THE HASHEMITE KINGDOM OF JORDAN



TELECOMMUNICATIONS REGULATORY COMMISSION

Explanatory Memorandum to the Regulatory Decision on the Dedicated Capacity Markets Reviews

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CHAPTER I: INTRODUCTION

The Explanatory Memorandum summarises and evaluates the comments of the various members of the telecommunications industry in Jordan to the Dedicated Capacity Markets Public Consultation Document published by the TRC on 25 April 2010, including the further comments of operators made with respect to the initial set of comments lodged by operators.

Formal responses to the *Public Consultation Document* were received from Jordan Telecommunications Company (Orange Fixed), Umniah Mobile Company / Batelco Jordan (Umniah/BTJ), Jordan Mobile Telephone Services Company (Zain), and Metro Beam – Kulacom Jordan (Kulacom). Formal comments on the above responses were, in turn, received from Orange Fixed and Umniah / BTJ.

Chapter II of this Explanatory Memorandum provides an overall summary of the comments received by all operators accompanied by TRC's reasoned response, broken down by reference to:

- 1. Markets for Retail Dedicated Capacity and Retail VPN & Frame Relay Services (in the absence of any *ex ante* regulation);
- 2. Markets for Trunk and Terminating Segments of Wholesale Dedicated Capacity (in the absence of any *ex ante* regulation); and
- 3. Markets for Retail Dedicated Capacity and Retail VPN & Frame Relay Services (with *ex ante* regulation of wholesale Dedicated Capacity in place).

The TRC notes that respondents, in relation to a specific question, have also often commented on issues addressed in other questions. In the discussion which follows, the TRC has maintained the original sequence of questions, and provides its assessment of those responses that are directed to a specific question.

CHAPTER II: OVERVIEW OF COMMENTS BY THE INDUSTRY

1. Markets for Retail Dedicated Capacity and Retail VPN & Frame Relay Services (in the absence of any *ex ante* regulation)

Q1: Do you agree with the TRC's preliminary conclusions regarding the product and geographic definition of the relevant markets for retail Dedicated Capacity ("DC") and VPNs & Frame Relay?

Kulacom fully agreed with the TRC's preliminary conclusions on the product and geographic definition of the relevant markets.

Umniah/BTJ agreed with the majority of TRC's conclusions regarding the market definition. However Umniah/BTJ voiced concerns about the apparent exclusion of Ethernet, the treatment of xDSL, and the distinction of two markets with a breakpoint at 2 Mps.

- Umniah/BTJ argued that point-to-point dedicated Ethernet links are both supply and demand side substitutes for other forms of dedicated capacity products, and noted that other operators in Jordan already provide Ethernet links as a substitute to traditional interface leased lines. The same respondent, in its response to other operators' replies, provided additional comments regarding the need for the inclusion of Ethernet services in DC markets, noting that it is already widespread practice in EU countries to include Ethernet services. Umniah/BTJ took the view that the exclusion of Ethernet services would grant an unwarranted first-mover advantage through the possibility to leverage bottleneck resources (*i.e.*, the legacy local access network) into retail markets.
- In addition, Umniah/BTJ expressed concerns regarding the treatment of xDSL technologies and proposed either to specify a 1:1 contention ratio as one of the main characteristics of DC markets, or to include all services in DC markets that have contention ratios better than those included in broadband markets. Umniah/BTJ did not question the 2 Mbps breakpoint for retail DC markets, but pointed out that higher speeds were technically achievable over copper lines. In its response to other operators' replies, Umniah/BTJ shared Orange Fixed's and Zain's doubts about defining separate retail markets for services up to/including 2 Mbps and above 2 Mbps.

Zain broadly agreed with the TRC's preliminary conclusions, but with qualifications. Zain believed that SDSL can be used as a low cost substitute for DC, and that the TRC should take note of this in future market reviews. Zain also noted that including self-supplied DC circuits (*e.g.*, Zain's own microwave links for connecting BSCs) in the product market for high bandwidth DC would be incorrect. According to Zain, it only uses microwave links because Orange's DC services are currently overpriced. Finally, Zain claimed that the break point at 2 Mbps was not substantiated by evidence and wondered if there was any value in defining separate markets along such lines.

Orange Fixed disagreed with the TRC's market definition. Orange Fixed seemed to suggest that the self-supply of WiMAX and fibre-based services should be included within the scope of relevant product market definition. In addition, Orange Fixed expressed concerns regarding

the 2 Mbps breakpoint used for the differentiation of markets. Furthermore, it took the view that retail international DC markets should be defined on a route-by-route basis.

Response of the TRC

The TRC takes due note of the Umniah/BTJ comments on **Ethernet** services. The TRC does not question that Ethernet-based services are a substitute for traditional interface leased lines and, as such, should be prospectively included in the relevant retail markets for DC services. The TRC also takes note of the fact that retail Ethernet services have already become commercially available in Jordan, while corresponding wholesale services which alternative operators could use to compete at the retail level are not as yet available (notably unbundled local loops and wholesale DC terminating and trunk lines). The TRC has therefore revisited its preliminary position taken in the Consultation Document and takes the view that Ethernet services should be included in the relevant product markets for retail DC, with immediate effect.

As regards the concerns raised by Umniah/BTJ regarding the clarification of a **1:1 contention rate** as one of the main characteristics of DC lines, the TRC believes that this point is already covered in the public Consultation Document. In particular, in section 1.1 of Chapter III it is mentioned that: "*DC services are referred to as "dedicated" capacity connections, meaning that the capacity can be used by each individual end user, and is available (in its entirety) for their sole use, when they require it." The TRC takes the view that no further clarification is required to describe the criterion of "dedicated" capacity (the other two criteria for DC being its point-to-point and transparency characteristics).*

The TRC does not share Orange Fixed's implicit suggestion that other operators' **self-supply** of wireless and fibre-based DC should be included in the relevant product market. Other operators lack the coverage and ubiquity that Orange Fixed can provide. The TRC also notes that, if self-supply were to be included in the market definition, the self-provided DC of all operators - including that of Orange Fixed - would have to be taken account. This would not be practical, as it is unclear how the (self-) provision of DC on integrated networks could be defined.

