THE HASHEMITE KINGDOM OF JORDAN

TELECOMMUNICATIONS REGULATORY COMMISSION

Explanatory Memorandum to the Regulatory Decision on the Mobile Markets Review

21 December 2010

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I. INTRODUCTION

This Explanatory Memorandum summarises and evaluates the comments of the various members of the telecommunications industry in Jordan to the Mobile Markets Public Consultation document published by the TRC on 20 January 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 Petra Mobile Telecommunications Company (**Orange Mobile**), Umniah Mobile Company (**Umniah**), and Jordan Mobile Telephone Services Company (**Zain**). Formal comments on the above responses were, in turn, received from Orange Mobile, Zain and Umniah.

The following Chapters of this Explanatory Memorandum provide a summary of the comments received by all operators, accompanied by the TRC's reasoned response, broken down by reference to:

1. Market for Retail Mobile Services (in the absence of any *ex ante* regulation);

2. Market for Wholesale Mobile Voice Call Termination (in the absence of any *ex ante* regulation);

3. Market for Wholesale SMS Termination (in the absence of any *ex ante* regulation);

4. Market for Wholesale Mobile Access & Call Origination (MACO) (with *ex ante* regulation of Wholesale Mobile Call Termination in place);

5. Market for Retail Mobile Services (with *ex ante* regulation of wholesale Mobile Voice Call Termination and MACO in place); and

6. Other Comments

II. MARKET FOR RETAIL MOBILE SERVICES (IN THE ABSENCE OF ANY *EX ANTE* REGULATION)

Q1: Do you agree with the TRC's preliminary conclusion regarding the relevant product and geographic market definitions for retail mobile services?

Zain generally accepted the TRC's preliminary conclusion regarding the scope of the respective product and geographic market definitions for retail mobile services. The TRC concluded that the relevant product market is made up of a cluster of voice and data-related services (in both their post-paid and pre-paid forms), including the provision of access, national, international and roaming calls, SMS and other value-added services. However, **Zain** voiced concerns regarding apparent inconsistencies between the broad scope of market definition and the narrower scope of the assessment of the market analysis and *ex ante* regulatory obligations discussed later in the Consultation Document. According to **Zain**, the CS/CPS service, which is a calls-only product based on the user buying access elsewhere, should be a remedy imposed - if at all – in relation to the retail service cluster under examination. However, it is said that this obligation is being applied to an international call origin market, which has not been defined in the discussion relating to market definition. In addition, the TRC is said not to have provided an adequate explanation for the remedy.

Zain also agrees that both post-paid and pre-paid services payment options belong in the same relevant product market, based on both demand and supply-side substitutability considerations. Consequently, it was argued that the TRC's selective use of an operator's success in a particular narrower market as evidence of dominance is not consistent. In addition, **Zain** took the view that multiple SIMs might constitute evidence of separate 2G and 3G devices, thereby undermining the TRC's later conclusions of Zain's dominance. These concerns will also be addressed in Zain's responses to the TRC's proposed remedies. According to **Zain**, these inconsistencies between the market definition and proposed obligations undermine the TRC's market review process, particularly with respect to its determination of dominance.

Orange Mobile also generally agrees with the TRC's methodology in determining the scope of the relevant product market. However, it also voiced some concerns regarding the inclusion of particularly complex products within the relevant product market, as defined. **Orange Mobile** agrees that there is no convincing evidence from either a demand or supply side that would suggest that the TRC's conclusions on substitutability regarding business and residential services are unfounded, nor that these services need to be considered as separate product markets. It is also agreed that both post-paid and pre-paid services fall within the same relevant product market. There is disagreement, however, on the treatment of 3G retail services in terms of market definition, insofar as they do not need to be considered until after the lifetime of this particular market review. Accordingly, **Orange Mobile** urges the TRC to adopt a principle of regulating services as opposed to regulating markets, in order to accurately reflect dominance at the retail level.

There is also agreement with the TRC's conclusion that the relevant market is national in scope; however, **Orange Mobile** also believes that emphasis should be placed on actions and conduct outside of Jordan which affect competition on the national market. Finally, there is full agreement with the vertical sequencing of markets which the TRC has identified, namely: the market for the provision of wholesale call termination and the market for the provision of wholesale SMS termination; the market for wholesale mobile access and call origination; and the market for the provision of retail mobile services.

Orange Mobile also commented on the responses received from Zain with respect to the scope of the relevant product market, rejecting the argument that multiple SIMs may be evidence of various 2G and 3G devices, which might prevent the TRC from imposing *ex ante* regulation. There is also no agreement with Zain that the market is already saturated, as is said to be demonstrated by the comparative penetration levels for Jordan’s population and relative wealth.

For its part, **Zain** found the above response somewhat confusing since the answer initially discussed the question of substitutability and then reverted to accepting the assessment by the TRC that post and pre-paid services fall within the same relevant product market. It also focused on the comments made urging the TRC to look at actions taken by operators beyond the borders of Jordan, while not elaborating upon the precise scope of TRC action envisaged.

While in broad agreement with the TRC’s review of the relevant markets and market power issues, **Umniah** essentially disagreed with the TRC’s conclusion that the market not fully mature and that there is room for growth. It holds the view that the market is already saturated.

In addition, **Umniah** commented upon the responses submitted by the other operators. For example, it disagreed with Zain’s statement that identifying market failure and dominance in one market segment is not equivalent to a finding of dominance in the MACO market. **Umniah** is of the opinion that Zain’s dominance is simply highlighted in the post-paid segment, and that its overall conduct is to take advantage of existing discrepancies in wholesale termination charging to provide very high handset subsidies/excessively long contracts on the market. Furthermore, it was argued that Zain’s assertion regarding CS/CPS was incorrect, especially insofar as a number of National Regulatory Authorities (NRAs) in the EU have mandated CS/CPS on the basis of an SMP finding in relation to the fixed incumbent, and have also applied it to mobile operators.

Response of the TRC

All the MNOs agree with the TRC's market definition for retail mobile services in all material respects.

The TRC's identification of a cluster market of mobile services at the retail level - with which all respondents agree - in no way prevents it from identifying market failures in a narrower segment of the identified relevant product market, nor from prescribing *ex ante* regulatory obligations which target a segment or segments of the market which are narrower than the scope of the identified relevant product market. The legitimacy of such a policy is explicitly referred to in EU guidance notes, in the administrative practice of the European Commission and in the methodology outlined by the TRC in its *White Paper*. On the contrary, identifying the segment of the overall market most likely to be affected by market failure is an approach which is most compatible with the proper application of the principle of "proportionality" when selecting remedies. The application of the principle of proportionality is, in turn, a particular application of a cost/benefit analysis in the context of a market review.

For the same reason, there is nothing inconsistent with market power being also identified in relation to a particular segment of the retail market insofar as market power has also been identified in the broader market for wholesale MACO (especially given that the MACO wholesale inputs are used to provide the full range of retail services).[1] Seen in this light, the consideration of an access remedy such as CS and CPS as means of affecting origination is a wholly proportionate approach on the part of the TRC, given Zain's overall market dominance (and its position in the provision of mobile international calls originating in Jordan).

There is no evidence available to the TRC at the moment which suggests that it is appropriate or possible to identify separate relevant product markets for 2G and 3G services. *First*, as noted in Chapter III, Section 1.4 of the *Public Consultation Document*, 3G services are still relatively immature compared to 2G services, thereby not allowing the TRC to compile persuasive historical data which would serve as the basis for determining distinct patterns of supply and demand upon which to base a market review. This is without prejudice to the TRC reviewing 3G services again after the lifetime of this current market review. At this stage of their development, however, their inclusion would not be capable of changing any of the conclusions reached in this market review. *Second*, consistent with international best practice, there are no relevant precedents in more mature mobile sectors where a market review has identified a separate relevant product market for 3G retail services. *Third*, it is arguable that, on a forward-looking basis, a relevant product market which includes 3G services would also encompass 2G services (*i.e.*, the relevant market would include both generations of technology). In any event, the TRC will monitor the development of 3G services during the lifetime of this review.

The TRC also considers that its consideration of Zain's position in the post-paid segment of the relevant market to be highly relevant for the purposes of its assessment of dominance, and for the purposes of identifying market failures caused by the lack of Number Portability (especially as regards business customers). The approach adopted is therefore wholly consistent with the approach above regarding segmentation in general, and is endorsed by the other two respondents.

For the reasons stated at length in the *White Paper*[2] and consistent with international best practice, the TRC cannot agree with the approach proposed by Orange Mobile that services, rather than markets, should be the subject of *ex ante* regulation. It is self-evident that such an approach is totally at odds with a market review approach. Moreover, such an approach, taken to its logical conclusion, would result in disproportionate and non-rationalised intervention by the TRC.

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[1] The principle of differentiated remedies within a broader product applies with equal strength to the identification of narrower geographic sub-markets, For example, the European Commission has expressed the view recently that: "…*it could nevertheless be appropriate for NRAs to respond to diverging competitive conditions between different areas within a geographically defined market… by imposing differentiated remedies and access products*" (Commission Recommendation on regulated access to Next Generation Access Networks (NGA), at Recital 9; version of 4 June 2010).

[2] Refer to the relevant methodology to be deployed by the TRC to identify relevant "markets".

The TRC has paid due consideration to the breadth and depth of services provided by the various MNOs' corporate groups outside of the territory of Jordan. These considerations are particularly relevant to issues relating to the assessment of dominance, and to the identification of potential market failures or emerging competition problems. These considerations have not, however, been considered to be material in the initial market definition exercise when determining the scope of the relevant geographic market for retail mobile services.

As regards the relative maturity of the market, the TRC believes that there are certain aspects of the mobile sector which suggest that there is still scope for growth, especially considering factors such as the very high penetration levels in other Middle Eastern States (especially in the Gulf), current low fixed sector penetration levels (especially in the non-urban areas), the likely take-off of 3G services in Jordan and other factors such as population growth. This is also consistent with the TRC's position adopted in its 2008 *Green Paper* (*Creating Conditions for Effective Competition in the Mobile Sector*), where it was concluded that:

" Whilst it is observed that the mobile sector in Jordan is beginning to mature, it is noted that mobile penetration at the end of 2007 was circa 78%, thus, there is no concrete evidence that the market is saturated. Many countries exhibit mobile penetration figures in excess of 100% and further growth in the Jordanian sector is anticipated."

<u>*In conclusion, there is no change with respect to the position of the TRC taken in Consultation Document regarding the relevant product and geographic market definitions for retail mobile services*.</u>

Q2: Do you agree with the TRC's preliminary conclusion that, in the absence of any ex ante regulation, the three criteria are cumulatively fulfilled in relation to the relevant market for retail mobile services?

Zain disagreed completely with the TRC's preliminary conclusion that the three criteria have been cumulatively fulfilled in relation to the relevant market. As regards high and persistent barriers to entry, it agrees with the TRC's conclusion that the limited amount of spectrum available, combined with its licensing policy, constitutes a high and persistent barrier to entry. However, it also states that it is up to the TRC to eliminate that barrier to entry by releasing spectrum, in accordance with a paper used by the European Commission when determining the relevant markets subject to *ex ante* regulation. While the TRC identified structural barriers to entry due to economies of scale and scope, it did not present any evidence to support this claim. The TRC stated that, after allowing for second SIM cards, penetration in the market is only at 65%, suggesting that there is room for additional new entrants into the market. Furthermore, **Zain** pointed to international examples such as Sweden, which had a successful new entrant when the penetration of the market was already at 93%.

Zain also discussed the issue of whether the market exhibits a lack of a dynamic trend towards competition. Zain stated that the TRC's conclusion that the market lacks a dynamic trend towards competition contradicts the findings of independent third party reports, which are otherwise referred to by the TRC. **Zain** claims that the

TRC's conclusion that the market shows no dynamic trends towards competition is based largely on the fact that Zain has been commercially successful, even against stronger competitors. Furthermore, it takes the view that *ex post* interventions would be sufficient to remove any identified competition problems.

It claims that the TRC used out-of-date information for its assessment and did not provide any plausible legal or factual justification for its conclusions. It is also asserted that the fact that Zain entered into an MVNO agreement with Friendi contradicts the TRC's assertion that no operator will enter into such agreements in the absence of *ex ante* regulation. **Zain** again draws a comparison between the mobile market in Jordan and mobile markets within the EU. To this end, it states that the level of market concentration in Jordan is similar to that in most Western European countries, where *ex ante* regulation is considered to be not necessary at the wholesale or retail levels. Moreover, it asserts that volatile market shares are a sign of a competitive market, in which operators respond to the legitimate competitive actions of their rivals by improving their customer offerings. Therefore, according to **Zain**, the TRC's conclusion will result in operators lacking incentives to compete, thereby harming consumers who will not have access to high quality services at a range of prices. Zain did not comment on the responses to this question by other respondents, based on its view that their comments do not provide any further evidence to support the initial decision of the TRC.

By contrast, **Orange Mobile** agreed in full with the TRC's preliminary conclusions that, in the absence of any *ex ante* regulation at the wholesale and retail levels, the three criteria are cumulatively fulfilled. According to **Orange Mobile**, however, the market is mature, and neither *ex post* nor current *ex ante* intervention can sufficiently resolve the competition problems. In its response to the comments already submitted, **Orange Mobile** stated that it would be naive for the TRC to rely on the evidence of only one recent MVNO agreement as sufficient justification for relying on *ex post* intervention.

Orange Mobile also expressed its agreement with Umniah regarding the latter's concern over the ratio of on-net/off-net traffic on Zain's network. It holds the view that cost-oriented pricing for termination rates will contribute to the correction of that distortion, along with additional remedies such as tariff approvals and price controls. Finally, it takes the view that there are no merits in another operator receiving special regulatory treatment.

Umniah states that the TRC correctly identified many of the real impediments to competition which exist, even in the presence of basic regulatory obligations. It agrees that the high on-net/off-net ratio enjoyed by Zain, combined with the absence of other facilitators of competitive markets, allows Zain to maintain its significant market advantage. Additionally, the current obligations regarding interconnection fall symmetrically on all mobile operators in the market and impose a greater burden on the smaller operators such as Umniah, compared to larger operators such as Zain and Orange Mobile. In its view, therefore, non-dominant operators should not be subject to any regulatory obligations.

However, it commented that, to its surprise, the TRC had carried out a "greenfield" assessment under the 3-criteria test without excluding those regulatory obligations which would exist independently of this market review. Normally, those obligations which depend on the regulation that is currently in place should be excluded in order to allow only competition law or symmetrical obligations (such as an interconnect obligation) to be taken into consideration.

