

**TRA Ex-ante Guidelines**  
**(Redacted version)**

**February 2011**

## **Contents**

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
<b>2</b>	<b>General comments.....</b>	<b>2</b>
<b>3</b>	<b>Procedure .....</b>	<b>8</b>
<b>4</b>	<b>Market definition .....</b>	<b>10</b>
<b>5</b>	<b>Relevant markets – the three criteria test .....</b>	<b>15</b>
<b>6</b>	<b>Criteria for dominance determination.....</b>	<b>21</b>
<b>7</b>	<b>Remedies .....</b>	<b>41</b>
<b>8</b>	<b>Conclusion .....</b>	<b>45</b>
	<b>Annex – Market context in Oman .....</b>	<b>46</b>

# 1 Introduction

- 1.1 TRA, in its role as regulator for the telecommunications sector in the Sultanate of Oman, has issued a consultation regarding a Decision and Guidelines on market definition and determination of dominance (“Decision on ex ante Rules Governing Market Definition and the Regulation of Dominance” and “Market Definition and Dominance Guidelines”, 23 October 2010). TRA has contemporaneously issued a draft decision and guidelines regarding ex-post competition rules (“Principles and Guidelines on Anti-Competitive Behaviour.”) Omantel has provided separate comments to the ex-post Draft Guidelines.
- 1.2 This consultation follows the previous “Consultation Paper on Criteria for Determination of Dominance in a Market” by TRA issued on 31 March 2009. Omantel provided comments on the previous consultation.
- 1.3 The Draft Guidelines are not legally binding on TRA but explain how TRA aims to define markets, assess dominance and impose remedies in the Omani telecommunications sector. The accompanying TRA Decision refers<sup>1</sup> to Article 46 (1) and (6) of the Telecommunications Act which state that

*The dominant licensee of public telecommunications services shall provide, when requested by any other licensee of public telecommunications services, access its telecommunications network with fair and reasonable conditions.<sup>2</sup>*

and

*The licensee of public telecommunications services shall provide interconnection, site sharing, access, leased lines, and unbundling of the local loop services to any other licensee of public telecommunications services at reasonable prices and without discrimination, in accordance with the rules and procedures issued by the Authority.<sup>3</sup>*

- 1.4 Omantel’s comments start with some general observations on the Draft Decision and the Draft Guidelines (section 2). Subsequently, Omantel addresses every section of the Draft Guidelines. These are:

---

<sup>1</sup> Draft Decision on ex ante Rules Governing Market Definition and the Regulation of Dominance, Article 1.

<sup>2</sup> Telecommunications Regulatory Act, Article 46 (1).

<sup>3</sup> Telecommunications Regulatory Act, Article 46 (6).

- Market definition and dominance report procedure (Section 3);
- Market definition (Section 4);
- Relevant markets (Section 5);
- Criteria for dominance determination (Section 6);
- Remedies (Section 7).

1.5 Section 8 concludes.

## 2 General comments

### **Many Discrepancies between Draft Decision and Draft Guidelines**

2.1 Omantel notes that there are many inconsistencies between the Draft Decision and the Draft Guidelines which need to be clarified and corrected.

2.2 Such discrepancies start at the scope of the Draft Decision and Draft Guidelines. Whereas the Draft Decision references Article 46(1) and 46(6) of the Telecommunications Act, which is concerned with access regulation (see quotes in Section 1 above), the Draft Guidelines refer to other parts of the Telecommunications Act<sup>4</sup> and address a much broader set of issues. For instance, there is a detailed discussion on joint dominance, which is basically associated with tacit collusion, and which has not much relevance in terms of access regulation. Furthermore, there are remedies that support consumer protection (e.g. publication of information) which is another separate field of regulation. There is therefore an inconsistency in the respective scope of the Draft Decision and Draft Guidelines and of the scope stated in the Draft Decision and its actual content. Omantel in this response to the consultation on the Draft Guidelines and Draft Decision gives comments on all issues raised in the Draft Guidelines, including those that are currently not mentioned under the scope of the Draft Decision.

2.3 There are further differences, discrepancies and inconsistencies covering almost every topic discussed in the Draft Guidelines and Draft Decision. Omantel discusses these in separate subsection at the end of each main section. Omantel believes that the inconsistencies between the Draft Guidelines and the Draft

---

<sup>4</sup> Draft Market Definition and Dominance Guidelines, Section 1.3.

Decision introduce a large degree of uncertainty regarding the final Decision taken by TRA.

#### **Joint dominance**

2.4 A further strong concern is the treatment of joint dominance. Again Omantel has encountered inconsistencies between the Draft Decision and the Draft Guidelines that are concerning. In particular, the Draft Decision does not contain a description of the mechanism that would need to be present to show joint dominance, and, furthermore, does not clarify sufficiently that joint dominance requires common policies and is as regards the analysis therefore identical to tacit collusion.

2.5 In addition, Omantel points out that TRA, even in the Draft Guidelines, relies on a long list of indicators which purport to detect joint dominance, when actual mechanisms of potential tacit collusion in telecommunications have been studied extensively. The economic literature on telecommunications networks should not be ignored and would be a good substitute for Annex B on joint dominance. It is concerning that in the seminal economic model that shows an impossibility of tacit collusion between two operators, most of TRA's criteria regarding such collusion would be met. Criteria should therefore never be seen as a substitute for the description and analysis of an actual mechanism of how tacit collusion would occur in a market and TRA should be required to carry out such an analysis before determining joint dominance.

#### **The aim and the scope of ex-ante regulation**

2.6 The Draft Guidelines provide information on when and how the TRA aims to regulate telecommunications markets but it does not lay down the reasons *why* intervention takes place. Understanding the reasons that justify regulation is at utmost importance as these reasons should undermine the assessment as a whole.

2.7 TRA's objectives are set out in Article 7 of the Telecommunications Act. The scope of these objectives is wide. The ex-ante Draft Guidelines would benefit from setting out which objective TRA intends to achieve with ex-ante regulation.

*Market regulation for Oman*

2.8 Market regulation should be tailored to a particular market. Omantel notes that most of the concepts reference regulatory ideas from the European Union. Omantel welcomes the reliance on an established regulatory framework, but notes that there are significant differences between Oman and the European Union, which should be reflected both in the objectives of regulation and the implementation of regulatory controls.

2.9 In the Appendix, Omantel provides a brief overview of the current market situation in telecoms markets in Oman. Omantel sees as the main differences with Europe, and the main challenges, the following issues:

- With 400,000 households but a land area of around 300,000 sqkm Oman is significantly less densely populated than European member states. This appears to be both true in the macro sense, i.e. across the country, but also cities themselves are more spread out.
- As a result of difficult natural conditions, Oman by comparison has a very low fixed line penetration of around 60%, far below European member states. Since mobile penetration is very high (around 140%), a large number of households have mobile communications but not fixed communications. The low penetration rate also means that in many areas, the number of viable operators on purely commercial grounds is zero; and overall that the cost of provisioning communications services is high. This suggests that overall in the country the total number of viable companies is probably quite low and much lower than in most European member states. As Omantel highlighted in its response to the ex-post consultation, this does not imply that markets are not competitive, since operators are unlikely to be able to collude.
- There are currently no regulated unbundled local loops on Omantel's network. Omantel is upgrading its fixed network by moving fibre lines to street cabinets. This means that traditional ULL regulation would be obsolete for Oman on practical grounds.

2.10 Given high costs of the provision of services, a low number of potential customers and a low number of viable companies, the ex-ante Draft Guidelines would benefit from emphasizing how effective competition under these circumstances would be characterised, or, in other words, how TRA would see

the benchmark at which regulation is not necessary. In Omantel's view most markets are now characterised by the presence of at least one competitor (mostly Nawras). The presence of that competitor has introduced effective competition in Oman. Therefore none of the markets in which Nawras is also present should be regulated ex-ante.

*Regulatory developments – failures of the European experience*

- 2.11 Omantel also notes that in November 2009 the European Union saw a significant modification of its regulatory framework with the Better Regulation Directive.<sup>5</sup>
- 2.12 In Omantel's view, the most important aspect of the directive is an admission of tension between regulation – and in particular access regulation - on the one hand, and investment activity on the other. In the fixed sector many European countries are struggling with proposed Fibre-to-the-curb or Fibre-to-the-home build-outs. In several countries, public funds are used to pay for such upgrades. This appears a worrying development since regulation has worked very well in lowering prices when the infrastructure was in place, yet it appears that money from taxation is an important contributor in investments.
- 2.13 We note in particular that there is concern amongst companies that are principally willing to build out infrastructure whether, similarly to TRA's proposal, they would be protected against being required to offer cost based access. In our view, the investment problem throws a worrying light on whether the European regulatory framework, which TRA is borrowing from substantially, works quite as well in situations in which one cannot rely on an infrastructure that has in most instances been written down.
- 2.14 Omantel notes that, in contrast, it is currently undergoing a major upgrade of its fixed infrastructure, in which it will replace many former street cabinets with multi-service units, which are connected to higher layers of the network with fibre-optical cable. Once the upgrade is in place, fixed broadband services will be very strongly enhanced.
- 2.15 We note that this infrastructure upgrade is also significantly easier to carry out than if it had been the case that access regulation (for example at the local loop) had been given. In that case, it would need to be determined whether the legacy

---

<sup>5</sup> Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009.

infrastructure would be needed to continue to operate for ULL-users or whether a special migratory path should be designed for such operators. A complicated issue is that effectively ULL-operators lose at least some of the benefit of their infrastructure investment compared to operators that connected at higher levels of the network. ULL may indeed no longer be feasible, not only because the capillarity of networks at the point of a fibre street cabinet is very fine, such that each street cabinet only has a limited number of addressable customers; but also because in many instances there is no space inside the street cabinet to carry out ULL and the building of further cabinets on crowded pavements, with connections through ducts, is time-consuming and expensive.