The TRC does not share the concerns raised by Orange Fixed, Umniah/BTJ and Zain regarding the separation of DC markets at the **2Mbp** breakpoint. The TRC notes that, in the Consultation Document, a supply and demand side substitution analysis was performed based on Jordanian market conditions. The respondents did not provide additional evidence that would change the market definition. The TRC also notes that, when DC services are supplied over copper, there are limits to switching to higher bandwidths. To offer higher bandwidths, a supplier of DC would have to replace copper with another technology (*e.g.*, fibre), even though he may continue to use the same underlying duct or pole infrastructure. Although the provision of high-bandwidth DC (above 2 Mbps) is theoretically possible under copper (through the use of xDSL technologies), this is limited by the length and the quality characteristics of the local loop. Indeed, the availability of the relevant services is lowered as the length of the local loops increases. The above considerations are confirmed by Umniah/BTJ's reply. In particular, Umniah/BTJ in its response mentions that: "Single-pair ShDSL enables symmetric speeds well in excess of 2 Mbit/s on relatively short loops_...." The TRC therefore maintains its view that DC prices, and the characteristics of the network

infrastructure used to provide DC, support a break in the chain of substitution between lowerbandwidth leased lines (up to/including 2 Mbps) and higher-bandwidth leased lines (above 2 Mbps).

The TRC does not share the view of Orange Fixed that **international DC markets should be defined on a route-by-route basis**. The TRC notes that, although an international DC line to a given country is not a substitute for an international DC line to another country, international DC lines are often provided as part of a broader contract by international carriers (covering many routes) under different conditions of supply and with different pricing patterns. An operator supplying international DC to a specific route can easily switch to the provision of international DC to different destinations falls within the same relevant product market, as an operator providing DC to a specific country can easily switch to the provision of DC to another country. The supply side substitution argument clearly suggests that international DC to all international destinations falls within the same relevant product market.

In conclusion, the TRC maintains its view that five retail relevant product markets exist: (i) a market for retail local/national DC services up to/including 2 Mbps; (ii) a market for retail international DC services up to/including 2 Mbps; (iii) a market for retail local/national DC services above 2 Mbps; (iv) a market for retail international DC services above 2 Mbps; (iv) a market for retail international DC services above 2 Mbps; (iv) a market for retail international DC services above 2 Mbps; (iv) a market for retail international DC services above 2 Mbps; and (v) a market for retail VPN & Frame Relay services. The TRC reiterates that all DC services, irrespective of the technology used, are included within the relevant market definition if the three defining characteristics of DC (namely, its point-to-point, transparency and dedicated bandwidth aspects) are fulfilled. Finally, in contrast to the Consultation Document, the TRC now takes the view that DC lines with Ethernet interfaces form part of the relevant product markets. The TRC maintains its conclusion that all markets are national in scope.

Q2: Do you agree with the TRC's preliminary conclusion that the three criteria are fulfilled for the four relevant markets for retail DC services and for the relevant market for VPNs & Frame Relay, in the absence of any ex ante regulation at the wholesale and retail levels?

Kulacom and Zain agreed with the TRC's preliminary conclusion.

Umniah/BTJ agreed with the TRC's preliminary conclusion, subject to the comments made regarding the product market definition.

Orange Fixed disagreed with the preliminary conclusion that the three criteria are fulfilled for the four relevant retail markets for DC and for VPNs & Frame Relay in the absence of any *ex ante* regulation. Orange Fixed expressed the view that alternative operators will be no longer dependant on Orange Fixed for providing retail DC services. It argued that operators such as Zain and Umniah/BTJ are developing their own core and local access networks. Moreover, alternative operators were said to have the option of using wholesale inputs from the *National Broadband Network* for the provision of retail DC services. Orange Fixed also argued that *ex post* intervention would be sufficient to deal with any remaining competition problems.

Response of the TRC

The TRC does not agree with the view of Orange Fixed regarding the cumulative fulfillment of the three criteria for the respective retail DC and VPN & Frame Relay markets. As already stated in the Consultation Document, the usage of the National Broadband Network may reduce entry barriers over time, but the TRC does not believe that this will occur within the timeframe of this market review. The TRC believes that Orange Fixed's access and core network used for the provision of retail DC lines cannot be easily replicated whether by alternative operators' own infrastructure or by use of the National Broadband Network, at least within the timeframe of this market review. On the contrary, the data available to the TRC shows that the usage of alternative operators' own infrastructure for the provision of DC lines is de minimis, while most of alternative operators heavily rely on Orange Fixed's network infrastructure in order to provide retail DC lines (usually the resale of retail DC circuits). As regards Orange Fixed's concerns regarding the sufficiency of ex post intervention, the evidence (namely, the extremely high market shares of Orange Fixed) and the complaints expressed by alternative operators about potential discriminatory practices and margin squeeze in their responses to the consultation subjects Orange Fixed's position to doubt.

In conclusion, the TRC maintains its view that, in the absence of any *ex ante* regulation being adopted at the wholesale and/or retail levels, the three criteria relied upon to justify *ex ante* regulatory intervention have been cumulatively fulfilled in relation to the markets for retail DC services and VPN & Frame Relay services.

2. Market for Wholesale Dedicated Capacity

Q3: Do you agree with the TRC's preliminary conclusion regarding the product and geographic definition of the three relevant markets for low and high bandwidth terminating and trunk segments of wholesale DC?

Kulacom agreed with the TRC's preliminary conclusion.

Umniah/BTJ agreed with the TRC's preliminary conclusions relating to the product and geographic market definition, subject to a number of qualifications:

- Umniah/BTJ stressed that wholesale DC markets need to be defined as input markets for any type of use that alternative operators choose to effect (*e.g.*, self-provisioning to support interconnection and backhaul, the provisioning of wholesale services to third parties and affiliated companies, the provisioning of retail services of any kind).
- The same operator stated that the TRC should not only include technologies already used in Jordan but also Ethernet, which is being rolled out by Orange Fixed at present, but might not be fully operational as yet, as well as symmetric xDSL.
- Further, Umniah/BTJ voiced the concern that a delineation of terminating segments at local level with an obligation to provide access to DC circuits also at higher points in the network hierarchy is not viable and may be open to challenge. Umniah/BTJ also noted that such an approach would be open to non-compliance by the dominant

operator, thereby rendering the TRC's proposed approach ineffective in practice. Umniah/BTJ requested that the boundary between terminating and trunk segments should be set at the transit level, and that remedies should require terminating segments to be provided at both the local exchange and transit levels, with an economic incentive provided to alternative operators to connect at the local exchange level rather than at the transit level whenever economically and technically feasible.

