

TRA Response Report to Submissions received on the Public Consultation Document

on

Market Definitions and Dominance Report pursuant to the ex-ante Rules Governing Market Definition and the Regulation of Dominance

10 June 2013

Introduction

This report is called a Response Report because it contains TRA's comments and observations in response to the comments contained in the submissions received from interested stakeholders to the Public Consultation on the Competition Framework and the Draft Market Definition and Dominance (MDD) Report that commenced on 8 August 2012.

The comments in response are set out in two parts – the first being general matters organised by subjectmatter, and the second being structured in terms of the structure of the draft MDD Report.

General Comments

Organised by subject matter

Reference	Subject	Respondent	Comment	TRA Response
1	European Commission approach	Friendi, p 1	Friendi is comforted by the adoption of the EC approach to market analysis by the TRA	Noted. However the TRA's approach is one that is prepared to depart from the EC wherever Omani conditions make that appropriate.
2	Approach based on systematic application of economic principles	Omantel, 1.1 at p 2	'Omantel applauds and supports TRA for its efforts to modernise the regulatory framework of the communications industry. By moving to a well- structured and internationally recognised system based on economic principles of competition, TRA increases the transparency of the regulatory process and improves its regulatory decisions.'	Noted. It is intended that the approach be as systematic and transparent as possible, removing regulatory uncertainty as far as possible.
3	Further consultation on remedies	Omantel, 1.2 at p 2	'Omantel understands that the current consultation describes a framework, and that the precise remedies imposed in a market would be subject to further consultation with the operators.'	After Finalising the MDD report, the TRA will issue decisions in relation to market definition, determination of dominance and imposing appropriate remedies. Implementation arrangements of Remedies and related regulations will be as per the standard procedures applied for passing new regulations.
4	Other sector initiatives	Omantel, 1-69 at pp 18-9	'Omantel is aware of at least four other policy initiatives in the communications sector: (i) the formulation of a sectoral policy, (ii) discussions regarding a national infrastructure company, (iii) the licensing regime and (iv) the broadband strategy.'	The TRA is aware of the need to consider the way in which various new initiatives, including the Competition Framework, are introduced and the way that they may inter-work in their operation. It is not intended to generally defer the implementation of the Competition Framework further, but it will be a matter for the TRA to consider at a later stage whether the implementation of some aspects of the Framework might best be deferred to coincide with the implementation of other initiatives.
	Industry	Nawras, 2.1 at p	Nawras notes that there are a number of changes to	Not all of these factors will influence the outcome and

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	changes not reflected in MDD Report	2	the telecoms landscape not reflected in the report including; - The development of a National Broadband Strategy - Release of significant additional spectrum (2100, 1800, U900, 2300) - Refarming of spectrum (U900) - Creation of a Government owned infrastructure company - Introduction of OTT applications including VOIP into the market, such applications often provided by global players increase choice and competition in the market - MNP has been launched for Class II Operators (adding to the already implemented MNP for Class 1 Operators) - FNP has been launched	 implementation of the Competition Framework at this time. Some of the matters listed will be implemented in timescales that suggest that they might be best considered in the next market analysis. The outcomes of the current exercise will be crafted to support the National Broadband Strategy, and to be as consistent as current detail permits with the creation of a Government owned infrastructure company. The growth of OTT applications and the recent VoIP decisions taken by the TRA will be further considered when drawing conclusions in the present study. The Review of the Licensing Framework is an important project and matters that require review of operator licences will be left for that review. This especially affects the potential grant to Class II licensees and to Mobile Resellers powers to install and operate their own network infrastructure.
5	Wholesale regulation first	Nawras, 2.2 at p 3	'Based on the underlying principles highlighted above, we believe that the Authority's initial regulatory intervention should always be in the wholesale market first. However, we note that in many cases and for the same market, TRA has identified remedies to both the wholesale and retail level. 'We consider it preferable for wholesale markets to be regulated and for such regulation to fail before the TRA considers applying remedies in retail markets. The report appears to focus on each market separately, determining remedies for retail, which we consider less effective, unnecessary and contrary to legislative principles.'	The TRA has a different perspective on this matter. It agrees that ex ante regulation is better directed to wholesale markets rather than to retail markets. This is TRA's objective, although not one that will be capable of being fully implemented in the course of the current market analysis. It is not useful to attempt wholesale-only ex ante regulation and to wait to see if that is effective before attending to the immediate issues associated with retail markets that are uncompetitive. Where both retail and wholesale markets are uncompetitive it is appropriate to adopt ex ante measures at both levels, although these should be as light-handed as possible, consistent with being effective. Once the wholesale level interventions start to take effect, the retail level arrangements can be reviewed and possibly reduced or removed. The TRA does not consider such short-term measures to be

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				contrary to legislative principles.
6	Resale constraints	Friendi, p 2	Friendi notes the imbalance of power between Omantel and Nawras, and the mobile resellers. 'An example of this imbalance can be seen in, the mobile operators' contracts with resellers, which generally impose a requirement that resellers should not sell below the operator's retail price. This creates an in built price squeeze mechanism which prevents fair and open competition.'	The issue raised by Friendiis to do with the exercise of market power and the imposition of anti-competitive constraints on resellers.
7	Policy shift on resale	Omantel, 1.3 i) at p 2	'In spite of tangible success with a model of infrastructure competition and commercial reseller negotiations, the new regulatory framework represents a shift to a model based on regulated resale and regulated access. Omantel believes that this policy shift is unnecessary, and inappropriate and dangerous for the evolution of the Omani market.'	There is no policy shift towards increased regulation of resale and increased regulation of access, of the kind described, in this market analysis. The purpose of the market analysis is to adopt a more market-by-market approach to regulatory intervention that is as principled and as transparent as possible. Where there is effective competition it is intended to withdraw ex ante regulation that would otherwise be justified by dominance.
8	Sequencing of policy actions	Omantel, 1.3 ii) at p 2	'TRA's aim of providing a consistent framework for market participants is in conflict with the sector initiatives of (i) a framework for a sector policy, (ii) the possible establishment of a national infrastructure company, (iii) the National Broadband Strategy and (iv) a reform of the licensing framework. Omantel believes that these other initiatives should take precedence before TRA can conclude on the competition framework.'	TRA disagrees and will aim to ensure that all of the initiatives referred to are introduced in a mutually consistent manner. TRA is not prepared to defer the Competition Framework until other important initiatives are introduced. Such initiatives are emerging on a regular and frequent basis. If the Competition Framework, and the important outcomes that it is intended to deliver, were to be delayed until all other important reviews have been completed, it would be seriously out of date and require further revision because of the elapse of time. Another possibility is that the Competition Framework would not be implemented at all, which would not assist the TRA or the sector. A well-crafted Competition Framework will

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				help shape the other initiatives in the sector,.
9	Regulation scope and intensity	Omantel, 1.3 iii) at p 2	'Omantel believes that regulations should not be stronger than current regulations. TRA states repeatedly that competition in Oman is becoming more intense. This should be recognized and reflected in the proposed regulatory remedies.'	This statement assumes that current regulation is adequate and appropriate. One of the purposes of the market analysis is to test that. TRA agrees that as competition develops ex ante regulation should be reviewed and, if appropriate, reduced or removed. However it is important to remember that this should occur on a market by market basis based on market review and analysis.
10	Preference for ex post intervention	Omantel, at p 3	Omantel considers that 'Ex-ante regulation should be carefully and sparingly adopted, only when the ex- post regulation fails, therefore, ex-post approach should be the initial thrust of competition regulation'. Further at 1.7: 'Ex-post regulation enhances competition via efficient market entries, anti-trust and merger regulations. As long as the three-criteria test are not all met at once, the market should be regulated ex-post'.	This statement raises issues about the nature of regulatory failure. Ex post regulation does not have to actually fail before resorting to ex ante regulation. It is enough that the TRA reasonably anticipates, taking all available information into account, that ex post regulation will be insufficient or ineffective to address the problem in the relevant market. TRA agrees that the three-criteria test must be passed in total before ex ante regulation should be considered – that is, that all three criteria must apply. The third criterion relates to the insufficiency of ex post regulation. The most appropriate interpretation is that the regulator needs to make a judgment on the sufficiency or adequacy of ex post regulation in the circumstances.
		Nawras, 2.3-4 at p 3	'Nawras has a general preference for ex-post regulation and has raised this previously with the TRA on many occasions. It is our firm belief that the Omani market is sufficiently developed, competitive and stable to support such a move. It is also our firm belief that such move would make the market more dynamic and free up Operator and TRA resources currently engaged in the burdensome price approval process, to be involved in longer-term strategic	TRA agrees with Nawras' stated general preference. However, whether the Omani market has developed sufficiently in terms of competitiveness is a matter to be tested by examination of specific service markets, rather than by attempting to analyse the situation for the whole of the sector. That is the rationale for the current and future market analyses. Nawras's reference to the lack of robust and tested competition laws is noted. This is not the only reason for

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			initiatives. 'We consider that one of the reasons the TRA remains reluctant to trust ex-post regulation is that it does not have the comfort of robust and tested competition laws. If Oman was to develop and introduce more comprehensive competition laws this might assist in the inevitable move to ex-post regulation. '	the TRA's proposals to use ex ante regulation. The requirements of the other two criteria in the three- criteria test for susceptibility also have to be met. It is not within scope of the current market analysis to develop national competition laws. However, suitable regulations have been developed for the sector and subjected to public consultation by TRA in 2010.
11	Retail market regulation via ex post means	Omantel, 1.10 at p 3	'At current level of telecom infrastructure development, Oman requires a pre-dominantly ex- post approach in telecom regulation. In particular, Retail Markets should be managed through ex-post regulation.'	TRA takes the view that all markets, wholesale and retail, should be regulated via ex post means to the extent that the state of competition in those markets will reasonably allow. However, the ability of ex post regulations to support timely intervention before lasting damage to competitors, competition and the consumer interest are also matters to be taken into consideration. The approach to be adopted in any given situation is therefore a matter for judgment with multiple considerations being weighed in the balance.
12	Risks of regulator distortion	Omantel, 1.11 at p 3	'By ex-ante regulation, there is a risk that Regulator may leap into premature action and subject a service provider to excessive regulation just because of dominance. The company may be dominant because it has invested substantially more than its competitors, offer better payment plans, or simply the quality of its technology offerings are better than other companies.'	TRA recognises that dominance – which is a position of power in a market and therefore reflective of market structure – may have resulted through appropriate investment, good management and responsiveness to the needs of customers. These are aspects of a licensee's operations that are to be applauded. However dominance means that the constraints of a market are absent or weak, and therefore the regulator must assess whether the risk of abuse of dominance is sufficient to warrant regulation. TRA agrees that caution is required of regulators proposing to intervene in this way.
13	Forbearance	Omantel, 1.17 at p 3	'As stated in the TRA workshop on MDD study held on 23rd September 2012, forbearance should be preferred over excessive regulation. The regulator should decide to refrain from action unless the	Noted. TRA reiterates the point. The risks are material that regulators, when called upon to intervene ex ante in a market, will not be in possession of all information, and that therefore the risks of non-intervention need to be

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			benefits of regulation substantially outweigh the benefits of no regulation. For the sector to accept the decisions, the basis of this decision should be transparent.'	appreciable to offset the risk that regulation will not be optimal.
14	Ladder of investment theory	Omantel, 1.28 at p 8	'It is unlikely that the proposed regulation, if implemented, would yield similar long-term benefits. The positive dynamic effects of infrastructure competition contrast with the misconceived idea of a "ladder of investment", ¹ which underlies the European regulatory idea and seems to have been a guiding light for the Omani framework. According to the "ladder of investment", if access regulation is imposed at different points in the network, then new entrants will first start as resellers, then gradually acquire new infrastructure assets to become virtual network operators before finally making sufficient investments to become full facilities based operators. Regulatory policies can be designed to encourage this gradual process, and these regulatory policies consist of opening and withdrawing certain access points to first allow resale, then virtual operation and finally infrastructure operation.'	TRA is aware of the ladder of investment theory and the way that it is intended to work. It is important to note that TRA has not adopted for the purposes of the market analysis any version of the ladder of investment approach. It is not the TRA's view that service based operators (SBOs) should be required to become facilities based operators (FBOs). Omantel has said in its submission that the mobile resellers, as SBOs, have fulfilled a valuable role in addressing the needs of market segments that have not been a focus of Omantel's marketing. On the other hand, open licensing must leave it as an option for such operators to become FBOs, and to access the facilities that they require on reasonable terms. SBOs may choose to remain SBOs however. TRA recognises that there are major balances to be achieved, such as maintaining the new investment incentives of FBOs.
15	Reseller arrangements	Omantel, 1.31 at p 9	'By allowing resellers to carry out diversification of its brand and service, Omantel has managed to compete better with Nawras in the pre-pay segment while being able to focus its own brand to higher-value customers. While of the five resellers, two are successful and three are not, in Omantel's view this reflects the risk of the specific resellers' business plans as well as willingness to support by the host operator	Noted. TRA accepts that mobile reseller failures will occur and that this may well be for the reasons referred to by Omantel. However, the general point needs to be conceded – namely that resellers with options to develop as FBOs will provide greater regulatory constraint on current FBOs than resellers without such options. These matters will be discussed further in relation to specific relevant markets below.