- 2.16 Against this background of regulation that has failed in the EU to provide sufficient incentives for fixed network upgrades, and the fact that Omantel is carrying out a fixed upgrade itself, Omantel believes that any ULL policy should be discarded at this point, that a regulatory holiday be given to services on the upgraded network and the ex-ante question be reconsidered after an initial period. Omantel believes that its new upgraded network will provide new services that would fall under the category as set out by the consultation.

#### **Minimum necessary intervention**

- 2.17 Omantel welcomes TRA's intention to

*Refrain from intervening in markets unless there is market failure*

and to

*intervene, if at all, to the minimum extent necessary to address the market failure.<sup>6</sup>*

- 2.18 As Omantel will show below, the direct consequences of "minimum intervention" are:

- If a wholesale market has access regulation, then the downstream retail market should not be regulated since the "barriers to entry" criterion of the three criteria test has been removed.
- If there are several services in the same relevant market, as may be the case for example with call-by-call and pre-selection indirect access services, and the market is regulated, then only one service should be

---

<sup>6</sup> Draft Market Definition and Dominance Guidelines, Section 2.1.



regulated. By the logic of market definition, the regulation of that service provides a competitive constraint on the other services in market and therefore only one service needs to be regulated.

### **Check-box list for dominance and joint dominance**

2.19 Omantel has a general concern that the guidelines consist to a large degree of check-box lists. This is particularly the case for “Criteria for Single Dominance” and “Criteria for Joint Dominance”.<sup>7</sup> While Omantel appreciates that there are sizeable appendices that outline the criteria, Omantel believes that there is a fundamental flaw, so that criteria are only aids in understanding dominance and joint dominance.

2.20 Omantel acknowledges that TRA defines dominance as the “capacity for acting independently” and joint dominance as the “potential for tacit collusion”.<sup>8</sup> Omantel also understands TRA’s comment that

*no evidence of intent or behaviour is required.*<sup>9</sup>

2.21 In Omantel’s view, and as set out in the EU debate on *Airtours*<sup>10</sup>, a list of indicators or criteria is not sufficient to show tacit collusion (or dominance). Instead, a competitive assessment should be carried out. In other words, a “mechanism” must be defined by which a company can act independently in a market, and by which several companies can potentially tacitly collude.

2.22 There is a large body of literature that provides insights into the competitive dynamics of the telecommunications industry, and in particular whether tacit collusion is possible. The literature states that tacit collusion between equal operators is not possible if they compete in prices that are traffic independent. Omantel believes that the study and application of such literature is far more direct and revealing than the application of general criteria. Omantel therefore believes that whenever robust mechanisms are known and accepted that identify dominance or joint dominance, those mechanisms must be given precedence of a range of indicators. In addition, Omantel believes that indicators by themselves must always be supplemented with a description of a mechanism by which a company is regarded as dominant, or several companies as jointly dominant.

---

<sup>7</sup> Draft Market Definition and Dominance Guidelines, Section 5.2 and 5.3.

<sup>8</sup> Draft Market Definition and Dominance Guidelines, Section 5.1.

<sup>9</sup> Draft Market Definition and Dominance Guidelines, Section 5.1.

<sup>10</sup> Case T-342/99.

### **The process of market definition and dominance assessment**

2.23 According to the Draft Guidelines the regulatory process that the TRA aims to follow includes the following steps:

- defining the product and geographic scope of markets, mainly based on supply and demand side substitutability,
- selecting those markets which are susceptible to regulation, using the three criteria test,
- assessing whether one or more companies have significant market power on the selected markets and
- imposing remedies.

2.24 Omantel welcomes the application of this comprehensible and well-structured framework. There is a clear indication that not all markets that have been defined will be susceptible to regulation. Only those markets will be subject to dominance assessment, which pass the three cumulative criteria of the second step. Furthermore, intervention may take place only on those markets where one or more companies are assigned to have significant market power.

2.25 Omantel expects the TRA to follow this approach and introduce regulation when it is indeed required and not when some aspects could be regulated. However, Omantel has some concerns on whether this approach will be followed in practice. For instance, the statement in the Draft Guidelines which says that

*If any of these 3 criteria is no longer satisfied in a market, ex ante regulation may be removed<sup>11</sup> [emphasis added]*

seems to show hesitation. If TRA's criteria as set out in the Draft Guidelines no longer support ex-ante regulation, then TRA should not be left with the discretionary power to continue such regulation.

## **3 Procedure**

3.1 Omantel appreciates that the Draft Guidelines set out a procedure similar to the so-called "Article 7" procedure of the European Regulatory Framework. Omantel appreciates the statements that regulatory intervention should be kept to a

---

<sup>11</sup> Draft Market Definition and Dominance Guidelines, Section 4.2.

minimum and that, when intervention takes place, it should keep distortions to a minimum.

- 3.2 Omantel also acknowledges TRA's decision that
- the forecasting horizon would be two years;<sup>12</sup>
  - it would carry out reviews of ex-ante regulated markets at least every five years but not more frequently than every two years.<sup>13</sup>
- 3.3 Omantel also welcomes the opportunity that licensed service providers can apply for a report on a telecommunications service market or group of markets.<sup>14</sup>
- 3.4 Omantel however finds that TRA does not draw the conclusions from its own view that a forecasting horizon should be limited to two years due to "rapid change resulting from changes in underlying technologies, cost structures and cost relationships and demand".<sup>15</sup>
- 3.5 In Omantel's view, the implication of regulation of markets that are found to be undergoing rapid change must be to be cautious with regulation, i.e. to apply a type of light-touch regulation. Rapid technological change usually means it is unpredictable. The clearest example is that the rapid rise of smart phones has meant that a significant and rising number of users access internet services on mobile devices and therefore mobile internet connections have become ever more substitutable to fixed connections. For Oman, the implication is that, increasingly, Nawras is a broadband competitor to Oman Mobile and Omantel. Omantel's own fixed broadband division is in competition with Oman Mobile broadband. In Omantel's view, the Smartphone development is a confirmation that increasingly, mobile and fixed broadband markets are convergent and regulatory analysis should consider such convergence.
- 3.6 TRA would be able to account for technological change in its regulations by explicitly adopting lighter remedies for markets that undergo rapid change.

---

<sup>12</sup> Draft Market Definition and Dominance Guidelines, section 2.4

<sup>13</sup> Draft Market Definition and Dominance Guidelines, section 2.5

<sup>14</sup> Draft Market Definition and Dominance Guidelines, section 2.6

<sup>15</sup> Draft Market Definition and Dominance Guidelines, section 2.4

## 4 Market definition

4.1 Omantel considers Section 3 of the Draft Guidelines that deals with the issue of market definition to be well founded. The principles laid down in this section largely correspond to the European regulatory framework which proved to be appropriate as regards market definition.

4.2 Omantel particularly welcomes TRA's intention not to define markets based on the technology used.<sup>16</sup> This approach has an increasing importance due to the convergence of technologies in telecommunications. As such, products which do not necessarily have the same characteristics and are not provided through the same way could still constitute a single market.

4.3 Although Omantel generally agrees the principles set out in this section, it would like to call TRA's attention to some omissions and inaccuracies. The majority of these concerns relate to the SSNIP test that TRA aims to apply as a means to define markets.

### **The concept of SSNIP test**

4.4 In Omantel's view it is important to understand and describe the core idea behind a test before it is going to be applied. The Draft Guidelines currently lack this description as regards the Hypothetical Monopolist Test.

4.5 In particular, it is not explained that the test relies on the concept of a marginal customer. The question that the regulator has to pose is whether marginal customers, meaning a sufficient number of customers would switch had a hypothetical monopolist increase the price of the product concerned. In other words, what matters is not the reaction of an average consumer but whether there are sufficient marginal customers who would react to the price increase by switching to another supplier. This consideration should be incorporated in the Draft Guidelines.

### **Issues with the SSNIP test**

4.6 Although the Hypothetical Monopolist Test provides a useful theoretical framework for market definition, in most cases it is not feasible to carry it out empirically using actual market information. Lack of detailed available data,

---

<sup>16</sup> Draft Market Definition and Dominance Guidelines, Section 3.5.

infrequent price changes or the absence of competition could all preclude the estimation.

- 4.7 This is also acknowledged as regards telecommunications regulation by the European Commission who stated that

*One possible way of assessing the existence of any demand and supply-side substitution is to apply the so-called 'Hypothetical Monopolist Test'.<sup>17</sup>[emphasis added].*

*Data limitations*

- 4.8 Confidential

- 4.9 Confidential

---

<sup>17</sup> Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03), Section 2.2, par. 40.

4.10 Confidential

- 4.11 TRA should be aware that only these few data points together with data from Nawras, plus additional data on prices and coverage will be available for TRA to decide on a market definition. It is unlikely that on that basis, TRA will be able to carry out a formal SSNIP test. Therefore TRA needs to acknowledge that descriptions of market dynamics regarding substitution of marginal customers must be relied on.

*Problem of impact of regulation*

- 4.12 Another limitation arises in the applicability of the SSNIP test as

*In principle, the 'hypothetical monopolist test' is relevant only with regard to products or services, the price of which is freely determined and not subject to regulation.<sup>18</sup>*

- 4.13 Obviously, it is often not the case in the Omani telecom markets. This limitation does not imply that the application of the SSNIP test is precluded for all markets that are subject to some kind of regulation. However, care has to be taken as regards what constitutes the competitive price level compared to which the price is increased by 5-10%.