• Umniah/BTJ, in its response to Orange Fixed, argued that FWBA should not be included in the relevant DC product market. It stated that FWBA is not suitable to deliver high quality services due to a lack of solid quality of service, while the coverage of FWBA network is limited due to the lack of assigned spectrum and the existence of interference issues. In support of its arguments, Umniah/BTJ mentioned that FWBA has not been included in the relevant DC market by any regulator in the European Union. In addition, the same respondent in its replies to comments stated that Umniah/BTJ's own fibre network has very limited coverage and, due to the time required to expand fibre optic networks, cannot become a viable substitute for wholesale DC circuits. Umniah/BTJ, in response to Orange Fixed comments regarding the *National Broadband Network*, argued that this network is only a backbone network with no reach into the local exchange level, and the proposed delineation point at Orange Fixed's local exchanges would therefore not be an option.

Zain agreed with the TRC's preliminary conclusions for distinguishing between markets for trunk and terminating segments of wholesale DC. The same operator disagreed with the identification of a breakpoint at 2 Mbps for the terminating segments, and proposed that a single product market for terminating segments of wholesale DC exists.

Orange Fixed agreed with the classification that the TRC has reached with regard to wholesale DC markets. Orange Fixed stated that not all operators are currently collocated at Hashem Data Center, as alternative operators are developing their own networks and can make use of the *National Broadband Network*, and there are other locations where they are collocated. Further, Orange Fixed agreed with the TRC's preliminary view to exclude international DC services from the present market review, but emphasized that, in the future, international DC markets should be defined and analyzed on a route-by-route basis.

Response of the TRC

As regards the Umiah/BTJ concerns in relation to the inclusion of **Ethernet and symmetric DSL technologies** in the relevant wholesale DC markets, the TRC reiterates that wholesale DC services may be provided over different types of networks and technologies. Ethernet services are already commercially available in Jordan, while the corresponding wholesale services which alternative operators could use to replicate the Ethernet services of the fixed incumbent operator (LLU and wholesale DC terminating and trunk lines) are not yet available. The TRC takes the view that Ethernet services should be prospectively included in the relevant product markets for wholesale DC. As regards SDSL technologies, the TRC clarifies that, if a service provided through SDSL technologies (or any other technology) fulfils the three main characteristics of DC lines (point-to-point, transparency and dedicated bandwidth characteristics), this service should be included within the wholesale DC markets definition. As regards comments made by Umniah/BTJ in relation to the exclusion of the

wireless DC services (e.g. FBWA), the TRC argues that - based on the same arguments analysed above regarding the inclusion of different technologies in the wholesale DC market - wireless DC services form part of the relevant DC markets once they fulfil the basic characteristics of wholesale DC services. It should also be noted that the comments made by Umniah/BTJ regarding the exclusion by EU National Regulatory Authorities of FBWA from the relevant DC markets is not correct. The TRC notes that the majority of EU NRAs define the relevant market regardless of the technology used.

The TRC does not share the view of Zain in relation to the **2 Mbps breakpoint** between high and low bandwidth terminating segments. Technical limitations to supply-side substitution support the conclusion that there are two distinct product markets for terminating segments of wholesale DC, with the breakpoint at 2 Mbps. There is also no demand-side substitutability between low and high bandwidth terminating segments of DC services from the viewpoint of other operators demanding such services.

In relation to Orange Fixed's comment that a number of alternative operators are **no longer collocated at Hashem Data Center**, the TRC would like to point out that this will not change the market definition for wholesale DC markets. In the Consultation Document, the TRC stated that from the point of view of remedies, it is important to allow alternative operators to purchase terminating segments when they are collocated at transit level (this can be done by purchasing a combination of a terminating segment until the local exchange, and a trunk segment until the transit level).

As regards Orange Fixed's suggestion to define, in the future, **wholesale international DC markets on a route-by-route basis**, the TRC disagrees. Rather, it appears to the TRC that supply substitution is likely to create similar competitive conditions across different routes.

In consequence, the TRC maintains its conclusion that there are three product markets for wholesale DC, namely: (i) a market for terminating segments of wholesale DC up to/including 2 Mbps in Jordan; (ii) a market for terminating segments of wholesale DC above 2 Mbps in Jordan; and (iii) a market for trunk segments of wholesale DC in Jordan. The TRC clarifies that wholesale DC services, irrespective of the technology used, are part of the relevant product markets if the three main characteristics of DC lines (point-to-point, transparency and dedicated bandwidth) are fulfilled. Finally, in contrast to the Consultation Document, the TRC now takes the view that wholesale DC lines with Ethernet interfaces form part of the relevant product markets. The TRC also maintains its conclusion that all these markets are national in their geographic scope.

Q4: Do you agree with the TRC's preliminary conclusion that the three criteria are fulfilled for the three markets for low and high bandwidth terminating and trunk segments of wholesale DC and that these markets are thus susceptible to ex ante regulation?

Kulacom and Zain agreed with the TRC's preliminary conclusion.

Umniah/BTJ agreed with the TRC's preliminary conclusion, subject to the comments made on the product market definition. Umniah/BTJ, in its response to Orange Fixed's comments, disagreed that there is an international trend towards the deregulation of high bandwidth terminating segments. Umniah/BTJ stated that only 3 of 27 EU countries have deregulated their high bandwidth terminating segments. These are countries where, in contrast to Jordan, infrastructure-based competition exists.

Orange Fixed disagreed with the preliminary conclusion that the three criteria have been cumulatively satisfied for the three markets for low and high bandwidth terminating and trunk segments of wholesale DC. The respondent stated that there are no persistent high entry barriers to the provision of high bandwidth terminating segments, and that any entry barriers would decrease, as international experience would show. The same respondent also noted that there is already regulation at the wholesale level and that it has acted in compliance with all the laws and regulations issued by the TRC. Orange Fixed also noted that it does not discriminate between its retail arm and other licensed operators, and that imposing further *ex ante* regulations at the wholesale level would not be reasonable or logical. Orange Fixed, in response to Umniah/BJT and Zain, disagreed with the comment that it is impossible to duplicate Orange Fixed's infrastructure and that therefore dominance would persist. Orange Fixed expressed the view that both operators neglect alternative options such as using the *National Broadband Network* or deploying their own infrastructure.

Response of the TRC

The TRC notes that all respondents, other than Orange Fixed, agreed with its preliminary conclusions regarding the fulfilment of the three-criteria test in relation to the three markets for wholesale DC services.

