appear to have established (or if it has, it has not provided any indication) that the Home Office could not act

Paragraph	CMA position	Comment
	we consider that the Home Office is well placed to ensure that an alternative communication network for the emergency services is introduced by the end of 2029 (which would address Airwave's market power at source), or to safeguard against the risk of anti-competitive outcomes arising by taking other measures available to it. As set out in section 8, we propose to make a recommendation to the Home Office that it should, as soon as possible, implement a plan to ensure that the supply of communications network services for public safety is subject to competitive pricing arrangements, or measures to similar effect, by not later than the end of 2029.	sooner. It is also unclear what the CMA considers to be the "other measures available to it". In Motorola's view, the Home Office should respect the PFI Agreement it has signed, and the CMA should not undermine the incentives the Home Office has to ensure it has the right solution in place by 1 January 2027. There is simply no justification for the CMA's proposal to decide now to regulate until 2029.
101	The Home Office said it considered decommissioning costs to have already been paid for (as decommissioning was expected to be required at the end of the original PFI Agreement), unless Motorola provided evidence showing that the estimate had increased because of the extension of the agreement.	As noted above, this is inconsistent with the view that asset ownership should change to the Home Office. In any case, these charges have not been incurred and the idea of such costs already having been paid for through the charges up to 2019 is a mere fiction.
105	We have taken evidence of Airwave Solutions' outturn costs, and Motorola's own forecasts of relevant costs over time, as our starting point, and made adjustments to Motorola's views of relevant costs only where we consider there to be a strong case for doing so on the balance of available evidence.	This is just an assertion – the adjustments made by the CMA are not sufficiently supported by evidence. There is certainly no "strong case" for making these adjustments other than the CMA's view that Airwave has artificially inflated costs.
106	With respect to Motorola's comment that necessary investments in the network could be put at risk if a charge control were set too tightly, we note that Airwave Solutions would continue to be subject to service standard requirements after the proposed charge control was introduced, and that it would be for Motorola to determine how those service standard requirements were to be met, and at what cost. Nevertheless, as was set out above, we consider Motorola's comments to be consistent with the Home Office's concern with respect to asset	In Motorola's view, this statement is a strong indication of the of the proposed charge control amounting to an expropriation. The CMA is essentially saying that investments cannot be at risk because Airwave would be required to perform regardless of whether the investments required can be recouped, i.e. Airwave is to be required to incur costs for which it is not entitled to be compensated. This is quite an astonishing position to take.

Paragraph	CMA position	Comment
	stewardship risks. We set out our provisional views on how those risks should be addressed in paragraphs 55 to 60.	Concerns about asset stewardship are supposedly addressed through extensive reporting requirements. This is not correct as no amount of additional reporting can address the problem that no firm should be required to make loss-making investments. If concerns about poor asset stewardship exist, they are indicative of the cap being too tight.
111	We note the Home Office's submission that as decommissioning was expected to be required at the end of the original PFI Agreement, decommissioning costs should be treated as having already been paid for unless Motorola was to provide evidence showing that the estimate had increased because of the extension of the agreement. In line with the approach we adopted in our profitability analysis, our provisional view is that the proposed charge control should not provide an allowance for decommissioning (or associated redundancy) costs other than to the extent that Motorola can demonstrate that there are incremental decommissioning (or associated redundancy) costs related to the extension of the period over which the Airwave Network is operational beyond the end of 2019.	The sole evidence for disregarding decommissioning costs is apparently the Home Office's <u>claim that</u> it had already paid for these costs. This is plainly not a proper justification.
120	We note that under the PFI Agreement, revenues increased in line with RPI. However, RPI lost its status as a National Statistic in 2013. The Office of National Statistics (ONS) considers it a very poor measure of general inflation and discourages its use. Our provisional view is that opex allowances under the charge control should be linked to movements in CPIH, which is now the ONS's lead measure of consumer price inflation.	The replacement of the lead inflation indicator by the Office for National Statistics is no justification for rewriting yet another contractual term. A number of Airwave's supplier contracts follow the same RPI inflation clause and therefore the charges due under these contracts will continue to increase with RPI, regardless of what the CMA considers to be the more appropriate measure of inflation.