---

<sup>18</sup> Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03), Section 2.2, par. 42.

- 4.14 In conclusion, Omantel suggests clarifying in the Draft Guidelines that the SSNIP test might not be feasible or appropriate to apply for several reasons and that TRA will not insist on using it in these cases.

#### **Price levels v. customer segments**

- 4.15 Omantel agrees with TRA's approach that markets might be defined for different customer segments.<sup>19</sup> However, it would like to emphasize that different price levels do not necessarily imply different markets. A low quality and low price product can be regarded as potential substitute for a high quality and high price product for certain marginal customers, who might decide to choose the low quality product in case of further price increases of the high quality product.<sup>20</sup>
- 4.16 Important in this context is also the concept of a chain-of-substitution, which states that under certain conditions if service A constrains service B, and B constrains service C, then A also constrains service C and therefore all of A, B and C are in the same market. For a chain of substitution to apply, the number of marginal customers that switch must be sufficiently high.

#### **Geographic scope of markets**

- 4.17 Omantel makes two observations concerning Section 3.3 of the Draft Guidelines that discusses the geographic scope of markets.
- 4.18 First, Omantel welcomes that the TRA aims to build on international practice in determining whether a particular service market should be defined as local, regional or national. Though, it must be noted that this comparison cannot disregard country peculiarities and, in particular, the distinguishing features of the telecom industry in each country that serves as a basis for comparison. Such ignorance would most likely yield wrong conclusions about the markets defined. This consideration is especially relevant for Oman where the number of households is relatively slow, compared to the geographic scope of the country. Thus, it is necessary that the TRA clearly state how benchmarks will be interpreted and incorporated into the process of market definition.

---

<sup>19</sup> Draft Market Definition and Dominance Guidelines, Section 3.4.

<sup>20</sup> See the Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03), Section 2.2, par. 46.

- 4.19 Secondly, it does not seem to be clear what TRA means by stating that it will take into account the consequences of market definition for competition and the impact, effectiveness and convenience of regulatory administration when determining geographic markets.<sup>21</sup> Therefore Omantel requests clarification on these points of the Draft Guidelines.
- 4.20 In Omantel's view, there is also the danger that defining different geographic submarkets might allow entrants to cherry-pick different access products. For example, if a bit stream access would be defined as a remedy in a national market then by substitution Omantel believes that other forms of broadband access should not be given (due to minimum regulatory intervention) since they are in the same market. By dividing Oman into submarkets, TRA could however define city markets, in which ULL would need to be provided and more rural markets in which other forms of broadband access would be provided. European experience has shown that such an arrangement leads to regulatory arbitrage in the form that entrants choose their least cost access options on a site-by-site basis to the detriment of investment incentives for the network operator.
- 4.21 Omantel maintains that if submarkets are defined, such implications of regulatory arbitrage should be avoided and the impact on investment incentives need to be explicitly considered.

**Consistency of Article 2 (e) and 3 of Draft Decision with section 3 of the Draft Guidelines**

- 4.22 Omantel notes that markets are defined in the Draft Decision differently from the Draft Guidelines. The Draft Decision define Relevant Market in 2(e) as

*comprising products or services that are regarded as interchangeable or substitutable due to their characteristics, prices and intended uses*

whereas the Draft Guidelines state in section 3.1. that

*A telecommunications service market [...] comprises all network services which are substitutes for each other not only in terms of the objective characteristic of those products, their prices or their intended use, but also in terms of the conditions and/or the structure of supply and demand for the product in question. [...]*

---

<sup>21</sup> Draft Market Definition and Dominance Guidelines, Section 3.3 (c) and (d).



4.23 Omantel is concerned that the key clarification which appears to be missing in the Draft Decision is that a market is defined as a behavioural concept relying on the behaviour of marginal customer groups. A behavioural concept implies that the objective product characteristics can be different as long as a sufficient number of consumers substitute between the products. In particular, as stated in Section 3.5 of the Draft Guidelines

*As a general rule the TRA will not define markets and services in technology terms.*

4.24 Since technology is an objective characteristic (such as mobile or fixed technology), Omantel requests:

- Section 3.5 of the Draft Guidelines should be incorporated into the Decision; and
- Article 2(e) of the Decision should be clarified that a market is a behavioural concept defined by the substitution behaviour of a sufficient number customers and producers.

## **5 Relevant markets – the three criteria test**

5.1 Omantel appreciates the new approach to market definition, and in particular the use of a three criteria test and the explicit acknowledgement of new markets. As regards the process of selecting markets where regulation might be justified, Omantel makes the following comments.

### **The meaning of “relevant market”**

5.2 Section 4 of the Draft Guidelines discusses the issues related to relevant market which is defined as a market

*that the TRA has determined, from a list of candidate markets, to be susceptible to ex ante regulation for dominance.<sup>22</sup>*

5.3 In Omantel's understanding this terminology differs from what is used in other jurisdictions. In Europe, the relevant market is the market defined for the purposes of ex-ante regulation or ex-post competition rules, while TRA seems to apply this expression restrictively to those markets which pass the three criteria

---

<sup>22</sup> Draft Market Definition and Dominance Guidelines, Section 4.1.

test and as such, susceptible to regulation had dominance be established. This distinction has no consequences on the essence of the assessment, but Omantel still finds it important to note as the Draft Guidelines highly build on the European experience. Awareness of this difference in terminology allows one to avoid confusion. This is particularly the case since TRA has concurrently issued Draft Guidelines on ex-post competition policy rules.

#### **Screening markets that are susceptible to regulation**

5.4 Omantel welcomes that TRA has incorporated the three criteria test as a screening device for markets that are susceptible to regulation. This framework will assist TRA to reasonably narrow down the number of markets where imposing remedies might be appropriate.

5.5 However, Omantel would like to call TRA's attention to another aspect of screening which has not been discussed yet. Telecommunications markets are strongly related and as such, both vertical and horizontal relationships affect market outcomes. As argued above in Section 2 regulatory intervention should take place in the smallest possible portion of markets. Therefore, when the regulator determines whether intervention is necessary in a particular market it should take into account whether regulation has been introduced in an adjacent market.

*Ex-ante regulation in a wholesale market should mean that the downstream retail market should fail the three criteria test and not be regulated ex-ante*

5.6 For instance, if wholesale access is regulated it might not be appropriate to intervene in the retail level even if the market analysis shows that the downstream market does not work well. Rather than imposing restrictions on the freedom of economic activity of firms at both levels, the regulator should revise the measures it already applies to understand what can be the reason for the lack of effectiveness. This has also been recognised in the Draft Guidelines, but in later stages of the process, i.e. in the dominance and remedies' assessment.<sup>23</sup> Omantel does not see the reason why the consideration of this aspect should be delayed.

*Two-sided markets are also related*

---

<sup>23</sup> Draft Market Definition and Dominance Guidelines, Section 5.1 and Section 6.1.

5.7 Similarly, two markets might be related if they constitute two sides of one platform. This is a common example in the telecommunications sector which should not be ignored as regards market definition and intervention. See, for example, the Recommendation of the European Commission which states that

*Markets in the electronic communications sector are often of a two sided nature, in that they comprise services provided over networks or platforms that bring together users on either side of the market; for example end-users that exchange communications, or senders and receivers of information or content. These aspects need to be taken into account when considering the identification and definition of markets, as they can affect both the way markets are defined and whether they have the characteristics which may justify the imposition of ex ante regulatory obligations.<sup>24</sup>*

*If there are many services in the same ex-ante relevant market, only one of the services needs to be regulated ex-ante*

5.8 An important implication of the three criteria test and market definition is that if one relevant market contains several services, then by the logic of market definition, these services must be substitutes. If TRA decides to price-regulate one of the services, then such regulation will mean that the new regulated service prices will impose a competitive constraint on other services in the same market. For this reason, minimum regulatory intervention requires that only one of the services be regulated.

5.9 Omantel notes that therefore the Reference Access Offer initiative is directly affected. TRA intends to regulate a large number of access products under the RAO process. Naturally, TRA should wait for the outcome of market definition. It might be the case that

- not all markets in which RAOs are intended are susceptible to ex-ante regulation; but also
- that several services intended to be regulated are in the same relevant market, which would imply that only one such service should be price-regulated since it would then impose a competitive constraint on other services.

---

<sup>24</sup> Commission Recommendation on relevant product and service markets (2007/879/EC), par. 4.

### **New markets**

- 5.10 The TRA considers further the concept of New Service markets. The TRA states that

*...the TRA will be disinclined to intervene with ex ante regulation for dominance where the services are new and innovative and demand patterns are unclear.<sup>25</sup>*

- 5.11 While Omantel welcomes the incorporation of this argument in the Guidelines, it notes that, in contrast to the clear criteria for the Forecasting Horizon and the Periodicity of Reports, TRA does not specify how long such a “regulatory holiday” would last. Omantel urges TRA to both provide a list of new markets as well as the time horizon for which the new market would be free of ex-ante regulation. The appropriate time horizon would depend on take-up so that it would seem that the time horizon set by TRA would need to be an initial view, an extension of which should be considered at the end of the regulatory-free interval.

- 5.12 Omantel also notes that technology development does not only provide grounds to create new markets, but it also blurs the borders between markets. Instead of defining several small new technology markets, it might be more appropriate to investigate whether technology changes lead to a change in the appropriate market delineation.