The TRC does not agree with **Orange Fixed**'s view that **the existence of high and persistent barriers to entry and the lack of a dynamic trend towards competition** would not be supported by the evidence. It is clear that Orange Fixed's nationwide (access and core) network required for the provision of wholesale DC services cannot be easily replicated, at least within the timeframe of this market review. The TRC also reiterates its position that, based on the data available to the TRC, the usage of other operators' own infrastructure for the provision of DC lines is *de minimis*. Orange Fixed, in 2008, was the only provider of terminating segments, and its market share in trunk segments was 70-80%. The TRC also believes that the use of the *National Broadband Network* cannot provide a full substitute for the wholesale DC lines of Orange Fixed, since the *National Broadband Network's* primary focus is the connection of public institutions such as universities, schools, government and medical institutions.

Consequently, the TRC maintains its view that the relevant markets for terminating segments up to/including 2 Mbps, terminating segments above 2 Mbps, and trunk segments of wholesale DC, fulfill the three criteria, and are thus susceptible to *ex ante* regulation.

Q5: Do you agree with the TRC's preliminary conclusion that Orange Fixed has a dominant position on the two markets for low and high bandwidth terminating segments of wholesale DC?

Kulacom and Umniah/BTJ agreed with the TRC's preliminary conclusion.

Zain agreed with the TRC's preliminary conclusion, subject to the comments made in relation to the boundary drawn between low and high bandwidth terminating segments at 2Mbps.

Orange Fixed disagreed with TRC's preliminary conclusion. Orange Fixed claimed that the TRC relies overly on market shares and has not considered other factors in detail such as the number of competitors, changes in market shares, the existence of countervailing buyer power, the ability to invest, scale, vertical integration, and other factors. Orange Fixed also believed that the TRC has not considered the impact of network roll-out by alternative operators, as well as their use of the *National Broadband Network*.

Response of the TRC

The TRC notes that all respondents, other than Orange Fixed, agreed with its preliminary conclusions regarding the dominant position of Orange Fixed on the markets for terminating segments of wholesale DC lines up to/including, and above 2 Mbps.

The TRC does not share the view of Orange Fixed that the TRC relied overly on **market shares** and has not considered in sufficient detail **other factors**. As set out in the Consultation Document, the TRC examined among others: the number of suppliers and the relative shares in the markets, the existence of barriers to entry, the control of essential facilities, the presence of substantial economics of scale and scope, the degree of vertical integration and the existence of FBWA operators as well as the development and usage by alternative operators of the *National Broadband Network*.

To conclude, the TRC maintains its view that Orange Fixed holds a dominant position in the markets for terminating segments of wholesale DC lines up to/including, and above, 2 Mbps.

Q6: Do you agree with the TRC's preliminary conclusion that Orange Fixed has a dominant position on the market for wholesale trunk segments of DC?

Kulacom and Zain agreed with the TRC's preliminary conclusion.

Umniah/BTJ fully agreed with the TRC's preliminary conclusion. The same respondent also argued that, even in the case of the inclusion of self-supply in the relevant product market, Orange Fixed would need to be designated as the dominant operator.

Orange Fixed disagreed with TRC's preliminary conclusion. Orange Fixed stated that the market for trunk segments of wholesale DC is not controlled by Orange Fixed. In addition, Orange Fixed stated that its high market share is due to the high number of interconnection lines provided by Orange Fixed to Orange Mobile. It argued that there is competition from other suppliers of trunk segments of wholesale DC such as Vtel, Damamax, Batelco and Mada.

Response of the TRC

The TRC notes that all respondents, other than one, agreed with its preliminary conclusions regarding the dominant position of Orange Fixed on the market for trunk segments of wholesale DC lines.

In relation to Orange Fixed's concern regarding **market shares**, the TRC reiterates its view that the measurement of self-supplied DC within integrated networks would encounter concerns as to practicability. Moreover, the TRC also takes the view that the inclusion of self-supply of trunk segments in the market – if it were possible - would not result in a significant change in market shares. Since the number of self-supplied trunk segments used by Orange Fixed is expected to be at least at the same level (either in terms of numbers or bandwidth) as the self-supplied lines of Zain and Umniah, Orange Fixed's market share in trunk segments would not fall below the level of the market share cited in the Consultation Document. As regards the availability of competition from alternative DC suppliers, the data available to the TRC suggests that the market shares of alternative suppliers will remain low, and are unlikely to increase significantly over the lifetime of this market review.

To conclude, the TRC maintains its view that Orange Fixed holds a dominant position in the market for trunk segments of wholesale DC lines.

Q7: Do you agree with the TRC's preliminary conclusion that the potential competition problems related to the dominant position of Orange Fixed include the denial of access to wholesale terminating and trunk segments of DC, discrimination and excessive wholesale charges?

Kulacom and Zain agreed with the TRC's preliminary conclusion.

Umniah/BTJ agreed with the TRC's preliminary conclusion. Umniah/BTJ, in its response to Orange Fixed's comment regarding the existence of other operators providing wholesale terminating and trunk products, argued that if alternative operators are providing such a service at much lower prices than Orange Fixed, this appears to indicate that Orange Fixed apparently considers itself immune to this competition.

Orange Fixed disagreed with the TRC's preliminary conclusion. Orange Fixed argued that the potential competition problems identified by the TRC would not exist in reality. The same respondent argued that there are operators that are actually providing wholesale terminating and trunk products at much lower prices than Orange Fixed and that this has not been properly taken into consideration throughout the Consultation Document.

Response of the TRC

The TRC notes that all respondents, other than one, agreed that the potential competition problems related to the dominant position of Orange Fixed include the potential denial of

access to wholesale terminating and trunk segments of DC, discriminating practices and the charging of excessive wholesale charges.

As regards Orange Fixed's comment on the **existence of other operators** that are providing wholesale DC products, the TRC reiterates that given their limited network coverage and low market shares, they would not be in a position to effectively constrain the behaviour of Orange Fixed.

In relation to the identified **potential competition problems**, the TRC notes that all respondents other than Orange Fixed agreed with the views of the TRC. In addition, as stated in the Consultation Document, competition problems such as delaying tactics (a form of access denial) have been raised by alternative operators in their responses to the Qualitative Questionnaire of the TRC. Moreover, given the lack of effective competition that is likely to exist in the absence of wholesale regulation, and the lack of nationwide alternative options in the markets for wholesale DC, a finding that potential competition problems are likely to arise is almost self-evident.