Paragraph	CMA position	Comment
121 and 122	We note that recent energy price movements have been significantly greater than movements in CPIH, and Motorola's forecasts take this into account by making two specific uplifts of around 25% to 2021 energy costs to reflect price increases to 2022 and 2023, and use a 2% annual inflation assumption after that. Under this approach, the allowance for energy costs in 2023 would be £[✂]m, £[✂]m higher than the figure identified for 2021 (c£[✂] million). However, our provisional view is that a specific adjustment of this kind to reflect energy cost pressures should not be included in the proposed charge control. In forming this provisional view, we have taken account of the fact that increases in energy costs are already taken into account by CPIH, and that energy cost increases have been the largest upward contributors to recent annual CPIH inflation rate	This would require that the share of energy costs in Airwave's opex is roughly the same as the share in the CPIH basket. The CMA has not provided any evidence for this. Motorola's analysis indicates that the total costs of sites, which includes rent, rates, and power, accounts for about [✂]% of Airwave's opex (excluding depreciation), compared with a [✂]% weight of housing, water, electricity, gas and other fuels in the CPIH basket, indicating that the impact of rising energy prices on Airwave would be larger than captured in the CPIH.
123	Our provisional view is that scope for ongoing efficiency improvements of 1% per year should be assumed when setting allowances to reflect the potential for productivity improvements to be achieved over time	There is no justification for simply assuming an efficiency gain year on year.
133	Motorola's assessment of actual capex in 2021 (£45 million) was £28 million (around 38 per cent) lower than the level included in the May 2021 forecast. Motorola said that this difference resulted from supply chain shortages of spares it had encountered in 2021, and that it had reprofiled the number of base stations to be upgraded in the years 2022-26 to take account of this. We understand that to mean that Motorola treated the observation of significantly lower capex than it had forecast in 2021 as justifying an increase to the capex levels that had previously (ie in the May 2021 forecast) been estimated as required in 2022-26.	It is difficult to conceive a more judgmental statement that sets aside proper reason without any justification than the claim that Motorola "treated the observation of significantly lower capex … as a justification" for reprofiling its capex forecasts. The investments required to maintain the network are not discretionary and, regardless of the CMA's view, need to be undertaken at a later point if they could not have been carried out in 2021. Motorola has provided information on the impact of 2021 underspend on actual 2022 spend above.

Paragraph	CMA position	Comment
134	we note that evidence on actual capex in 2022 would be reflected in charge control allowances (given our provisional view set out in paragraph 152, on how the opening RAB value should be determined). As a result, Motorola's reprofiling of capex that had been forecast to take place in 2021 would be taken into account in the proposed charge control to the extent that it was reflected in actual 2022 capex levels.	This would only be the case to the extent that all the work that could not be undertaken in 2021 was undertaken in 2022 in addition to the work that was meant to be undertaken in 2022. It does not account for any further delay or knock-on effects. As Motorola has explained above, some of the planned investment for 2022 has been pushed back so that the 2022 actual figure represents some, but not all the delayed 2021 capex.
142	No indexation provisions should be applied to capex allowances. We have understood that Motorola's capex forecasts – as with its opex forecasts – represent its assessment of relevant outturn costs. We note that Motorola told us (in relation to the April 2022 forecast) that its submission represented its current view of capex requirements and assumed no cost increases. Motorola said that global supply chain issues were driving increases in input costs, and that to the extent these cost increases persist, they would inevitably result in higher capex than it had forecast based on cost increases experience in the last ten years. While we recognise that there are factors which could – depending on how they evolve – tend to put upward pressure on capex requirements, there are also factors (including associated with technological improvements) which may put material downward pressure on capex requirements over time. In line with this, we have not included indexation arrangements for capex allowances in the proposed charge control.	Given the recent dramatic changes to market conditions, this is not appropriate (in particular as the CMA has also removed the risk provisions completely). Motorola has seen increases in the internal price of equipment which will translate to a higher 'gross' price. Labour costs will also rise annually. Even with long term third party contracts, there would be indexation clauses or the possibility of vendors coming back to renegotiate prices due to rising prices. Indexing allowable revenue using CPIH will not account for the increase in capex costs.
147	our provisional view is that assets that were provided for by the PFI Agreement should be valued at their Net Realisable Value, which Motorola estimated to be £[✂] million. This is consistent with treating the recovery of capital expenditure associated with the provision of the	Motorola has explained above the reasons for rejecting this approach. In any case, the claim that the agreed charges have allowed Airwave to recover all of its capex (net of the scrap value of £[✂] million) is entirely unsupported and obviously wrong,