¹Cave, M., (2006)*Encouraging infrastructure competition via the ladder of investment.* Telecommunications Policy, 30, 223-237

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			rather than inadequate regulation.'	
16	Regulatory impact on new investment	Omantel, 1.34-5 at pp 9-10	'With only around 270,000 fixed lines for a population of around 2.7m people, it is self-evident that, if fixed voice and broadband access is to be improved, significant investments are required. There is now a wide consensus that in order to generate such investments, either a US model of no access to an incumbents' infrastructure or an Asian/Australian model of a national access infrastructure company works. The European model of access at cost and competition between the vertically integrated fixed incumbent and access seekers without their own local infrastructure has not been successful regarding the build-out of fibre-based infrastructure. 'In support of this argument, Omantel expands on a recent article regarding access regulation and investment incentives. ² Briglauer, Ecker and Gugler (2012) review the literature on the question of incentives and regulation and then carry out a statistical comparison of fibre deployment rates across various countries. They find empirically that "our results indicate that the stricter broadband access regulation is the lower is NGA infrastructure roll-out.""	Noted. TRA accepts that poorly-designed infrastructure access regimes will have an adverse impact on new investment levels. However, this does not entail that the only remaining options are the models referred to by Omantel. There are many variations of the models referred to. Also, the need for careful design of facilities access arrangements does not mean that such arrangements should not be used at all.
17	Effective competition	Omantel, 1-41-2 at pp 10-1	'Omantel observes that TRA in general struggles with the problem of how to define "effective competition" at the stage of "susceptibility to ex-ante regulation", and the related concept of "joint dominance" in the dominance assessment. The recurring question is	Omantel has touched on an important question: when will the competition in markets in which Omantel and Nawras may be the only significant participants be sufficient to be considered to be effective and to negate a conclusion of single or joint dominance? In practice TRA

²Briglauer, W. and Ecker, G. and Gugler, K. (2012) *Regulation and Investment in Next Generation Access Networks: Recent Evidence from the European Member States*. Working Papers / Research Institute for Regulatory Economics, 2012,1. ForschungsinstitutfürRegulierungsökonomie, WU Vienna University of Economics and Business, Vienna.

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			always whether the existing competition between Omantel and Nawras is sufficient to refrain from regulation. 'Omantel feels there is an inconsistency regarding the notion of when competition is "effective".'	has put the question around the other way. In the absence of factors that support a conclusion of dominance the default outcome is that the competition will be considered to be effective. However, the market structure and the nature of competition to date are factors to be considered in the analysis. For the avoidance of doubt, the TRA has adopted in the market analysis an approach to effective competition which is based on the existence of competition and absence of factors reasonably suggesting a conclusion that one or more competitors are dominant in the relevant market. If there is competition is a market the question is whether the competition is sustainable in the absence of regulatory intervention. At the end of the enquiry a market will be considered to be effectively competitive if there is no dominant participant. The existence of high market concentration is always an issue to be considered, as Omantel has noted.
	Effective competition and the 3- criteria test	Omantel, 1-45-6 at p 12	 'in the judgment of whether a market is effectively competitive or not, TRA misinterprets the meaning of its 3-criteria-test. Under the 3-criteria-test, TRA is not required to form a judgment of whether there is effective competition. The 3-criteria-test is precisely used as a <u>safeguard</u> against excessive regulation. Omantel wishes to expand on the use of this test as a safeguard. 'The mere existence of dominance or joint dominance is insufficient for regulations to be imposed under the 3-criteria-test. Instead, three additional criteria are formulated. These are whether (i) entry is unlikely, (ii) whether competition amongst existing players is unlikely to develop and whether (iii) the existence of ex-post competition rules are sufficient to sanction anti-competitive behaviour.' 	TRA agrees that the three-criteria-test is a safeguard against excessive regulation and, in particular, where the market is not susceptible to ex ante regulation at all. If there is clear evidence that competition is robust and apparently sustainable, it will be relevant to the second criterion. If a market is determined to be susceptible to ex ante regulation under the 3-criteria-test, then the next step is to determine whether there is dominance and the nature of that dominance.

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18	Joint dominance – the concept	Omantel, 1-43 at p 12	'Regarding joint dominance, TRA uses a definition from merger control - namely that purely the likelihood of collusion is sufficient for a finding of joint dominance - which Omantel believes, is inappropriate. Merger control by its nature needs to consider future situations and therefore resorts to asking whether the conditions exist for <i>future</i> tacit collusion. In contrast, for its assessment of joint dominance, TRA had the ability to rely on past behaviour and would have needed to analyse whether Nawras and Omantel did in fact follow coordinated strategies.'	Merger control is a competition law remedy that is based on an assessment of whether the proposed merger will result in a substantial lessening of competition, compared to the level of competition that would have resulted in the absence of the merger. The approach requires a comparison between two forecasts. This is not the case in the present market analysis. TRA is making no statement that there is actual collusion (tacit or explicit) between the jointly dominant operators, nor is it forecasting that there <i>will</i> be collusion in future. Omantel's statement misunderstands the nature of the proper enquiry that TRA should make. It needs to establish that the conditions are such that the operators <i>could</i> pursue a collective policy in future, and further, that the risk of this happening is sufficiently material forex ante regulatory intervention to be appropriate to manage or mitigate that risk. TRA may not have past behaviour to rely on as a guide for this enquiry. TRA disagrees with the implication in Omantel's comments that if there is no past behaviour of following co-ordinated strategies then there is no basis for TRA to determine that there is joint dominance.
19	Entry possibilities to be exhausted	Omantel, 1-48-9 at pp 12-3	'In other words, Yoo [Christopher Yoo] makes it clear, that regulation should only be used if the possibilities of entry are exhausted. In Omantel's view this is the correct view of the 3-criteria-test: As long as the possibilities of entry are not exhausted, the test should fail and no (price) regulation should be imposed. 'Omantel believes that this is a central problem with	The views attributed to Mr Yoo are but one approach to the way in which ex ante regulation should be used. There are alternative views on this that are at least as compelling, including the approach in the MDD Report by the TRA. The notion of exhausting all possibilities of entry is problematic and, being uncertain, would create a policy problem if adopted. The mere possibility that there might be competitive entry cannot be enough, of itself, to defer
			TRA's assessment. Despite the successes with entry of Nawras and mobile resellers, TRA disregards the superiority of commercial entry. In Omantel's view,	reasonable regulatory intervention in the face of existing dominance. Judgments will have to be made, but the proposition as put by Omantel is too extreme to be

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			the correct interpretation of the 3-criteria-test is that the new licensing initiatives should not only take precedence of regulation due to the success of the past (which Omantel will expand on below), but also on the grounds that these are less likely to disturb competition in the future.'	accepted. For the record, TRA does not disregard the superiority of commercial entry as the best means of delivering competitive price and other outcomes. However this does not lead to an approach of 'exhausting the possibilities of entry'.
		Omantel, 1-50 at p 13	'As long as the licensing framework is still under reform, Omantel maintains that TRA is in fact in no position to answer the question of whether the 3- criteria-test is satisfied or not since it may well be that commercial entry is feasible.'	TRA cannot accept this proposition. Taken literally it means that while the licensing review continues any outcome is possible and therefore the first criterion of the three-criteria test must fail. To refute the proposition it only needs to be pointed out that entry is not always, or even often, to do with licensing. The test is whether there are high non-transient barriers to entry. These may be economic in nature and have nothing to do with the licensing regime.
20	History of competition and investment in infrastructure	Omantel, 1-51- 68 at pp 13-8	Omantel sets out the way in which competition and investment have developed since the entry of Nawras in 2005, providing and interpreting data on investment and market shares during the period since then.	Noted – the material set out by Omantel in its submission has been most useful.
21	Licensing Framework	Omantel, 1-71-2 at p 19	'In Omantel's view, the advantage of licensing initiatives to foster competition in the telecommunications market lies in the fact that it is a "structural" rather than a "behavioural" competition remedy, and that greater flexibility that can be attached to licenses. ' Omantel strongly believes that, due to the successful history of licensing in Oman and the greater flexibility introduced by licensing, the review of the licensing framework should be carried out before changes to the regulatory framework are made. Licensing should	Licensing reform is an important means of opening up markets to competition. It is one amongst many means of doing so, and has advantages, as Omantel has observed. Competition may be impeded, for example, not by the availability of licences or the scope of available licences, but by the high concentration that results from the market size or by economic barriers to further entry.

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			be given a higher priority than the regulatory framework. Regulations may not be needed if certain licenses are expanded or if new licensees enter the market. Both initiatives would increase competition and additional regulation.' would then be a duplicative remedy.	
22	Intrusiveness of regulation	Omantel, 1-76 at p 20	'Omantel proposes that, as a general rule, initial regulations under the ex-ante framework must not be more intrusive than existing regulations.'	This is effectively the same point as discussed in Item 9 above.
23	Price controls	Omantel, 1-78 at p 20	'Price regulation is the main tool of ex-ante regulation. The Report recommends "Price Cap" approach whereas "Rate of Return" approach is generally considered successful in generating the capital required for the development of specific sectors of telecom infrastructure. TRA should also consider "Rate of Return" approach for investment-needy specific markets, e.g., broadband.'	The issue of specifying a particular price control approach will be covered in the relevant regulations.
24	The markets overall	Omantel, 2.1 at p 31	'Some markets are artificial and are in fact regulatory remedies. 'Firstly, quite a number of the markets as defined in the consultation paper are not true markets, but instead are remedies. This is true for most of the wholesale markets. They are not real markets since the infrastructure owners would be unlikely to give access in the way perceived by TRA. Omantel believes that Markets 10, 12, 13, 16, 18, 19 and 20 are such markets disguised as remedies.'	Omantel raises the notion of an <i>artificial</i> market and distinguishes such markets from <i>true</i> markets. These terms have no distinct meaning and are not helpful to the analysis. Omantel seems to regard artificial markets as those in which the sellers are unwilling to offer services. This mistakenly assumes that buyers and sellers have to be willing participants for there to be a market. Clearly at least one party would normally be willing. Mandatory supply of a service might be a remedy, but that is quite different from saying the remedy is the market or vice versa.
25	Defining markets at will	Omantel, 2.3 at p 20	'It is Omantel's concern that TRA might analyse an arbitrary part of its network and decide that, at that point, since no access is given a market defined at that point requires ex-ante regulation. Such reasoning is	TRA believes that there is nothing in the MDD Report or in other material from TRA that could reasonably give rise to such a view. It is important to repeat that TRA is committed to exercising considerable caution in the

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			insufficient. No access is given at a particular point because Omantel decided not to sell services at that point to third parties. With the reasoning, TRA can effectively impose access obligations at will. This should not be the reason for an ex-ante competitive framework.'	imposition of any ex ante regulatory remedies for dominance. Facilities access cannot be a function of access seeker demand alone—it will require that the facility in question is a scarce resource, one that is not economic to replicate, or constrained in some other way (e.g. requiring environmental clearance) Omantel should not be concerned that access obligations will be imposed by TRA at will or randomly. There is no basis for such a concern.
26	Fixed and mobile convergence	Omantel, 2.5 at p 31	'Omantel believes that it would lead to better regulation if instead of defining separate fixed and mobile retail markets, TRA were to define 'access', 'voice' and 'broadband' markets, regardless of which underlying technology is used.'	TRA recognises that such an approach may in future be more compelling than now. For now it needs to be recognised that fixed and mobile platforms and related services have characteristics that make it useful to continue the separation. The case is argued in relation to relevant markets, below. TRA will examine this aspect of the matter each time it conducts a market review.
		Omantel, 2.7 at p 32	'TRA's own survey evidence shows that a SSNIP would not be profitable for fixed voice services, and that mobile call costs are only 9% above fixed voice costs. In order to distinguish between fixed and mobile markets, TRA draws on functionality indicators (what a product is capable of). However, the economic philosophy of the new regulatory framework established by TRA rests on the comparison of behavioural indicators (reactions to price changes) instead.'	TRA considers that SSNIP tests are often conceptually useful and sometimes, if the data is available and reliable, may be very useful. Sometimes SSNIP tests do not resolve the boundaries of substitution and then it is appropriate to reconsider, from a customer perspective, the characteristics of the services that might aid or hinder substitution. This is a perfectly legitimate line of inquiry. To determine the boundaries of substitutability one must examine the circumstances that may favour or disfavour substitution. What customers do (behaviour) gives effect to substitution, and the reason they are likely to behave (their assessment of functional similarity). In circumstances where there is no customer behaviour to consider it is important to understand what they might do.
27	Licence-based obligations	Nawras, 2.6 at p 4	Nawras notes that remedies for dominance should only apply to dominant operators, but some of the	Nawras has raised an important issue. A traditional approach to individual licensing was to include all or

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			proposed remedies are licence obligations applying to all operators. 'As a result, we question how will these obligations enhance or impact competition in the market'	many obligations in the terms and conditions of licences. Modern approaches tend more and more to generalise the conditions. However it is not the within the scope of this market analysis to pursue these matters.
28	Factual errors and evidence	Nawras, 2.7 at p 4	'We note that many conclusions set out in the paper lacked empirical evidence to support such conclusions. Absence of supporting evidence undermines many of the conclusions. It is our respectful opinion that such factual errors or omission should be addressed prior to any final decisions being taken.' Nawras gives examples.	TRA has examined the examples provided by Nawras and where decisions have been based on poor data this will be addressed, as far as possible, in the final decisions that are made. Quite apart from that, the submissions in response to the Public Consultation document have provided additional information and comment that has been very useful in reviewing many conclusions that had been recorded in the MDD Report. The important point to note is that TRA can only base its decisions on the evidence available to it.