In conclusion, the TRC maintains its view that the potential competition problems related to the dominant position of Orange Fixed include the denial of access to wholesale terminating and trunk segments of DC, discrimination and excessive wholesale charges.

Q8: Do you agree with the TRC's preliminary conclusion about the appropriate remedies to be imposed on Orange Fixed to address the competition problems identified?

Kulacom agreed with the TRC's preliminary conclusion.

Umniah/BTJ agreed in principle with the proposed remedies, but proposed that these remedies be strengthened in order to create the desired effect. Umniah/BTJ proposed either to remove the notion of "reasonable request" or to define "reasonable request" by reference to a specific list of factors. The same respondent proposed to expand migration procedures also to include migration between current retail (resale) products and wholesale products (including the possibility of bulk migration) and to synchronize migration procedures with number portability. In addition, Umniah/BTJ argued that all types of co-location, and especially co-mingling, should be imposed on Orange Fixed. Service Level Agreement (SLAs) should include explicit penalties, and both internal and external KPIs should be published. The TRC should also be more explicit in targeting any discrimination between the internal and external provisioning of wholesale DC in price and non-price terms, as well as the vertical leveraging of market power from wholesale into retail markets.

For this purpose, Umniah/BTJ proposed the imposition of *ex ante* margin squeeze tests. The same respondent also proposed the harmonization of the imposed accounting separation obligation with prevailing EU standards. Finally, Umniah/BTJ agreed with the proposed cost standard. The same operator, in its response to Orange Fixed's arguments regarding the relation between existing interconnection services and terminating segments, believed that Orange Fixed confused the purpose and the outcomes of the TRC's market analysis. The respondent stated that, whether or not wholesale terminating segments of leased lines are defined as an interconnection service, is totally irrelevant in a market review exercise. In

addition, Umniah/BTJ noted that Orange Fixed's proposal to sell terminating segments on a "retail-minus" basis demonstrates that Orange Fixed refuses to understand that one of the obligations of Orange Fixed is the provision of wholesale links between customer locations and PoP of alternative operators (i.e., terminating segments).

Zain agreed with the TRC's preliminary conclusion, and proposed that the TRC be more specific in its prescription of KPIs and accounting separation. Zain argued that separate KPIs should show Orange Fixed's performance in the provision of wholesale DC services to itself and to external customers. The same respondent also proposed the publication of separated accounts, where the form and the methodology should be made subject to a public consultation process.

Orange Fixed disagreed with the TRC's preliminary conclusion regarding remedies. Orange Fixed argued that no additional *ex ante* obligations should be imposed on Orange Fixed, and stated that the proposed remedies are the result of false assumptions that would lead to excessive regulation. The same respondent also stated that the current regulations imposed by the TRC through numerous instruments have ensured that access to terminating and trunk segments of wholesale DC is available to other operators. Orange Fixed argued that obligations of non-discrimination and accounting separation are already in place. Additionally, Orange Fixed believed that the TRC bases its analysis on the assumption that Orange Fixed would abuse such a market situation with anti-competitive practices at the wholesale and retail levels. Orange Fixed argued that the proposed remedies would restrict investments and the degree of product innovation in the market. Finally, Orange Fixed rejected the introduction of price controls at the wholesale level because it believed that "termination" is in principle not an interconnection service and therefore prices do not need to be cost-based and could be set on a cost-plus or retail-minus base. Orange Fixed, in response to Umniah and Zain, did not agree with the view that it would use anti-competitive practices.

Response of the TRC

As regards Umniah/BTJ's comments on the term "**reasonable request**", the TRC notes that where access obligations are imposed on operators that require them to meet reasonable requests for access, these requests should only be refused on the basis of objective criteria such as technical feasibility or the need to maintain network integrity. Clear exceptions, where it may not be possible for Orange Fixed to provide access to a particular service (*e.g.*, a DC link between two specific points) should also be specified in the relevant Reference Offer, which is subject to the prior approval of the TRC. In any situation where access is refused, the aggrieved party may submit the case to a dispute resolution procedure.

In relation to the same respondent's comments on **migration procedures** between retail and wholesale DC products, the TRC agrees with Umniah/BTJ's suggestion, especially due to the fact that until now Orange Fixed is not subject to obligations for wholesale DC lines provisioning between end-user premises. The TRC also notes that it explicitly includes in the Decision the requirement of migration between retail and wholesale DC (both individual and bulk migration).

In contrast, the TRC does not agree with the Umniah/BTJ comment that Orange Fixed should be obliged to provide **all types of co-location services.** In the TRC's view, only physical co-location is essential for the provision of wholesale DC services.

As regards the **SLAs**, the TRC reiterates its view, already expressed in the Consultation Document, that SLAs should include appropriate compensation in the case of non-compliance with the agreed service levels.

In relation to comments made by Umniah/BTJ and Zain regarding the form and the **publication procedures for KPIs**, the TRC agrees that KPIs should be provided for internal and external service provision (respectively, provisioning to companies affiliated to Orange Fixed and alternative operators), and should be published.

The TRC does not share the view of Umniah/BTJ in relation to the imposition of *ex ante* **margin squeeze tests** on Orange Fixed. The TRC believes that the proposed price control obligations (cost-based prices) both at retail and wholesale level are appropriate to target a potential margin squeeze problem in the retail market for DC services up to/including 2 Mbps. While the retail markets for DC services above 2 Mbps and for VPNs & Frame Relay are not subject to *ex ante* price controls, the TRC believes that margin squeezes, if they occur, can be remedied under the TRC's *ex post* powers. The TRC also notes that the obligations of cost-based and non-discriminatory prices for wholesale DC render margin squeezes less likely to occur.

The TRC takes note of Umniah/BTJ and Zain's concerns in relation to **accounting separation**, and reiterates its position stated in the Consultation Document that it will consult on accounting rules and reporting formats for all services subject to an obligation of accounting separation after the adoption of the proposed measures.

With respect to the view expressed by Orange Fixed that the proposed remedies are a result of **false assumptions that will lead to excessive regulation**, the TRC refers to the rationale described in the Consultation Document as to why the provision of DC services must be considered to be subject to the imposition of *ex ante* regulation.