Umniah also provided comments on the statements of the other respondents. It disagreed upon any reliance on the agreement between Zain and Friendi as evidence of a lack of dominance and willingness to deal with third party MVNOs on the part of Zain. Instead, this was characterised as possibly an attempt by Zain to forestall *ex ante* regulation and/or an attempt to exert its dominance indirectly with respect to the termination and origination functions. It therefore urged the TRC to monitor carefully market developments once the MVNO agreement is in force.

In addition, **Umniah** made comments also with respect to Zain's argument regarding the dynamic of competition, where it was stated that the TRC had based its conclusion largely on the fact that Zain had been commercially successful. However, due to the lack of Mobile Number Portability and other enablers of competition, it is clear that Zain had used its market position in the post-paid segment to hinder effective competition. Accordingly, **Umniah** re-affirmed its opinion that the TRC had conclusively demonstrated that the three criteria test had been satisfied for MACO, and that *ex ante* regulation was therefore required to constrain Zain. In turn, the TRC was urged to impose appropriate constraints at the retail level, as well as at the wholesale level. For example, the TRC should restrain Zain's ability to use its market power and it ability to leverage between markets, as it does with its "One-Network" offer. It was therefore argued that the TRC should prohibit these offers outright or require Zain to make its One-Network offer available on non-discriminatory wholesale terms.

Response of the TRC

Two of the three respondents agreed with the TRC's essential conclusions that the conditions of the three-criteria test were cumulatively satisfied in the absence of appropriate wholesale measures being introduced.

The TRC wishes to emphasise that the question of whether or not the retail services market satisfies the three-criteria test must not be assessed in isolation, but in conjunction with the discussion later in the *Consultation Paper* on whether the introduction of wholesale *ex ante* remedies would address any competition concerns that are perceived at the retail level. In addition, the assessment of the competitive situation at the retail level is inevitable in the assessment of whether dominance exists in relation to wholesale markets which are otherwise not characterised by third party sales.

Zain's comment regarding the origins of spectrum scarcity (*i.e*., government failure in allocation) do not address the TRC's concerns about the relevance of spectrum scarcity as a rationale for the assessment of markets for *ex ante* purposes (*i.e*., as a screening device for whether *ex ante* intervention might be necessary). Regardless of the origins of spectrum scarcity, the fact that it exists as a high entry barrier is indisputable. Moreover, spectrum is treated as a scarce resource for the purposes of regulatory policy around the world, and Jordan can be treated no differently to other jurisdictions in that respect. In a similar fashion, the lack of Number Portability also currently sacts as an entry barrier (refer to the response immediately above.)

Zain's observation that successful entry can still occur at high penetration rates of 93% is acknowledged by the TRC tends to contradict Zain's argument raised in response to Consultation Question No.1, where Zain stated that it considered the market to be saturated. For their part, Orange Mobile and Umniah also consider the market to be mature.

The second threshold issue of a lack of a dynamic trend towards competition is based on the *prima facie* view of the key market dynamics, and does not constitute a definitive view about the existence of dominance. In this respect, the TRC notes that Zain's comment that the TRC’s analysis relies on out-of-date evidence is wholly without merit; the market share trends identified by the TRC for the year 2008 have been updated internally for the end of the year 2009, and not only confirm the market trends identified previously, but also suggest that a major increase in share for Zain has occurred in one particular market segment. The claim that Zain's market position is a reflection of its superior competitiveness has been cross-checked by the TRC, which conducted pricing analyses, evaluations of on-net traffic, and which has had to consider a variety of *ex post* claims in the recent past which confirm its concerns established on the initial review of market shares. Moreover, Zain quotes from the 2007 *Arab Advisors Report*[3] where it is stated that Zain is the provider with the highest coverage and quality, while selectively dismissing the observation in that same Report that customers were less happy with Zain’s high prices at that time.

As regards the recent signature by Zain of an MVNO Agreement with Friendi, that MVNO relationship is the subject of a separate review as regards the possible anti-competitive effects of particular clauses of the Agreement. As has also been shown, the concentration level is high and, most importantly, international comparisons suggest that the instances of the leading MNO in a 4-operator environment having in excess of 50% market share across so many competitive parameters is very rare. Zain's reference to "volatile" market shares is at odds with the market pattern witnessed by the TRC, as volatility suggests fluctuation. On the contrary, the market has witnessed a certain level of stability, with Zain having been consistently over 50% of the market in a four operator environment, and with Orange Mobile holding about a third of the market. Furthermore, there was a surge in market share for Zain after a "one shot" price decrease in 2008 designed to redress its incremental decline in market share over the years (with the incremental and gradual decline in Zain’s market share prior to this point being more compatible with the workings of a truly competitive market).

[3] Jordan Mobile Uses Survey 2007 (dated on July 2007)

The TRC also notes Umniah's concerns that the lack of Number Portability is reinforcing Zain's position of market dominance. This situation tends to exacerbate existing concerns relating to the business segment of the market and to on-net/off-net traffic ratios. As noted earlier by the TRC, it does not consider it appropriate for *ex ante* regulation to address all of Umniah's concerns, which nevertheless remain to be considered under the TRC's *ex post* competition powers.

In conclusion, there is no change with respect to the position of the TRC taken in Consultation Document regarding the TRC's preliminary conclusions that, in the absence of any ex ante regulation, the three criteria are cumulatively fulfilled in relation to the relevant market for retail mobile services

III. MARKET FOR WHOLESALE MOBILE VOICE CALL TERMINATION (IN THE ABSENCE OF ANY EX ANTE REGULATION)

Q3: Do you agree with the TRC's preliminary conclusion regarding the relevant product and geographic market definitions for wholesale mobile voice call termination?

Orange Mobile and **Zain** agreed in full with the TRC's preliminary conclusion that the relevant wholesale market is that for the termination of voice calls on individual mobile networks over the whole territory of Jordan.

Umniah agreed that the TRC has correctly defined the relevant product market as "that for the termination of voice calls on individual mobile networks'", unless the pricing convention or pricing level mitigates the monopoly problem. However, Umniah disagreed that the wholesale SMS and voice termination markets are only different because of the respective charging regimes in place. In its view, the wholesale SMS and voice termination markets are different also due to functional and product characteristics. The competitive dynamics are as important as the differences, particularly if charging for wholesale SMS termination is introduced or a similar analysis of MMS termination is carried out. Umniah also agrees with the TRC's conclusion that wholesale voice call termination is a single product market, but comments that even though the products themselves are identical, the costs for producing termination services might not be uniform and may be technologically dependent. **Umniah** pointed out the example of spectrum allocations made in Jordan, where non-dominant operators have a cost disadvantage since unit costs of termination will be much higher than those incurred by its competitors, particularly given its allocation of 1800 MHz spectrum only (as compared to 900 MHz). In the absence of spectrum trading, the differences between termination charges must be allowed in order to assist a disadvantaged operator.

Orange Mobile was in agreement with the conclusion that a market is not defined by the pricing convention alone and that, from a functional perspective, wholesale SMS and voice termination markets are different. It also reserved its opinion on the TRC's proposal for LRIC-based termination rates until more details concerning the application of that model are released.

Zain also commented on Umniah's statements in its response, where it argued that it has a cost disadvantage beyond its control and should be allowed a higher termination rate. It found this claim surprising given the amount of time that has passed since the license to Umniah was awarded and given that it was aware at the time of obtaining its license of the relative costs of an 1800 MHz network compared to a 900 MHz network. If an 1800 MHz operator is not able to provide a service to consumers at the market price without a subsidy from consumers on a 900 MHz network, than it should not remain in the market. Accordingly, Zain urged the TRC to ignore Umniah's arguments and to maintain its trend towards symmetric termination rates in accordance with the worldwide trend, as mobile markets become highly developed and new entrants are able to compete without the support offered by asymmetric rates (since their cost base has had a chance to stabilize and become more equal to the more established operators).

Response of the TRC

The TRC notes that the three respondents agreed with all the material aspects of its market definition. The majority of comments received under this Section related to issues that were unrelated to issues of market definition, and which are also dealt with elsewhere in this Explanatory Memorandum by the TRC.

The TRC agrees that functionality, as well as market dynamics and absolute price levels, differentiate the respective wholesale services for voice call and SMS termination.

In conclusion, there is no change of the TRC's preliminary conclusion regarding the relevant product and geographic market definitions for the wholesale mobile voice call termination.

Q4: Do you agree with the TRC's preliminary conclusion that, in the absence of any ex ante regulation, the three criteria are cumulatively fulfilled in relation to the markets for wholesale voice call termination on individual mobile networks and that these markets are therefore susceptible to ex ante regulation?

Both **Orange Mobile** and **Zain** agreed in full with the TRC's preliminary conclusion that the markets for wholesale mobile call termination fulfil the three-criteria test and therefore are susceptible to *ex ante* regulation. Neither of these operators submitted comments on the responses provided by the other operators with respect to this question.

Umniah only commented that its answer depends on the pricing convention or pricing level, which mitigates the monopoly problem, as is the case in wholesale SMS termination today and might also be the case for wholesale voice termination at lower price levels.

Response of the TRC

The TRC notes that the two of the respondents agreed in full and one respondent (Umniah) conditionally agreed in all material respects with the TRC's analysis regarding the cumulative fulfilment of the three criteria in its application of the three-criteria test with respect to the relevant markets for voice call termination on individual mobile networks.

In conclusion, there is no change of the TRC's preliminary conclusion that, in the absence of any ex ante regulation, the three criteria are cumulatively fulfilled in relation to the markets for wholesale voice call termination on individual mobile networks and that these markets are therefore susceptible to ex ante regulation

Q5: Do you agree with the TRC's preliminary conclusion that Zain, Orange Mobile, Xpress and Umniah each hold dominant positions in the markets for wholesale voice call termination on their own respective networks?

Zain agreed with the TRC's preliminary conclusions on this issue. However, it took the view that the presence of a bottleneck in the market is largely a regulatory construct. In addition, it expressed the view that the Bill & Keep principle, which is currently being used for the termination of SMS, would have the ability to remove the termination bottleneck and eliminate the need for *ex ante* regulation.

Orange Mobile stated that, while it agreed with the methodology adopted by the TRC in assessing whether the concerned markets are characterized by dominance and the conclusion that each mobile operator is considered to be 100% dominant for calls terminating on its own network, it also raised some additional concerns. It took the view that there was a lack of analysis of the market effects arising from Zain's dominant position in voice call termination on its own network in comparison with other mobile operators on their own networks. Zain currently has 2.5 million subscribers and would be able to attract subscribers from alternative operators if they implemented excessive termination rates on their respective networks for off-net calls. It also suggested that the proposed remedies should differ among mobile operators when enforced. It did not provide any comments on the other responses submitted with respect to this particular question.

Zain provided comments to the response of Orange Fixed, particularly regarding Zain's effect on the market given its number of subscribers. It pointed out that it is not the largest operator overall, stating that there are a total of 2.6 million customers connected to Orange Fixed and Mobile combined. Therefore, Orange Mobile would also be able to create a significant network effect on the market. In addition, Zain clarified that, under the existing regulation of the market, the termination rates are set by the TRC on the basis of the Fully Allocated Cost (FAC) model.

For its part, **Umniah** only commented that its answer depends on the pricing convention or pricing level adopted, which can mitigate the monopoly problem, as is the case in wholesale SMS termination today and which might be the case for wholesale voice termination at lower price levels.

Response of the TRC

The TRC notes that the three respondents agreed with the TRC's material conclusions in its finding that each of the MNOs was dominant with respect to the termination of voice calls terminating on its individual network.

The TRC agreed with the observation that the adoption of the “Bill & Keep” regime could overcome existing market failures with respect to mobile voice call termination. However, there is no evidence that such a “Bill & Keep” regime would materialise at some stage in the future with respect to mobile voice call termination services without *ex ante* regulatory intervention imposing it.
In conclusion, TRC maintains the view that Zain, Orange Mobile, Xpress and Umniah each hold dominant positions in the markets for wholesale call termination on their own respective networks.

Q6: Do you agree with the TRC’s preliminary conclusion about the potential competition problems related to the dominant position of each MNO in the market for wholesale voice call termination on its own network?

Orange Mobile and **Zain** agreed that the TRC had correctly identified problems that may arise in mobile markets due to the dominant position of each MNO in the market for wholesale call termination on its own individual network.

Umniah also agreed, however, that Zain and Orange Mobile are likely to apply high external wholesale voice call termination charges for national calls relative to their actual costs in providing such a service. This conduct might result in those operators using surplus profits generated in the wholesale termination market to maintain a dominant position. Umniah pointed out that it is disadvantaged by its lower economies of scale, and that the cost disadvantages facing it will not disappear as a result of lower wholesale termination rates, which means therefore that a higher level of asymmetry is essential for Umniah and other non-dominant operators regardless of the absolute level of mobile termination rates.

Orange Mobile stated that, while it had not conducted the exact calculation to confirm the effect on the market created by the termination rates of Zain and Orange Mobile in the absence of a higher asymmetrical termination rate, it believed that the application of cost-oriented pricing for call termination rates should address the competition issues raised by the TRC.

Zain also commented on the statement made by others that in most EU Member States, wholesale termination rates are no longer allowed to include direct costs. This statement is said to be not correct and is based on a confusion between the adoption of a pricing Recommendation by the EC and the implementation of that Recommendation. A Recommendation calling for the exclusion of indirect costs from fixed and mobile termination rates was adopted by the EC in May 2009, but National Regulatory Authorities are not obliged by law to adopt the terms of the Recommendation. Accordingly, it was argued that termination charges are set by the

TRC on the basis of the FAC model, resulting in some operators enjoying higher termination rates than other operators.

Response of the TRC

There is general consensus among the respondents as regards the potential problems created by the existence of dominant positions in the provision of voice call termination services.

The only point where different views are expressed is whether or not the TRC should impose symmetric termination rates, on the one hand, or asymmetric termination rates which acknowledge the less favourable commercial conditions under which later mobile entrants operate, on the other. The TRC's approach, which is consistent with international best practice,, has been to move towards symmetric termination rates progressively, relying on the application of a LRIC cost model whose details are scheduled to be resolved by the end of 2010. While being sensitive to the issues faced by smaller operators, the TRC also acknowledges that it cannot support for an indefinite period of time the economic inefficiency resulting from pricing at levels above LRIC costs on the part of smaller operators.

In conclusion, the TRC maintains its view regarding the competition problems identified in the Consultation Document.

Q7: Do you agree with the TRC's preliminary conclusion about the appropriate remedies that should be imposed on Zain, Orange Mobile, Xpress, and Umniah to address the identified competition problems?