Specific Comments

Structured by theme in the following sequence:

- Market Definition
- Susceptibility to ex ante regulation
- Dominance analysis
- Remedies

Reference	Subject	Respon dent	Comment	TRA Response
Market definition – Market 1	Market 1: Retail access to the public telephone network at a fixed location	Omantel, 3.4 at p 34	' for 60% of households, mobile is the only means of accessing a communications network. This means that for 60% of households, the SSNIP test has either been passed (they switched away from fixed since it was too expensive) or the SSNIP test is irrelevant since there is no fixed infrastructure in their building and they have no choice of taking up a fixed line.'	The conclusion that 60% of households have passed some form of SSNIP test is unwarranted. Those households may not have been influenced by the relative cost of fixed service but by the availability, bill control, mobility and general convenience of mobile service. The important matter is to consider those subscribers, often government and business but also some households, for whom the fixed access service has characteristics and functionality that is not readily provided by mobile services and who, for a range of reasons, do not consider that it is an option in their situation.
Market definition – Market 1	Consistency with NBB Strategy	Omantel, 3.5 at p 35	'It is important in Omantel's view that the market definition of access is consistent with the National Broadband Strategy. If the implementation of that strategy is carried out with a mixture of mobile and fixed technologies, then also the market definition should reflect this convergence At some point in time, the convergence that we are witnessing needs to be considered to form part of also of the Competition Framework to ensure that the policies that the government formulates for the sector are aligned and consistent.'	National Broadband Strategies are usually based on a mixture of fixed and mobile platforms, with the mix reflecting cost and functionality balances. It is the NGA (Next Generation Access) component of the Strategy that has this mixture. Convergence is to be found in the NGN component of the platforms, which will connect to any access technology. Future market analyses will examine the substitutability of fixed and mobile access platforms. This is because fixed-to-mobile call and service substitution has been continuing for some time. It is not a function of having a National Broadband Strategy.
Market	Market 1 and	Omantel,	'Omantel believes that over the regulatory review period,	Noted. Omantel is supporting the TRA conclusion for this

Reference	Subject	Respon dent	Comment	TRA Response
definition – Market 1	Market 2 – same market?	4.2 at p 36	 fixed access and fixed voice services are separate since there are separate products on offer (in contrast to mobile, where prepay does not require an access charge), and (access is an input into both fixed voice and fixed broadband products. Without access as a separate market, one would need to compare the bundle of access & internet use with the bundle of access & voice use.' In these situations, the general recommendation is to separate access and voice.' 	market analysis. At the present time, fixed access may be access to service markets other than voice, and therefore should not be conflated with Market 2 which is about voice services.
Market definition – Market 1	Market 1 as wholesale	Nawras, Box 2.1 Q1 at p 6	Nawras recommends that this market be amended from retail access to wholesale access, 'The reason being, access by itself is not a service, access is a means by which customers obtain broadband service, voice service or both. We do not foresee customers paying for access as a standalone product; it is always obtained as a mean for other services/.	TRA considers that fixed access by itself <i>is</i> a service, and is distinguishable from the specific services that may be made available using it – including the voice services that constitute markets 2 and 3. For example, DSL service is available via the fixed access service, and when sold as a non-voice service in this way, it is often referred to as a naked DSL service. Nawras is correct in saying that, at the retail level, fixed access is purchased with some other service in mind, but the variety of those services means that it can be considered separately. The alternative would be to conflate all access and service markets. This might occur in a broadband future but is not useful for regulation at the current stage of market development.
Market definition – Market 2	Market 2: Retail local, national voice call service from a fixed location	Omantel, 4.15-6 at p 39	Fixed and mobile calls in the same market: 'Omantel is surprised that TRA, against its own evidence of a modest premium for mobile calls and survey results indicating substitution, defines separate markets for fixed and mobile voice services.' 'In support of the survey, it would also appear from Omantel's tariffs that fixed and mobile calls are in the same market.'	There is a residual market that has a preference for receiving and making calls from fixed locations, including from business and government offices. For these customers responding to price increases by switching to mobile services is not presently an option. This approach fully recognises that for many customers with both fixed and mobile services there may be a preference at different times and for different types of calls for one

Reference	Subject	Respon dent	Comment	TRA Response
				originating mode over the other. TRA considers that this is a more complex issue than comparative pricing.
Market definition – Market 2	Fixed-mobile substitution	Nawras, Box 2.3 Q1 at p 7	Nawras considers that the services are not substitutable because of the importance of the fixed local feature of fixed calls for business and Government organisations.	TRA agrees in part. For many customers the calls are substitutes and if they have access to fixed and mobile services they need to decide which originating service to use. However for a significant group of customers, including some business and government customers, the point made by Nawras applies.
Market definition – Market 2	Asymmetric substitution	Omantel, 4.19 at p 40	'The key insight for TRA is that substitution from fixed to mobile is more important for regulatory policy than from mobile to fixed, since mobile services on their own can be regarded as more competitive.'	This is a very interesting insight. If, however, there was some characteristic of fixed calls that a significant part of the subscriber base could not replicate through substituting mobile calls, and the loss of this functionality was regarded by a significant group of users as important, then the point that mobile calls are more competitive does not assist in market definition.
Market definition – Market 2	Effect of post- pay contracts	Omantel, 4.21 at p 40	' post-pay contracts are increasing due to the success of expensive smartphones that are often purchased with a long-contract period, during which the operators effectively provide a form of trade credit. With these tariffs, the marginal costs of mobile calls are very low. As long as users stay within the boundary of the contract, they are zero. The effect of this change in tariffs is that mobile call prices are effectively cheaper than fixed call prices under standard tariffs. For this reason, fixed- mobile substitution is likely to increase further with the adoption of smartphones.'	TRA agrees that some of the price plans available to enable customers to acquire smartphones significantly reduce the marginal costs of mobile calls covered by the plan. These plans will therefore be a factor for customers deciding whether to use their fixed or mobile service to originate various calls. They will not influence those customers—referred to already—who have business, government or other preference s for fixed service operation.
Market definition – Market 3	Market 3: Retail international voice call service	Friendi, p 5	'Friendi agrees with the TRA's assessment about the relevant service, geographic and customer market definition for the international call services market.'	Noted.

Reference	Subject	Respon dent	Comment	TRA Response
Market definition – Market 3	Fixed-Mobile substitution	Omantel, 4.31 at p 43	'Omantel supports TRA's findings that due to fixed- mobile substitution there is one market for international call services.'	Noted
Market definition – Market 3	Fixed-Mobile substitution	Nawras, Box 2.4 Q1 at p 11	Nawras agrees with the definition. The introduction of Nawras introduced 0902 International VoIP (25% lower prices than IDD) shows demand elasticity in this market.	Noted. The additional information provided by Nawras lends support to the conclusion that demand is more price elastic in this market.
Market definition – Market 4	Market 4: Retail broadband Internet access from a fixed location	Omantel, 4.37-8 at p 44	Are mobile and fixed broadband services in the same market? Omantel considers that this should be left open since the answer is not relevant to regulation – neither form of broadband being proposed for regulation.	TRA understands the view propounded by Omantel. Perhaps nothing hangs on whether the market definition is left open or not, because the definition needs to be reviewed as a prelude to each market analysis in future. TRA's preference is to note the definition of markets in which no further action is proposed and make it clear that no ex ante remedies have been imposed. This level of clarity could assist future market analyses.
Market definition – Market 4	Fixed-mobile broadband substitution	Nawras, Box 2.5 Q1 at p 18	Nawras agrees with the TRA's conclusion that there is no substitutability. Nawras does not consider WiMAX as a fixed technology, notwithstanding that it has not implemented the mobility feature of WiMAX.	Noted. The lack of substitutability is at present and may change if the functionality of fixed and mobile services converges further in future. TRA notes but does not necessarily endorse Nawras's categorisation of WiMAX as a non-fixed technology. It also notes the reference to the mobility feature of WiMAX.
Market definition – Market 4	National market?	Nawras, Box 2.5 Q2 at p 18	'Nawras considers the geographical scope very critical for this market. We believe it should not be on national basis; rather it should be defined for urban and rural. The current market dynamics is different in urban area than that of rural. We consider the market to have high penetration and acceptable level of competition in urban (if WiMAX is considered).'	The market is for fixed broadband. Penetration is occurring initially and most significantly in urban areas. The service is being provided on a national basis however with national tariffs, even if the coverage is less than national at present. Nawras makes the valid point that competition exists in some urban areas (if WiMAX is included, which TRA considers should be the case). TRA is disinclined to separate out urban and regional markets at this point in the early stages of market development.

Reference	Subject	Respon dent	Comment	TRA Response
Market definition – Market 5	Market 5: Retail dial-up Internet access from a fix	Omantel, 4.45 at p 46	' Omantel believes that it is best regulatory practice to refrain from defining the market "Retail dial-up Internet access from a fixed location". TRA decision not to regulate internet access is independent of the market definition for mobile, fixed, broadband and dial-up services.'	This is essentially the same point that Omantel made in relation to Market 4 above. TRA's view differs. The market definition is entirely for the purpose of ex ante regulation of dominance, if such exists. The act of defining the market in cases where no regulation ensues is important for clarity of the market analysis outcome. It is necessary to signal what specific market has been analysed in this way.
Market definition – Market 6	Market 6: Retail mobile services market	Friendi, p 5	'Friendi disagrees with one aspect of the Market Dominance Paper in that we believe that mobile data should be a separate and regulated market in the wholesale market and, ideally, in retail as well.'	Friendi has provided no evidence or support for this view. To a very large extent mobile services are sold as bundles, rather than as separate voice, data and access services, and this suggests that the market definition is correct at this stage of development. TRA understands that Friendi and other mobile resellers are concerned to ensure that they have access of to all mobile services for resale into the future. TRA will monitor the market with this in mind.
Market definition – Market 6	Mobile data	Friendi, p 5	'We are experiencing a significant growth in data packages and feel that the mobile data market will need to be separately defined within the time frame of the review.'	As above, in relation to bundles.
Market definition – Market 6	Access and usage combined	Omantel, 4.49 at p 48	'In Omantel's opinion what is important is the degree of substitution between the downstream services. If voice and broadband services are purchased largely separately, then market definition gains from defining separate markets. If they are purchased together, then the market definition exercise gains less from separate markets.'	TRA accepts the point about separate purchasing, but notes that it is not conclusive for the definition of the relevant markets. The available evidence suggests that mobile services are generally purchased together—in effect, as bundles. However, separate data services are increasingly purchased in the form of dongles or through ISP resale offerings. This means there will come a time when mobile data may need to be considered as a separate market. TRA believes that the time is not within

Reference	Subject	Respon dent	Comment	TRA Response
				the horizon of the current study.
Market definition – Market 6	Mobile broadband	Nawras, Box 2.7 Q1 at p 23	Nawras agrees that mobile broadband ought to be considered for now as part of the mobile retail market.	Noted. This is TRA's view as well.
Market definition – Market 7	Market 7: Retail national leased line services	Omantel, 4.60 at p 51	'Omantel agrees with the market definition but believes that internet connectivity and 'virtual' leased lines such as VPNs play an increasing role in the retail business market.'	Noted. TRA agrees that VPNs and managed services are increasingly eating into the traditional market for leased lines.
Market definition – Market 8	Market 8: Retail international leased lines	Omantel at p 52	'Omantel has no comments.'	Noted.
Market definition – Market 9	Market 9: Retail business data services provided from a fixed location	Omantel, 4.61 at p 53	'Omantel concurs with TRA's view that more and more companies are moving from leased lines to managed data products. Omantel believes that with the upgrade of its network, yet more customers will migrate to managed data services. Omantel notes that therefore it would expect leased line markets to be merged into managed data services markets in the coming review period from 2014.'	Noted. The issue of changed market definitions so that leased lines might possibly become part of the business managed data services market has been considered by TRA.
Market definition – Market 10	Market 10: Wholesale voice call origination on the public telephone network provided at a fixed location	Omantel, 4.64-8 at p 54-5	'Omantel strongly disagrees with the definition of a "wholesale fixed voice call origination market".' This is because the service is not operational at present. Omantel considers that there can be no market without a current service, and in this case believes the market would be artificially created through regulation, via 'indirect access voice providers' such as Skype, Viber, Google Talk, Apple Face Time and so on.	There is self-provision by Omantel and there appears to be a demand for services by at least one other party. Clearly there is real demand for such services as evidenced by the Nawras submission as part of this Public Consultation. The market is real.
Market definition –	Market 11: Wholesale voice	Omantel, 4.75-6 at	'It is common regulatory practice in countries with Calling-Party-Network-Pays systems to regulate	Omantel's view is noted.