The TRC does not agree with Orange Fixed's comments in relation to existing obligations (accounting separation, non-discrimination) and also does not share the view that "termination" services are not an interconnection service, and should thus not be subject to cost-based prices. The TRC believes that these comments are based on a misunderstanding of the market review procedure. The market review process identifies the relevant markets susceptible to ex ante regulation, determines whether any operator holds a position of dominance in a relevant market and imposes remedies to address the potential competition problems related to dominance. The market review process thus determines whether and where competition problems exist and whether existing regulations should be abandoned, maintained or modified. It is in no way bound by legal definitions and categorisations of existing ex ante regulations. In addition, the TRC disagrees with the view expressed by Orange Fixed that the current regulations imposed by the TRC have ensured that access to terminating and trunk segments of wholesale DC is available to alternative operators. The TRC notes that the current regulations, among others, do not oblige Orange Fixed to provide wholesale DC lines, when the termination points of the DC lines are to be found at end-user premises.

Finally, the TRC does not agree with Orange Fixed that the proposed remedies would restrict investment and the degree of product innovation in the market. The TRC believes that any adverse effects on investment incentives can be avoided by setting proper cost-based wholesale charges. Cost-based wholesale charges will maintain Orange Fixed's incentive for network investments, because they allow earning a competitive rate of return on the invested

capital. They will also retain alternative operators' incentive for investment in own network infrastructure if they are able to build out network infrastructure at a cost that is lower than Orange Fixed's wholesale charges.

In conclusion, the TRC maintains its view that the potential competition problems identified by it justify the imposition of a comprehensive set of remedies, including access to wholesale terminating and trunk segments of DC, transparency (including Reference Offer obligations), non-discrimination, price controls as well as cost accounting and accounting separation obligations. The TRC clarifies that migration procedures should also refer to migration between retail and wholesale DC (individual and bulk) and that KPIs should be published for internal and external service provision (respectively, provisioning to companies affiliated to Orange Fixed and alternative operators).

3. Markets for Retail Dedicated Capacity and Retail VPN &Frame Relay Services (with *Ex ante* Regulation of Low and High Bandwidth Terminating and of Trunk Segments of Wholesale Dedicated Capacity in Place)

Q9: Do you agree with the TRC's preliminary conclusion that, even with the ex ante regulation of terminating and trunk segments of wholesale DC in place, the three criteria are fulfilled for the two relevant markets for retail low bandwidth DC services?

Kulacom, Umniah/BTJ and Zain agreed with the TRC's preliminary conclusion.

Only **Orange Fixed** did not agree with the TRC's preliminary conclusion. It expressed its belief that the conclusion is incorrect and does not reflect the market facts. Orange Fixed argued that regulation at both the retail and wholesale level contradicts the main regulatory principle that *ex ante* regulatory measures should be tested and examined at the upstream level before proceeding to regulate the retail downstream level. It also argued that this approach contradicts with the mobile market review, where the TRC has concluded that the regulation of the retail mobile services market is unnecessary in light of the *ex ante* regulatory measures directed at the wholesale level. Further, Orange Fixed argued that the imposition of retail and wholesale regulation will prevent it from competing and providing innovative services and will negatively affect its investments in developing DC services.

Response of the TRC

The TRC notes that all respondents, other than Orange Fixed, agreed that, even with the *ex ante* regulation of terminating and trunk segments of wholesale DC in place, the three criteria are fulfilled cumulatively for the two relevant markets for retail low bandwidth DC services.

The TRC does not agree with Orange Fixed's view that **the fulfilment of the three criteria** is not supported by market facts. Especially for low bandwidth DC services, alternative operators have little scope for price and quality differentiation. Other entry and expansion barriers, which are less addressable by wholesale regulation, also exist, such as nation-wide marketing and brand recognition. The respective market shares for Orange Fixed in 2008 was above 90% for low bandwidth local/national DC, and 100% for low bandwidth international

DC. Moreover, it is unlikely that, within the timeframe of this market review, these market shares will decrease to a level which can be regarded as reflecting effective competition.

The TRC does not identify a contradiction between the DC and mobile market reviews. While *ex ante* regulation at the wholesale level is introduced with the objective to avoid *ex ante* regulation at the retail level, this is not always possible. Retail markets may need to be regulated if wholesale regulation is essential for creating competition, but has not yet been effectively implemented and/or when it is likely that effective implementation of wholesale remedies will require time. The need to regulate retail markets will also depend on the particular competitive conditions. In the case of DC, for example, the situation is relatively unique insofar as the wholesale and retail level products are <u>identical</u>, other than with respect to price. That is a relatively unique situation, as all other markets are characterized by relatively narrowly defined upstream wholesale services feeding into much broader defined downstream retail services. The TRC does not agree with Orange Fixed that these conditions are comparable in the mobile and DC markets. In any event, it would be a misunderstanding of the regulatory process to assume that wholesale remedies need to be tested first, before regulations at the retail level can be imposed.

In conclusion, the TRC maintains its view that even with the *ex ante* regulation of terminating and trunk segments of wholesale DC in place, the three criteria are fulfilled for the two relevant markets for retail low bandwidth DC services. Both markets thus are susceptible to *ex ante* regulation.

Q10: Do you agree with the TRC's preliminary conclusion that, with the ex ante regulation of terminating and trunk segments of wholesale DC in place, the three-criteria test is not fulfilled for the two retail high bandwidth DC markets and the market for VPNs & Frame Relay?

Kulacom disagreed with TRC's preliminary conclusion that the 3 criteria are fulfilled for retail high-bandwidth DC and VPNs & Frame Relay markets, arguing that there was insufficient data to draw such a conclusion.

Zain disagreed with the TRC's preliminary conclusion in relation to the high bandwidth DC market. Zain also stated that - due to the high prices charged by Orange Fixed for wholesale DC - it uses microwave links between BCSs. It argued that its investment in microwave links was inefficient and would not be undertaken if Orange Fixed set prices for wholesale DC at a competitive level. It therefore argued that the relevant market seemed to tend to towards competition only because the excessive prices in the relevant market have encouraged inefficient investments in alternative technologies. Zain concluded that the three criteria are fulfilled.

Umniah/BTJ disagreed with the preliminary conclusion of the TRC that the three criteria are not fulfilled for the markets for retail high bandwidth DC services. Umnah/BTJ stated that, due to the absence of wholesale DC remedies today and the time needed for the implementation of new wholesale remedies, it was not convinced that the retail markets for high-bandwidth DC tended towards effective competition, or that an "emerging market" logic could be adopted. As regards the VPN & Frame Relay market, Umniah/BTJ argued that this market is totally reliant upon the resale of the fixed incumbent's retail leased lines, and that this strong level of dependency will not disappear upon the adoption of the market review decision by the TRC. Therefore, Umniah/BTJ believed that the relevant market is unlikely to move towards effective competition over the lifetime of this market review. In addition, the same respondent had doubts about the sufficiency of *ex post* intervention, since this has not been the case in the past. Ummiah/BTJ took the view that the relevant retail markets fulfil the three criteria.