### **Further exemption required for markets that are becoming obsolete**

- 5.13 Omantel also believes that a further regulatory exemption is required for markets that are becoming obsolete. Omantel in particular makes reference to the ULL market. As stated before, upgrading the local network infrastructure to NGA makes traditional LLU regulation obsolete.

- 5.14 Moreover, given the current absence of regulated LLU lines, it remains unclear for Omantel whether a European style solution of LLU access at the Multi-service-cabinet with access to ducts would be appropriate. Such regulation must be understood in the context of investment security for LLUs that are already in place. With no such LLU investments in Oman, Omantel believes that regulation, if at all imposed following a market assessment, should not follow such a European model.

---

<sup>25</sup> Draft Market Definition and Dominance Guidelines, Section 4.3.

### **The question of reconsideration**

5.15 TRA states that it

*reserves its position in relation to the reconsideration at a later date of candidate markets that are found in the course of a review not to be susceptible to ex ante regulation for dominance. This reservation is particularly appropriate in cases where the service market has been found to be too embryonic to be susceptible to ex ante regulation, but where it has subsequently developed towards maturity at the time of a later review.<sup>26</sup>*

5.16 In Omantel's view this statement raises concerns if it means that TRA might regulate a given market which failed the three criteria test at a later point in time *without going through the market definition process again*. Market definition should always be the first step before determining whether that market is susceptible to regulation or not. As acknowledged by TRA, telecommunications markets quickly develop and evolve which implies that it would be erroneous to simply use a market definition from a different point in time. If TRA meant by this statement that it could define markets and impose regulation even if that market has been treated differently before, Omantel has no objections but still requires clarification.

### **Additional consideration concerning access regulation**

5.17 Omantel's last comment on the issue of relevant markets is a caution that passing the three criteria test should not automatically imply regulatory intervention. Here Omantel would like to refer to the so-called *Bronner* criteria which are used in ex-post intervention to determine whether refusal to supply is anti-competitive or not.<sup>27</sup> The *Bronner* criteria consist of four cumulative criteria:

- the input must be indispensable to provide downstream service,
- there is an at least potential demand for the downstream product,
- there is no objective justification for the refusal to supply and
- the refusal would eliminate all downstream competition.

5.18 These criteria were established to ensure that an obligation to grant access can only occur if it is more likely to increase welfare not only in the short but also in

---

<sup>26</sup> Draft Market Definition and Dominance Guidelines, Section 4.4.

<sup>27</sup> Case C-7/97.

the long run. As it is particularly important to preserve the incentives to invest in the telecommunications sector, and the European ex-ante regulatory framework failed to provide such an incentive, Omantel suggests to consider these factors when TRA determines whether intervention is justified or not.

- 5.19 Omantel believes that the *Bronner* criteria provide a better framework for balancing investment and access, in particular as regards access to different points of a network, or for different services of the same network. While in Europe, broadband access is often given at LLU, bit stream and wholesale level, this would not be possible under the *Bronner* criteria and in Omantel's view is the key obstacle to upgrading local network infrastructure in European that should be avoided in the telecommunications market in the Sultanate of Oman.

#### **Consistency of Article 7 of Draft Decision and Section 4 of the Draft Guidelines**

- 5.20 Omantel notes that the three criteria test is written differently in the Draft Decision and the Draft Guidelines. In particular, Article 7 of the Draft Decision lacks the condition of Section 4.2 (a) of high and non-transitory barriers to entry. Without such inclusion of an entry barrier criteria, too many markets would be found susceptible to ex-ante regulation.
- 5.21 Omantel also notes that the Draft Decision does not contain a reference to new markets as in Section 4.3 of the Draft Guidelines.
- 5.22 Omantel submits:
- Article 7 of the Draft Decision should be modified in accordance with the principles set out in Section 4.2. of the Draft Guidelines.
  - The concept of New Service markets from section 4.3 of the Draft Guidelines should be introduced in Article 7 of the Draft Decision.
  - A further concept of not finding a market susceptible to ex-ante regulation if that market is becoming obsolete over the horizon of the market assessment should be introduced to avoid wasteful regulation.

## 6 Criteria for dominance determination

6.1 In this section, we evaluate the economic relevance of the criteria proposed in the Draft Guidelines and preferred approach to optima dominance criteria to be used in Oman.

6.2 In our response to TRA's Consultation Paper on Criteria for Determination of Dominance in a Market we analysed whether the criteria listed comply with economic literature and can be easily and practically implemented. We concluded that not all criteria have similar economic relevance. They should be grounded on the key economic conditions that determine single or collective dominance. As a consequence, different relevance levels need to be attached to the criteria proposed by the TRA.

6.3 We suggested that the TRA should base its assessment of single dominance on three broad criteria:

- the evolution of market shares, as a first indication since under many circumstances they fail to inform on the existence of market power;
- existing barriers to entry and expansion; and
- whether countervailing buyer power can discipline market participants.

6.4 For the assessment of joint dominance we suggested to focus the analysis on

- whether incentives to collude exist and
- whether collusion is feasible.

6.5 Feasibility depends on the ability to monitor market participants, the existence of a credible deterrent mechanism and whether or not countervailing factors exist.

6.6 In the Draft Guidelines, TRA sets out general rules for the application of criteria to assess dominance.<sup>28</sup> In this section, TRA explicitly states that it does not intend to apply any prioritisation in advance. Omantel understands that TRA does not want to unduly constrain itself for its future investigations. However, structuring the conditions used helps TRA to guide the assessment and helps the stakeholders concerned to better understand the underlying arguments. A well-structured analysis would help to avoid the automatic check-list application of the criteria

---

<sup>28</sup> Draft Market Definition and Dominance Guidelines, Section 5.4.

listed. Therefore we still support and suggest applying the framework and the prioritisation we outlined in our previous response.

### **Single dominance criteria**

6.7 As stated above, we will discuss the criteria of single dominance using the three broad categories: market position of firms, barriers to entry and expansion and buyer power. This section is in line with the previous response of Omantel, but includes new arguments as a response to the Draft Guidelines' more detailed description of implementation.

6.8 Before reviewing each element, we would like to highlight a somewhat controversial issue in TRA's approach as described in the Draft Guidelines. When selecting the markets susceptible to ex-ante regulation, TRA aims to apply the three criteria test:

- high and non-transitory barriers to market entry,
- no tendency towards competition behind such barriers, and
- ex-post control is insufficient.<sup>29</sup>

6.9 However, it seems that some aspects of this pre-selection also appear in the assessment of dominance. We suggest making it clear that these are two different tests. Barriers to entry should be taken into account in the market selection phase as long as they are high and non-transitory. Other entry barriers should be assessed under the dominance test. In addition, potential competition is part of the selection process and therefore it is not justified to include it as a separate criterion in the list used to assess dominance.

#### *Wholesale and retail market dominance*

6.10 Also related to the confusion between the three criteria test and dominance is TRA's statement regarding wholesale and retail telecommunications services. In addition, this discussion should appear in Section 4 rather than Section 5.1. Notwithstanding this comment, Omantel supports TRA's view that

*[...] will seldom be a justification for the ex ante regulation for dominance of downstream retail telecommunications service*

---

<sup>29</sup> Draft Market Definition and Dominance Guidelines, Section 4.2.



*market if wholesale markets in the same value chain are either sustainably competitive or effectively regulated.<sup>30</sup>*

- 6.11 In contrast, Omantel does not follow the exception to this rule “if wholesale market regulation is untried”.<sup>31</sup> Omantel submits that there is experience with wholesale market regulation in Oman and worldwide and therefore the case that such regulation is untried is not conceivable.

#### **Market position of firms**

- 6.12 Market shares and their evolution have commonly been used to provide a first indication on the market structure in terms of absence or (rebuttable) presumption of market power.
- 6.13 In our previous report, we argued that it is consistent with economic theory not to apply high market shares as proof of dominance automatically. For instance, strong buyers or new entrants can discipline the incumbent and prevent price increases. This is also acknowledged in the Draft Guidelines.<sup>32</sup>
- 6.14 In addition to the importance of other factors for competition, a dynamic perspective is better suited than a static analysis. For instance, declining market shares over time indicates some sort of competitive constraints by other market players. This consideration is also reflected in the Draft Guidelines.
- 6.15 TRA correctly noted in its previous consultation that market shares are less relevant in emergent and quickly growing markets.<sup>33</sup> However, this is not explicitly stated in the Draft Guidelines. As this consideration also applies to dynamic or quickly changing, liberalizing and growing markets like Oman, we suggest to emphasize that dynamic perspective is even more important for the assessment of new markets.
- 6.16 Finally, TRA’s Consultation observed that

*firms that have higher market shares by value than by volume, it may be an indication of dominance that allowing higher prices than its rivals.<sup>34</sup>*

---

<sup>30</sup> Draft Market Definition and Dominance Guidelines, Section 5.1.

<sup>31</sup> Draft Market Definition and Dominance Guidelines, Section 5.1.

<sup>32</sup> Draft Market Definition and Dominance Guidelines, Annex A.1, p22.

<sup>33</sup> Criteria for Determination of Dominance in a Market, p6.

<sup>34</sup> Criteria for Determination of Dominance in a Market, p6.

6.17 This approach is reflected in the Draft Guidelines, which state that

*if the market share measured in revenue terms is considerably greater than the market share measured in terms of services, there may be an implication of dominance.<sup>35</sup>*

6.18 This statement is however not accurate since this circumstance may be simply explained by entrepreneurial creativity, marketing acumen and innovation and product differentiation which should be rewarded rather than penalized. When there is some kind of vertical differentiation (i.e. differences in product quality) between the products included in the same market we expect the higher quality product to charge a higher price. In this case, market shares by value can be bigger than market shares by volume. Nevertheless, this does not imply dominance. A significant and non transitory increase in prices by the firm producing the higher quality goods could trigger customers to switch to the lower quality product. The latter competitively constrains the higher quality good product.