Orange Mobile takes the view that the remedies proposed by the TRC in the call termination market should apply equally to all MNOs, or not at all, in accordance with best practice principles. It disagrees with what it considers to be the arbitrary nature in which the TRC is imposing certain obligations against Zain and Orange Mobile, such as the obligation of accounting separation. In order to achieve complete transparency and to ensure non-discriminatory behaviour, there must be uniformity of treatment of all suppliers. Furthermore, **Orange Mobile** emphasizes that the TRC's proposed remedies should be prospective and anticipatory. Instead, the operator has the impression that the TRC proposed its remedies based on a snapshot of the market, instead of the evolution of the market, which includes mobile operators gaining market shares.

Orange Mobile also responded to the TRC's proposals for accounting separation, cost accounting, LRIC modelling and KPIs. In its view, the cost accounting obligation is only meaningful if separate accounts are required. To this end, it expresses the view that it will be difficult for all operators to identify and accurately construct the separate profit and loss account associated solely with call termination. **Orange Mobile** has little confidence that the remedies proposed by the TRC, if implemented, will be enforced in a timely manner. This would be in contrast to Article 61 of the

Statement of Government Policy 2007, which requires the TRC to act quickly to investigate complaints, and to enforce any remedies.

Orange Mobile also expressed serious concerns regarding the implementation of the proposed remedies only at the wholesale level, and urges the TRC to enforce such remedies. It believes that *ex ante* regulation at the retail level should be imposed on dominant operators with very high market shares, and those obligations should only be removed when there has been a complete and successful implementation of the proposed remedies at the wholesale level. In conclusion, it urges the TRC to revisit the proposed remedies and their selective application on certain operators where they have been arbitrarily dismissed in relation to other operators.

In comments submitted on the responses received by other operators in the market, **Orange Mobile** restated its concern about the TRC's inability to carry out its proposed remedies in a thorough and timely manner. It shares some of the concerns expressed by others regarding the feasibility of accounting separation, but recognizes that a proportionate solution, is needed to ensure transparency and fairness in the market. It reserves its position on the proposed remedies until all details of the remedies are released. It also shares the view of another respondent that it is discriminatory not to oblige all relevant operators to satisfy the same proposed remedies. Given the similar nature of the subscriber base that is shared between various operators, there is no justification for the asymmetric treatment of operators.

Zain agrees in part with the TRC's preliminary conclusion regarding the appropriate remedies to be imposed on Zain, Orange Mobile, Xpress, and Umniah. It does not oppose the obligation to provide termination services upon reasonable request or the price control remedy. However, it expresses the view that the accounting separation remedy proposed by the TRC is disproportionate and inconsistent with other findings in the market review.

In Jordan, the TRC sets the prices for mobile termination on the basis of the FAC model, and the relevant information is information in the public domain which is transparent to all interested parties. Therefore, the publication of separated accounts will do nothing to improve transparency over and above the cost-oriented rates set by the TRC. In light of these circumstances, if the purpose of accounting separation is to provide a higher level of transparency; the obligation would therefore be disproportionate. Additionally, separated accounts are only feasible where there exists a clear separation between the access network and the trunk network, which is not the case in mobile, where the radio network is used for multiple services. Zain also holds the view that a simpler set of remedies will be as effective in a far less costly manner for the MNOs. Furthermore, it claims that the proposed obligation of accounting separation is inconsistent with the market definition set by the TRC in Question 3. When there is no separate market for access and calls, then it is simply not feasible to produce separated accounts for call termination, as the cost of doing so would not be proportionate to the benefit likely to be gained.

Finally, **Zain** considers the proposal not to impose the obligation of accounting separation upon Xpress and Umniah to be discriminatory, given that the TRC has decided to impose the obligation only on Zain and Orange Mobile, despite a finding that all four MNOs are dominant in their own network market for voice call termination.

Zain also commented on the response to the same question by Orange Mobile. It agrees with respect to the impracticality of constructing a separate profit and loss account regime for mobile termination services alone. It also pointed out that it agrees with an accounting separation obligation being imposed in principle, but only with respect to those markets where it is found to be dominant. It sets this aspect of the TRC's case as another example of the selective application of findings and conclusions.

Umniah commented that its answer depends on the pricing convention or pricing level, which mitigates the monopoly problem, as is the case in wholesale SMS termination today and may be the case for wholesale voice termination at lower price levels.

It also went on to state that the cost disadvantage experienced by Umniah will not disappear as a result of lower termination rates, and therefore achieving a level of asymmetry is essential for non-dominant operators. The use of termination price discrimination practices to foreclose the market arises mainly when one MNO has a significantly higher market share than its competitors. This will result in higher costs for off-net calls for other MNOs at the wholesale level and at the retail level. The on-net calls, however, are associated with a lower cost overall and lower retail costs. The disadvantage is greater the higher the termination charge, creating a larger difference between the price of an on-net and an off-net call. If an MNO has a large proportion of on-net versus off-net traffic, competition concerns arise where prices vary depending on call structure. Therefore, competing MNOs' ability to compete based on retail pricing packages is very limited.

Umniah agrees with the transparency and non-discrimination obligations being proposed in relation to Zain and Orange Mobile, but believes that the TRC must adapt its margin squeeze test so that it is product-specific. This would mean that every product offered by both Zain and Orange Mobile must be capable of individually passing a margin squeeze test. A third party relying on Zain and Orange Mobile externally should be able to create a retail product which can viably compete without recourse to discounts. According to Umniah, Zain and Orange Mobile's principle mechanism for effecting margin squeeze is the use of handset subsidies which also allows those MNOs to dictate the level of funds which other competitors are able to direct at developing their market position. Since it does not seem that the infrastructure gap between those MNOs and other competitors will decrease, Umniah requested the TRC to limit Zain and Orange Mobile handset subsidies in the market, citing to the fact that other jurisdictions have imposed this restriction and to its ability to demonstrate that end users will not be affected adversely.

Umniah also commented on the responses submitted by the other two MNOs (Zain and Orange Mobile). It claimed that one of the other MNOs made a number of assertions which are factually incorrect, such as those relating to the accounting separation obligation. Those MNOs had stated that no other country has imposed an accounting separation obligation on MNOs when, in reality, 14 of the 27 EU Member States have imposed accounting separation as a result of dominance in termination markets. The TRC's suggestion of imposing Accounting Separation obligation is therefore in accordance with international best practice. Furthermore, Umniah asks the TRC to reject the call for symmetric Mobile Termination Rates since the cost disadvantages experienced by smaller operators will not disappear as a result of lower termination rates, and therefore a level of asymmetry is necessary. It also urges the TRC to impose non-discrimination obligations on Zain and the Orange group, which will require those operators to offer any internal wholesale products to third party operators on a non-discriminatory basis.

Umniah also commented on the response of one MNO, where that MNO had insisted on the imposition of symmetrical obligations in the voice call termination market. It holds the view that there is a self-serving motive behind this request, in that the dominant operators will in all likelihood generate excess profits from termination services, which will in turn be used to preserve their positions on the retail market. Therefore, the level of asymmetry is essential for non-dominant operators to overcome their cost disadvantages. Additionally, the Accounting Separation obligation should be maintained in order to restrict the practices of cross-subsidization, margin squeezing, and other practices which are used to leverage a dominant position into the retail mobile market.

Orange Mobile also commented on concerns expressed regarding the distortion in on-net and off-net traffic passing over Zain's network, and is of the opinion that the correct application of cost-oriented pricing for call termination should address these concerns.

In turn, **Zain** also commented on the response lodged by Umniah. It once again points out that termination rates are set by the TRC based on a FAC model and that handset subsidies are not included in allowable costs. In its view, handset subsidies are a normal part of competition in most mobile market offers, but the costs are excluded by the TRC from the regulated termination charge. Therefore, the mobile operators cannot cross-subsidize handsets from termination rates. In addition, the operator questions the claim that the alleged cost disadvantage felt by some of the other competing operators will disappear as a result of lower termination rates. All operators were fully aware of the spectrum limitations at the time of obtaining their licenses, and this matter has not been addressed previously as a major discussion point in other regulatory jurisdictions.

Response of the TRC

The TRC notes that one of the key aspects of the application of the proportionality principle is the fact that the proposed remedies must be tailored to suit the particular competition problems identified. In the case of the proposed accounting separation remedy, the aim of this remedy is to overcome the possible discrimination that might occur mainly between the internal and external provisioning of termination services, the creation of margin squeezes through the manipulation of the termination rate in light of high on-net/off-net tariff variation and through the provision of bundled services. The level of vertical leveraging because of a large customer base, as well as the range of retail products/services provided by the Mobile Network Operators (or affiliated entities) justifies the imposition of accounting separation in relation to Zain and Orange Mobile. By contrast, it would be disproportionate to impose the same remedy on the smaller Mobile Network Operators, as they are not in a position to adversely affect the overall market through any leveraging practices facilitated by the lack of transparency that would be overcome through the use of separated accounts.

With respect to the accounts separation remedy, the TRC does not accept Zain's view that accounts cannot be separated in a way which enables the transparent monitoring of the relevant termination business, largely because of the supposed blurring of the boundaries between the various network assets. In this respect, the TRC notes that there is no physical separation of assets involved, accounts separation can be achieved through the notional separation of assets using certain allocation assumptions consistent with international best practice. Moreover, the prescription of this remedy for termination is quite widespread across the world, which reinforces the view that it is enforceable in practice. Finally, the costs of implementing such a remedy, relative to the benefits in transparency achieved, are proportionate for larger operators such as Zain and Orange Mobile, whereas the same cannot be said in relation to smaller operators such as Umniah and Xpress.

In the absence of evidence of failure of wholesale remedies, the TRC does not share the view that remedies should also be imposed at this stage at the retail level. The TRC takes the view that the regulation of the retail mobile services market is unnecessary at present in light of the *ex ante* regulatory measures directed at the wholesale level, and might lead to over-regulation. Those wholesale measures should be given the opportunity to succeed but, if proven to be unsuccessful, it would be legitimate to examine the retail market in its own right as being a market susceptible to *ex ante* regulation. For the same reason, the TRC does not share the view that, at least at this stage, the prevention of a margin squeeze situation should be imposed as an *ex ante* remedy on the relevant retail mobile services market. However, the TRC takes the view that other appropriate and proportionate *ex ante* transparency measures can facilitate the examination by the TRC of margin squeeze situations under its *ex post* powers.

The TRC does not share the view of Umniah regarding the imposition of asymmetric mobile termination rates. The TRC notes that asymmetric mobile termination rates are in theory justified only at the early stages of new entry in order to increase a new entrant's profitability, thereby providing incentives to invest in new networks and because a new entrant in the early stages of its roll-out is not able to achieve sufficient economies of scale. On the other hand, permitting differences in asymmetric termination rates over an excessively long period of time can lead to operational inefficiencies and can be detrimental to competition and welfare Taking into account the above considerations, plus the fact that from 2004 four Mobile Network Operators are present in the Jordanian mobile market, the TRC maintains its position that the imposition of symmetric mobile voice call termination rates is its preferred policy option, as expressed also in *The Regulatory Decision on The Principles to be Used in the Construction of TSLRIC+ Models for the Costs of Interconnection Services*.

Finally, as a result of the TRC's initial position regarding MACO in the Public Consultation, and the recent signing of an MVNO agreement, it has been decided that a logical extension of the TRC’s approach on termination rates should result in **MVNOs entering the market being subject to compliance with the termination rates charged by the Network Mobile Operator which is hosting the MVNO in question**. As a result, the TRC takes the view that the wholesale charges for the voice call termination services of an MVNO should in principle be equal to those charged by the hosting MNO to other operators, unless the MVNO in question demonstrates to the TRC that a deviation from this principle is justified.

In conclusion, the TRC maintains its view regarding the appropriate remedies proposed in the Consultation Document that should be imposed on Zain, Orange Mobile, Xpress, and Umniah to address the identified competition problems.

IV. MARKET FOR WHOLESALE SMS TERMINATION (IN THE ABSENCE OF ANY EX ANTE REGULATION)

Q8: Do you agree with the TRC's preliminary conclusion regarding the relevant product and geographic market definitions for SMS wholesale call termination?

Orange Mobile and **Zain** agreed with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for SMS wholesale call termination. Neither of these operators submitted additional comments regarding this question.

In contrast, **Umniah** does not believe that the pricing regime should limit the scope of the product market definition alone. It commented that the wholesale termination monopoly problem is mitigated by the charging convention that exists in the market and that no further remedy is required with respect to wholesale SMS termination. However, the bottleneck monopoly problem can easily be revived and a remedy will then be necessary.

TRC Response

The TRC notes that there is essential agreement[4] among all respondents with the approach adopted by the TRC. (Refer also to response above of the TRC regarding the rationale for distinguishing between voice call and SMS termination.

In conclusion, TRC maintains its view expressed in the Consultation Document regarding the relevant product and geographic market definitions for SMS wholesale call termination.

Q9: Do you agree with the TRC's preliminary conclusions that, in the absence of any ex ante regulation, the three criteria are not cumulatively fulfilled in relation to the market for SMS wholesale termination, and that this market is thus not susceptible to ex ante regulation?

Orange Mobile and **Zain** expressed general agreement with the TRC's conclusion that the SMS termination market does not cumulatively fulfil the three criteria test and does not need to be considered for *ex ante* regulation. **Orange Mobile** did note the absence of data concerning SMS volumes and patterns in the analysis. Neither of these MNOs submitted additional comments regarding this question.

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[4] It is noted that Umniah, whilst not disagreeing with the TRC's product and geographic market definition for SMS wholesale termination, takes the view that such a definition should not be based solely on the pricing regime.

Umniah appears not to disagree with the TRC’s preliminary conclusion that the three criteria have not been cumulatively fulfilled in the market for SMS wholesale termination. It states that the reasoning for SMS wholesale termination should be the same as the reasoning used by the TRC to justify regulatory interventions in voice termination It also comments that, in the absence of regulation, the wholesale termination rates will tend to be high and symmetrical, which benefits the larger operators since they will be net recipients of the revenue. The level of termination rate will not matter directly to the operators if the exchange of traffic is balanced, since the payments in and out of any network will cancel out each other. Given the fact that the traffic is much closer to being balanced than in wholesale voice call termination market, the operators have adopted a billing convention which mitigates the issues created with a standard termination monopoly, thereby eliminating the need for *ex ante* regulation.

Response of the TRC

In response to Orange Mobile's comments, the TRC notes that it is aware of the changing volumes of SMS traffic patterns and volumes, but also notes that a detailed discussion of these issues is largely immaterial in light of the TRC’s overall conclusions on the competitiveness of the relevant market. Seen in this light, a discussion along the lines suggested would not alter any conclusions reached by the TRC.