Reference	Subject	Respon dent	Comment	TRA Response
Market 11	call termination on individual public telephone networks provided at a fixed location	p 57	termination rates. The economic literature states that under certain circumstances, termination rates can be used as an instrument of tacit collusion and can increase prices. 'Omantel has no comments regarding this reasoning and its applicability to Oman in the face of overwhelming regulatory convention.'	
Market definition – Market 11	Definition	Nawras, p 32	Agree with TRA assessment.	Noted.
Market definition – Market 12	Market 12: Wholesale network infrastructure access at a fixed location	Omantel, 4.77 at p 58	'Omantel objects to the definition of this artificial market. If a market were defined in the way proposed by TRA, then line sharing and full unbundling should be in the same market.'	Noted. Market 12 has been defined as including ULL and line sharing in the draft MDD Report (see p. 48). This market is in no sense artificial. There is real demand and there is self-supply at present. The reluctance of a potential vendor to supply third parties does not mean that the market is artificial. It is not part of the definition of a market for current purposes that there must be willing vendors.
Market definition – Market 12	Unbundled Local Loop (ULL)	Omantel, 4.78-85 at pp 58- 9	Omantel objects to copper wire unbundling for the following reasons: 1. Prevents technical progress 2. Available in an ever-decreasing number of sites makes the effort disproportionate to customer benefit 3. Omantel now connecting 600 MSUs in street cabinets – line density in each location is reduced 4. Interference issue requiring interference management 5. Problems of network upgrades and notice periods, delaying fibre rollout 6. National Broadband Strategy does not treat upgrading of copper networks as 'a prime avenue to realize defined national objectives'	Omantel has provided a number of reasons that might encourage a regulator not to proceed with ULL. However there is a demand for this service as a means of accessing subscribers and delivering competing services to their premises. Whatever the merits of the factors put forward by Omantel, there is a distinct market for this service. There may exist, as Omantel suggests, good policy reasons for discouraging ULL or deflecting the demand to other services without the difficulties of ULL. In addition it is open to TRA to impose conditions on ULL access that address the problems listed by Omantel. The costs associated with establishing a ULL regime will likely fall on

Reference	Subject	Respon dent	Comment	TRA Response
			Technical challenges of unbundling at street level.	access seekers. In the light of possible conditions and cost causation principles, the demand for ULL might change or transform into demand for other solutions.
Market definition – Market 12	Exclusion of fibre and wireless access networks	Omantel, 4.86 at p 60	'Omantel believes that the ULL market should not be defined. Given that it is an artificial market, it is pure regulatory expediency to exclude other competitors from regulation. This allows TRA to claim at the subsequent stage that the 3-criteria-test is met and that Omantel is dominant in the market.'	Noted. The issue of real and artificial markets has been discussed earlier in this Report. Many of the points made by Omantel about ULL here and earlier are better addressed after the ULL market is defined, rather than at the definition stage. However TRA notes that the world has largely moved on from using ULL as a means for service delivery. By that is meant that new ULL schemes are uncommon.
Market definition – Market 13	Market 13: Wholesale broadband access at a fixed location	Omantel, 4.100-1 at p 63	Should bitstream be in same market as ULL? 'Omantel believes that, from a technical and upgrade perspective, bitstream access is more appropriate than ULL. However, Omantel also agrees with TRA that there is a problem with incentives to invest. Omantel appreciates TRA's caution and comments on TRA's proposed remedies below.' Both bitstream and ULL are both artificially created markets, and the only price for SSNIP or other purposes is the regulated price.	To avoid the Cellophane Fallacy it is important that the price used as a base for SSNIP is a competitive price. It may be a regulated price that reflects the price that a competitive market would produce. It is not clear what Omantel means by 'bitstream access is more appropriate than ULL'. Some wholesale customers may seek to use both solutions in their broadband service plans. However it is not clear that a business model built on bitstream access will be readily switched to a ULL model, or vice versa, or that a small price increase might have that effect. TRA has considered whether Markets 12 and 13 ought to be merged, but, given the point made immediately above, ULL and bitstream ought not to be considered as close substitutes. For some wholesale customers they may not be substitutes at all.
Market definition –	Bitstream and LLU in same	Nawras, Box 2.14	'No. In our opinion ULL is a full pipe on which services can be added to (voice, data etc.), while Bitstream only	The market is defined in terms of substitutability, not technical capabilities. TRA does not find this distinction to

Reference	Subject	Respon dent	Comment	TRA Response
Market 13	market?	Q1 at p 34	relates to the broadband service. ' Nawras agrees to include wireless access as well.	be compelling, even though it agrees that ULL and bitstream access lack close substitutability and are best put into separate markets.
Market definition – Market 14	Market 14: Wholesale terminating segments of leased lines	Omantel, bottom of p 65 and p 66	'Currently leased lines are offered only as full circuits (originating tail end segment + trunk segment + terminating tail end segment). As per given network topology of Omantel, it may not be appropriate to define the trunk and terminating segments as separate markets.' Omantel proposes merger of Markets 14 and 15.	The distinction between terminating and trunk sections of leased lines reflects traditional differences in the way leased service have been designed and tariffed. The trunk segments may be incorporated in larger transmission systems and be priced to reflect lower unit transmission costs. It is possible that a wholesale customer could self- supply trunk segments but not terminating segments. Under these circumstances it is considered appropriate to retain the trunk and terminating segments of leased lines as two separate markets. This is appropriate notwithstanding that they are often sold at wholesale level as, in effect, a bundle, in the manner mentioned by Omantel.
Market definition – Market 15	Market 15: Wholesale trunk segments of leased lines	Omantel, top p 66	'Currently leased lines are offered only as full circuits (originating tail end segment + trunk segment + terminating tail end segment). As per given network topology of Omantel, it may not be appropriate to define the trunk and terminating segments as separate markets.' Omantel proposes merger of Markets 14 and 15.	As above
Market definition – Market 15	Inclusion of both trunk and terminating segments in the market	Nawras, Box 2.16 at p 37	Nawras agrees that both trunk and terminating segments should be included in the market.	As above
Market definition –	Market 16: Wholesale IP	Omantel, 4.113 at	'In contrast to Markets 14 & 15, the definition of this market is less artificial. Mobile resellers (Friendi, Renna,	Noted. TRA has clarified the service content of this market by changing the title to explicitly refer to IP

Reference	Subject	Respon dent	Comment	TRA Response
Market 16	international bandwidth capacity	p 68	Injaz and Samatel) may all wish to negotiate separate contracts for their international rates. There is therefore true demand for such a product. Samatel's acquisition of a license shows that it is possible to enter into this market as self-supply.'	bandwidth.
Market definition – Market 17	Market 17: Wholesale voice call termination on individual mobile networks	Friendi, p 6	'As the market stands now should the TRA enable resellers to be licensed as "full" MVNOs then Friendi would respectfully suggest that further regulation would be required to ensure that mobile operators pass on any termination payments to the relevant MVNO in full.'	TRA will determine at the appropriate time the Class II mobile reseller licences becoming MVNO licences or enabling the licensee to operate network platforms. The matter will be considered along with the review of the Licensing Framework which is already underway. It might be noted, in response to Friendi's comment, that MVNOs can take many forms, and that its comment regarding which party receives terminating access charge revenue relates only to some of these forms. For present purposes each mobile network is a separate market for termination.
Market definition – Market 17	CPNP	Omantel, 4.75-6 at p 57	'It is common regulatory practice in countries with Calling-Party-Network-Pays systems to regulate termination rates. The economic literature states that under certain circumstances, termination rates can be used as an instrument of tacit collusion and can increase prices. 'Omantel has no comments regarding this reasoning and its applicability to Oman in the face of overwhelming regulatory convention.'	Noted.
Market definition – Market 17	Definition	Nawras, Box2.18 at p 40	Nawras agrees with the definition.	Noted
Market definition –	Market 18: Wholesale	Friendi, p 6	'Friendi completely agrees with the TRA's assessment of the relevant service, geographic and customer market	Noted

Reference	Subject	Respon dent	Comment	TRA Response
Market 18	access and call origination on public mobile telephone networks		definition for wholesale mobile access and call origination services.'	
Market definition – Market 18	Not hypothetical	Omantel, 4.120-1 at p 69	'In contrast to other markets in the consultation, the wholesale mobile origination market is not hypothetical. The demand side consists of Class II resellers. 'Omantel notes that there is an error in TRA's reasoning regarding the hypothetical monopoly test. TRA argues that a Class II reseller cannot switch Class I resellers easily. This is not a correct question within the "hypothetical monopoly test" but should be asked at a later stage in the market evaluation process.'	Noted. Omantel is making a statement about the sequencing of each stage in the market analysis methodology. In fact the issue of switching barriers is raised later in the analysis as suggested by Omantel.
Market definition – Market 18	Definition	Nawras, Box 2.19 at p 42	Nawras considers the definition 'acceptable'.	Noted. However on further consideration TRA has included a number of services within the access element of market that were presented as services in separate markets. Although these forms of access are not necessarily substitutes for each other they are all forms of mobile network access. They include national roaming (formerly in Market 19); MVNO services; and sale of airtime through mobile resellers.
Market definition – Market 19	Market 19: Wholesale national roaming	Omantel, 4.134 at 72	'Omantel does not agree that a national roaming market should be defined. Nawras has a comparable market share to Omantel and does not require national roaming. In case a 3rd operator will be licensed, the question of national roaming may arise, but it would be tied together with questions regarding the distribution of spectrum, and other regulatory issues. Therefore Omantel believes that it is better to refrain at this point from the definition of such a market.'	Since the Public Consultation on the MDD Report the matter of national roaming has arisen in a more imminent form and a formal request might be received. Therefore a market that includes roaming may be important. TRA has reconsidered roaming and some other services and determined that they are forms of mobile network access and, as such, are best included in Market 18. Market 19 is no longer required as a separate market.

Reference	Subject	Respon dent	Comment	TRA Response
Market definition – Market 20	Market 20: Wholesale transit	Omantel, 4.136-7 at p 72	'In Omantel's view, there is no need for the definition of such a market. By evidence of Nawras' success, an obligation to interconnect between Omantel and Nawras is a sufficient regulatory tool. 'Omantel and Nawras and other Class I providers should they be licensed can negotiate precise terms of interconnection on a commercial basis.'	This market is distinct from the obligation of two operators to interconnect their respective networks. Wholesale transit involves the carriage of traffic between two points of interconnection and the originating and /or terminating networks need not be operated by the transit operator. The value of defining the market, even in the absence of current apparent demand, signals that the matter is one that will be considered further if circumstances so justify.
Susceptibility – Market 1	Market 1: Retail access to the public telephone network at a fixed location	Omantel, 4.8 at p 37	'In any case, be it for a national market or for built-out areas, it is not conceivable that ex-ante regulation be more stringent than historic regulation, since it is a fact that Nawras is increasing competition in this market.'	In this market TRA is not suggesting greater regulatory stringency or intrusion than in the past. The purpose of the study is to ensure that regulatory stringency is appropriate, not more or less than the current arrangements.
Susceptibility – Market 1	Constraint by mobile markets	Omantel, 4.22 at p 41	'Omantel believes that the constraint imposed by mobile markets should be taken into account. In effect, fixed regulation should not be stricter than retail mobile voice regulation.'	TRA does not agree with this line of reasoning. There is some constraint imposed by the existence of a market for services that some customers accept as a possible substitute. However, as Omantel has recognised in its submission, the remaining fixed customers would have been aware of the possible option of fixed-to-mobile service substitution and have chosen to retain their fixed services. Whether this decision was conscious or at a single point in time is not the issue. The key point is that some customers wish to retain the characteristics of service at a fixed location. The constraint in such circumstances provided by mobile service prices is weak.
Susceptibility – Market 1	VOIP	Omantel, 4.23 at p 41	' it appears that TRA has not properly considered the impacts of the recent regulation on Voice-over-IP provisioning and the TRA decision to allow for certain VoIP applications but equally the impact of a grey VoIP market. VoIP providers, be these legal or illegal, have	Omantel's point is well made. The VoIP changes occurred after the Public Consultation document was settled. TRA considers that the impact of VoIP should be considered in relation to alternative calling services and therefore notin Market 1.