Paragraph	CMA position	Comment
	network and services to the end of 2019 as having been fully accounted for in the bid for the original contract	given that much more has been invested in the network than was envisaged in 2000.
151	However, for 2019, we identified capex relevant to the extension period as reported capex less £[✂] million, that being the level of capex that Motorola has identified would be required in 2026 on the assumption of Airwave Network shutdown at the end of that year.	There is no justification of this. The 2019 capex actually incurred clearly did not include decommissioning capex.
155 and following	Discussion of the implications of an uncertain end date.	Final settlement arrangements are envisaged in the case of earlier than planned shutdown. This is of course something that was not included in the agreement from 2016, i.e. Airwave would not be paid anything extra if the service were terminated earlier than it had expected. Also, the view that Motorola could have “a material incentive to prolong the operating life of the Airwave Network until at least 2029 in order to secure the remaining depreciation allowances” is nonsensical – the timing of the Airwave Shut Down is not in Airwave’s control, which is why Airwave is carrying the full risk of an indeterminate period.
159	that the recovery of new capex – once incurred - should not be dependent on when the Airwave Network is shut down (in order to avoid generating incentives for delay)	Again, Airwave has no control over the timing of the shutdown.
164	Our WACC assessment identified a range – in CPIH deflated terms – of between 1.1% and 4.7%, with a midpoint of 2.9% on this (100 per cent equity-financed) basis.	It is not clear how these numbers have been derived. They do not appear anywhere in Appendix J (or anywhere else in the document, for that matter).
167 b	Calibration of the charge control has also been structured in ways that are intended to lessen the extent to which Motorola may face incentives to prolong the operation of the Airwave Network, over and above the dampening of such incentives that would be expected to result from the overall reduction in allowed revenues referred to	The CMA’s point that the charge control has been structured in way a way to reduce Motorola’s incentive to prolong the operation of the Airwave network does not make any sense as it assumes that Motorola has control over the timing of the Airwave Shut Down date. As explained above, this is not the case.

Paragraph	CMA position	Comment
	above. In particular, the final reconciliation arrangements set out in paragraph 157 would mean that the incremental revenues that Airwave Solutions would be allowed to earn, should the Airwave Network continue to operate beyond the end of 2026 (the current national shutdown date), would be lower than the allowed revenue figures shown in Table K-9 for 2027-29. In particular, the incremental revenue that Airwave Solutions would be allowed to earn would arise only from the opex allowance and from the proposed funding of new capex for those years (which was set out in Table K-4 above). Given this, the scope for additional gains to be earned from continued operation would be expected to be relatively limited (and dependent on Airwave Solutions being able to outperform those allowance levels, given prevailing opex and (maintenance) capex requirements).	
169 to 170	Reporting requirements and assurance	The CMA's proposed reporting requirements are excessive and there is no attempt to try and establish the burden/cost that compliance with these requirements imposes on Airwave. The claim that this would be a proportionate way of monitoring compliance is simply an assertion. In any case, compliance costs would have to be included in the cost base for the charge control. As Motorola has explained with reference to its experience with US cost accounting obligations for government contracts, such compliance costs can be significant to the extent that potential suppliers are discouraged from even bidding for such contracts.