Orange Fixed did not expressly comment on the question.

Response of the TRC

The TRC takes note of **Zain**'s comment that it would not self-provide microwave links between BCS and BTSs if the prices of Orange Fixed for wholesale DC services were more competitively priced. The TRC, however, notes that it is a common practice for mobile operators to use microwave links for the interconnection of BCSs and BTSs. The TRC also points out that its conclusion that the market for VPNs & Frame Relay does not fulfil the 3-criteria test is based on other evidence, notably the market entry of several operators based on wholesale products already available in the past, and the market shares of well over 40% of alternative operators.

In relation to Umniah/BTJ's concerns with regard to **high-bandwidth DC**, the TRC reiterates its view that the retail markets for high-bandwidth DC do not fulfil the three criteria test. The market data available to the TRC indicates that market shares for alternative operators both for high bandwidth and VPNs & Frame Relay have been considerably lower than for low-bandwidth retail DC (well in excess over 40% in 2008). The TRC is expecting that, with the effective implementation of the proposed wholesale remedies, the market shares of alternative operators will further decrease to a level compatible with effective competition. In addition, the TRC reiterates its position that the small number of high-bandwidth DC circuits provided in the market suggest that this is still an emerging market.

In conclusion, the TRC maintains its view that with the *ex ante* regulation of wholesale DC in place, the three-criteria test is not fulfilled for the two retail high bandwidth DC markets and the market for VPNs & Frame Relay. The two markets are thus not susceptible to *ex ante* regulation.

Q11: Do you agree with the TRC's preliminary conclusion that Orange Fixed has a dominant position in the retail markets for low bandwidth local/national DC and low bandwidth international DC?

Kulacom, Umniah/BTJ and Zain agreed with the TRC's preliminary conclusion.

Orange Fixed disagreed with the TRC's preliminary conclusion and expressed the view that the retail market for low-bandwidth DC was not properly analyzed and that the conclusions derived did not address the demand and supply side issues properly.

Response of the TRC

The TRC notes that all respondents, other than Orange Fixed, agreed that Orange Fixed has a dominant position in the retail markets for low-bandwidth DC lines.

As regards Orange Fixed's concerns, the TRC points out that all the arguments raised by Orange Fixed have been answered in relation to previous questions.

In conclusion, the TRC maintains its view that Orange Fixed holds a position of dominance in the retail markets for low-bandwidth DC lines.

Q12: Do you agree with the TRC's preliminary conclusion that the potential competition problems related to the dominant position of Orange Fixed in the retail markets for low bandwidth local/national DC and low bandwidth international DC include discriminatory practices and the imposition of excessive retail tariffs?

Kulacom, Umniah/BTJ and Zain agreed with the TRC's preliminary conclusion.

Orange Fixed disagreed with the TRC's preliminary conclusion pointing out that the TRC had failed to adopt a sound and solid approach in analyzing the wholesale and retail markets, with the assumptions upon which the TRC had based its conclusions being mostly inaccurate and false.

Response of the TRC

The TRC notes that all respondents, other than Orange Fixed, agreed with the identified potential competition problems in the retail markets for low-bandwidth DC lines.

As regards Orange Fixed's concerns, the TRC takes the view that all arguments of Orange Fixed have been answered in relation to previous questions.

In conclusion, the TRC maintains its view that the potential competition problems related to the dominant position of Orange Fixed in the retail markets for low-bandwidth local/national and international DC include discriminatory practices and the imposition of excessive retail tariffs.

Q13: Do you agree with the TRC's preliminary conclusion about the appropriate remedies to be imposed on Orange Fixed in the retail markets for low bandwidth local/national DC and low bandwidth international DC to address the competition problems identified?

Kulacom agreed with the TRC's preliminary conclusion.

Umniah/BTJ agreed with qualifications on the remedies proposed by the TRC. It also proposed these remedies to be further strengthened in order to have the desired effect. Umniah/BTJ proposed to impose an obligation to Orange Fixed to obtain prior TRC approval for any tariff differentiation, especially to ensure that alternative operators relying on wholesale DC are not subject to margin squeezes on large customer contracts. The same respondent agreed with the proposed obligation for accounting separation for all types of DC lines, but questioned the viability of this obligation as retail high bandwidth DC markets are not regulated. Umniah/BTJ expressed the fear that the accounting separation obligation for all retail high bandwidth DC lines would be open to regulatory challenge. Finally, Umniah/BTJ proposed to impose an *ex ante* price squeeze test on all retail DC lines rather than require that retail prices be cost-based.

Zain agreed with the proposed remedies, except for the cost-based price control measure. Zain proposed to oblige Orange Fixed to comply with a price cap (PRI-X), believing that a cost-based price control will not provide a proper incentive for efficiency improvements and would fail to reduce prices.

Orange Fixed disagreed with the TRC's preliminary conclusions and pointed out that the TRC has failed to adopt a sound and solid approach in analyzing the wholesale and retail markets. It also argued that the assumptions that the TRC has based its conclusions on (presumably the preceding analysis of the susceptibility to ex ante regulation of the markets for retail DC up to/including 2 Mbps and the finding of dominance) are mostly inaccurate and false. Orange Fixed rejected all proposed remedies, since it believed that the retail markets are not susceptible for *ex ante* regulation.

Response of the TRC

In relation to Umniah/BTJ's proposal of an obligation of **prior TRC approval for any tariff differentiation**, the TRC takes the view that the proposed price control mechanism, based on cost-based prices, addresses the issue raised by Umniah/BTJ. All prices for retail low-bandwidth DC lines will have to be approved by the TRC and properly justified by Orange Fixed on the basis of costs. Prices to be approved will include those for large customers.

As regards the suggestion made by Umniah/BTJ for the imposition of a **margin squeeze control mechanism**, and the suggestion made by Zain for the imposition of a retail-minus approach and price cap instead of the cost based approach, the TRC disagrees with these suggestions. The TRC takes the view that the proposed price control obligations (cost-based prices) at retail and wholesale levels are appropriate to target the potential competition problems, including predatory pricing and margin squeezes. The TRC notes Zain's view that

charges should be made subject to a price cap and may consider such an approach once the cost orientation of the charges is assured.