Reference	Subject	Respon dent	Comment	TRA Response
			gained significant market share in the voice market, which constrain Omantel's pricing so the test of emerging competition fails.'	
Susceptibility – Market 2	Market 2: Retail local, national voice call service from a fixed location	Nawras, Box 3.2 Q1 at p 8	Nawras disagreesin relation to application of criterion (b): 'The introduction of Nawras' fixed services in 2010 has enhanced competition for the national voice services. Although still at early stage of competition, with Omantel having a larger market share, the market is witnessing competitive rates and new offers that were not previously available.'	Charges for voice calls from a fixed location have not shown the effect of new entry competition of the kind referred to by Nawras. The standard peak and off peak, on-net and off-net rates have held firm since 2008.
Susceptibility – Market 2	Criterion (b) – Competition criterion	Nawras, Box 3.2 Q1 at p 8	Nawras disagrees with the TRA on the application of this criterion: 'With current market dynamics, competition although at early stage is present and growing in this market. Regardless of number of players in the market, we consider prices are competitive and within reasonable rates compared to that in the Region. Both operators are competing aggressively through attractive offers such as CUG in order to gain higher market share.'	Competition is at the margins and is associated with promotional offers and, as noted by Nawras, to CUGs. The tariffs for these calls have not changed since 2008. It is accepted that competition in this market may be at an early stage. Absent regulatory intervention, there is no reason to believe that consumer welfare will be delivered in this market to a broader base of users.
Susceptibility – Market 3	Market 3: Retail international voice call service	Friendi, p 6	'With the limited number of international termination voice providers Friendi agrees with the TRA's assessment.'	Noted. The assessment that Friendi is referring to is that shown in the draft MDD Report as part of the Public Consultation document. At that time TRA considered that the market was susceptible to ex ante regulation to address dominance, and suggested that Omantel and Nawras were jointly dominant in the market. The issue has been reconsidered in the light of the comments made in submission for the public consultation, and information on further developments in the market. The retail international voice market is served by Omantel, Nawras, mobile resellers and various operators using IP based services. It is true that mobile resellers have tended to be timid and not to offer aggressively

Reference	Subject	Respon dent	Comment	TRA Response
				competitive price packages. However they have a clear capacity to do so. In addition, grey and ghost traffic in this market serves to act as a constraint on the main participants. Samatel is also licensed to participate in this market as a gateway operator. The business model that it adopts is yet to be made clear. Market uncertainty of this kind also serves to encourage competitive pre-emption and responses by the main players. Therefore criteria (a) and (b) have not been met, and the market must be considered not to be susceptible to ex ante regulation.
Susceptibility – Market 3	Effect of 3- criteria test	Omantel, 4.41 at p 45	Omantel considers that 'TRA's own reasoning for not imposing regulation should be applied already at the stage of the 3-criteria-test.'	TRA considers the methodological sequence to be important. There may be reasons beyond those covered by the three criteria not to impose regulation, and these reasons might emerge in the course of examining whether there is dominance in the relevant market. However, as noted above, TRA considers that the market is not susceptible to ex ante regulation for dominance and there is no further examination required.
Susceptibility – Market 3	Criterion (a) – High non transitory barriers to entry	Nawras, Box 3.3 Q1 at p 13	'Criterion (a): Disagree. The Authority in its assessment has not provided supporting evidence as to why it considers this market subject to high non-transitory barrier. There is no empirical evidence to show that competition is not sufficient in Market 3. In accordance to TRA's licensing regime and FTA obligations, we consider this market open, supported by introducing a third international gateway licensee.'	TRA has reconsidered this market and has determined that Criterion (b) has not been met. It now considers that, in light of the comments and information provided during the course of the consultation, that this market has a tendency to competition, notwithstanding the nature of entry barriers. TRA is also inclined to agree with Nawras that the entry barriers to the retail market are not particularly high and are non-transitory. TRA will therefore determine that Market 3 is not susceptible to
Susceptibility – Market 3	Criterion (b) – Tendency to competition	Nawras, Box 3.3 Q1 at p	'Criterion (b): Disagree. We consider international market as one of the most competitive markets defined. While we agree there is lack of competition on the wholesale	ex ante regulation of dominance. TRA acknowledges Nawras' agreement that there is lack of competition on the wholesale side.

Reference	Subject	Respon dent	Comment	TRA Response
		13	side, on the retail side, the market has experienced major changes, with VoIP applications such as Viber being unblocked in the Omani market as well as the launch of Nawras' 0902 promotion which has been running since January and is expected to be offered on a permanent basis soon.'	
Susceptibility – Market 4	Market 4: Retail broadband Internet access from a fixed location Criterion (a) Barriers to entry	Nawras, Box 3.4 Q1 at p 21	'Criterion (a): TRA's conclusion contradicts its assessment in market analysis for dominance. In criteria A.16 in Figure 4.6 the Authority in fact has determined the market to be competitive with no major barrier to entry.'	TRA has reconsidered Market 4 following the Public Consultation, taking account of the development of the market, and has determined that both Omantel and Nawras are jointly dominant in this market. The lack of competition in the related wholesale markets needs to be addressed before it is appropriate to relax the remedies proposed to address the lack of competition in this retail market.
Susceptibility – Market 4	Criterion (b) Tendency to competition	Nawras, Box 3.4 Q1 at p 21	'Criterion (b): TRA's statement is inaccurate because: 1. It lacks detailed assessment as to why this market is considered uncompetitive. 2. It does not differentiate rural and urban geographical scope.'	The market is not showing a tendency to effective competition under present circumstances. It is in its early stages and therefore such a tendency might yet emerge, supported by other initiatives, such as the National Broadband strategy and an infrastructure company. TRA has already indicated that the identification of sub- markets – such as urban and non-urban – may be necessary in future to better differentiate the competitive outcomes as they emerge. TRA considers that such an approach will be for a future market analysis.
Susceptibility – Market 4	Criterion (c) Adequacy of ex post remedies	Nawras, Box 3.4 Q1 at p 21	'Criterion (c): Accept TRA's conclusion only based on its definition of geographic scope. However as this market is rapidly growing, we request the Authority to conduct reviews on annual basis.'	TRA does intend to monitor this market carefully, however, the market review will be conducted whenever the market situation demands the same.
Susceptibility – Market 5	Retail dial-up Internet access from a fixed location		No comments received.	Noted.

Reference	Subject	Respon dent	Comment	TRA Response
Susceptibility – Market 6	Market 6: Retail mobile services market	Friendi, p 6	'Friendi agrees strongly with the TRA's assessment.'	Noted.
Susceptibility – Market 6	Competition in fact	Omantel, 4.52 at p 48	' it is difficult to argue that a market with a penetration rate of 177% and a growth rate in subscriptions of around 10% or 450,000 subscriptions between Q1 2011 and Q1 2012 does not present consumers with sufficient benefits and would therefore need to be regulated ex- ante.'	TRA has re-examined the evidence for competition in Market 6. TRA is particularly concerned that general price competition is limited, with standard per minute rates being identical and constant since 2005 and off peak rates being identical and constant since 2009. This means that price competition has followed a pattern common in concentrated oligopolistic markets, namely via promotional offerings and at the margin.
Susceptibility – Market 6	Market monitoring	Nawras, Box 3.4 Q1 at p 21	'Omantel understands the wariness of TRA, given that there are "only" two operators in the market. In that sense, Omantel understands that TRA would like to "monitor" the market. Under the current regulatory framework, TRA is only able to do so if it finds that the 3- criteria-test is met and that there is joint dominance. This appears to be a fundamental weakness of the regulatory framework for Oman, where monitoring might understandably still be required but other regulations such as price regulations in the mobile retail market could not be justified.'	See comment above regarding price competition. Omantel has explained how it has used its mobile resellers to access specific market segments in ways that might have been difficult for its Omantel main-brand. Although useful to grow markets, mobile resellers have not sought to compete vigorously on price, and have sat within the comfort zone of their hosts' price structure. There is no reason to expect this to change in the short term. Under these circumstances the market structure and concentration are very important.
Susceptibility – Market 6	Criterion (a) High and continuing entry barriers	Nawras, Box 3.6 Q1 at p 23	Nawras is inclined to disagree because there are no regulatory and economic entry barriers for Class II operators.	The most important barriers are economic. These are barriers for Class II operators (should they be permitted to become infrastructure-based operators following the Review of Licensing Framework) and new entrants. Nawras has referred to the penetration level of 177%. In addition there are significant economies of scale associated with mobile operations that will extend beyond 50% of the market for the incumbent operators

Reference	Subject	Respon dent	Comment	TRA Response
				combined. These circumstances, taken together, present a high economic barrier.
Susceptibility – Market 6	Criterion (b) – Trend to competition	Nawras, Box 3.6 Q1 at pp 23-6	'Criterion (b): Disagree. Competition in retail mobile has been established, regardless of number of players in the market. Retail mobile is one of the most aggressive competitive markets in Omani telecom sector, with 5 service providers, 4 of which have a reasonable market share.' Nawras offers evidence of substantial decrease in mobile broadband prices over the period 2010 to 2012.	A better description of the current market is that there are 5 service providers, two of which have large market shares and the remaining three have small shares based on segmentation strategies without emphasis on robust price competition. In the absence of regulatory or policy (licensing) intervention the current situation will continue, but with declining growth.
Susceptibility – Market 6	Criterion (c) – Adequacy of ex post remedies	Nawras, Box 3.6 Q1 at p 26	Nawras considers that the TRA had not provided evidence in relation to ex post regulation being insufficient.	Noted. The overall adequacy of competition law and the level of experience in Oman of the application of ex post regulations to this sector are untested and cannot be fully relied upon. Omantel covered some aspects of this problem in its submission. The evidentiary burden associated with proving that there is collusion ex post is very high indeed, and significant damage may occur in the meantime to consumer welfare
Susceptibility – Market 7	Market 7: Retail national leased line services	Omantel, top p 52	'Omantel has no comments.'	Noted. The position in the draft MDD Report will be maintained.
Susceptibility – Market 8	Market 8: Retail international leased lines	Omantel at top p 53	'Omantel has no comments.'	Noted. The position in the draft MDD Report will be maintained.
Susceptibility – Market 9	Market 9: Retail business data services provided from a fixed location	Omantel, 4.62 at p 53	'Omantel agrees with the findings of this test. Omantel is however puzzled as regards the various findings of the impact of Nawras' competition on regulation. While in Market 9, the impact is such that the market is not susceptible to ex-ante regulation, Market 6 is susceptible to regulation, there is joint dominance with Nawras and a remedy of a light form price regulation. In Markets 1 and	Noted. The circumstances in each of the markets are sufficiently different to justify different outcomes.

Reference	Subject	Respon dent	Comment	TRA Response
			2 Omantel has single dominance and there is a price- cap.'	
Susceptibility – Market 10	Market 10: Wholesale voice call origination on the public telephone network provided at a fixed location	Omantel, 4.70 at p 56	'The analysis of TRA is flawed. Indirect access providers using over the top internet services can easily use existing Omantel or Nawras infrastructure. They are fast- growing and already provide a competitive constraint which is becoming increasingly important. Ex-ante regulation might concern the neutrality of the network, but the TRA's analysis is based on classical indirect access providers and therefore mistaken.'	The market is for voice call origination at the wholesale level. Increased OTT service usage, referred to by Omantel, does not affect the <i>classical</i> indirect access providers. OTT service issues and related net neutrality policies are best dealt with directly and not as an incident of market analysis.
Susceptibility – Market 11	Market 11: Wholesale voice call termination on individual public telephone networks provided at a fixed location	Nawras, p 32	Agree with TRA assessment	Noted
Susceptibility – Market 12	Market 12: Wholesale network infrastructure access at a fixed location	Omantel, 4.86 at p 60	'Omantel believes that the ULL market should not be defined. Given that it is an artificial market, it is pure regulatory expediency to exclude other competitors from regulation. This allows TRA to claim at the subsequent stage that the 3-criteria-test is met and that Omantel is dominant in the market.'	Noted earlier as a matter of market definition. Omantel is right that the tight definition results in the three-criteria test being more readily satisfied. However the suggestion from the words used is that Omantel considers that TRA wanted such an outcome. TRA is neutral on the matter. The market definition has been expanded to include all fixed network infrastructure access, and not just ULL. ULL remains the focus for discussion however.
Susceptibility	Regulation v	Omantel,	Paper by W Briglauer et al (see 4.89):	Noted. TRA accepts that wholesale access to

Reference	Subject	Respon dent	Comment	TRA Response
– Market 12	investment in NGA	4.90 at p 60	'The paper finds that successful NGA roll-outs happen in countries that either adopt a national broadband company, such as Australia and Singapore, or, at the other extreme, countries that deregulate access such that competitors have no regulated access to the local loop, as in the U.S The European model of cost based access, which is emulated in the TRA regulations, has not shown to lead to fibre upgrades in the same way.'	infrastructure needs to be progressed with caution and the potentially adverse impact on new investment kept in mind at all times. The paper referred to is noted. However this goes more to remedies once there is shown to be dominance, rather than to susceptibility to ex ante regulation.
Susceptibility – Market 12	Meeting the 3- criteria test	Omantel, 4.93 at p 61	'Omantel does not agree that the 3-criteria-test is met. The 3-criteria-test is endogenous. If TRA decides to regulate at cost, then no competition will emerge due to a lack of investment incentives and the test appears satisfied.'	At this point in the methodological sequence the issue is susceptibility, not the specific remedies that might be considered.
Susceptibility – Market 13	Market 13: Wholesale broadband access at a fixed location	Omantel, 4.105 at p 64	'Since even in an effectively competitive market companies would not necessarily elicit to give access to their infrastructure, it does not appear logical to carry out a 3-criteria-test for the market. It would instead be correct to ask whether the corresponding retail market would pass the 3-criteria-test. If not, then one of the remedies could be access (as in Market 13).'	The willingness of companies to give access to infrastructure and the conditions under which such willingness might exist is not relevant to the issue of susceptibility. If such willingness was the defining issue then there would be no question ever about mandated access to certain types of telecommunications infrastructure. It may not be mandated at all. TRA considers the 3-criteria test to be relevant because ex ante regulation should not be considered if any of the criteria tests fail. Omantel is making another point in this comment — namely that the corresponding retail market would need to fail the 3-criteria test before access is mandated at the wholesale level. (It is clear that Omantel means 'pass' rather than 'fail'. The retail market would need to have passed the test and be susceptible to ex ante regulation before wholesale access should be mandated.) The corresponding retail market is Market. As already noted