Umniah's concerns regarding symmetric termination rates are noted, but the TRC draws attention to its consistent policy position in this regard (see responses above).

<u>*In conclusion, TRC maintains its view that the three criteria are not cumulatively fulfilled in relation to the market for SMS wholesale termination, and that this market is thus not susceptible to ex ante regulation.*</u>

V. MARKET FOR WHOLESALE MOBILE ACCESS AND CALL ORIGINATION (MACO) (WITH *EX ANTE* REGULATION OF WHOLESALE MOBILE CALL TERMINATION IN PLACE)

Q10: Do you agree with the TRC's preliminary conclusion regarding the relevant product and geographic market definitions for wholesale MACO services?

Zain and **Orange Mobile** supported the TRC's preliminary view regarding the inclusion of self-supplied mobile access and call origination services by all four of the vertically integrated MNOs currently operating in Jordan into one relevant product market. It is noted by the TRC that the inclusion of self-supplied access and call origination services is also consistent with international best practice and reflects the true nature of a market with no external transactions with third parties.

Furthermore, **Orange Mobile** agrees with the TRC's conclusion that, until the full implementation of CS/CPS by Zain, the current market definition should include both access and call origination functions. It agrees with the TRC's overall conclusion that the relevant wholesale MACO market is an integrated multi-operator MNO market, which includes both the wholesale access and wholesale provision of origination services. This combination provides access seekers with a range of competitive services at the retail level. Orange Mobile did not submit any comments on the responses received by other MNOs regarding this particular question.

Umniah commented upon its capability to grow while focused on the pre-paid segment of the market, as stated in the TRC's assessment. ItIt holds the view that there is still significant capacity in the market for operators to grow without diverting its resources to managing third party relationships.

Finally, **Zain,** while supporting the TRC's preliminary views, also provided comments on the other responses received to the Consultation question. It dismisses the comments received by Umniah as being irrelevant, since whether a firm in a relevant market has room to grow does not affect the market definition based on demand-side and supply-side substitutability concerns. In response to the comments received by the Orange Mobile, it was claimed that there seems to be some confusion between a market definition and the appropriate remedies to be adopted.

According to Zain, in the EU, CS/CPS is a remedy in the fixed line business, where there is an economic bottleneck in the provision of local access. In the absence of a CS/CPS obligation, the bottleneck owner can foreclose the calls market to new entrants. However, there is no equivalent bottleneck in the mobile market since all operators can provide access and call origination using their own facilities. It is therefore of the opinion that CS/CPS is an unnecessary and inappropriate remedy in mobile markets and, to the best of its knowledge, has never been applied as a remedy in another country.

Response of the TRC

The TRC notes that there is essential agreement among all respondents with the approach adopted by the TRC with respect to market definition for MACO.

The TRC agrees with Zain that the comments made by Umniah in response to the Consultation question are more appropriate to the discussion on remedies than to the discussion on relevant markets.

As regards the CS/CPS pre-selection remedy, the TRC discusses the appropriateness of this remedy when it considers specific comments on remedies (see Question 14 below).

In conclusion, the TRC maintains its view expressed in the Consultation Document regarding the relevant product and geographic market definition for wholesale MACO services.

Q11: Do you agree with the TRC's preliminary conclusion that, in the absence of any ex ante regulation for MACO, the three criteria are cumulatively fulfilled in relation to the wholesale market for Mobile Access and Call Origination (MACO), and that the MACO market is susceptible to ex ante regulation?

Orange Mobile fully agrees with the TRC's preliminary conclusion that the relevant market for MACO fulfils the three criteria test and is therefore a market susceptible to *ex ante* regulation.

By contrast, **Zain** wholly disagrees with the TRC's preliminary conclusion that the three criteria have been cumulatively fulfilled. It restates its earlier comments that the TRC is itself in the position to lower barriers to entry by releasing further spectrum, which could be used to provide mobile voice and data services. In addition, it refers to the new entrants in mobile markets throughout various European countries to demonstrate that the Jordanian market is not characterized with high and persistent barriers to entry.

Whereas the TRC points to the lack of Mobile Number Portability (MNP) as a barrier to entry in the MACO market, Zain states that the implementation of number portability is the responsibility of the TRC and not the responsibility of the operators themselves. The TRC plans to launch MNP, which will eliminate MNP as a potential barrier to entry. Moreover, Zain refers to Orange's promotion of a new prefix, which allowed customers of another network to keep their old number, to demonstrate the competitive nature of the market and how at least one firm found its way around this issue. The TRC asserts in its Public Consultation document that there are no MVNO agreements; however, Zain claims this information to now be out of date. It states that there is already intense competition between MNOs at the retail level, which will feed into greater competitiveness at the wholesale level. It also points out that there is an MVNO agreement already on the market, and it is possible that others will follow in the near future.

Umniah briefly mentioned the three criteria test in its response to this Consultation Question, and then commented on the need for a functioning MNP regime to overcome barriers to entry. It states that the three criteria must be applied in a forward-looking manner in order to adequately assess whether or not a market should be considered appropriate for regulation. It also states that the TRC should prioritize an effective MNP regime together with CS/CPS (with consolidated billing) and effective limitations on "One-Network" offers in order to facilitate competition in the post-paid market segment. It is further alleged that the cost advantages enjoyed by Zain and Orange Mobile allows them to misuse the handset subsidy regime and to undermine the retail market.

Umniah then discusses at length the need for a MNP regime in Jordan and recognizes that the problem is unrelated to the need for regulation on MACO, and should be made effective on its own merits. However, the absence of MNP is hindering competition because consumers are hesitant to switch from the incumbent to a competing operator due to the fear of losing their mobile number. MNP will allow customers to keep their mobile number when switching providers. This will enhance competition, bring benefits to consumers, such as reduced switching costs, and will encourage those which would not switch without MNP to consider other competing operators.

Finally, **Umniah** comments on factors which can facilitate competition and overcome existing barriers to entry. The use of handset subsidies, for example, is such a factor in the market in Jordan. According to this respondent, the principal mechanism utilized by Zain and Orange Mobile to restrict competition is the use of handset subsidies, which appeal to end-users at the retail level and which allow Zain and Orange Mobile to dictate the level of funds that other operators are able to direct at developing a market position. The more the dominant MNOs subsidize their handsets, the more their competitors must react with their own subsidies, resulting in fewer funds for the competitors to develop their own products, networks, and customer base. This creates a large gap between the dominant operators and the other competitors. Therefore, Umniah urges the TRC to limit the handset subsidies of Zain and Orange Mobile in the Jordanian market, launch an MNP regime and curtail the anti-competitive cross-subsidies inherent in the "One-Network" offers.

Umniah also provided comments on Zain's response, to the effect that there is no competitive problem at the retail level due to the lack of effective MNP. By contrast, it found Zain's assertion that the retail market is competitive to be a hollow statement. **Umniah** concedes that there exist problems at the wholesale level, and that problems do not manifest themselves only at the wholesale level but also at the retail level, unless addressed by regulation.

For its part, **Zain** commented on the issue of the lack of MNP as a barrier to entry. It re-emphasized its point that implementing MNP is in the hands of the TRC and is not a structural barrier to entry which can be corrected by a licensee. In addition, it commented on the accusation that anti-competitive cross-subsidies are inherent in the One-Network offers. **Zain** pointed out a lack of evidence that the provision of the "One-Network" tariff plan, which offers significant cost savings to international roamers, is considered to constitute anti-competitive behaviour. There is no inherent feature in the One-Network offer which prevents other operators with international reach from offering similar benefits to their subscribers.

Orange Mobile fully agreed with the TRC's conclusion, and provided comments on the responses received by the other two MNOs. It states that it is not plausible for Zain to contend that the lowering of barriers in the recent past or in the future means that the market is competitively dynamic. It also comments on the issue raised regarding handset subsidies by Umniah. Handset subsidies are prevalent in many markets and are considered to be a crucial element in lowering the barriers to purchasing by many consumers. Accordingly, it refutes the assertion that the handset subsidies have been misused by Zain and Orange Mobile. It states that the position regarding handset subsidies has been known throughout the market since 2005. During this time, the progress made by Umniah does not appear to have been conspicuously impaired. However, Orange Mobile does agree with Umniah as to the discriminatory and allegedly anti-competitive practices of Zain's One-Network tariff plan.

Response of the TRC

Two of the three respondents agree with the TRC's application of the three-criteria test to the MACO market.

With respect to the argument that Mobile Number Portability does not constitute an entry barrier because it is the responsibility of the TRC to implement, the TRC reiterates its view that the long term commitment of the TRC to the implementation of MNP does not in any way diminish its importance as an actual entry barrier for the purposes of a market review. The lack of a functioning Mobile Number Portability system exacerbates the competition concerns of the TRC that business customers (which are usually post-paid customers) consider that their switching costs are very high to switch from Zain to other Mobile Network Operators. Moreover, Zain's consistent and very public challenge of the TRC's attempts to introduce a Mobile Number Portability obligation is at odds with its position expressed in this Public Consultation process.

In this regard, the TRC notes that Zain has in the recent past also challenged the TRC's spectrum policies regarding the introduction of 3G services, while now arguing in the context of this Public Consultation that the non-allocation of spectrum is also an entry barrier that has been created by the TRC. As stated earlier, however, the removal of spectrum as an entry barrier reflects the longer term goals to which all regulators and policymakers should aspire, but in no way mitigates the importance of spectrum as an existing entry barrier when conducting a market review.

As regards the issue of handset subsidies, the TRC feels that the arguments with respect to the positive and negative elements of handset subsidisation are finely balanced, and that the anti-competitive aspects of such practices are best addressed through the application of ex post competition rules (it is being widely accepted internationally that *ex ante* regulatory interventions should not deal with handset subsidies, which are considered to be commercial/promotional practices). Similarly, as regards the alleged anti-competitive effects of the "One Network" tariff offering of Zain, the TRC feels that, beyond the transparency measures proposed by the TRC in the context of this market review, the anti-competitive aspects of such practices are also best addressed through the application by the TRC of its *ex post* competition powers. Moreover, it is felt that the balanced regulatory treatment of termination and origination pricing will assist in minimising the competition problems arising from large on-net/off-net tariff differentials.

As regards the existing recently signed MVNO agreement between Zain and Friendi the TRC notes that it is still the subject of a separate review. Given the ongoing review of the Zain / Friendi MVNO Agreement, the TRC reserves its opinion, for the reasons expressed in the Public Consultation document, as to whether its concerns about pent-up demand can be addressed by the conclusion of this particular MVNO agreement.

Finally, the TRC repeats its policy commitment to avoid the regulation of the retail market insofar as the wholesale obligations it imposes are designed to have the desired pro-competitive effect at the downstream retail level (subject to their successful implementation). Of course, that position is predicated upon the timely and effective application of wholesale remedies. Consistent with its other market reviews, the TRC reserves its position to take action directly at the retail level in the absence of wholesale regulation taking effect.

In conclusion, TRC maintains its view that the three criteria are cumulatively fulfilled in relation to the wholesale market for Mobile Access and Call Origination (MACO), and that the MACO market is susceptible to ex ante regulation.

Q12: Do you agree with the TRC's preliminary conclusion that Zain holds a dominant position in the wholesale MACO services market, based on its position in the retail services market, and that it should be designated as being individually dominant at the MACO level?

Orange Mobile fully agrees with the TRC's conclusion that Zain is dominant in the relevant market. The TRC conducted a comprehensive analysis of market shares, barriers to entry and expansion, and conduct in the market with respect to competitors and customers. It considers it reasonable to conclude that Zain, a fully vertically integrated entity which controls the full value chain for mobile services and is active in all relevant markets of the value chain, would enjoy strategic advantages and would not encourage any opportunities for another operator to effectively compete. This position, according to **Orange Mobile**, leads to the erection of barriers to entry in the marketplace, thereby lowering the overall level of competitiveness. It agrees with the TRC's preliminary view that Zain is able to exercise a sufficient degree of autonomy in its pricing practices, which suggests that it has the ability to act independently of its competitors and consumers. Therefore, the anti-competitive practices conducted by Zain in offering unreasonably low prices will not be met by an effective response from other market players, thereby eliminating the competition. Furthermore, the TRC examined Zain's three MNO competitors to determine if there was a lack of other competitive restraints. The TRC concluded that, at this stage, the only immediate competitive threat is posed by Orange Mobile in the pre-paid segment of the overall retail service markets. **Orange Mobile** disagrees with the view that it can present any competitive threat to Zain, given the large amount of *ex ante* regulations imposed on Orange Fixed, which owns Orange Mobile. The TRC does acknowledge the recent acquisition of the 3G license by Orange Mobile, but states that it does not significantly limit the power of Zain in the short term. The respondent agrees with this remark. Overall, the respondent therefore agrees with the TRC's preliminary conclusion that Zain should be considered individually dominant in the MACO market.

By contrast, **Zain** wholly disagrees with the TRC's conclusion that it holds a dominant position in the wholesale MACO services market. It claims that the analysis is not consistent and appears to be a means to justify regulating Zain, instead of an objective analysis on the facts. The respondent considers the MACO market as one of the most competitive in the Middle East and as competitive as the markets in Western Europe. It therefore disagrees with the TRC's conclusion that Zain is in any position to have a significant adverse impact on the market and has the ability to control and affect the activity of the market.

It also commented on the TRC's assessment of market shares in order to determine dominance. It claims that the TRC incorrectly calculated Zain's market shares and that in fact both Umniah and Orange Mobile have market shares above 25%; however, the TRC did not conduct any further analysis into the position of these two MNOs. It regards this treatment as discriminatory and inequitable. It also states that it is inconsistent and incorrect for the TRC to consider market shares in different customer segments since the market definition defined the market as a "cluster" of services. Therefore, the only relevant market shares for this analysis would be those for total revenue and total subscribers. The operator pointed to the HHI calculated by the TRC for retail revenues, showing that Zain's market share of subscribers is lower than that for revenue and below the threshold at which dominance is assumed. It also stated that market shares are not a source of market power and is only the beginning step for the assessment of dominance. The asymmetric market shares are considered healthy by this respondent because firms with a lower market share will have the incentive to improve their position and larger firms will have the incentive to defend their position. Additionally, neither Umniah nor Orange Mobile is prevented from improving its network coverage and quality, since Zain does not have exclusive or privileged access to any operating assets. Zain's conclusion on the market share analysis is that the TRC's analysis of market shares is too inconclusive to find Zain dominant and that the international comparison of market shares demonstrates that Jordan is at the same concentration levels as EU countries, where the market is not subject to *ex ante* regulation.