#### **Threat of competitors' expansion or entry**

6.19 TRA's list of criteria for the assessment of single dominance includes a significant number of criteria linked to barriers to entry and barriers to expansion. We will discuss each criterion that belongs to this category. However, Omantel notes that more than a comprehensive list of barriers to entry TRA should put emphasis on whether there are barriers impeding likely, timely and sufficient market entry or expansion capable of deterring price increases.

#### *Barriers to entry*

6.20 Omantel generally agrees with the assessment of entry barriers suggested in the Draft Guidelines. However, we would like to note that barriers to enter are primarily of legal nature in Oman and these artificially imposed barriers are considered to be an indication of dominance later, which is a bit controversial. Consequently, Omantel suggests to ease market entry as much as possible using tools like the Authorisation Directive in the European Union.<sup>36</sup>

6.21 In addition, Omantel noted that no reference was made to sunk costs, although this is one of the most important economic entry barrier. Sunk costs, for instance,

---

<sup>35</sup> Draft Market Definition and Dominance Guidelines, Annex A.1, p22.

<sup>36</sup> Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002.

can take the form of high investments in technology or developing the network structure (exogenous sunk costs) or result from necessary investments in R&D or advertising to increase the perceived quality of products (endogenous sunk costs). Therefore we suggest to mention sunk costs in the discussion of this criterion.

*The control of infrastructure which cannot easily be duplicated*

- 6.22 This is an additional source of entry barriers. Omantel agrees with this criterion and with the acknowledgement that the possibility of duplication depends on the characteristics of the given region. Differences in geographical areas might justify different regulatory interventions, as it has become clear during the European regulatory reform. The new rules encourage NRAs to define submarkets, especially for those rural areas where competition is highly unlikely to evolve.

*Switching barriers*

- 6.23 Confidential

*Network effects*

- 6.24 As for network effects first a distinction has to be made between *network effects due to size* and *tariff mediated network effects*.<sup>37</sup> It is only the latter that might raise competition concerns, and only when two-way interconnection is required. What follows is that it could potentially be a problem in mobile markets, but not in other telecom sectors in Oman. However, as the two mobile network operators are approximately of the same size, network effects are not likely to be a concern. As a consequence, the factors TRA aims to apply to assess network effects (size of network, interconnection, saturation, on-net discounts) are not, in practice, relevant.

*Economies of scale and scope*

---

<sup>37</sup> See Katz, M-L and Shapiro, C 1986. "Technology Adoption in the Presence of Network Externalities", *Journal of Political Economy*, University of Chicago Press, vol. 94(4), pages 822-41.

- 6.25 Economies of scale and scope may constitute barriers to entry. Markets exhibiting significant positive returns to scale benefit the largest firm. In the same way firms benefitting from learning-by-doing easily takes advantage of it. Note however, that NRAs have rarely used economies of scope or have used it in an uncertain way.<sup>38</sup>

*Customers' ability to access and use information*

- 6.26 The customers' ability to access and use information could also act as a barrier to entry, as if consumers do not have access to information about offers available in the market that might prevent entry. In principle, Omantel agrees with this criterion but notes that it is unlikely to be relevant in the Omani telecom market.

*Vertical integration*

- 6.27 Omantel considers this criterion to be less relevant. First, vertical integration may increase costs when the market is more efficient than the vertically integrated firm. Furthermore, the difficulty of managing a larger firm can create larger costs.

- 6.28 Secondly, according to the Draft Guidelines, TRA aims to assess the ability of a service provider to foreclose and to carry out imputation tests when evaluates the effect of vertical integration on market power. However, these assessments could provide evidence about anticompetitive behaviour (which should be assessed ex-post), not about the existence of dominance. In addition, vertical integration in itself is not necessarily an indication of dominance. Vertical integration requires two markets, and the market position of an integrated firm should be assessed separately in each of them.

*Financial strength*

- 6.29 The financial strength of a company should rarely create a barrier to entry (often referred to as deep pockets). In principle, capital markets will finance new entrants or market expansion for agents with profitable investment projects at no disadvantage. However, capital markets may not be efficient due to, among other factors, information asymmetries.

---

<sup>38</sup> Hou, L. 2008. "the Assessment of Single SMP: Lessons Learned from the First Round Market Review" *Competition and Regulation in Network Industries*, Vol. 9, No. 1, pages 49-74.

6.30 TRA aims to compare the cost of capital for each firm to infer whether access to cheaper funds yields better market position. However, this method's practical relevance is questionable. The reason is the following. If a firm is not able to get enough funding, it will not be able to operate in the telecom industry, regardless of the existing regulation. Therefore access to capital cannot really be an issue for regulation, as it is a screening in any case.

#### *Profitability*

6.31 There is not a clear position among economists on the role of incumbent's profitability as a barrier to entry or expansion.<sup>39</sup> Empirical studies have not identified a clear relation between profitability and market structure. If anything, the only point of consensus is that lack of profitability cannot discard the existence of dominance.

6.32 In addition, profitability might indicate market power, but it is not always appropriate to take it into account for regulatory purposes. If a company becomes dominant by merit, it clearly should not be regulated. Therefore we suggest to assess not just the level of profitability but also the source of that.

6.33 TRA's previous consultation also referred to excess pricing jointly with profitability. Excess pricing could indicate the existence of a dominant position. However, before concluding that excess pricing exists a thorough cost study should be conducted to determine whether it is the case. International price comparisons are meaningless unless a link is established between the circumstances in the countries used to compare and the national market. Finally, "excess pricing" may result from existing regulation, which creates an imbalance in favour of a certain type of operator. For instance, mobile to fixed termination charges are commonly regulated and are well below fixed to mobile termination charges.

6.34 The Draft Guidelines seem to be more focused on profitability rather than price levels. Omantel notes that high prices and high profitability have different implications, and should not be handled as they were the same. Therefore Omantel requires clarification on these questions: whether TRA intends to assess

---

<sup>39</sup> See Carlton, D. and J. Perloff. 2005. "Modern Industrial Organisation", 4th ed., Boston, Pearson Addison Wesley, Chapter 8 for a description of the debate.

price levels, profitability or both, and what conclusions it is going to draw based on these assessments.

*Technological advantage or superiority*

- 6.35 TRA's previous consultation stated that technological advantage or superiority may constitute a barrier to entry

*when dominant players enjoy the access to a superior technology due to early access to frequency bands, exclusive contracts with vendors.<sup>40</sup>*

- 6.36 The former statement can be misleading. Prior access to frequencies results from regulatory intervention. The regulator pursued a specific objective when it decided to grant access to a limited (or one) number of frequencies. So, possible advantages granted to an individual market participant result from regulatory interventionism. Furthermore, exclusive contracts are often welfare enhancing. For instance, they are appropriate tools to solve free riding problems and ensure quality.

- 6.37 In its Draft Guidelines, TRA does not refer to frequency bands anymore. However, it states that

*it is still possible that a service provider might enjoy technological advantages and superiority as a result of deploying proprietary systems, including software, or because of exclusive contracts.<sup>41</sup>*

- 6.38 Omantel considers this approach to be a misunderstanding. If an input can be purchased in the market, there is no issue of technological superiority. If it cannot be purchased due to exclusive contracts, that is a form of behaviour (which can be assessed ex-post) and not a factor that indicates dominance.

**Countervailing buyer power**

- 6.39 According to the Draft Guidelines, TRA would consider buyer power for instance in relation to termination fees. We agree with the importance of buyer power in the assessment of dominance in general. However, concerning termination fees, it is worth noting that buyer power more likely to exist in the mobile market (as resellers can switch between Navras and Oman Mobile).

---

<sup>40</sup> Criteria for Determination of Dominance in a Market, p6.

<sup>41</sup> Draft Market Definition and Dominance Guidelines, Annex A.5, p25.

### **Other criteria**

6.40 This categorization does not explicitly mention all the criteria TRA aims to apply in the dominance assessment. In particular, we did not include the following:

- absence of potential competition,
- overall size of the undertaking,
- highly developed distribution and sales network,
- product/service diversification and
- lack of active competition on non price factors.

6.41 In the following, Omantel discusses the relevance of each criterion in this list. Omantel suggests to remove from the list the “absence of potential competition” and the “lack of active competition on non price factors” criteria, and to put a low weight in the assessment on the other criteria.

#### *Absence of potential competition*

6.42 Concerning this criterion, Omantel refers to the problem of the three criteria test. As the absence of potential competition is a prerequisite of ex-ante regulation, it should not play a role in a later stage of the process such as the dominance assessment.

#### *Overall size of the undertaking*

6.43 The reason for the suggestion to apply with care the overall size of the undertaking as a criterion is twofold. First, the assessment is complicated and could affect the final conclusion in both directions – as the Draft Guidelines correctly state. Secondly, Omantel believes that the less ambiguous effects of this condition are covered by other criteria, namely by economies of scale and scope and network effects.

#### *Highly developed distribution and sales network*

6.44 Highly developed distribution and sales network do not imply much concern in the telecom industry as alternative mechanisms to sell do exist. In addition, exclusive contracts constitute a type of behaviour which should be assessed as a potentially anticompetitive practice, not as a proof of dominance.