Reference	Subject	Respon dent	Comment	TRA Response
				above the TRA has reconsidered Market 4 following the Public Consultation and determined that the test is not passed and that Omantel and Nawras are jointly dominant. The point of Omantel's further comment has disappeared as a result.
Susceptibility – Market 13	Criterion (a) Entry barriers	Nawras, Box 3.13 Q1 at p 34	'Criterion (a): Overall, there is regulatory barrier in this market.'	Noted.
Susceptibility – Market 13	Criterion (b) – tendency to competition	Nawras, Box 3.13 Q1 at p 34	'Criterion (b): Yes, we agree. Competition to a certain degree is ineffective in this market.'	Noted.
Susceptibility – Market 13	Criterion (c) – adequacy of ex post remedies	Nawras, Box 3.13 Q1 at p 34	'Criterion (C): We accept TRA's conclusion.'	Noted.
Susceptibility – Markets 14	Wholesale terminating segments of leased lines		No comments received.	Noted. The position outlined in the draft MDD Report is maintained, and the market is susceptible.
Susceptibility – Markets 15	Wholesale trunk segments of leased lines		No comments received.	Noted.
Susceptibility – Market 16	Market 16: Wholesale IP international bandwidth capacity	Omantel, 4114-5 at p 68	'The entry of Nawras and now also Samatel proves that this market does not have insurmountable barriers to entry. When terms cannot be negotiated to the satisfaction of a customer, it is possible to enter into the market to provide self-supply. 'The change in the competitive landscape provided by Nawras' entry and Samatel's license must be reflected in	There are high barriers to entry. These are economic rather than regulatory. As Omantel notes the entry of Nawras and the licensing of Samatel shows that licences are available. The economic barriers to entry relate to the established position and commercial network of the incumbent and

Reference	Subject	Respon dent	Comment	TRA Response
			the regulations, whether in the 3-criteriatest, in the assessment of dominance or in the regulations.'	the time taken to again traction in this market.
Susceptibility – Market 16	Criterion (a) Entry barriers	Nawras, Box 3-16 at p 37	Nawras considers that there are no barriers to entry in this market, because licensing is open and the FTA signed by Oman determines an open entry policy.	See above. Although there is an open entry policy and open licensing, the barriers are economic and the need to replicate the network of capacity supply of the incumbent. The barriers do not have to be insurmountable – the test is whether they are high and enduring, even if longer term the impact might be lessened.
Susceptibility – Market 16	Criterion (b) – tendency to competition	Nawras, Box 3-16 at p 37	Nawras considers the market to be uncompetitive with Omantel owning several international cables to its one.	TRA considers that Nawras is able to impose some constraint on Omantel in this market even though the capacity levels of the operators differ. However, the market structure means that the current levels of concentration are likely to continue without any increase in the levels of competition.
Susceptibility – Market 16	Criterion (c) – adequacy of ex post remedies	Nawras, Box 3-16 at p 37	Nawras accepts TRA's conclusion.	Noted.
Susceptibility – Market 17	Market 17: Wholesale voice call termination on individual mobile networks	Friendi, p 6 Nawras, Box 3.17 at p 40	'Friendi agrees with the TRA's assessment that this market is susceptible to ex ante regulation.' Nawras agrees with TRA's assessment.	Noted. The market that is susceptible is, in each case, the market formed by each mobile network in relation to call termination. Noted.
Susceptibility – Market 18	Market 18: Wholesale access and call origination on public mobile telephone	Friendi, p 6	'Friendi agrees strongly with the TRA's assessment that this market is susceptible to ex ante regulation. However, we do not agree with the statement that ex poste controls are untried and untested and may be insufficient. There are a number of markets worldwide where ex ante regulation has strengthened the position	Noted. For the present there are only two MNOs and no reasonable prospect of others are foreseeable within the time horizon of the current market analysis. As previously noted in response to Omantel's proposal that the possibilities of new entry must be exhausted, TRA intends to seek indications that are more practical and less

Reference	Subject	Respon dent	Comment	TRA Response
	networks		of alternative providers and thereby benefited consumers. Indeed the Paper highlights that without ex ante regulation in this market the damage could be immediate and severe. We believe that it is essential that rules for this market are set as a matter of urgency to enable investment and innovation by resellers.'	theoretical when examining new entry possibilities.
Susceptibility – Market 18	Level of competition	Omantel, 4.124 at p 70	'4.124 There are currently two class I licensees with a mobile license that class II licensees can negotiate with. Whether this market would be active without regulation is unclear. Omantel believes however that subscriber numbers are sufficiently high so that the market can be regulated with ex-post competition law. Resellers have more than 600,000 subscribers. Both Omantel and Nawras have incentives to host traffic for such a large number of subscribers. For this reason, it is likely that the existing resellers are in a strong negotiating position vis-à-vis Omantel and Nawras.'	TRA notes that much of this commentary relates to the retail market (Market 6), which has been concluded to be susceptible. However that does not mean that the retail market is not at risk as a result of the exercise of market power in upstream (wholesale) markets. The latter has to be separately assessed. If the wholesale market is characterised by dominance, this means that competition in the retail market is also at risk.
Susceptibility – Market 19	Market 19: Wholesale national roaming	Omantel, 4.135 at p 72	'Omantel believes that there is no meaning in carrying out a 3-criteria-test for this market.'	National roaming has now been included in Market 18 as a wholesale mobile access service. Omantel's point is that in the absence of demand for roaming application of the 3-criteria test is speculative or theoretical. However, the test needs to be applied on an 'as if' basis. The MNOs might be expected to be reluctant to allow roaming by potential competitors, thereby creating a high and continuing barrier. There is no evidence of competition emerging between the MNOs or with unnamed new entrants. On balance the issues associated with ex post intervention generally might be expected to apply in this case.
Susceptibility	Market 20:	Omantel,	'Omantel does not believe that this market should be	Noted. The comments in relation to the meaning and

Reference	Subject	Respon dent	Comment	TRA Response
– Market 20	Wholesale transit	4.139 at p 73	defined.'	practical significance of applying the 3-criteria test made in the case of Market 19 (now merged with Market 18) also apply to Market 20.
Dominance Analysis – Market 1	Market 1: Retail access to the public telephone network at a fixed location	Omantel, 4.9-10 at p 37	'TRA notes that Nawras has started rolling out its network and has around 6% of the fixed line market. We note that Nawras in fact has almost 40% of the fixed broadband market, which necessitates fixed access as one of the products. Omantel concedes that it continues to have a high market share and can be regarded as dominant, it is nevertheless the case that the increased competition from Nawras must be recognised by TRA in its regulations, which will be expanded upon below.' 'Further, Omantel cannot be regarded as dominant in areas in which there is no service.'	TRA considers that notwithstanding Nawras's entry to the market TRA's analysis of dominance still holds. Nawras' constraint on Omantel in this market is weak. As the market is defined on national basis, TRA do not agree with Omantel's views.
Dominance Analysis – Market 1	Market 1 - Excess profitability	Omantel, 4.11 at p 37	'Enough specific evidence has been provided by Omantel that it does not any excessive profitability in Market 1. In fact, from year to year since 2008, Omantel has been submitting its calculation of Access Deficit to the TRA.'	Noted.
Dominance Analysis – Market 2	Market 2: Retail local, national voice call service from a fixed location	Omantel, 4.25 at p 41	'if mobile substitution is taken into account, then the last point at which this should be the case is in the assessment of dominance. The reason is that TRA finds single dominance in Market 2, but not in Market 6. For this reason, Omantel should not be regarded as dominant in Market 2.'	The two markets are not comparable. Nawras' position in Market 2 is that of a recent entrant still very much smaller than Omantel. This is not the case in Market 6 where the positions of the two operators are more closely matched. Omantel's point here is that mobile substitution should be taken into account in defining the market. However, the market has already been defined and that point has already been considered earlier in the market analysis process.
Dominance Analysis – Market 2	CS/CPS	Omantel, 4.27 at p 41	'Omantel is also concerned that in the statement, TRA's view of an effectively competitive market is the one in which CS and CPS providers are present. As Omantel has argued in its general introductory section and will restate	TRA will review the text of the draft MDD Report to ensure that it remains appropriate. However, even if CS/CPS providers are present this would not necessarily be sufficient to create an effectively competitive market

Reference	Subject	Respon dent	Comment	TRA Response
			in the sections on wholesale markets, this view is dangerous for the evolving infrastructure competition, antiquated and not applicable to Oman.'	in the short term. CS/CPS is a pro-competitive remedy that has, in the past, been useful in certain situations – particularly in the early days of competition for long distance revenues. That is not to say that it would be necessary or sufficient to render Market 2 effectively competitive. The other comments on CS/CPS are noted.
Dominance Analysis – Market 2	Market 2 – Excess profitability	Omantel, p 41	'Omantel has been providing specific evidence to the TRA in its annual products profitability reports that it does not have abnormal profit.'	Noted. It is also noted that the services in these markets have been subject to a price cap over the last 5 years or more, and therefore tendencies to abnormal profitability may have been curtailed.
Dominance Analysis – Market 2	Reasons according to Nawras	Nawras, Box 4.3 Q1 at pp 9-10	Nawras agrees that TRA's assessment is reasonable because Omantel has higher market and revenue shares (compared to Nawras); the potential to margin squeeze, and has been reluctant to implement CS, LLU and FNP.	Omantel's higher revenue share was not the sole reason for the previous proposal. Nor was any potential on Omantel's part for margin squeeze (this being a retail market). Omantel may as it pleases be reluctant to implement CS, LLU and FNP. This is not proof of dominance but, more likely, reflects Omantel's view of the net cost that those initiatives would have for Omantel.
Dominance Analysis – Market 3	Market 3: Retail international voice call service	Friendi, p 7	'Friendi agrees with the TRA's assessment that Omantel and Nawras are jointly dominant in this market. Indeed, this dominance and the ability of the two mobile operators to control the reseller agreements, in particular retail mobile prices, has been a significant factor is restricting the market share of the mobile resellers.'	However the control that Friendi refers to exists, if at all, at a wholesale level in the overall market. A retail market is being considered here. In any case, TRA has reviewed Market 3 in the light of the Public Consultation feedback and found that it is not susceptible to ex ante regulation.
Dominance Analysis – Market 3	Joint dominance	Nawras, Box 4.4 Q1 at pp 14-5	Nawras disagrees based on the retail international market being very competitive. TRA should consider Nawras' recent and substantial investment; Nawras' continuing dependence on Omantel pipes to deliver	TRA has reviewed this market and determined that it is not susceptible to ex ante regulation of dominance. TRA acknowledges Nawras's comments on competition.

Reference	Subject	Respon dent	Comment	TRA Response
			outgoing international traffic; and asymmetry of market share.	
Dominance Analysis – Market 4	Market 4: Retail broadband Internet access from a fixed location	Omantel, 4.44 at p 45	'Omantel agrees with the analysis. Omantel believes that TRA should cross-reference its own Guidelines on the issue of regulation in an emerging market.'	Noted.
Dominance Analysis – Market 4	No single or joint dominance	Nawras, Box 4.5 Q1 at pp 21-2	'TRA's conclusion is appropriate only when national is defined as the geographic scope. In Omani fixed broadband market, different characteristics exist in urban and rural areas, and therefore market performance differs.' Nawras considers that Omantel may be regarded as singly dominant in urban areas based on current market shares and relative capacity to influence the market.	TRA has reviewed its position in the light of the comments received and after further consideration of the nature of the market and of related wholesale markets. It has concluded that further competitive entry into Market 4 is significantly dependent on the imposition of effective regulation on related wholesale markets or those wholesale markets themselves becoming effectively competitive. In the meantime it is inappropriate to relax the regulatory controls on Market 4 or to assume that the wholesale markets involved are effectively regulated or effectively competitive when they are not.
Dominance Analysis – Market 6	Market 6: Retail mobile services market	Friendi, p 3	Friendi notes that service based competition (SBC) and facilities based competition (FBC) are complementary and that both are needed in Oman. 'The TRA should not, however, present itself with a false choice by pitting services-based competition (SBC) against facilities-based competition (FBC). Rather, a robust service based competitive dynamic will drive increased infrastructure competition and a truly long- term commitment on the part of carriers in Oman. There should be a balance between the two forms.'	The point is noted. However there is a balance to be struck in terms of the expectations of the sector and the incentives for new investment at any particular time.
Dominance Analysis – Market 6	Services v facilities based competition	Friendi, pp 3-4	Friendi notes that one way in which SBC and FBC preferences have been reconciled is though the ladder of investment theory, which regards SBC as an important step in the ladder of investment for service providers with aspirations to be network operators. Friendi notes that ' SBC is important, not only as a rung on the way to	At least one other submission supports the view expressed by Friendi. It is not necessary for the Competition Framework that TRA has a view on the ladder of investment theory. However, as a matter of fact, the theory has not been used to support or justify any regulatory position adopted by TRA.