Zain also commented on its market conduct, particularly regarding its ability to control and affect the market to the extent that a firm can profitably raise prices, independently of its competitors. In this regard, it argues that if it were dominant in the market, it would be able to set its prices without regard to the likely response of its competitors and customers; however, the assessment of Zain's demand curve would dispute this fact. One way of measuring the degree of market power enjoyed by an operator is to measure its own demand curve, which is inversely related to its market power. Accordingly, Zain's position is that the Zain demand curve is more elastic than the demand curve of the industry as a whole, showing that Zain cannot be dominant, as customers will respond to an increase in price by switching to another competitor.

Zain also challenges the TRC's conclusion that Zain's dominant position is protected by high barriers to entry. Once again, it refers to the argument that the barriers are regulatory and that the TRC alone is in the position to lower these barriers. In addition, the TRC states that Zain's position as a fully vertically integrated operator strengthens its dominant position. The operator disagrees with this statement, pointing out that all mobile operators are vertically integrated.

The respondent also challenges the TRC's discussion of Zain's pricing conduct by stating that the TRC has used the incorrect legal standard in Part VI, Section 3.3 of the Consultation Document, rendering the whole discussion irrelevant to any finding of dominance. The TRC used as a standard *"the ability to be able to act, to a significant degree, independently of its customers and competitors"* as the legal standard. The operator states that the TRC's adopted definition is *"such a sufficient impact on the market that it can control and affect the activity of the relevant market*." In addition, according to the operator, the TRC relied on out-of-date data during its assessment.

In its response, **Zain** also examined other *"Impact Factors*" not considered by the TRC, such as the control of essential facilities, the size of the operator, technological advantages, countervailing power, access to capital markets, the bundling of products or services, the level of vertical integration, characteristics of its distribution, and the absence or presence of competitors on the market. The operator concludes, after its brief analysis of the "impact factors" ignored by the TRC, that Zain is not in a stronger position than its rivals to control and affect the markets. In some instances, the operator points out, Orange Mobile is in a stronger position than either Zain or Umniah.

Finally, **Zain** states that the TRC has incorrectly followed its own procedure by assessing market shares in irrelevant segments, applying the incorrect test for dominance when examining Zain's conduct, and ignoring many of the impact factors set out in the *Competition Safeguards*. In conclusion, Zain disagrees with the TRC's finding of Zain as dominant, and urges the TRC to reverse its conclusion in this regard.

Zain also provided comments to the response of Orange Mobile. It states that, within the response, there is no additional evidence provided which supports the TRC's preliminary conclusion regarding Zain being a dominant operator. Instead, the response contains broad statements without any concrete facts to support the claim. The lowering of prices, the loyalty of customers, and the ability to attract consumers does not render an operator dominant in a market. There have been periods of time where Zain has had a decreasing market share. The current nature of the market is the normal behaviour of a competitive market. Zain also comments on the fully integrated nature of Zain and its effect on barrier to entry. It states that all mobile operators are fully vertically integrated; for example, Orange is the most integrated company in the mobile market, both horizontally and vertically. Orange is vertically integrated through its control of the international gateway, and horizontally integrated with its fixed line, Internet, and broadband operations.

Finally, with regard to Zain's anti-competitive conduct in offering lower prices, Zain commented that an operator having lower prices than competitors is not in itself anti-competitive, provided that such prices are above marginal cost, or above average variable cost as a reasonable proxy. In response to Zain's conduct, other operators should improve their own efficiency and competitive offerings. This respondent urges that the TRC withdraw its finding of dominance against Zain, based on its response and the lack of further evidence provided by other respondents. The TRC presents evidence which suggests that Zain has generally been in a position to enjoy a price premium over its competitors and has been able to preserve this overwhelming position despite the entry of other operators into the market, in addition to enjoying a rather large market share. However, there is no presumption in competition law that mere size, or even the possession of a dominant position, is offensive or problematic in itself. The concern should be with the conduct and behaviour identified on the relevant market.

Orange Mobile raised concerns over the arguments put forth by Zain concerning the TRC's alleged erroneous calculation. A party cannot simply assert this position without any evidence to support its position. Instead, the burden falls on the TRC to issue an immediate clarification before proceeding any further with the market review. It therefore remained concerned regarding the currency of the data used by the TRC during the review assessment. It is the responsibility of the TRC to ensure its data is up-to-date and error free. Orange Mobile is also concerned about the lack of clarity in the TRC's application of the *Competition Safeguards* in its assessment and in the parallel broadband markets Public Consultation.

Umniah states that it takes issue with the position that the capacity is not restrained and that all operators, aside from one, have reportedly established methods to address any possible capacity restraints. According to Umniah, all the various competitive restrictions in the market have the net impact of making significant expansion feasible only at prohibitive expense, thereby making it difficult to see any likely expansion of capacity as suggested with the TRC.

According to this respondent and the evidence cited by the TRC, Zain enjoys considerable advantages not only through its economies of scale but also as a well-established regional operator, thereby giving Zain leverage and allowing it to make its international and roaming tariffs equal to the national tariff under its One-Network tariff offering. Smaller rival operators have the incentives to aggressively compete against a dominant operator; however, they will face the threat of overwhelming reaction by the dominant firm. This serves as an effective deterrent.

The same respondent also submitted comments focused on the responses provided by the other two MNOs. It pointed to, what it claims, is a factual error made by another MNO, namely, where it made an international comparison and stated that the MACO market is not subject to *ex ante* regulation throughout the EU. While the EU no longer obliges all Member State to examine the MACO market, the market itself is not put beyond the scope of regulation. The removal of the market from the list of relevant markets should be viewed as removing the need for a market examination when the vast majority of Member States do not find this market problematic.

Umniah also commented on the argument put forth by Zain regarding its demand curve and its inability to raise prices without the consumers switching to a rival operator. This respondent argues that this argument is illogical. To be regarded as a dominant in an economic sense, the firm must have sufficient market power to enable the raising of prices or to act independently of its rivals. A downward sloping demand curve means that if a firm unilaterally raises its prices, it will lose some, but not all, of its sales. If a firm faces a relatively inelastic residual demand curve, then the decrease in sales, as a result of a price increase, will be relatively small and it will be profitable for it to unilaterally increase prices. The TRC has provided the relevant evidence of Zain's pricing power in the Consultation Document, also demonstrating Zain's lack of or delayed reaction to price increases by other operators. Overall, the evidence provided by the TRC correctly demonstrates Zain's dominance in the market.

Umniah also commented on the recent 3G spectrum allocation to Orange Mobile. In this regard, Zain stated that the TRC acknowledged the allocation, but did not see it as a serious competition threat at this time. The respondent disagrees with this comment. Due to the allocation, it is within Orange Mobile's power to quickly finish rolling out its network and to shift the focus of the market to 3G services, where it will be leader. This spectrum allocation strategy goes against best practices, which are followed throughout other jurisdiction in terms of spectrum management and allocation procedures. The operator urges the TRC to impose greater control on Orange Mobile and the group, particularly regarding handset subsidies.

Neither **Zain** nor **Orange Mobile** commented on the responses submitted by Umniah, given its largely theoretical nature.

Response of the TRC

The TRC has conducted a very thorough review of all responses. Accordingly, it is wrong for Zain to assert that the TRC has been selective in its selection of materials to support the case for dominance. Starting with market shares, the TRC has not relied on one market share measurement alone, which might arguably not reflect market realities at any given point in time. Instead, the TRC has measured Zain's market power by reference to a very broad range of commercial performance parameters that are usually associated with the measurement of market power in the telecommunications sector. Many of those market shares are not only **indicative** of dominance under the legal standards set forth in the *Competition Safeguards*, but also **presumptively dominant** under the legal standard established those *Competition Safeguards* (refer to analysis below in Part A of Annex I).

The establishment of a rebuttable presumption in law requires that the party the subject of the presumption must adduce persuasive evidence to prove the contrary. Zain has failed to adduce any such evidence but, rather, has preferred to challenge individual isolated elements of the TRC's Decision which are otherwise fully supported by the facts. For example, the TRC also subjected its market share analysis to a pricing analysis, according to which it showed that Zain still commanded a premium for its services even after a significant one-off price drop in 2008. At the time of that price drop, the Arab Advisors Group[5] reported that Zain customers had been unhappy with the high prices charged by Zain. As quoted by Zain itself in its response: ***"The Arab Advisors Group 2007* report showed that in 2007 Zain had the lowest satisfaction rating of prices",** which perhaps is not surprising given that they were more expensive than either Orange or Umniah."

One price drop meant that Zain recovered a very significant amount of market share across a wide range of criteria, while at the same time dropping only one percentage point in market share for revenues (while still being at an indicatively dominant market share level at law for revenues).

The high ROCE of Zain, its high on-net/off-net traffic ratios, the high level of concentration in the market, the range of competition complaints raised by competitors, the existence of high entry barriers and the lack of Number Portability preventing customer churn (especially for business users in the post-paid segment), plus other factors referred to in the Public Consultation document, generate a comprehensive picture of dominance going far beyond what the market share figures already presume. The TRC has subjected its analysis to such a rigorous set of checks and balances precisely because of its wish to avoid any negative conclusions being drawn from the commercial success of Zain on the merits, as opposed to its market power.

Seen in the above light, Zain's comment that the TRC should take into account all of the *Impact Factors* listed in the *Competition Safeguards* seems to be wholly unrealistic. The list provided in the *Competition Safeguards* covers a very broad set of potential factors, and includes all functional levels of competition. The logical extension of Zain's preferred approach of examining each and every potential impact factor would be for the TRC to prove that Zain is a *de facto* or *de jure* monopolist, which is clearly not the standard of proof required neither by the TRC nor internationally. With a view to addressing this comment on the part of Zain, and in order to remove any doubt as to its findings, the TRC has conducted a full overview of the individual *Impact Factors* listed in the *Competition Safeguards*, by reference to fully updated data covering the whole of the year 2009. Annex I to this Explanatory Memorandum (Part B) analyses these individual *Impact Factors*, and confirms the conclusions reached by the TRC in its Public Consultation document with respect to Zain holding a position of individual dominance.

Similarly, the allegation of Zain that the TRC has applied the wrong legal standard for dominance is incorrect. The legal standard satisfied by the TRC is indeed that contained in the *Competition Safeguards* (which in turn amplifies what is found in the *Competition Law*). This is not to say, however, that this standard – which is a standard understood by economists – is not in all material respects the same as that found in the EU. Any other result would be counter-intuitive, given that all other elements relevant to a finding of dominance under Jordanian law, whether market share levels or the various matters listed in the *Impact Factors*, are drawn clearly

[5] Jordan Mobile Uses Survey 2007 (dated on July 2007)

from EU precedents. It is in this context that the TRC's reference to the EU legal standard should be made, essentially because it represents a wealth of case-law which has come to apply and interpret the various matters listed in the *Impact Factors*. The unreasonableness of Zain's position becomes all the more evident when it effectively asserts that operators with over 25% should be assessed to be individually dominant, while at the same time arguing that its market shares in excess of 50% are not at the very least persuasive evidence of dominance (yet alone amounting to a rebuttable presumption of dominance).

In addition, any concerns regarding the current nature of the data relied upon are wholly unfounded. The TRC based its initial analysis on data collated through to the end of 2008. In response to Zain's response in the Public Consultation regarding the "out of date" nature of the data relied upon, the data reviewed by the TRC through to the end of 2009 confirms all the trends identified by the TRC in its dominance analysis. More importantly, in one particular respect, Zain's share of a particular market segment had jumped upwards very significantly, even beyond the existing extrapolations of the TRC's analysis made on a "forward looking basis". The collection of such current data was relatively straightforward in the mobile sector, which keeps very current records of most important commercial performance indicators.

The TRC also notes that Zain errs fundamentally in its understanding of EU best practice. Not only is MACO still the subject of *ex ante* regulation (both Cyprus and Slovenia renewed their existing individual dominance findings in relation to MACO earlier this year) in the EU, but the availability of MVNOs is becoming even more widespread among EU Member States through commercial negotiation. Moreover, EU Member States currently considering the renewal of 2G licences or the granting of 4G licences are actively exploring making those licences contingent upon operators making access available to MVNOs (*e.g.*, France). The rationale as to why the MACO market is not part of the *EC Relevant Markets Recommendation* is correctly explained by Umniah in its response to the Public Consultation. Having said that, the TRC has re-considered its initial position, to impose an MVNO remedy in light of the developments of the MVNO agreement signed by Zain with Friendi, and the future introduction of Mobile Number Portability, on the one hand, and the likely market failure in the international calls segment, on the other.

As regards Zain's alleged inability to raise prices because of its particular demand curve, the TRC agrees with Umniah that the position espoused by Zain is without merit. This issue is addressed more fully by the TRC in the discussion in Part C of Annex I. As has indeed been explained by the TRC in its analysis, Zain has in fact won back significant market share by a single price increase which has only cost it one percentage point in terms of market share measured by revenue, while at the same time increasing its share across virtually all competitive business parameters in the telecommunications sector.

Finally, the TRC notes that the remarks of Umniah concerning the need for the TRC to impose greater control over the activities of the Orange group in general, tend to obscure the fact that the TRC is not at liberty to take any such measures in the absence of a finding of dominance in relation to the relevant market the subject of review.

In conclusion, the TRC maintains its view that Zain holds a dominant position in the wholesale MACO services market, based on its position in the retail services market, and that it should be designated as being individually dominant at the MACO level.

Q13: Do you agree with the TRC's preliminary conclusion about the potential competition problems related to the dominant position of Zain in the wholesale MACO services market?

Orange Mobile was in agreement with the TRC's preliminary conclusions concerning the likely competitive behaviour of Zain, as the dominant operator on the market. Consistent with the views of the TRC, Zain had not exhibited any behaviour which would indicate that, in the absence of the necessary *ex ante* regulation, it would negotiate reasonably and in good faith concerning the supply of wholesale MACO on reasonable terms and conditions.

Zain did not agree with the TRC's preliminary conclusion about the potential competition problems relating to a dominant position held by Zain in the wholesale MACO services market. This respondent argued that the conclusion is not supported by the facts, particularly the suggestion that, in the absence of an *ex ante* obligation, Zain would not provide wholesale MACO services to an MVNO operator. It points to a MVNO agreement which Zain entered into voluntarily with the MVNO "Friendi" in January 2010. The operator states that, as a result, the potential competition problems identified by the TRC simply do not exist any longer.