The TRC does not share Umniah/BTJ's concerns about the **viability of an accounting separation obligation** on retail DC services as a whole. The TRC notes that even if it had imposed accounting separation obligations on retail DC services up to/including 2 Mbps, it would have also required a P+L statement as well as a MCE statement for the entirety of retail DC services. In order to carry out its regulatory tasks, the TRC requires information about related markets, where Orange Fixed is not dominant. The imposition of accounting separation may cover markets where an operator is not dominant, in particular, to ensure the coherence of costing and revenue data. The TRC confirms it will consult on the accounting rules and reporting formats for all those services subject to an obligation of accounting separation.

As regards Orange Fixed's concerns, the TRC states that all the arguments of Orange Fixed have been answered in relation to previous questions.

In conclusion, the TRC maintains its view that, in order to address the competition problems related to dominance in the market for low and high bandwidth DC, Orange Fixed should be subject to a comprehensive set of remedies, including the non-discrimination, accounting separation, price control and cost accounting obligations.

4. Other Comments

Industry structure – market shares - market data – impact assessment

Orange Fixed argued that the data used by TRC are outdated and the TRC did not take account of future trends and developments. It believed that the development of a body of regulation and the subsequent development of wholesale services will take a year or longer. By this time, market shares and competitive conditions will have changed compared to the present situation. Orange Fixed argued that remedies should be targeted at future and not historical distortions or inefficiencies. In addition, it argued that the TRC relied overly on market shares and has not considered other factors in detail such as the number of competitors, changes in market share, countervailing buyer power, the ability to invest, scale, levels of vertical integration, and other factors. In addition, Orange Fixed notes that the Statement of Government Policy clearly states that the TRC should evaluate the impact of its regulatory decisions on the markets in a legal and economic manner.

Response of the TRC

The TRC disagrees with the view expressed by Orange Fixed that the Consultation Document relied upon **out-of-date information and did not carry out a forward-looking assessment**. Aside from data based on the responses to the Operator Questionnaire, the TRC has also sought to factor into its analysis any observable trends regarding market developments such as the development of the *National Broadband Network* and the development by alternative operators of their own infrastructure, including FBWA. In any event, it should be remembered that the TRC must be able to rely on a complete set of data upon which to base its forward-

looking analysis. By definition, that data will always be historical to some degree, and will be based on harmonised Operator Questionnaires; if that were not the case, the market review process would be in a state of being constantly updated, at the expense of legal certainty to the whole industry.

The TRC does not share the view that the TRC relied overly on **market shares** and has not considered other factors. The TRC notes that, in its Public Consultation Document, it has examined, among other factors: the number of players and the relative shares in the markets, the existence of barriers to entry, the control of essential facilities, the presence of substantial economics of scale and scope, the degree of vertical integration and the existence of countervailing buyer power.

With respect to the view expressed by Orange Fixed about a Regulatory Impact Analysis, the TRC notes that, historically, it has been not uncommon for regulators to carry out a separate Regulatory Impact Assessment exercise in order to justify the imposition of regulatory obligations outside the context of the Market Review process, and in order to minimise arbitrary regulatory interventions. However, once the market review framework came into effect, this introduced its own in-built Impact Analysis mechanism, based upon the application of the principle of proportionality and the clearing of a number of threshold issues in order to justify regulatory intervention. The conduct of such a process has been clearly explained in the White Paper itself. In its present market review, the TRC has thus clearly taken into account, consistent with Paragraph 33 of the *Government Policy*, of the requirement to publish 'reasoned decisions' that also provide "an assessment of the impact on affected parties of the resulting regulatory burdens". It also takes into account Paragraph 47 of the Policy, which envisages the application of proportionality test insofar as it is specified that remedies "should be no more burdensome than is required to ensure fair competition".

Single economic entity

Zain agreed with the TRC's practice of considering Orange Fixed and Orange Internet as parts of a single economic entity. Zain argued that Orange has been able to act strategically by supplying regulated services through an unregulated entity in an attempt to circumvent regulation and harm competition. Zain proposed that all obligations to be imposed as a result of this market review should be applied to the whole economic entity and not just to any single part of that entity.

Orange Fixed's response to Zain stated that, under the Jordanian legal system, Orange Fixed is considered as a legal entity independent from its subsidiaries. It also noted that each of Orange Fixed's subsidiaries holds separate accounts and operates in different markets. Orange Fixed also noted that the TRC would have to adopt the same approach with regard to other operators, *e.g.*, Zain and Umniah.

Umniah/BTJ, it its response to Orange Fixed's comments, stated that in reality Orange Fixed has strategically withheld the provision of fit-for-purpose wholesale terminating segments, and has only permitted alternative operators to resell end-to-end retail traditional interface leased lines, only granting access to inputs that are strategically designed not to enable real competition in terms of features and in terms of pricing. Therefore, Umniah/BTJ agreed with Zain's and the TRC's practice to consider Orange group as a single economic entity.

Response of the TRC

The TRC does not share the view expressed by Orange Fixed in relation to the treatment of Orange Fixed and Orange Internet and/or Orange Mobile as part of **a single economic entity**. The TRC reiterates that where individual operators are affiliated with one another by reason of common ownership, such operators shall be deemed, from the economic prospective, and with acknowledgement to their situation as independent juridical entities as regard to their registration and legal standing, to constitute a single economic entity for the purposes of the market assessments, as they will - by necessary implication of common ownership - be adopting a common course of strategic commercial behavior in relation to the relevant market in question. If an entity could avoid regulation solely by creating separate legal forms for its constituent parts, the net result would be that regulators could not address critical anticompetitive practices. In addition, the TRC notes that this principle has been applied by the TRC consistently to all market reviews and with respect to all operators.

In relation to Zain's comment on the application of the single economic entity concept to DC markets, the TRC notes that, while it takes into account in its market analysis the behavior of the economic entity as a whole in its assessment of the three criteria and the effectiveness of competition, it is only Orange Fixed that is operating on the markets identified as susceptible to ex ante regulation. The TRC thus imposes the regulatory obligations only on Orange Fixed - the legal entity that is dominant in the respective relevant market. Thus, in the current market review of DC services, all remedies are imposed on Orange Fixed's wholesale and retail markets.