Reference	Subject	Respon dent	Comment	TRA Response
			FBC, but also in its own right'.	
Dominance Analysis – Market 6	Market 6 – incentives for and risk of tacit collusion	Omantel, 4.56 at p 49	'4.56 Omantel strongly objects to this logic. This notion of a "danger" of tacit collusion is borrowed from merger control, where an authority needs to decide whether the merger of two firms would post-merger —in the future —potentially lead to tacit collusion. This is not the case for the current assessment of ex-ante markets. Here, Omantel and Nawras are active in the market now. If TRA found anti-competitive collusive behaviour, it could sanction Omantel and Nawras under the (forthcoming) ex-post competition decree.'	The point about merger control regulation has been addressed in Item 18 in the General Section earlier in this Report. The text will be reviewed to ensure that it reads most appropriately. However the point is that the market structure is highly concentrated and both major operators have an interest to pursue a common policy rather than compete away margin to consumers. They are not forced to do this by smaller and much weaker mobile reseller competitors. The potential is for anti-competitive collusion in future (whether tacit or explicit) and it is not part of the risk assessment that past anti-competitive or collusive conduct needs to be shown to have occurred.
Dominance Analysis – Market 6	Spare capacity	Omantel, 1 st para at p 50	' the way mobile networks are built corresponds to forecast of demand leaving some capacity for expected growth be it that this results from our own customers or from the customers of our mobile resellers. The constraints to cater to demand are known and most importantly involve spectrum. Currently, with the recent reframing initiatives, we do not foresee specific concerns on our capacity to build out networks in line with demand.'	Noted.
Dominance Analysis – Market 6	Effectiveness of MNP arrangements	Omantel, 2 nd para at p 50	'Since MNP was introduced a total of 180 thousand customers have benefitted from this measure. Recent the MNP feature has been extended to also include the mobile resellers which will further enhance the competitiveness of the market.'	Noted.
Dominance Analysis –	Price decreases	Omantel, 3 rd para at	'No change in headline price for national mobile calls., although through promotions, bundles, and charging	Noted. However the nature of oligopolistic price competition, which is evident in this market, has been

Reference	Subject	Respon dent	Comment	TRA Response
Market 6		p 50	mechanism from per minute to per call have benefited the consumer with better and lower rates compared to the published per minute charge.'	discussed above. Price competition is marginal and in terms of promotions. The standard rate applies more generally and has not been changed since 2005 for peak and since 2009 for off peak calls.
Dominance Analysis – Market 6	Joint dominance	Nawras, Box 4.6 Q1 at p 28	Disagrees, claiming lack of evidence to support the TRA assessment, especially given the aggressive retail market. No evidence of operating collectively.	Noted. Because it is important, TRA notes once again that joint dominance is a concept based on market structure together with an assessment of the risk of collective action being adopted as a strategy in future. It is not necessary to have evidence of the operators having acted collectively in the past. Although such evidence may be very relevant in supporting an assessment of joint dominance. Its absence does not support or require a conclusion of non-dominance.
Dominance Analysis – Market 6	Reseller assessment	Nawras, Box 4.6 Q1 at p 28	'TRA assessment on resellers' inability to compete fairly in the market as a result of joint dominance is inaccurate. The Authority in fact asserted resellers' inability to develop independent strategy thus it's unlikely to become effective competitor to Nawras and Omantel. This is a natural advantage of facility based service providers and therefore, within the scope of each service provider's network the market is effectively competitive. Moreover, the regulatory requirement set by the TRA obliges Nawras and Omantel to transfer any reductions in retail tariffs to resellers. This includes promotional offers.'	The source of the competitive constraint is one thing, the reality of such a constraint is another and that was the point being made.
Dominance Analysis – Market 6	MNP effectiveness	Nawras, Box 4.6 Q3 at p 29	'Number portability is indeed an effective tool/product in promoting competition as demonstrated by number of ports.' Nawras notes that the MNP process could be further improved.	Noted. It is accepted that customers have used MNP, although its success is not to be measured in terms of the number of ports but in terms of overall price levels for services since its introduction. As noted already price competition has been marginal and concentrating on promotional offers and the like. Standard prices have not

Reference	Subject	Respon dent	Comment	TRA Response
				changed for years.
Dominance Analysis – Market 7	Market 7: Retail national leased line services	Omantel, top p 52	'Omantel has no comments.'	Noted. The position in the draft MDD Report will be maintained.
Dominance Analysis – Market 8	Market 8: Retail international leased lines	Omantel at p 53	'Omantel has no comments.'	Noted. The position in the draft MDD Report will be maintained.
Dominance Analysis – Market 9	Market 9: Retail business data services provided from a fixed location	Omantel, 4.62-3 at pp 53-4	'Omantel agrees with the findings of this test. Omantel is however puzzled as regards the various findings of the impact of Nawras' competition on regulation. While in Market 9, the impact is such that the market is not susceptible to ex-ante regulation, Market 6 is susceptible to regulation, there is joint dominance with Nawras and a remedy of a light form of price regulation. In Markets 1 and 2 Omantel has single dominance and there is a price- cap.' As an infrastructure competitor to Omantel, Nawras provides constraints in all markets to Omantel.	Noted. As already observed each market has been assessed in terms of its circumstances. Broad comparisons of the kind made by Omantel cannot displace the market-specific analysis. In principle TRA accepts that, as infrastructure competitor to Omantel, Nawras provides some level of constraint in all markets to Omantel. The issue is the extent of the constraint in each market and whether it is a constraint that is weak or whether it is otherwise sufficient to negate dominance.
Dominance Analysis – Market 10	Market 10: Wholesale voice call origination on the public telephone network provided at a fixed location	Omantel, 4.71 at p 56	'Omantel notes that there is much confusion in the analysis regarding retail and wholesale markets. The wholesale market currently does not exist and therefore without customers it is not meaningful to consider the concept of dominance.'	TRA notes Omantel's comment but does not agree that there is confusion of the kind referred to. The confusion may result from Omantel's approach to the existence or non-existence of some wholesale markets, and labelling some <i>real</i> and some <i>artificial</i> . TRA has reviewed the market and considers that Omantel is dominant in it. There are weak constraints in terms of the presence of Nawras, but market share and a greater focus on data are likely to mean that the constraint remains weak in the short term.
Dominance Analysis –	Market 11: Wholesale voice	Nawras, p 32	Agree with TRA assessment	Noted.

Reference	Subject	Respon dent	Comment	TRA Response
Market 11	call termination on individual public telephone networks provided at a fixed location			
Dominance Analysis – Market 12	Market 12: Wholesale network infrastructure access at a fixed location	Omantel, 4.94 at p 61	'Omantel does not agree with the premise of the market definition and the 3-criteria-test.'	Noted. This comment has been dealt with earlier in this Report in dealing with definition and susceptibility issues. The primary service in this market is ULL access. Only Omantel has the capacity to provide ULL to access seekers, and the facility is not likely to be replicated or close substitutes offered by other wholesale providers. Therefore in the short term within the horizon of this report Omantel is singly dominant in this market.
Dominance Analysis – Market 12	Dominance regarding other infrastructure assets	Omantel, 4.95 at p 61	'In Omantel's view, the TRA approach is fundamentally flawed. Cost based access to infrastructure might appear attractive but is harmful, in particular in the case of Oman, in the longer term when network are upgraded and facilities based competition arises. Point (c) and (d) on page 139 of the Consultation illustrate the complex nature of access regulation in practice and therefore support Omantel's view that significant regulatory and management resources would be required to establish a ULL regime.'	This comment goes to remedies and will be further considered at that stage of the methodology. TRA appreciates the point that Omantel is making. Establishment of any ULL regime will involve set-up costs that will need to be borne by one party or another. Cost causation principles will need to be considered.
Dominance Analysis – Market 13	Market 13: Wholesale broadband access at a fixed location	Omantel, 4.107 at p65	'There is much confusion in TRA's reasoning (pages 139- 144) regarding whether a retail or a wholesale market is considered. This arises out of the fact that the access markets are artificial markets. Access products are remedies for perceived retail market failures rather than failures in a "wholesale market" itself. As stated above,	The issue of <i>real v artificial</i> markets has already been discussed. It is agreed that in effectively competitive markets companies may choose to permit access to their infrastructure, and may negotiate the terms of such access. However if the market is not effectively

Reference	Subject	Respon dent	Comment	TRA Response
			even in an effective wholesale market, companies may choose not to give access to their technology. For example, TRA states that Both Omantel and Nawras are vertically integrated operators that have the ability and the incentive to refuse to provide access to the various types of bit stream services on reasonable terms. By doing they deter entry at retail level and protect their own interests and position in the retail market.'	competitive, as here, refusal to grant access on reasonable terms where the infrastructure is not economically replicable may amount to an exercise of market power affecting downstream competition.
Dominance Analysis – Market 13	Existence of wholesale market	Omantel, 4.108 at p65	'This analysis is correct, but points to the fact that truly TRA sees a problem in the retail market and as a solution imposes a wholesale remedy. Such a remedy is then analysed as if a wholesale market existed.'	The existence of markets, and whether they are <i>real</i> , has already been discussed in this Report.
Dominance Analysis – Market 13	Relationship with retail market (4)	Omantel, 4.109 at p65	'However, TRA finds that no operator is dominant in the retail broadband market (Market 4). As a logical consequence, the wholesale access remedy should not be imposed and there cannot be a finding of wholesale dominance in the associated artificial wholesale market. TRA's reasoning is inconsistent and incorrect.'	As noted above, in subsequent consideration of the matter the TRA has determined that Omantel and Nawras are jointly dominant in Market 4. The point of Omantel's comment has now been addressed.
Dominance Analysis – Market 14	Market 14: Wholesale terminating segments of leased lines	Omantel, p 66	'Omantel does not consider itself to be dominant in market 14 and 15 as Nawras has built out its network for this service.'	Nawras has built out an inter-exchange or trunk fibre network and is in a position to provide trunk segments of leased lines at short notice between locations served by its network. This capability does not apply to the same extent for terminating segments. To deliver wholesale leased lines or provide them at retail level Nawras would need to invest in new capacity connecting premises (terminating segments) or lease these from Omantel. Nawras has a very small share of this market and therefore is exerting effectively no constraint on Omantel. Omantel is therefore singly dominant in this market.

Reference	Subject	Respon dent	Comment	TRA Response
Dominance Analysis – Market 15	Market 15: Wholesale trunk segments of leased lines	Omantel, p 67	'Omantel does not consider itself to be dominant in market 14 and 15 as Nawras has built out its network for this service.'	See above. However, Nawras trunk capacity that can be deployed to provide trunk segments of leased lines, and can constrain Omantel's decision-making. Nawras and Omantel are jointly dominant in this market because of the market structure and the clear risk of their pursuit of a common policy in this market.
Dominance Analysis – Market 16	Market 16: Wholesale IP international bandwidth capacity	Omantel, 4.116 at p 68	'Omantel notes that TRA's finding of joint dominance is based on TRA's own definition of "possibility to coordinate" without a proof that such coordination occurs. Omantel objects to the use of joint dominance in this way.'	The market structure and the convergence of the interests of the two main operators make it a reasonable and credible risk that they may foreclose the related retail market by refusal to supply. This is not a mere possibility in TRA's assessment. In addition, there is no requirement to show past coordination has occurred.
Dominance Analysis – Market 16	Joint dominance	Nawras, Box 4.15 Q1 at p 38	Nawras considers that the market lacks competition, but that Omantel should be considered to be singly dominant. In particular, TRA's conclusion does not meet the criteria of low elasticity of demand, similar market share, countervailing buyer power, and lack of potential competition.	The factors referred to by Nawras are matters that need to be considered by the TRA but are not individually determinative of dominance. The determination of joint dominance is not a matter for check lists, but an assessment of the operation and prospects for the market considered overall. Nawras has not provided evidence of low elasticity of demand at the wholesale level. Nawras has a sufficient share of this market to be a constraint on the market decisions and behaviour of Omantel, but there is not similar level of constraint on Omantel and Nawras, considered together. Samatel is authorised to enter this market but has been slow to do so. It is therefore not currently and within the time horizon of this review is not likely to be such a constraint.
Dominance Analysis – Market 17	Market 17: Wholesale voice call termination on individual	Nawras, Box 4.16 at p 40	Nawras agrees with TRA's assessment.	Noted

Reference	Subject	Respon dent	Comment	TRA Response
	mobile networks			
Dominance Analysis – Market 18	Market 18: Wholesale access and call origination on public mobile telephone networks	Friendi, pp 7-8	Friendi 'agrees with the TRA's assessment that Omantel and Nawras are jointly dominant in the market for wholesale mobile access and call origination services. This can be seen from the nature of the contractual relationships with the mobile resellers and the mobile operators' tacit control over the business of the resellers, ranging from pricing levels to authorisation of marketing and promotions. Friendi has already lodged complaints concerning the anti-competitive actions of Omantel and cites these as evidence of Omantel's dominant position; Nawras' position appears to be similar.'	Noted.
Dominance Analysis – Market 18	Arguments against joint dominance	Omantel, 4.125 at 70	'Omantel disagrees that Omantel and Nawras are jointly dominant since resellers have reached a sufficient size and have a sufficient number of subscribers to have countervailing buyer power.'	Noted. There is no evidence that the countervailing buying power referred to by Omantel having been exercised or having moderated the behaviour of Omantel or Nawras.
Dominance Analysis – Market 18	Joint dominance	Nawras, Box 4.17 at p 42	Nawras agrees in principle with the TRA's conclusion that Omantel and Nawras are jointly dominant.	Noted and accepted.
Dominance Analysis – Market 20	Market 20: Wholesale transit	Omantel, 4.140 at p 73	'The concept of dominance requires customers, yet there are no customers in this market. Omantel also believes that any disputes between a new entrant and existing Class I licensees can be dealt with by ex-post competition rules.'	The issue of <i>real</i> vs. <i>artificial</i> markets has been discussed above. The concept of dominance does not require current customers or current demand. The issue has arisen recently and in order to send an appropriate signal to the market and to potential investors in the sector in Oman the TRA has determined that Omantel and Nawras are jointly dominant in this market. Both have the capacity to provide wholesale transit services on their networks and both have the incentive to foreclose the related retail markets to new entrants who may require wholesale transit services to compete. They do not have this position of market power if they act individually, only