Umniah agrees with the TRC that there are very specific competition problems that need to be addressed; however, there are problems which develop at the retail level but are a result of the ways in which retail and wholesale markets interact. For example Umniah comments on the high ratio of on-net to off-net traffic which allows Zain to leverage the network effects and set its tariffs in a way to lower its termination costs by keeping more traffic on-net. As a result, smaller operators are placed at a disadvantage. The disadvantage is larger the higher the termination charge, leading to a greater difference between the price of an on-net and off-net call. Competition concerns arise out of the situation where the prices vary depending on call structure since competing operators' ability to compete based on retail pricing packages is limited. Umniah believes that the causes of this restriction on competition should be addressed, not the symptoms. Therefore, it urges the TRC to impose a restriction on the ability of Zain and Orange Mobile to finance handset-subsidies.

Orange Mobile considers that Zain's assertion to be disingenuous that a recent MVNO agreement is evidence that competition problems do not exist (see above). It also stated, with respect to the comments of Umniah, that the claim that termination rates should be addressed by prohibiting hand-set subsidies is inappropriate (see above also). The issue of termination rates may be addressed through cost-oriented pricing and the prohibition of cross-subsidies in accordance with best practice.

Response of the TRC

On balance, through the course of the Public Consultation process, the TRC revisited its initial position regarding the MVNO remedy for the following reasons : (1) the fact that it would be premature to judge definitively the effectiveness of the Friendi MVNO arrangement in the context of this market review alone, given the recent developments in the Zain/Friendi agreement (2) the likely impact of Mobile Number Portability when introduced; and (3) most importantly, the fact that the potential market failure (*i.e*., in relation to international mobile calls) is arguably best addressed in the short term with the provision of wholesale call origination for international calls to CS/CPS operators.

In conclusion, the TRC maintain its preliminary conclusions regarding the potential competition problems related to the dominant position of Zain in the wholesale MACO services market.

Q14: Do you agree with the TRC's preliminary conclusion about the appropriate remedies to be imposed on Zain, to deal with the identified competition problems?

Orange Mobile stressed the need for additional *ex ante* regulation for the promotion of competition at the retail level. It considers that any remedies proposed, as a matter of principle, should be transparent and non-discriminatory. It supports the TRC position of imposing an obligation on Zain to negotiate access requests from MNVOs in good faith, but urges the TRC to clearly exclude non-dominant mobile operators from such an obligation. It also considers it essential that a Reference Offer, which includes some basic elements of MNVO access, is mandated for dominant operators in order to ensure that the remedies will protect against anti-competitive behaviour. Furthermore, **Orange Mobile** does not fully understand why the TRC did not clearly state that Zain has not yet implemented the existing regulations issued for CS/CPS, a current remedy in the market that has not been enforced without any legal or regulatory justification. It holds the view that the TRC must take a new and aggressive approach in dealing with the issue. The failure to comply should be associated with penalties and sanctions in accordance with the requirements of the *Telecommunications Law* and with Zain's licensing obligations. It therefore urges the TRC to send a clear message to Zain that the anti-competitive behaviour in question will not be tolerated.

Additionally, **Orange Mobile** stressed the need for accounting separation, at least for a certain period of time, in order to ensure the fairness of prices and the establishment of the non-discrimination principle. It did not agree with the TRC's view that, at the early stage of the MACO market development, it is not necessary that the primary obligation on Zain not to be complemented by a supporting accounting separation obligation. It takes the view that there is a need for complete transparency with respect to non-discriminatory transfer costs and to other terms and conditions. Current best practice requires dominant operators to produce separated accounts and to develop appropriate cost accounting systems. The failure to impose accounting separation will provide Zain with an additional opportunity to increase its dominance. Finally, it agrees with the TRC's view that price controls for CS/CPS and NTS should be cost-based and should be prescribed on an *ex ante* basis.

Orange Mobile also submitted brief comments on the responses received by the other two MNOs. In doing so, it reiterated its strong view that without complete transparency it is simply not possible to ensure that obligations and negotiations are achieved in good faith. It also disagreed with the claim by Umniah that only Zain and Orange Mobile are dominant in any relevant market, and reiterated its statement that all operators should be subject to parity of treatment.

Zain has already rejected the finding that the MACO market is susceptible to *ex ante* regulation or to the dominance of Zain, but did seek to comment upon the proposed remedies. In its view, the proposed remedies are disproportionate and place unnecessary, discriminatory and onerous burdens on Zain. It views the obligation to negotiate in good faith with potential MVNOs as only prolonging the alleged competition problems, which are regulatory in nature and can only be mitigated by the TRC itself. In its view, the proposed obligation would be inappropriate, disproportionate and ineffectual.

According to **Zain** , the obligation to provide CS/CPS is inconsistent with the market definition and is said to be contrary to international best practice. The TRC imposed a separate remedy, which is not applied to the retail cluster market defined by the TRC, but to a specific product within the market – international calls. The TRC did not identify any particular problem with this market, nor did the TRC identify a separate market for the product. Accordingly, **Zain** finds no justification for the imposition of the obligation, which appears to be arbitrary in nature. Finally, it states that the symmetric obligation on all operators to maintain call origination of Number Translation Services has no place in the market review since the proposed obligation is not based on position of dominance.

Umniah does not agree with the TRC's conclusion regarding the appropriate remedies to be imposed on Zain. This respondent believes that an intervention which would mandate MVNO access on Zain is inappropriate and would be counterproductive if cost-based (by regulation) at a figure which is near or below costs. This could result in severe consequences. Obliging Zain to make MACO available on cost oriented terms, with its better economies of scale, would place other infrastructure operators at a disadvantage. The mandate on Zain would disadvantage particular MNOs, as opposed to MVNOs, which have the ability to build out their network where it is cheapest. The MACO remedies being proposed by the TRC run the risk of allowing Zain to host third parties' traffic onto its network at marginal price that relies on its economies of scale but under the cover of regulatory obligations. This would create a 'fighting brand' for Zain in the form of a third party pre-paid offer which is priced very low or below costs. Seen in this light, the respondent considers the MACO obligation to be unwarranted, with other remedies being more appropriate.

It also states that if the TRC's objective is to promote investment in infrastructure and innovation, the proposed access remedies will not be effective, since the access prices are set too low and will undermine the incentive to invest. **Umniah** urges the TRC therefore to pay more attention to the key remedies proposed which will be effective. The TRC should prioritize an effective MNP regime together with CS/CPS (with consolidated billing) and effective limitations on the anti-competitive cross-subsidies inherent in the One-Network offers. Finally, UmniahUmniah also holds the view that the TRC cannot justify why Umniah is subject to any call origination obligation mandated in the current *Interconnection Instructions*. The obligation requires Umniah to provide call origination at cost-based prices and on regulated terms and conditions. It urges the TRC to remove the obligation and let the operator voluntarily choose to provide call origination under the same terms and conditions. Umniah is not dominant in the call origination market and should not be subject to the obligations.

Umniah also provided comments on the responses of the other two MNOs. It argued against the positions put forward by Zain, which stated that remedies directed at specific parts of the market are inappropriate since the remedies imposed must be applied across the 'whole' market. Umniah does not agree that only remedies which address the whole market are appropriate. On the contrary, it is not unusual to see remedies which impact only certain parts or segments of broader product markets.

Zain also provided comments on the other responses received by the TRC. In regards to the comments put forth by Orange Mobile, it stated that the mandating of a Reference Offer would be inappropriate and disproportionate. Additionally, CS/CPS should not have been imposed by the TRC in a cluster market without specifically identifying a competition problem with regard to international calls and which is, in any event, inappropriate in mobile markets. Furthermore, other MNOs have been inconsistent by calling for the need for accounting separation in MACO but not in relation to Call Termination.

Zain also provided comments on the response of Umniah. It also completely disagreed with the proposed obligation to negotiate MVNO agreements in good faith. The logical extension of this type of obligation, asserted Zain, was an outright ban on an MVNO agreement freely entered into by it, which is a principle that it would not support. It feels that it will lose the most from the presence of MVNOs in the market, but if the MVNOs are not being used as an anti-competitive tool, there is no justification for the ban.

Response of the TRC

Taking into account the views expressed by one of the respondents to this Public Consultation and the experience gained by the TRC in light of Zain having signed a recent MVNO agreement coinciding with the TRC's market review, **the TRC has decided to refrain from imposing upon Zain the MVNO-related obligations proposed in the Public Consultation document.** On balance, it is felt that the MVNO agreement already signed by Zain needs to continue to be assessed as to its efficacy, particularly in the broader context of the TRC's existing policy position on MVNO arrangements. Moreover, it is felt that an appropriate and proportionate response to the most clearly identified market failure – namely, the potential for Zain to charge high prices for international mobile calls to selected destinations which it manifestly dominates – is best reflected in the mandating of an appropriate obligation to provide wholesale call origination to Cs/CPS operators for international calls. By contrast, it is unclear whether an MVNO relationship would be able to address this segment of the market quickly and effectively.

Despite the decision of the TRC not to pursue the mandating of MVNO relationships via this market review mechanism, this decision is without prejudice to the decision that MVNOs, should they be hosted on the network of Zain or any other MNO, should be subject to the same mobile termination rates as their host network is subject (see discussion above on mobile voice call termination remedies).

Consistent with the views expressed previously in this Explanatory Memorandum, the obligation to provide wholesale call origination to CS/CPS operators for international calls can be legitimately imposed on Zain - in order to target competition problems which are most likely to arise in a particular segment of the relevant market - in relation to the provision of international calls. In this regard, Umniah correctly sums up international best practice in this respect. As has been explained, there is no need for the TRC to define this segment as a separate relevant product market of its own accord. Accordingly, the TRC does not need to define a separate international calls market, as has been proposed by Zain, in order to impose the CS/CPS remedy to address the problems of the MACO market, for which the retail mobile services market serves as a proxy. In turn, while the TRC concedes that CS/CPS remedies are not commonplace in the mobile sector, the particular dynamic of the mobile international calls segment of the market, given the large immigrant population of Jordan and the prevailing calling patterns that exist with neighbouring countries such as Palestine, Syria and Egypt, dictates to the TRC that .a CS/CPS remedy is appropriate.

Finally, the TRC agrees with Zain that it should not be obliged to provide Number Translation Services, as originally suggested in the Public Consultation document, as part of its asymmetric obligations imposed pursuant to this particular market review. Such an obligation is already currently imposed on **all** Mobile Network Operators irrespective of whether they hold market power.

In conclusion, the TRC has decided to refrain from imposing upon Zain the MVNO-related obligations proposed in the Public Consultation document. TRC takes the view that given the recent signing of the MVNO agreement between Zain and Friendi the potential market failure (i.e., in relation to international mobile calls) could be best addressed in the short term with the obligation on Zain to provide wholesale call origination for international calls to CS/CPS operators.

VI. MARKET FOR RETAIL MOBILE SERVICES WITH EX ANTE REGULATION OF WHOLESALE MOBILE VOICE CALL TERMINATION AND MOBILE ACCESS AND CALL ORIGINATION (MACO) IN PLACE

Q15: Do you agree with the TRC's preliminary conclusion that in light of the proposed ex ante regulatory remedies (if implemented) put forward in this

Public Consultation, the three criteria are not cumulatively fulfilled for the retail mobile services market and that, therefore, this market is <u>not</u> susceptible to ex ante regulation?

Orange Mobile strongly disagrees with the TRC's conclusion that the regulation of retail mobile services market is unnecessary in light of the *ex ante* regulatory measures directed at the wholesale level. It believes that if the evidence supports the finding of a Dominant Operator, in terms of market shares of subscribers and more heavily dominant in terms of revenues, there needs to be remedial action taken at the retail level as well as at the wholesale level. It therefore urges the TRC to consider using the typically available remedies, including strong scrutiny and approval of tariffs files, and accounting separation, at the retail level to ensure that the existing market dominance is eliminated. Furthermore, it considers that it is imperative at this stage to impose a retail price control. It further states that the TRC cannot continue to disregard the effects of the dominant operators and should not refrain from regulating the retail market until all of the proposed remedies are in place and have proven to be successful.

Umniah commented that there are deep competition problems on the retail market and that appropriate remedies are also necessary at this level of competition. The TRC should therefore mandate an effective MNP regime together with CS/CPS (with consolidated billing) in order to ensure competition on the post-paid market segment. Finally, it suggests that Zain and Orange Mobile's ability to misuse the handset subsidy should be curtailed. While disagreeing with Umniah's view regarding the effects of handset subsidies, **Orange Mobile** strongly agrees with the statement put forward that there are serious competition problems in the retail market.

Zain did not lodge any comments in relation to this Consultation Question since it holds the view that the retail market is already effectively competitive without regulation at the wholesale level. It did provide comments on the responses of the other MNOs. In its view, one particular MNO's call for regulation at the retail level is contrary to international trends and is not supported by any economic argument or evidence.

Response of the TRC

As has been noted elsewhere, in the absence of evidence that wholesale remedies have not been implemented effectively, the TRC does not share the view that remedies in the retail mobile services market should also be imposed on Zain. Consistent with its general policy position that remedies should be limited to what is proportionate to address the competition problems identified, the TRC has determined that the retail mobile services market is not susceptible to *ex ante* regulation, as it does not fulfil the three-criteria test when appropriate wholesale *ex ante* regulatory obligations have been effectively implemented.

<u>In conclusion, the TRC maintains its view that in light of the proposed ex ante regulatory remedies put forward in this Public Consultation, the three criteria are not cumulatively fulfilled for the retail mobile services market and that, therefore, this</u>

market is not susceptible to ex ante regulation. However, this conclusion is without prejudice, however, to the TRC deciding to intervene in the retail sector at a future point in time in response to a failure of wholesale remedies to be implemented in a timely and effective manner.

VII. OTHER COMMENTS

Zain provided some general comments prior to responding to the specific Consultation Questions. One of its comments focused on the leveraged dominance possibilities in light of the market position of Orange Mobile. It states that Orange is both vertically and horizontally integrated and can provide narrowband, broadband and mobile services at both wholesale and retail levels. Therefore, Orange is in a position to uniquely offer bundle packages across the full range of communications services, which cannot be replicated by its competitors without using at lest one wholesale service from Orange. For example, Orange is able to sell to its fixed line customers in the geographic area in which a pre-paid SIM card with the same number is registered to it as the customer's fixed line. No other operator is able to make this offer. However, the TRC has allegedly overlooked Orange's position in its analysis.