*Product/service diversification*

- 6.45 Concerning product diversification, TRA would assess whether bundle offers exist and whether there is a possibility to cross-finance services in different markets. Omantel notes that differentiation across markets is not a competitive concern as such, since it is a natural way to cover fix costs.
- 6.46 On the other hand, bundling might be anticompetitive but as it potentially brings large benefits to consumers should not be the trigger for ex-ante regulation. Instead, ex-post evaluation under competition rules should be applied.
- 6.47 In addition, note that in the telecom industry many services are inherently sold in bundles (e.g. phone and access to network), which implies that the implementation of this criteria can easily become arbitrary.

*Lack of active competition on non price factors*

- 6.48 In Omantel's view, competition on non price factors is identical to the issue of product differentiation and should be dropped as such.

**Conclusions on single dominance criteria**

- 6.49 Omantel maintains that TRA's list of criteria could lead to inappropriate conclusions, since it does not prioritise between the different factors and mixes the different criteria. Omantel suggests that TRA structures their criteria along three categories:
- the assessment of market position,
  - the existence of barriers to entry and expansion and
  - the evaluation of countervailing buyer power.
- 6.50 Omantel believes that a list of criteria, as proposed by TRA, does not provide a robust framework to assess market dominance. Instead, Omantel proposes TRA to assess dominance in broader terms by seizing a structured approach referred above.
- 6.51 Furthermore, Omantel identified two criteria that seem to be redundant and therefore should be removed from the Draft Guidelines' list. These criteria are:
- absence of potential competition and



- lack of active competition on non price factors.

6.52 Omantel also identified a number of criteria, which have low relevance in terms of dominance assessment. Omantel suggests to put less weight in the assessment on the following:

- vertical integration,
- easy or privileged access to capital markets/financial resources,
- technological advantage or superiority,
- overall size of the undertaking,
- highly developed distribution and sales network and
- product/service diversification.

6.53 The inclusion of some other criteria seems to be justified based on the theory while their practical relevance is likely to be low in the Omani telecom market. These criteria are:

- switching barriers,
- network effects and
- customers' ability to access and use information.

6.54 In Omantel's view, the most relevant criteria from TRA's list are the following:

- market shares,
- ease of market entry,
- barriers to expansion,
- control of infrastructure not easily duplicated,
- economies of scale,
- economies of scope,
- excess pricing and profitability and
- absence or low countervailing buyer power.

6.55 However, these criteria should also be applied with care and as part of the general framework that Omantel suggests.

6.56 The table below summarizes the conclusions on single dominance criteria (updated version of Exhibit 22 from Omantel’s response to the Consultation Paper):

### Single dominance criteria

Category	TRA's criteria	Relevance	Rationale
<b>Market position</b>	<ul style="list-style-type: none"> <li>Market share</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Provides first indication of market structure. Under many circumstances meaningless (existence of potential competition, buyer power, low barriers to entry...)</li> </ul>
<b>Countervailing buyer power</b>	<ul style="list-style-type: none"> <li>Absence of, or low countervailing buying power</li> </ul>	High	<ul style="list-style-type: none"> <li>Strong buyer power can prevent incumbents from increasing prices.</li> </ul>
<b>Barriers to expansion and entry</b>	<ul style="list-style-type: none"> <li>Absence of potential competition</li> </ul>	High	<ul style="list-style-type: none"> <li>Indicates that competition will be limited to that exerted by market participants – but as it is a prerequisite of finding a market susceptible to ex ante regulation, should not be repeated here.</li> </ul>
	<ul style="list-style-type: none"> <li>Barriers to expansion</li> </ul>	High	<ul style="list-style-type: none"> <li>Low barriers to expansion prevent the incumbent from setting high prices.</li> </ul>
	<ul style="list-style-type: none"> <li>Ease of market entry</li> </ul>	High	<ul style="list-style-type: none"> <li>If market entry is easy market participants will find it difficult to increase prices.</li> </ul>
	<ul style="list-style-type: none"> <li>Control of infrastructure not easily duplicated</li> </ul>	High	<ul style="list-style-type: none"> <li>Commonly involves high sunk cost or bottleneck facilities which hamper market entry.</li> </ul>
	<ul style="list-style-type: none"> <li>Highly developed distribution and sales network</li> </ul>	Low	<ul style="list-style-type: none"> <li>In the telecommunications industry it should not play much of a role. Alternative mechanism to sell products exists.</li> </ul>
	<ul style="list-style-type: none"> <li>Technology advantage or superiority</li> </ul>	Low	<ul style="list-style-type: none"> <li>Too much relevance to these criteria hinders competition on the merits. Furthermore, exclusive contracts should be assessed ex post.</li> </ul>
	<ul style="list-style-type: none"> <li>Vertical integration</li> </ul>	Low	<ul style="list-style-type: none"> <li>Ambiguous effect. Might lead to higher costs for the incumbent, and not necessarily an indication of dominance. Instead, dominance should be assessed in both affected markets.</li> </ul>
	<ul style="list-style-type: none"> <li>Easy or privileged access to capital markets/ financial resources</li> </ul>	Low	<ul style="list-style-type: none"> <li>Efficient capital markets fund profitable projects. Information asymmetries may hamper possibility to resort to capital markets by new entrants. In any case, it is a screening for telecom industry.</li> </ul>
	<ul style="list-style-type: none"> <li>Product/services diversification and lack of competition on non price factors</li> </ul>	Low	<ul style="list-style-type: none"> <li>Bundling is common in telecom industry, can be welfare-enhancing, therefore should be assessed ex post.</li> </ul>
	<ul style="list-style-type: none"> <li>Customers' ability to access and use information</li> </ul>	Low	<ul style="list-style-type: none"> <li>With the levels of market penetration existing in and the available sources of information existing nowadays it is difficult to foresee circumstances where this criterion would apply.</li> </ul>
	<ul style="list-style-type: none"> <li>Switching barriers</li> </ul>	Medium	<ul style="list-style-type: none"> <li>High and low switching barriers can prevent entry. Medium switching barriers and when operators cannot discriminate between locked-in and uncommitted customers can foster entry.</li> </ul>
	<ul style="list-style-type: none"> <li>Economies of scale</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Important economies of scale reduce incumbents costs compared to new entrants.</li> </ul>
	<ul style="list-style-type: none"> <li>Economies of scope</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Important economies of scope grant incumbents advantage over new entrants. Used rarely by EU NRA's.</li> </ul>
	<ul style="list-style-type: none"> <li>Network effects</li> </ul>	Low	<ul style="list-style-type: none"> <li>Only tariff mediated network effects imply a competition concern but it seems to be irrelevant in the Omani telecom sectors.</li> </ul>
<ul style="list-style-type: none"> <li>Overall size of the undertaking</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Complicated implementation, covered by other criteria (economies of scale and scope and network effect).</li> </ul>	
<b>Other &amp; barrier to expansion and entry</b>	<ul style="list-style-type: none"> <li>Excess pricing and profitability</li> </ul>	Medium	<ul style="list-style-type: none"> <li>High prices compared to costs sustained over a long period of time may indicate market power. Requires a deep assessment of costs. Excess pricing can result from existing regulation and competition on the merits. No empirical analysis has linked profitability and market structure.</li> </ul>

### **Consistency of the Draft Decision with the Draft Guidelines regarding single dominance**

6.57 Omantel notes that the Draft Decision is consistent with the Draft Guidelines in the Definition of Dominance as the ability to

*behave to an appreciable extent independently of competitors and customers in a relevant market*<sup>42</sup>

6.58 Omantel also notes that individual criteria are not listed and recommends the same approach to the notion of joint dominance. Omantel also observes that joint dominance is defined before the definition of dominance. Since the logical flow requires the Draft Guidelines first describe Dominance, the order of Dominance and Joint Dominance should be inverted.

6.59 Omantel is concerned about the additional statement in Article 4(2) of the Draft Decision, which proposes that

*Where a Service Provider is Dominant in a Relevant Market, it may also be deemed to be Dominant in a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged in the other market [...]*<sup>43</sup>

6.60 This statement does not appear in the Draft Guidelines and in Omantel's view should be deleted. It introduces a further methodological construct, namely the idea of two markets that are "related" which is not properly defined. Moreover, if the intention of the article is to regulate the tying and bundling of products across different markets, then Omantel believes that such bundling is already described in the ex-post Draft Guidelines. Omantel believes that bundling issues are dealt with in a more efficient way ex-post, since ex-ante regulation would prevent bundles that customer might desire and that would therefore increase welfare.

### **Joint dominance criteria**

6.61 In its previous response to TRA's Consultation Paper Omantel summarised the economic literature on joint dominance, described the practice of competition and regulatory authorities, and based on these, suggested a framework to apply in

---

<sup>42</sup> Draft Decision on ex ante Rules Governing Market Definition and the Regulation of Dominance, Article 2(b).

<sup>43</sup> Draft Decision on ex ante Rules Governing Market Definition and the Regulation of Dominance, Article 4(2).

Oman. Omantel evaluated the criteria listed in TRA's Consultation Paper to assess joint dominance within the suggested framework.

6.62 In this section, Omantel first review whether and how TRA took its suggestions into account. Omantel makes additional comments related to some, but not all of the criteria as a response to the Draft Guidelines. Finally, Omantel calls TRA's attention to an important aspect of joint dominance assessment, which has not been discussed until this point in the consultation process.

6.63 Omantel would like to repeat its preliminary remark related to joint dominance, namely that collective dominance is an unlikely outcome in telecommunications markets since the regulator decides the number of market players and has a say on an important part of the barriers to entry. In the current Oman market, TRA has a well developed three tiers licensing framework, robust executive regulations and explicitly chalked out measures and initiatives to discourage anti-competitive practices and ensure healthy competition. This makes the likelihood of a joint dominance emerging as low.