Reference	Subject	Respon dent	Comment	TRA Response
				if they work to a common purpose. The risk of that happening is material and credible and therefore they are considered to be jointly dominant in this market.
Remedies – Market 1	Market 1: Retail access to the public telephone network at a fixed location Market 1 - Discrimination	Omantel, 4.12 at p 38	'Omantel can objectively have reasons to give volume discounts to large corporate or government clients.' 'If TRA were to approve of all large client contracts ex- ante, the regulatory burden would increase dramatically and it is likely that some of the business risk sharing made possible by high volumes and fixed costs would be disturbed.'	Non-discrimination means here price differences in the absence of cost differences. There may well be cost reasons for volume discounts to large clients. The price differences must not exceed the cost justification however. The proposed remedies (in the PC document) remain as stated. To be very clear, it is not the intention of TRA to examine ex ante all large client contracts to ensure that they are non-discriminatory.
Remedies – Market 1	Market 1 – Price regulation and incentives	Omantel, 4.14 at p 38	'Omantel is currently building out a LTE wireless network using 2.3 GHz / 1.8 GHz frequencies based also on an allowance to provide with mobility. In order not to disturb incentives for roll-out, there should not be price regulation in those areas in which currently there is no infrastructure.'	The remedies apply to all services within Market 1 – which is a national retail market.
Remedies – Market 2	Market 2: Retail local, national voice call service from a fixed location	Omantel, 4.29-30 at p 42	' Omantel has identified three competitive constraints: there is fixed-mobile substitution, there are effectively VoIP providers and there is competition from Nawras WiMAX service. Omantel notes that Nawras offers low- price voice only services on its WiMAX network. 'Under these conditions, regulation should be no more strict than proposed for mobile retail voice services.'	Remedies in this and every market in which there has been found to be one or more dominant operators should be shaped to the threat that is posed to consumer welfare having regard to the most likely form of anti- competitive behaviour that is driving the analysis.
Remedies – Market 2	Ex ante regulation of retail markets	Nawras, Box 5.2 Q1 at p11	'While we agree with TRA's assessment, we do not agree that the retail market should be regulated on ex-ante basis.'	We believe that Nawras is saying that it agrees with the assessment of dominance in the draft MDD Report but considers that no regulation should be implemented ex ante because the market is a retail one and because action should be directed at the wholesale level. TRA agrees that the wholesale level should be the focus of

Reference	Subject	Respon dent	Comment	TRA Response
				regulation where vertically integrated operators are concerned. However, TRA is realistic in not expecting wholesale competition to be immediately effective. Therefore additional measures, perhaps more transient, need to be taken in the relevant retail market.
Remedies – Market 2	Are the remedies appropriate?	Nawras, Box 5.2 Q2 at p11	'No. In regulating this market it is important to apply remedies that will enhance competition and minimize dominance position. The question the Authority needs to consider is how effective are the proposed remedies in minimizing the harm in the market.' Nawras considers the proposed remedies to be insufficient and ineffective because the focus should be on wholesale rather than retail.'	See comment above on the way in which wholesale and retail markets are to be subject to ex ante regulation. The wholesale measures will ensure equivalence and fairness of access by operators to needed inputs to their retail operations. The retail measures will ensure fairness in the treatment of consumers while the wholesale measures take effect.
Remedies – Market 3	Market 3: Retail international voice call service	Nawras, Box 5.3 Q1 at p16	Nawras disagrees that there is a risk from dominance and therefore disagrees that the remedies are appropriate	The market is not susceptible to ex ante regulation of dominance. This comment was made before that reconsideration occurred.
Remedies – Market 3	Tariff notification and approval	Nawras, Box 5.3 Q1 at p17	'we see no need to impose tariff notification and approval obligations as a remedy as the risk is unforeseeable. We also oppose any requirement to sell all unbundled elements as separate products as well. With telecom industry moving to convergence it is inevitable to bundle services. Cross subsidy can be monitored through accounting separation.'	In relation to those retail markets that are subject to ex ante remedies for dominance, where a service is sold at the retail level as part of a bundle, that bundle cannot be used as a means of avoiding any price control regulation that applies to the service. Stack analyses using price imputation assessments can be employed to test the acceptability of bundles.
Remedies – Market 6	Market 6: Retail mobile services market	Omantel, 4.57 at p 50 Omantel, 4.58 at	'Omantel does not agree that there is a risk or a history of excessive pricing.' There is increasing competition from resellers. 'Omantel does not believe that there is a case for price regulation. Omantel is however encouraged by the form	In addition to the remedies outlined in the draft MDD report, both of the jointly dominant operators shall be subject to accounting separation – which means that costs and revenues for retail mobile services will need to be explicitly separate and accounted for in the regulatory financial returns.

Reference	Subject	Respon dent	Comment	TRA Response
		pp 50-1	of price regulation suggested by TRA. TRA writes: ³ The emphasis [of the remedies] would be on monitoring and identifying the introduction of pricing and other terms of service that are either not justified on cost grounds or constitute evidence of a pattern suggestive of tacit collusion or of implementation of common policies.' Really more like tariff notification and approval.	The case for price control regulation, which TRA is now proposing, is on the basis that price competition has not affected the standard per minute peak and off peak rates of either operator for several years despite reduced unit costs and substantially increased volumes.
Remedies – Market 6	Risks of harm	Nawras, Box 5.4 Q1 at p 30	Nawras does not consider the market being at risk of harm. Also Nawras notes that some of the remedies are provided for in Licences.	As above.
Remedies – Market 6	Appropriate- ness of remedies	Nawras, Box 5.4 Q2 at pp 30-1	Nawras disagrees that the remedies proposed are appropriate because it considers the market to be competitive. Nawras should be able to launch new services without prior approval of the TRA.	As above.
Remedies – Market 7	Market 7: Retail national leased line services	Omantel, at pa 52	'Omantel has no comments.'	Noted.
Remedies – Market 8	Market 8: Retail international leased lines	Omantel at p 53	'Omantel has no comments.'	Noted.
Remedies – Market 10	Market 10: Wholesale voice call origination on the public telephone	Omantel. 4.72-3 at p 56	'Omantel disagrees both with the analysis of harm as well as the appropriateness of remedies. 'Regarding refusal to supply, Omantel notes that in a market with competitive facilities based competition, each player would be likely to refuse supply to indirect	Longstanding case law gives a different character to a refusal to supply in a situation of dominance compared to a situation in which there is effective competition. This market has been determined in an earlier stage of the analysis to have a dominant participant. Amongst the

³Consultation, p. 190

Reference	Subject	Respon dent	Comment	TRA Response
	network provided at a fixed location		access providers, yet the market would be competitive without these. Therefore the indication of "refusal to supply" is natural independently of the degree of competition in the market.'	risks that ex ante regulation needs to address is the risk of refusal to supply on fair and reasonable conditions. As in other wholesale markets that have the same issue, one of the remedies is a requirement to supply on fair and reasonable conditions set out in a Reference Offer.
Remedies – Market 11	Market 11: Wholesale voice call termination on individual public telephone networks provided at a fixed location	Nawras, p 32	Agree with TRA assessment	Noted.
Remedies – Market 12	Market 12: Wholesale network infrastructure access at a fixed location	Omantel, 4.96 at p 62	 'In the section on remedies, TRA briefly discusses the issue of investment and network upgrades to NGA. TRA also explicitly recognises the problem of network upgrades for locations in which local loops are unbundled. However, it views the issues from an incorrect angle: Against all evidence, TRA believes that its current decisions have no bearing on network upgrades. This is incorrect. TRA notes that issues of upgrades at locations with ULL would need to involve periods of notice and other procedures as established in other countries, without recognising that these procedures damage the roll-out of new technologies.' 	Omantel has expressed a range of concerns before the detailed terms that it (Omantel) proposes in its Reference Offer have been formulated or submitted to approval by the TRA. Omantel has already acknowledged that TRA is aware of a number of important issues for upgrading or replacing networks that have ULL services in place. These processes are yet to occur and TRA assumes that Omantel will devise terms for its ULL offer that are consistent with its network upgrade plans and also reflect cost causation principles for the allocation of costs. TRA wants to make sure that network upgrade continues but this does not mean that demand for ULL should be simply ignored.
Remedies – Market 13	Market 13: Wholesale broadband access at a fixed location	Omantel, 4.102 at 64	'Omantel is of the view that, should TRA find that access must be given to Omantel's network – a notion that Omantel disputes - TRA should follow the logic of the "essential facilities doctrine". That logic recognises that giving 3rd party access to assets is a significant intrusion	The logic of the essential facilities doctrine that Omantel refers to is that mandated access is an intrusion into the economic freedom of the facility owners. This is not a new point. All regulation is intrusive insofar as it requires behaviour and compliance that would not otherwise have

Reference	Subject	Respon dent	Comment	TRA Response
			into the economic freedom of a company. It should therefore be limited to the minimum. This means in practice that no more than one access point should be given, and that giving access does not mean that the access seeker should be treated in a way that would make its economic proposition equal to the access giver. In this way, despite giving access, the assets and incentives of the access giver are still protected.'	been forthcoming in the circumstances. The matter of the appropriateness of regulation is therefore not going to be solved by references to economic freedom. TRA has already made it clear that it regards ex ante regulation as something to be avoided if there are other reasonable alternatives. It does not follow from the logic of essential facilities doctrine or from any other theory of facility access that only one access point should be permitted. The circumstances of each case will determine what is reasonable, appropriate and proportionate.
Remedies – Market 13	Appropriate- ness of remedies	Omantel, 4.110 at 65	'Omantel appreciates the caution adopted by TRA but points out the inconsistency between no price regulation at the retail level and access regulation at a regulated price at the corresponding wholesale level. This cannot be logically right. Moreover, regulated access at a regulated price is a very significant intrusion into the economic freedom of Omantel and therefore is a strong remedy. Omantel rejects the notion that there should be price regulation in this market.'	As noted above TRA has reconsidered its position in relation to market 4 and now concludes that Omantel and Nawras are jointly dominant in that market. This means that the point of Omantel's argument disappears. However TRA does not accept that the argument was compelling before this change because regulatory forbearance is always open to TRA in appropriate circumstances.
Remedies – combined Markets 14 and 15	Wholesale leased lines		No comments have been made on the proposed remedies.	The proposed remedies will remain.
Remedies – Market 16	Market 16: Wholesale IP international bandwidth capacity	Omantel, 4.119 at p 68	'Omantel opposes the notion that there should be price regulation in the market. However, in Omantel's view, TRA's price regulation requirement is similar in nature to the "tariff notification and approval" remedy.'	TRA does not agree with this view. The current market conditions justify the imposition of price control remedy for this market.
		Nawras, Box5-12, Q1-2 at p 39	Risks have been appropriately assessed but for risk of harm from single (Omantel) dominance.	

Reference	Subject	Respon dent	Comment	TRA Response
Remedies – Market 17	Market 17: Wholesale voice call termination on individual mobile networks	Nawras, Box 5.13 at p 41	Nawras agrees with TRA's assessment.	Noted.
Remedies – Market 18	Market 18: Wholesale access and call origination on public mobile telephone networks	Omantel, 4.129 at p 71	'TRA may wish to introduce carrier selection / pre- selection for mobile resellers. At the same time, TRA wishes to impose cost based contracts for these resellers. This would effectively mean that TRA regulates retail prices down to cost. This regulation is excessive. It more than duplicates mobile retail regulation. And the regulation is carried out in a market which has a penetration rate of 170% and a continued growth rate for both Class I and Class II operators.'	TRA would like to ensure that eligible licensees will be able to seek various forms of access to mobile networks under the fair and reasonable conditions set out in approved Reference Offers. The standard to be applied for fair and reasonable price terms is yet to be determined by the TRA.
Remedies – Market 18	More Class II operator infrastructure	Omantel, 4.130 at p 71	'Omantel rejects all additional regulations as unfounded and disproportionate. Instead, Omantel believes that access regulation can be abolished, while, at the same, time Class II licenses could be allowed to operate more infrastructure. In this way, Class II licenses would incur larger risks, but be more independent of Class I licensees.'	Noted.
Remedies – Market 18	Cost based access pricing	Omantel, 4.133 at p 71	'Omantel doubts that it is possible for TRA to compute what a "normal profit" should be for Omantel. TRA should also not decide on such an indicator. Omantel is strictly against increasing the regulation in a successful market.'	It is a matter of routine for regulators, including TRA, to compute appropriate risk adjusted returns on capital employed (i. e. profits) in the course of setting cost-based prices, when there is a requirement to do so.
		Nawras, Box 5.14 Q1-3 at p 43	'We agree to TRA's conclusion for this market, save that any movement away from Retail Minus approach needs to be separately analysed and understood. 'We note the following:1. Mobile resellers are not locked	It is envisaged in the listed remedies that TRA will establish pricing principles associated with cost-based access services and that the dominant operators will comply with them in the prices they include in their

Reference	Subject	Respon	Comment	TRA Response
		dent		
			into their provider. The Agreements have been approved by TRA and there is no exclusivity or unjustified commitment periods. 2. Need to consider the importance of other regulatory tools on this market. E.g. CS. Is currently regulated but not enforced. If it was enforced, it has the potential to significantly increase countervailing purchasing power.'	published reference offers.