In turn, **Umniah** made comments regarding the argument put forth regarding Orange's leveraged dominance. It points to the sending of free SIM cards as a commercial strategy which highlights the dangers of dominant operators and the need to attack the root causes of cross-subsidies, margin squeezes, and leveraging, especially given the difficulty of policing such activities. It states that the margin squeeze test currently proposed by the TRC will not be sufficient to address competition problems. It also raises concerns regarding the exchange of information/personal data shared among dominant entities. It states that many other possibilities for leverage do exist but were omitted from the responses to the Consultation Document. Finally, Umniah points to Zain's One-Network offers to leverage its regional advantages and to Orange Mobile's large termination market and position as part of the FT Group of companies.

Zain has also made the general comment that the TRC had not conducted a separate Regulatory Impact Analysis in order to assess the burdens imposed on investors, consumers, the regulated operator and other stakeholders, in accordance with the purported Government Policy requirements. In doing so, it cited the practice of the Irish and UK sector-specific regulators in carrying out such an analysis.

Response of the TRC

As regards the issue of the potential threat posed by the alleged leveraging of dominance by members of the Orange group across various services and platforms, it must not be forgotten that the fixed business of the Orange group is regulated in many material respects by the TRC. This level of regulation lessens the threat posed by the potential anti-competitive bundling practices that might arise from an integrated telecommunications offering across the various members of the Orange group, because it means that a wide range of fixed wholesale inputs that might be elements of a bundled service package are available to alternative operators for them to replicate their own service bundles. This results in the "imputation" of the real value of wholesale inputs is facilitated by regulatory intervention. Moreover, the availability of *ex post* competition rules could be utilised by the TRC to address the various types of anti-competitive practices likely to arise from the cross-platform bundling identified by Zain and Umniah respectively.

With respect to the view expressed by Zain that the TRC has not engaged in a separate Regulatory Impact Analysis prior to proposing the remedies for MACO, 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 *Government Policy*, which envisages the application of a proportionality test insofar as it is specified that remedies "should be no more burdensome than is required to ensure fair competition". This test lies at the heart of the remedy prescription process under a market review.

To this end, it is irrefutable that the TRC has clearly implemented the qualitative dimensions of a regulatory impact analysis in its process of market review. This is exemplified in the following sequence of analytical steps undertaken by the TRC, namely: *first*, a defined market has to be found susceptible to *ex ante* regulation by its fulfilment of the 3-Criteria test; *second*, .a particular operator who will be subject to the regulatory obligation must be found to be dominant (a strong test to fulfil) in this relevant market; *third*, once dominance is found to exist, the remedies imposed must target the particular competition problem(s) identified as a result of dominance. Moreover, the competition problem founds should be addressed with the lightest possible remedy capable of addressing the competition problem identified. In other words, measures that are in excess of what is required should not be applied as they will impose an unnecessary burden.

Consequently, a full set of analytical filters/tests have to be fulfilled prior to the imposition of a new regulatory obligation, thus minimizing the scope of unnecessary and arbitrary regulatory intervention. As a result, TRC is confident that the market review mechanism and its commitment to the principle of proportionality ensures the application of a Regulatory Impact Analysis which is inherent in the market review process. This is also reflected in the fact that the market review process, which was formulated in the EU, was itself subject to a Regulatory Impact Analysis by the European Commission. Moreover, when applying their own respective Regulatory Impact Analyses, the National Regulatory Authorities of the UK and Ireland were applying their own express national rules in parallel with their legal obligations under EU law. In doing so, they were obliged to act in a way which did not undermine the fundamental EU Regulatory Framework under which they were conducting their market reviews, which dictated that the measures adopted consistent with the market review mechanism not be subject to any additional Regulatory Impact Analysis (because of the application of the doctrine of proportionality) .

VIII. ANNEX I

Additional Information In Response to Zain's comments

The discussion which follows is designed to supplement the text of the body of the Explanatory Memorandum by providing additional information in response to Zain's comments, especially as regards:

- A clarification of the TRC's analysis of market shares;
- An overview of the TRC's evaluation of the various *Impact Factors* listed in the *Competition Safeguards*;
- An assessment of the persuasive value of Zain's own demand elasticity analysis, considered in light of what has been asserted by the rest of the mobile industry.

A review of the these issues reinforces the initial TRC conclusion expressed in its Public Consultation Document that Zain is an individually dominant operator on the wholesale market for MACO.

A. Analysis of Market Shares

The TRC reconfirms that the analysis of market shares is the logical starting point in its analysis of dominance. Table 7 of the Public Consultation Document lists market shares in terms of retail revenues, which from an analytical point of view are considered to be the most comprehensive market share indicator since they capture the combined effect of prices and output, for the period 2005 to 2008 (and are consistent with data for 2009).

Table 7: **Shares of MNOs**

Shares of Retail Revenue	31/12/05	31/12/06	31/12/07	31/12/08
Zain	[…][6]	[…]	[…]	[…]
Orange Mobile	[…]	[…]	[…]	[…]
Xpress	[…]	[…]	[…]	[…]
Umniah	[…]	[…]	[…]	[…]

With respect to Zain's market shares, it is important to note the following:

(i) Dynamic vs. static analysis

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[6] In this document confidential data have been omitted (indicated with brackets "[…]") without affecting the analysis and the conclusions

The reason the TRC collected data for several years was to be able to carry out a *dynamic* analysis of mobile markets rather than taking a *static* (snapshot) view. Such a dynamic analysis of market shares suggests that:

- ItI would be incomplete for the TRC to focus only on the […] market share of 2008. Instead, one has to consider all the available market share information for the entire period 2005-2008, especially where it illustrates that the impugned dominant operator is also leveraging its dominance into particular areas (while being willing to forsake them in others) and has won market share back significantly through a one-off price decrease.

- There is no legal requirement either in the *Competition Safeguards* or elsewhere dictating the TRC to focus its analysis of market shares on the figure for the most recent year instead of expanding its window of analysis, and any such approach would be contrary to international best practice. Even if one were to rely solely on the 2008 figure, however, the market share figure is so close to presumptive dominance, that Zain has not done enough to rebut that presumption (and exceeds that figure if the market share figures from the Arab Advisors Group of 6 December 2009 are considered). The case is strengthened by the fact that the market share figure is confirmed for the period through to the end of 2009. Even if one were to conclude that this figure of legal presumption has not been reached, the analysis of *Impact Factors* (see below) is sufficient to satisfy the legal test for dominance.

- A forward-looking analysis of Zain's dominance based on 4-year history yields more robust and reliable results than those based on any given past year, which might reflect short term competitive distortions. This is particularly relevant when assessing likely strategic behaviour where a dominant operator is anticipated to defend its market share. In other words, the consistent history of Zain's dominance can provide us with a more reliable prediction of its likely future dominance. The historical path serves as the basis for any "forward looking" predictions of market behaviour. It is important to note that, during the reference period, an apparent and inevitable decline in market share appears to be halted by a change in strategy, thereby re-establishing the competitive equilibrium at a level which still affords Zain a market share which is very large in comparative terms for any leading national mobile operator, and also in relative terms given that it is well over 50% larger than its nearest rival across all relevant comparators.

- Zain commenced the reference period with a market share of […] in 2005, which is generally considered to be "super-dominance". It fell, as would be expected, with the onset of new entry, down to nearly 50% in 2008, which is the mark at which dominance is presumed to exist under the *Competition Safeguards*. The starting point of Zain's market share is particularly important for any assessment of it possible dominance. Zain is not an operator which is starting with a market share of below 25% (presumed non-dominant) or even higher, growing its share to […]; such a scenario would arguably raise doubt as to whether this final figure is a transitory or a permanently "high" share, and might also raise doubts about whether Zain is simply being more "efficient" than its competitors, so as to allow the TRC to give t*he benefit of the doubt* to Zain in its assessment of its dominance.

- It is also important to note that, while Zain's share has followed a path from […] in 2005 to […] in 2008-2009, its profitability (measured in terms of ROCE) has remained consistently at a level which is considered to be “excessive” (nearly double) compared to Zain’s Weighted Average Cost of Capital (WACC) which, according to the TRC’s own estimates, is in the region of […] in pre-tax terms.. Accordingly, it has re-consolidated its market position while not sacrificing any profitability in doing so.

(ii) Arab Advisors’ Report estimate of market share of Zain

The cellular revenue market share of Zain for 2008, according to the Arab Advisors Report of 6 December 2009, is calculated to be 52% (=484,800/933,911), namely, higher than the […] calculated by the TRC. This is evidence that the TRC’s market share has been calculated conservatively, so that it is at the lower end of the estimated market share range. An adjustment which merely takes into account this figure, given that Zain cites the Report in question in its Public Consultation responses, would result in an adjustment of Zain’s market share above the presumption of dominance test of 50%.

(iii) Market share updating

In its efforts to confirm the conclusions of its initial analysis, the TRC updated the market share figures by collecting data for 2009. While the updating of the market shares in terms of retail revenues for 2009 was not possible, as the revenue data were not available, the updated figures indicate that while Zain’s share has remained steady in 2009 compared with 2008 in terms of subscribers, it has risen further very sharply with respect to international traffic from […] in 2008 to […] in 2009, which also implies an increase in retail revenue market share for 2009.

(iv) Market share in a 4-operator environment

Zain is in the very privileged position in terms of international benchmarking of being one of a handful of mobile operators with around 50% market share in a four-operator environment, which further reinforces the conclusion regarding Zain’s position of dominance.

Conclusion

Given its analysis of the above factors, TRC is in a position to confirm that:

i) Zain’s market share is effectively at the level of *presumed dominance*;

ii) Zain’s relative gap with its closest competitor Orange Mobile is large, namely, a revenue-based market share which is […] percentage points lower than that of Zain (namely, Zain is over 50% bigger than its largest competitor);

iii) Zain's market share compared to other mobile markets around the world is very large for a four-operator environment.

As a result, the TRC is in a position to confirm its initial analysis regarding the relevance and the importance of the revenue-based market share of Zain reported in the Public Consultation Document. Moreover, all other market share indicators conducted strongly confirm that this figure translates into a finding of dominance.

B. Comparative Analysis of Impact Factors

In its *Competition Safeguards*, the TRC lists a number of *Impact Factors* the consideration of which are highly relevant to the conclusion of whether dominance can be established on the basis of an initial analysis of market shares. Although the TRC considers that those *Impact Factors* were considered by the TRC in the Public Consultation Document and confirmed Zain's dominance, a more explicit comparative analysis of those factors is discussed below.

(1) Size, measured by revenue, number of subscribers, and network capacity as compared to the size of other competitors in the market.

Size is often confused with market share, given that in most cases it is *"naturally"* anticipated that the largest operator would have the highest market share. While such a one-to-one correlation is certain to occur when both size and market share are measured in terms of the same indicator (*i.e*., revenues), it is possible to have a situation where the largest operator (where size is measured in terms of a composite size index covering subscribers, traffic, number of employees, network capacity as suggested by the *Competition Safeguards*) does not have the highest market share. Such a phenomenon may occur under a scenario where the largest operator does not have highly developed and successful marketing, pricing and sales promotion strategies, while at the same time the second largest competitor, for example, through its successful strategies achieves the highest market share. Such a situation would cast doubt to the ability of the operator with the highest market share to have the level of impact on the market to be able to "control" it or to otherwise affect its performance adversely.

However, in the case of the Jordanian MACO market, Zain is by far the largest Jordanian MNO (as has also accepted by Zain in its response), since it is […] times the size of Orange Mobile in terms of subscribers. As regards network capacity (based on operators' replies) Zain has […] MSC compared to […] MSC of Orange Mobile and […] land coverage compared to […] for Orange Mobile. Therefore, in terms of size, the TRC concludes that Zain is by far the largest MNO with by far the largest market share and, as a result, size is a factor which inures to the benefit of Zain. When one compares "size" in terms of revenues, this comparator is even higher in favour of Zain.

(2) Its control of essential facilities, meaning facilities that competitors rely upon for participating in the relevant market.

Although it is true that Zain does not uniquely control essential facilities in MACO, given that Orange Mobile and Umniah could also provide MACO to access seekers, it is also true that the likelihood of commercial success and survival of an access seeker is higher when access is achieved with the largest operator with the largest market share, since (a) coverage is likely to be higher and (b) in terms of cost-based MVNO pricing, the largest MNO with the highest market share is anticipated to have cost advantages due to the comparative scale economies stemming from its size compared to its competitors (thus making it easier for it to accommodate a profitable MVNO). Given the amount of co-branding that also often occurs in MVNO relationships, this is an additional reason why obtaining access with the largest operator can offer significant competitive advantages to access seekers.

(3) Network effects, including the geographic availability of its services in the relevant market.

Zain is a subsidiary of a large international group, Zain Kuwait, with a consistent presence throughout the Middle East and the Gulf region. Zain's One-Network offer across the region provides Zain with a significant competitive advantage *vis a vis* its competitors. Although the geographic scope of the market is the national territory of Jordan, the TRC recognises that externalities arising from Zain's One-Network offer are highly likely to provide Zain with the possibility of leveraging its dominance into the national market. While in theory it would be possible for Zain's competitors such as Orange Mobile to replicate Zain's One-Network offering through the negotiation of various bilateral inter-operator relationships, such a replication would not be able to achieve the same effects since it would require the signing of a series of agreements with international MNOs with additional risks and transaction costs. As such, the arrangement would not be seamless, and there would be no savings of externality costs that could come close to matching those of Zain.

As also noted above, in terms of network capacity (based on operators' replies) Zain has […] MSC compared to […] MSC of Orange Mobile and […] land coverage compared to […] of Orange Mobile.

Furthermore, as stated in the Public Consultation Document:

> *"…Fourth, there appear to be network effects which clearly favour Zain (Competition Safeguards, Article 8(c), Number 3):*

- *Compared to its competitors, Zain is able to maintain a very high ratio of on-net/off-net traffic on its network (see below), which thereby allows it to extract greater benefits from the network effects created by its user base. High numbers of subscribers and the current level of on-net/off-net traffic means that Zain's customer base is less exposed to competitive pressure. Given that Zain grew its subscriber base by* […] *in 2008 in light of overall subscriber market growth of* […]*, the potential for such customers to remain on the Zain network is high."*

Table 10: **Ratio on-net / off-net originated traffic**

Ratio of on-net/off-net originated traffic				
	2005	2006	2007	2008
Zain	[…]	[…]	[…]	[…]
Orange Mobile	[…]	[…]	[…]	[…]
XPress	[…]	[…]	[…]	[…]
Umniah	[…]	[…]	[…]	[…]
Total	[…]	[…]	[…]	[…]

Source: Operator Response to TRC's Questionnaires

Moreover, as also stated in the Public Consultation Document:

> *"…Zain's widespread Middle East network of affiliates provide it with a significant competitive advantage, insofar as it is able to minimise its payments to third parties while at the same time being able to retain more international traffic on-net, thereby avoiding costs based on externalities.*
>
> *Fifth, there appears to be a lack of effective competitive restraint from being imposed on Zain by other MNOs in the market, largely because of the absence of number portability. This reinforces Zain's ability to retain its more profitable post-paid customers, which is the customer segment most likely to value the importance of being able to port a number (i.e., because it is this customer segment that is most likely to include high volume business users)."*

In conclusion, the TRC can justifiably conclude that Zain enjoys an advantage over its competitors due to, *inter alia*, (a) its One-Network advantages resulting from it regional presence and (b) its high on-net traffic ratio.