#### **Comments on the Draft Guidelines' analysis of joint dominance**

6.64 First of all, Omantel welcomes that TRA incorporated the so-called *Airtours* criteria as the initial step in its assessment of joint dominance. These criteria (monitoring, credible deterrence and sustainability) describe the mechanism through tacit collusion works, and as such necessary to understand whether undertakings can found to be jointly dominant.

6.65 The next step in the Draft Guidelines' approach is to consider the factors that could indicate that this mechanism of tacit collusion actually is at place. Concerning these criteria, Omantel repeats the table summarizing its comments in the previous response.

## Joint dominance criteria

Category	TRA's criteria	Relevance	Rationale
<b>Incentives to collude</b>	• Lack of technical innovation, mature technology	High	• Innovating markets are tougher to coordinate upon
	• Homogeneous product	Medium	• Limited scope from horizontal product differentiation. Vertical differentiation hinders collusion
	• Low elasticity of demand	Low	• Low price elasticity limits deviating profits, yet has limited effect on sustainability
	• Similar market share	Medium	• Companies which dissimilar market positions may find it tougher to find common understanding point. Although market share is not an indicative criteria in itself
<b>Incentives to collude &amp; Deterrent mechanism</b>	• Similar cost structure	High	• Cost asymmetries hinder the possibilities to agree on prices level. Limit retaliation possibilities. Role of mavericks
	• Stagnant or moderate growth on the demand side	Medium	• Potentially high future profits ease collusion. Deviation removes future rents
	• Mature market	Low	• Less technological innovation facilitates coordination, less expected future growth incentivizes deviation
<b>Incentives to collude &amp; Monitoring</b>	• Transparency	High	• Higher transparency facilitates monitoring and provides incentives to coordinate
<b>Monitoring</b>	• Market concentration	High	• Lower number of participants simplifies monitoring
<b>Deterrent mechanism</b>	• Absence of excess capacity	High	• No excess capacity limits the credibility of retaliation
	• Retaliatory mechanism	High	• Of utmost importance. It disciplines co-operators not to cheat
	• Lack or reduced scope for price competition	High	• Price wars prove the disciplining character of deterrence mechanism
	• Various kind of informal or other links between the undertaking concerned	Medium	• Existence may improve retaliation credibility since other things are at stake
<b>Constraints</b>	• High barriers to entry	High	• High barriers to entry prevent the entrance of mavericks distorting coordination
	• Lack of countervailing buying power	High	• Existence of countervailing buyer power can discipline collusive firms
	• Lack of potential competition	High	• Lack of external threats ease sustainability

6.66 In the Draft Guidelines, TRA kept the whole set of criteria suggested in the previous Consultation Paper, and included two additional criteria, namely:

- the incentives for tacit collusion and
- the enforceability of tacit collusion or understanding.

6.67 In the explanation of these criteria TRA argues that these are rather general conditions, kind of “catch-all” criteria which partly cover other criteria and partly would be used if no other evidence is found.

6.68 Omantel considers this approach to be a misunderstanding. The nature of these two factors is different from the other conditions on the list. The incentives to collude and the sustainability of collusion are indeed relevant for the assessment but should not be applied in the way the Draft Guidelines suggest, since they are

not separate criteria. Instead, together with the ability to monitor they serve to explain whether collusion could take place providing the base of the assessment. Therefore it is erroneous to include them in the list which is aimed to provide a tool to infer to the likelihood of joint dominance. Consequently, it is necessary to remove them from that list.

6.69 Concerning the other criteria we make the following additional comments.

*Market concentration*

6.70 According to the Draft Guidelines, the higher the HHI the more likely joint dominance is. However, this statement is not always correct. If the number of firms remains the same, but market shares change, the HHI might increase. If this change is due to increased asymmetry (i.e. the large firm gains and the small firm loses market share) that actually hinders collusion – as it is also acknowledged in the Draft Guidelines. Therefore we suggest to take this consideration into account when assessing the HHI of a given market.

*Low elasticity of demand*

6.71 In its previous response, Omantel argued that low elasticity of demand has an ambiguous effect on the incentives to deviate from a collusive outcome. Indeed, low elasticity implies that the gain from deviating is lower, but also it also affects the profits in the punishment period.<sup>44</sup> Therefore it is important to repeat that this criterion should play only a limited role in the assessment.

*Homogeneous product*

6.72 The argument of the Draft Guidelines is as follows:

*Incentives to collusion and potential for joint dominance are higher when products are homogeneous, similar or are perceived to be similar. This is because it is more difficult to punish the rival, and even a significant reduction in price might still leave the deviant firm with a positive demand. In these situations competition will be on price, because of the absence of non-price differences.<sup>45</sup>*

---

<sup>44</sup> See Motta, M. "Competition Policy. Theory and Practice", Cambridge University Press, 2004. p145.

<sup>45</sup> Draft Market Definition and Dominance Guidelines, Annex B.6, p36.

- 6.73 In Omantel's understanding, the first and third sentences concern a market with homogeneous product, while the second refers to a situation of heterogeneous products. If this is correct, it should be indicated in the second sentence that it applies to a different situation.

*Lack of technical innovation, mature technology*

- 6.74 Omantel agrees with TRA that markets without innovation are more prone to collusion. Omantel suggests that, in addition to evidence on investments, TRA should directly look at whether new products and services have been recently introduced in the market.

*Retaliatory mechanisms*

- 6.75 The description of this criterion seems to be indistinct. "Inter-form wholesale activity" and "conditions for a price war" as retaliatory mechanisms should be explained in a more clear way to provide useful guidance to understand TRA's approach.

*Lack of reduced scope for price competition*

- 6.76 Omantel agrees with the Draft Guidelines that this is an important condition to assess the likelihood of joint dominance. However, it is not entirely clear how TRA would infer to the lack of price competition from cost studies. Therefore Omantel suggests to make the application of this criterion more straightforward.

**A mechanism explaining tacit collusion is required and superior to indicators**

- 6.77 Omantel acknowledges the need to evaluate the likelihood of joint dominance in order to define whether ex-ante regulation is necessary in a market. The framework and the criteria described in the Draft Guidelines correspond to the approach that has evolved and is currently applied in the European Union. However, the assessment of the likelihood of collusion should not, in any case, be applied automatically. In this subsection, Omantel tries to clarify the relationship between the *Airtours* criteria and the criteria that are applied to evaluate the likelihood of joint dominance. Based on this clarification, Omantel argues that in several telecom markets the actual assessment of the listed criteria will be unnecessary.

- 6.78 First of all, the *Airtours* criteria describe the mechanism through which tacit collusion works. Firms must be able to monitor each other and there must be a credible threat that they can and will punish any deviating competitor. As an external condition, no other market player should be able to undermine the agreement.
- 6.79 In an ideal situation, regulatory authorities can directly observe what firms use or would use to monitor and punish each other. In such a case, the authority is able to determine whether collusion is feasible or not, based on criteria related to the mechanism of tacit collusion rather than generic criteria.
- 6.80 As also set out in Omantel's response to the Draft Guidelines on ex-post competition rules, there is a coherent and academic literature on competitive interactions in the mobile telephony market. In particular, the literature focuses on the issue of tacit collusion and it is fair to say that the mechanisms that would be needed to sustain such collusion between operators are quite well understood.
- 6.81 The seminal model of Laffont, Rey and Tirole (1998) suggests that whether collusive strategies work in mobile telephony depends on the tariff structure.<sup>46</sup> The underlying (and realistic) assumption is that the networks are interconnected and service providers pay for call termination. The existence of high termination fees affects the incentives to deviate from a collusive price.
- 6.82 The logic can be sketched as follows:
- Suppose initially that there are two operators that are symmetric and call flows between the two networks are balanced. Suppose also that retail prices are high.
  - Collusion would be sustainable if operators were able to maintain high retail prices. They would do so if lowering retail prices (deviating from collusion) would not be a profitable strategy.
  - Suppose an operator were to lower per minute call prices. Then the operator would attract more outgoing calls, since it would be cheaper to call from the operator with lower retail prices. However, those increased outgoing call flows are costly if termination rates are high. There is therefore a trade-off between increased revenue from higher call volumes

---

<sup>46</sup> Laffont JJ, Rey, P and Tirole, J 1998. "Network Competition: I. Overview and Nondiscriminatory Pricing." *RAND Journal of Economics*, Vol. 29, No. 1.



but higher cost of termination payments to the other party. If the increase in termination payments outweigh the gain from increased call volumes, collusion could be sustained.

- This argument relies on viewing competition over per minute prices. If instead there is a possibility to have competition over non-traffic related prices, such as subscription fees or bundles of minutes, the collusive argument breaks down. With traffic independent prices, it will always be possible to undercut the other operator profitably, since expensive traffic outflows are not affected by reducing traffic insensitive prices. Traffic insensitive prices exist for example through subsidised handsets, weekly or monthly subscription fees, call bundles and so on. The existence of such fees indicates that the collusive mechanism described in the literature does not exist. If both linear pre-pay and post-pay contracts exist, then, since customers self-select into the best contracts for them and collusion on post-pay contracts is not feasible, collusion on pre-pay contracts is constrained by arbitrage with post-pay contracts.

6.83 Based on that model, even though many indicators for joint dominance would be positive in Oman (low number of operators, transparency, symmetry, etc.), collusion would not be feasible in retail mobile markets.