(4) Its conduct in the market with respect to competitors and customers, including end users.

The Table below synthesizes Zain's overall market conduct and performance, as reflected in key economic variables:

Table: **Zain's Market Conduct and Performance**

	31/12/05	31/12/06	31/12/07	31/12/08
Share of Retail Revenue	[…]	[…]	[…]	[…]
Price Indicator	[…]	[…]	[…]	[…]
ROCE	[…]	[…]	[…]	[…]
ARPU (JDs)	[…]	[…]	[…]	[…]

A number of observations can be made on the basis of the above Table:

- Zain manages to consistently maintain market shares at levels of presumed dominance, with an average share for the period 2005-2008 of […] and minimum share of […]. The decline of the first two years has been halted because Zain has engaged in a large one-time price drop.

- Despite the halving of its price indicator in 2008, Zain still managed to maintain its profitability for 2007 and 2008 at supernormal levels compared to its TRC-calculated WACC level. This suggests that the factors identified in the *Impact Factors* are playing a major role in maintaining its position of dominance.

- While Zain's ARPU appears to be falling over the period of 2005-2008, the ARPU of 2008 is not far below the 2005 figure, at which time Zain had a […] market share and a price indicator which was more than twice the 2008 figure. All other ARPUs of its competitors have fallen much more significantly over the same reference period.

While if analysed in isolation Zain's price drop would appear to be "good news" and a reaction to competitive pressure, a review of all the key economic variables together suggests that Zain (as the largest operator in the market with by far the largest market share at the level of presumed dominance) appears to be simply adjusting its pricing strategy to regain market share, without that strategy affecting its key performance indicators such as ROCE, which is maintained at supernormal levels. According to the IRG definition adopted by the TRC in its Green Paper[7]: *"Effective competition can be defined as the persistent absence of players with market power. In its essence market power is the ability to influence prices as substantiated in the possibility* ***<u>of enjoying persistent excess profits.</u>****"*

Therefore, despite the price drop in 2008, Zain's pricing is far from being a concrete indicator that it is not dominant, since it has managed over the relevant period to maintain its supernormal profitability. Indeed, it is probably more consistent with the view that Zain's pricing was previously at excessively high levels, as has been confirmed by the criticisms in the Arab Advisors' Report[8] and the general understanding that it acted as the price leader in the Jordanian market. This is consistent with the behaviour of an initially super-dominant operator defending its high market share by adjusting its pricing strategy, while incurring zero costs in terms of its supernormal profitability. As stated in the Public Consultation Document:

> *"The review of overall calls price indicators needs to be considered in light of the fact that Zain has managed to successfully defend its market shares in terms of revenue, subscriber and traffic-based indicators (reported above in) by price indicator reductions during 2008 of around 50% (as can also be derived from) at the expense of only a non-significant drop of 1 percentage point in its share of revenues since 2007."*

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7 See "Creating the Conditions for Effective Competition in the Mobile Sector", Information Document (Green Paper), TRC Board Decision No. (11-13/2008), Date 23/06/2008.

8 Jordan Mobile Uses Survey 2007 (dated July 2007)

It is also noted that several studies have shown that a dominant firm's market share may decline over time, but that such declines in general occur gradually and in most situations the positions of market dominance continue for several years. This is because a dominant firm will normally be able to act strategically and to take measures to prevent the erosion of its market share. What is very important, as the TRC has demonstrated in its Public Consultation, is that Zain continues to be the highest charging operator in relation to key calls baskets commonly used at OECD level to determine pricing levels.

(5) Its technological advantages or disadvantages with respect to competitors in the marketplace.

There is no particular technological advantage of which the TRC is aware which Zain enjoys compared to its competitors. On the contrary, Zain argues that Orange Mobile has a technological advantage due to its existing 3G licence. However, due to its relative infancy, 3G services are not part of the market definition and, as a result, Zain does not appear to suffer any comparative disadvantage compared to its next competitor Orange Mobile. Moreover, it must be borne in mind that Zain itself acquired a 3G licence in June 2010, on the basis of which it anticipates to launch services in the first quarter of 2011.

(7) Access to capital markets/financial resources compared to such access by competitors.

In terms of access to the capital markets and financial resources, it is noted that Zain's Weighted Average Cost of Capital (WACC) calculated by the TRC is lower than its nearest competitor, Orange Mobile. According to the Table below which reports operator WACC, Zain appears to have a comparative advantage in terms of the cost of accessing financial capital with a cost of […] for both equity and debt capital, over its immediate competitor Orange Mobile, which has a cost of […].

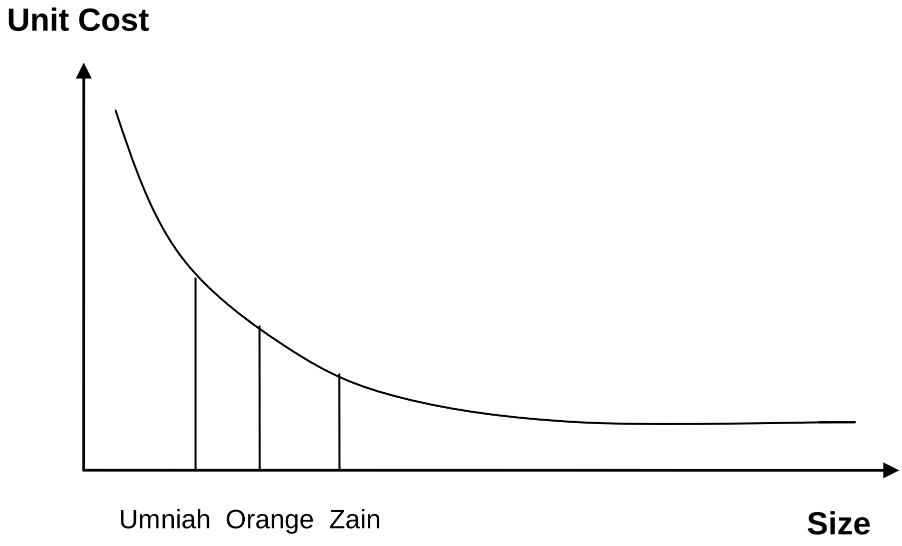
	Pre equity & pre debt tax WACC
Orange-Mobile-Central	[…]
Zain-Central	[…]
Umniah-Central	[…]

Source: *TRC*

(9) Economies of scale and/or scope, including relationships with affiliated Licensees.

Given that Zain is by far the largest MNO in Jordan, and assuming that the major Jordanian MNOs have similar cost structures with typical economies of scale and scope, Zain is anticipated to enjoy unit cost advantages compared to Orange Mobile and Umniah since due to its size it is anticipated to be further down at the typical U-shaped cost curve.

As a result, the TRC takes the view that Zain's size is highly likely to provide Zain with a **unit cost** advantage over its competitors, as is illustrated in the diagram below, which indicates how an operator will enjoy better *economics of scale* resulting from its larger size.



(10) Vertical integration, including relationships with affiliated licensees.

As discussed in the Public Consultation Document, Zain is a fully vertically integrated entity that is controlling the full value chain for mobile services, and is active on all relevant markets across the value chain enjoying a level of efficiency advantages and strategic options. The TRC also notes that, unlike Zain's smaller MNO competitors other than Orange Mobile (which predominantly relies upon Jordan Telecom), Zain has a high degree of self-reliance in terms of international mobile services originating in Jordan since over 50% of its international traffic passes over the international gateway of its affiliate, Pella. Furthermore, Zain, as the largest operator with the largest market share by far with a regional One-Network offering, has a comparative advantage over its competitors by being able to leverage its very significant market power in the international calls segment into other segments.

While Zain presents the recently signed MVNO agreement with Friendi as an indication of dynamic competition, it remains to be seen whether such an agreement is at arm's length from Zain's own interests. That agreement is currently the subject of a separate review as to its compatibility with fundamental principles of competition law.

(11) Characteristics of its distribution network.

The TRC has not carried out a detailed analysis of Zain’s distribution network either in terms of development and structure compared to those of its competitors, nor in terms of studying its various commercial distribution agreements. As a result, the TRC is not in a position to identify any comparative advantage which Zain might have in relation to this Impact Factor. In terms of absolute numbers of outlets, however, it is clear that Zain and Orange Mobile are in a far superior position to the other MNOs.

(12) Absence or presence of competitors and potential competition in the market.

While there is a presence of competing MNOs in the market, the TRC notes that, as indicated in the analysis of the Public Consultation Document, and as supplemented by the analysis herein, the level of competition is far from being effective, given the high HHl, the fact that the largest MNO with the highest market share of over 50% enjoys also supernormal levels of profitability.

(13) & (14) Barriers to entry and to expansion in the market.

The mobile industry operates behind entry barriers due to spectrum scarcity. Furthermore, as a result of the Jordanian Government Cabinet Decision of 2009, further entry of MNOs is not envisaged for a period of five years. In a four-operator environment where the leading MNO is also the largest one with around 50% market share, the exclusion of entry possibilities is anticipated to maintain the overall *status quo* of the market, including Zain’s position of dominance (and is exacerbated by the absence of Mobile Number Portability).

<u>Conclusion</u>

The comparative consideration and analysis of the additional *Impact Factors* listed in the TRC’s *Competition Safeguards* indicates that Zain appears to enjoy comparative advantages over its immediate competitor, Orange Mobile, in relation to most of the listed *Impact Factors*, namely:

(1) Its size, measured by revenue, number of subscribers, and network capacity as compared to the size of other competitors in the market;

(2) Its control of essential facilities, meaning facilities that competitors rely upon for participating in the relevant market;

(3) Network effects, including the geographic availability of its services in the relevant market;

(4) Its conduct in the market with respect to competitors and customers, including end users;

(7) Access to capital markets/financial resources compared to such access by competitors;

(9) Economies of scale and/or scope, including relationships with affiliated Licensees;

(10) Vertical integration, including relationships with affiliated licensees;

(12) Absence or presence of competitors and potential competition in the market; and

(13) & (14) Barriers to entry and to expansion in the market.

By contrast, the TRC has not identified any material comparative advantage held by Zain with respect to the specific *Impact Factors* regarding:

(5) Its technological advantages or disadvantages with respect to competitors in the marketplace.

(6) Countervailing power, if any, of competitors and customers, including end users.

Given that the assessment of the *Impact Factors* is a holistic exercise, and not one where Zain must be shown to have a material advantage in relation to every conceivable *Impact Factors*, the TRC takes the view that its conclusions regarding dominance are very firmly based on an evaluation of those *Impact Factors*, especially considering the high market shares involved and other elements of competitive advantage enjoyed by Zain and identified by the TRC.

C. **Estimates of the industry and Zain's own price elasticity of demand**

In its defence, Zain presented estimates of the industry and its own price elasticity of demand on the basis of estimated *residual* and *industry demand curves*. The *residual demand curve* is the demand curve faced by an individual firm. It is the total market demand curve less the supply of all the other firms in the market at each price. It is noted that the residual demand curve is bound to be more elastic than the industry demand curve. This is a result stemming from the nature of the residual demand curve where at each price level the quantity supplied equals the total quantity minus the quantity supplied by the other suppliers. Intuitively, as customers have the opportunity to switch to other suppliers of the same product, the individual demand faced by a supplier is always more elastic than industry demand (*i.e*., the *residual dema*nd curve is flatter than the *industry demand curve*).

The *industry* and *residual demand equations* estimated by Zain were:

<u>Industry demand equation</u>

[…]

<u>Zain residual demand equation</u>

[…]

In light of the above calculations and assumptions, the TRC notes as follows with respect to Zain's argument:

(a) "Goodness of fit" and level of significance

When estimating a regression line, it is standard practice to provide a minimum set of standard statistical tests to understand the *goodness of fit*, as well as the reliability of the estimation in terms of *significance levels (i.e.,* how well the estimated regression fits the empirical observations and the extent to which the estimated regression coefficients are considered to be *significant* in statistical terms to justify the inclusion of the relevant exogenous variable into the estimated regression line). The standard measure of the "fit" is the sum of squared residuals (R-squared) while the t-statistic shows the level of significance of each estimated coefficient.

No such evidence has been presented by Zain to permit the validation of the regression line.

(b) Price elasticity of demand

Zain presents the estimated coefficient of the *log (ARPU Average)* and *log (ARPUZain)* variables as an estimate of the industry and Zain's own price elasticities of demand. The methodology used by Zain, however, is clearly incorrect.

The price elasticity of demand is defined as percentage change of output due to a percentage change in price:

(dq/q)/(dp/p) = dlog(subscribers)/dlog(price)

while Zain estimated the coefficient of:

[…]

(c) Specification errors

In a typical estimation of a *demand function*, one would expect to see the prices of substitutes as part of the estimated specification. For example, the *log (subscribers of Zain)* is anticipated to be a function of Zain's own price as well as the prices of its competitors, something which would also allow the estimation of cross-price elasticities of demand. One would be surprised not to see such a specification, and it is suspected that the estimated equation suffers from the *specification error of omitted variables,* which is most likely to be reflected in a poor "appropriateness of fit" measured by the R-squared, for which no data has been provided by Zain.

(d) ARPU is not an exogenous variable

Despite the above significant methodological drawbacks of the regression equations estimated by Zain, those regressions suffer from a further very significant deficiency which invalidates them. A typical assumption that needs to be fulfilled when estimating a regression line is that the variables of the left side of the equation are dependent upon the variables of the right side of the equation, which must be exogenous (independent variables). The key problem with the equations presented by Zain to the TRC is that this major assumption has not been fulfilled.

In particular, the *log (ARPU)* variable is not an exogenous variable, given that ARPU is dependent upon traffic which in turn is dependent upon the number of subscribers. As a result, the estimated regression line suffers from endogeneity and ends up being devoid of meaning, where the number of subscribers is found both on the left and the right hand sides of the estimated equations (something which undermines the estimation process and the results).

Conclusion

The above analysis indicates that the residual and industry demand equations estimated by Zain suffer from major technical, specification and logical deficiencies. As a result, the TRC is obliged to discard them entirely as evidence of the industry and Zain's own price elasticity of demand.