6.84 More generally, the interconnection literature, of which we only quoted one article, provides a rich toolset to analyse possible mechanisms of joint dominance that should replace the generic indicators listed by TRA.

*Omantel proposes to replace Annex B with a discussion of the economic literature on competition in telecommunications networks*

6.85 Omantel believes that such a description of competitive interaction between communications operators is also more insightful and a sounder basis for regulatory decision-making than the expanded descriptions of the joint dominance indicators in Annex B. Omantel respectfully believes that a discussion of the literature on competitive interaction in the telecoms market, as provided by Omantel in its response to the ex-post Draft Guidelines may be a suitable replacement for Annex B.

### **Lack of consistency between the Draft Decision and the Draft Guidelines**

6.86 Article 2(a) of the Draft Decision discusses joint dominance. In contrast to the Draft Guidelines, the Draft Decision takes no note of the mechanism described in the *Airtours* criteria, (i.e. whether operators could come to an agreement; whether they would be able to monitor the agreement and would not be able to profitably deviate; and whether no external firm could undermine the agreement). Instead, the Draft Decision simply lists an inexhaustive list of indicators that is not consistent with the indicators listed in the Draft Guidelines. As discussed above, indicators are only inferior substitutes to a description of a mechanism of tacit collusion. The simple reliance on such indicators must be rejected.

6.87 Furthermore, the Draft Decision contains a different interpretation of joint dominant. It states:

*Joint dominance may be determined in cases of tacit collusion or market inertia (emphasis added)<sup>47</sup>*

6.88 This interpretation of joint dominance is inconsistent with the Draft Guidelines and should be rejected. Joint dominance requires the coordinated action of at least two large companies and therefore tacit collusion is a necessary condition for joint dominance. This is reflected in the Draft Guidelines:

*Dominant position may be held collectively (joint dominance) when two or more legally independent undertakings are linked in such a way that they adopt a common policy in relation to the market.<sup>48</sup>*

6.89 Market inertia, in contrast, is not mentioned in the Draft Guidelines.

6.90 Omantel submits that the Draft Decision should be clarified.

- The possibility of joint dominance in cases of market inertia should be deleted.
- Joint dominance should be explicitly linked to the adoption of a common policy by market participants.
- The three step test outlined in section 5.3 of the Draft Guidelines should be adopted in the Draft Decision.

---

<sup>47</sup> Draft Decision on ex ante Rules Governing Market Definition and the Regulation of Dominance, Article 2 (a).

<sup>48</sup> Draft Market Definition and Dominance Guidelines, Section 5.3.

- The incomplete list of criteria in Article 2(a) of the Draft Decision should be deleted.

### **Conclusions on joint dominance SMP**

6.91 In conclusion, we make the following points concerning the assessment of joint dominance:

- The incorporation of the *Airtours* criteria as the starting point of the assessment of joint dominance is justified and will help the TRA to carry out the adequate analysis and to provide guidance for stakeholders.
- If the criteria describing the mechanism of collusion are directly observable such as whether high interconnection rates allow for collusion between mobile operators, TRA should rely on the assessment of this mechanism to identify whether joint dominance might occur on a given market or not.
- Even if a mechanism is not observable or not well described in the literature in an accepted way, TRA will need to describe itself a mechanism of collusion and cannot simply rely on list of criteria that affect the likelihood of collusion. Depending on the mechanism of collusion described by TRA, some indicators may or may not be relevant for understanding joint dominance.
- Omantel mostly agrees with the criteria TRA listed in its Draft Guidelines. However, there are some which do not seem to be relevant and some other which require additional clarification.

## **7 Remedies**

### **Principles**

7.1 Omantel supports that TRA will first apply measures to wholesale markets before deciding whether to apply measure to downstream retail markets.<sup>49</sup> Omantel believes however that retail markets downstream from ex-ante regulated wholesale markets should not be regarded as market susceptible to ex-ante regulation at all and therefore a dominance assessment would not be necessary.

---

<sup>49</sup> Draft Market Definition and Dominance Guidelines, Section 6.1 (a).

7.2 Omantel also supports the concept of the “least intrusive remedy”<sup>50</sup> and repeats that in its view this means that for the case of price regulation in a relevant ex-ante market with more than one service, only one service should be regulated, since other services are by market definition constrained by that service.

7.3 Omantel also appreciates TRA’s comments regarding the shaping of remedies, in particular that TRA will consider whether impending market development will reduce dominance and that TRA is aware of the risk that a remedy could inadvertently reduce genuine competition in the relevant market.<sup>51</sup>

#### **Comparison with EU remedies**

7.4 In order to understand whether remedies proposed by TRA are excessive, Omantel has carried out a review of the European regulatory framework.

7.5 That framework provides regulatory authorities with a set of possible obligations that they can impose on dominant undertakings. The first set of remedies which are in principle related to wholesale markets are outlined in the Access Directive and consists of the following:

- obligation of transparency (accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices; including obligation to publish a reference offer),
- obligation of non-discrimination (in relation to interconnection and/or access),
- obligation of accounting separation,
- obligations of access to, and use of, specific network facilities,
- price control and cost accounting obligations.<sup>52</sup>

7.6 Obligations related to retail markets are set out in the Universal Service Directive:

- regulatory controls on retail services (only if obligations at wholesale level proved to be insufficient),
- regulatory controls on the minimum set of leased lines,
- carrier selection and carrier pre-selection.<sup>53</sup>

---

<sup>50</sup> Draft Market Definition and Dominance Guidelines, Section 6.1 (b).

<sup>51</sup> Draft Market Definition and Dominance Guidelines, Section 6.3.

<sup>52</sup> Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002, Article 9-13.

### Remedies in the Draft Guidelines and in the EU Access Directive

TRA	EU
publication of information reference offers	transparency
-	non-discrimination
accounting separation	accounting separation
terms and conditions of access and interconnection mandated provision of services access to essential facilities	access to, and use of, specific network facilities
price cap regulation	price control and cost accounting obligations
tariff filing and approval tariff notification cost studies subscriber information obligations terms of service quality of service	-

7.7 It appears that TRA considers a wider set of remedies than the European Framework. For instance, there is no explicit obligation to notify and request approval of tariffs in the EU. Furthermore, the European framework addresses the remedies related to wholesale and retail markets separately.

7.8 On the contrary, TRA follows its tendency to provide long lists of possibilities. Omantel notes that an exhaustive list of all thinkable remedies does not provide much guidance regarding the remedies that might be imposed in certain cases. It would have been more helpful if TRA had illustrated with examples which remedies would be considered appropriate in certain competitive scenarios.

### Consistency with Article 8 of the Draft Decision

7.9 Omantel notes the following inconsistencies between the Article 8 of the Draft Decision and Section 6 of the Draft Guidelines:

<sup>53</sup> Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002, Article 17-19

- The Draft Decision mentions in (b) a remedy not to discriminate in favour of the regulated firm's own network. This remedy is not discussed in the Draft Guidelines.
- The Draft Decision lists in (h) wholesale price controls, which again are not explicitly mentioned in the Draft Guidelines.
- The Draft Guidelines list in (c) a tariff notification remedy, which is separate from a tariff approval remedy. Tariffs would need to be notified to the market, rather than TRA. Whether this is the meaning of "notification" in Article 8 (i) is ambiguous.

## **8 Conclusion**

- 8.1 TRA's effort to provide Draft Guidelines for ex-ante regulation is welcomed.
- 8.2 Omantel's main concerns are the lack of consistency between the Draft Guidelines and the Draft Decision, the lack of explicit consideration of the market context, and the use of a long list of criteria for joint dominance.
- 8.3 Joint dominance cannot be found based on criteria alone but must be analysed using the description of a mechanism of tacit collusion. Such a requirement is missing in the Draft Decision. Not carrying out an analysis of how tacit collusion might work in a market will lead to incorrect results in the determination of joint dominance.
- 8.4 An explicit consideration of the market context reveals that Oman has certain characteristics that are different from Europe, on whose regulatory framework TRA relies. Regulation should address the differences in characteristics, such as low fixed penetration due to expensive network build-out, a low number of households and the current upgrade of the fixed network infrastructure of Omantel. In particular, it may be the case that investment is of greater importance in Oman than in Europe (given low fixed penetration). The European framework has worked well, when infrastructure was already in place, but has – to a degree – failed to elicit the investment that is deemed to be socially efficient. For this reason, regulations should be amended for Oman.
- 8.5 TRA introduces in this context a “new market regulatory holiday”, which however is not present in the Draft Decision. That concept should be expanded and also the conditions for access to infrastructure or for price regulation should be taken with the concern for the required necessary investments.

## **Annex – Market context in Oman**

- 8.6 We provide in this section a short overview of the Omani telecommunications market in order to best address the relevance of market dominance in Oman, with an emphasis on the evolution of the market since our response to the consultation done by TRA last year, in March 2009.eft intentionally blank

### **The Omani mobile market has become significantly more competitive in 2010**

- 8.7 Confidential

- 8.8 Confidential



**International comparison - market shares of third mobile entrants**

**The Omani fixed market remains small and has continued to experience increased fixed-mobile substitution**

**Fixed mobile substitution**

8.9 Confidential

8.10 Confidential

**Mobile vs. fixed subscribers' evolution 2005-2008 (in 000s)**

8.11 Confidential

8.12 Confidential

**Impact of wireless fixed line services**

8.13 Confidential

**2010 has shown more evidence that there is only one single broadband market in Oman, regardless of platforms**

8.14 Confidential

8.15 Confidential

**Oman's internet subscribers by technology**

8.16 Confidential

**Reach of broadband technologies in Oman, (1H 2010, 000s Households)**