

THE HASHEMITE KINGDOM OF JORDAN



TELECOMMUNICATIONS REGULATORY COMMISSION

**Explanatory Memorandum
to the Regulatory Decision
on the Review of Fixed
Markets**

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CHAPTER I: INTRODUCTION

This Explanatory Memorandum summarises and evaluates the comments of telecommunications operators in Jordan in response to the Fixed Markets Public Consultation Document published by the TRC in July 2019.

Formal responses to the above Public Consultation Document were received from Jordan Telecommunications Company (Orange Fixed), Umniah Mobile Company (Umniah) and Jordan Mobile Telephone Services Company (Zain). Further comments to those respondents' comments were received from Zain and Orange Fixed.

Briefly, in the Public Consultation Document, TRC defined the following markets:

- Retail Fixed Access and Call Origination (FACO)
- Retail Broadband
- Wholesale Local Access
- Wholesale Broadband Access
- Wholesale Fixed Voice Call Termination
- Wholesale Fixed Voice Call Origination
- Wholesale Fixed Transit

All of the above markets were found to be national in scope, covering the whole of Jordan.

The TRC's preliminary findings were that the retail broadband market was effectively competitive and hence not subject to ex ante regulation. Further, barriers to entry had largely been overcome in the market for wholesale fixed voice call origination. No ex ante remedies would be applied in these two markets.

Orange Fixed was found to have significant market power (SMP) on the retail market for FACO as well as on the markets for wholesale local access; wholesale broadband access; and wholesale fixed transit. All operators that can terminate calls on their fixed networks were found to have SMP on the respective wholesale fixed voice call termination market. The TRC proposed ex ante remedies in each market with an SMP operator or operators.

Chapter II of this Explanatory Memorandum provides a summary of the comments received by the above operators and TRC's reasoned response, broken down by reference to the following 16 questions put to consultation:

1. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for retail FACO services?
2. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for retail fixed broadband services?
3. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale local access services?

4. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale broadband access services?
5. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed voice call Termination services?
6. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed voice call origination services?
7. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed transit services?
8. Do you agree with the TRC's preliminary conclusions regarding the wholesale fixed telecommunications markets found to be susceptible to ex ante regulation?
9. Do you agree with the TRC's preliminary conclusions regarding the retail fixed telecommunications markets found to be susceptible to ex ante regulation?
10. Do you agree with the TRC's preliminary conclusions regarding the competition assessment and SMP findings in the wholesale fixed markets?
11. Do you agree with the TRC's preliminary conclusions regarding the competition assessment and SMP findings in the retail fixed markets?
12. Do you agree with the TRC's preliminary proposals for remedies in the wholesale local access market?
13. Do you agree with the TRC's preliminary proposals for remedies in the wholesale broadband access market?
14. Do you agree with the TRC's preliminary proposals for remedies in the wholesale fixed voice call termination market?
15. Do you agree with the TRC's preliminary proposals for remedies in the wholesale transit market?
16. Do you agree with the TRC's preliminary proposals for remedies in the retail fixed access and call origination market?

In the discussion that follows, the TRC has maintained the original sequence of questions set out in the consultation, and, where relevant, provides its assessment of responses to other issues within this framework.

The TRC notes that the respondents have also commented on issues outside the questions posed in the consultation. Annex 1 addresses such points. Annex 2 discusses certain additional, detailed, comments provided by Orange Fixed.

CHAPTER II: SUMMARY OF RESPONDENTS' COMMENTS AND TRC'S RESPONSE

Q1: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for retail fixed access and call origination (FACO) services?

Orange Fixed disagreed with the TRC's preliminary conclusions regarding both the product and geographic market definitions. In summary, Orange Fixed proposed that there should be a single retail market that included narrowband and broadband access; OTT services; mobile access and calls; fixed calls and broadband.

In particular, **Orange Fixed** proposed that:

- Broadband and fixed telephony should be in the same market. In Orange Fixed's view, the number of "internet lines" now exceeds the number of "fixed telephony lines." In addition, Orange Fixed claimed that broadband is an alternative service for fixed telephony, and that OTT services are a suitable substitute for traditional voice telephony. Finally, Orange Fixed claimed that broadband is in the same market as fixed voice services due to supply-side substitution.
- Mobile and fixed voice services should be included in the same market. Orange Fixed noted that the fixed telephony market has been in decline, and that, in its view, the reason for this is the rise in subscriptions in mobile telephony. Orange Fixed provided examples of two jurisdictions where the NRA found that there was a single market for fixed and mobile voice services.

Orange Fixed also disagreed with the TRC's analysis of the geographic market for retail fixed access and call origination. In Orange Fixed's view, it should be possible to define local geographic markets (particularly in Amman) that are already competitive based on the presence of fibre.

Umniah and **Zain** both accepted the TRC's preliminary conclusion regarding the scope of the respective product and geographic market definitions for retail fixed access and call origination services.

In its response to the comments of Orange Fixed, **Zain** disagreed with the view that there are sub-national geographic markets for retail fixed services (as argued by Orange Fixed) and agreed with the TRC that the market should be defined as national in scope. Even in Amman, other operators' infrastructure is not available across the whole city, whereas the Orange Fixed network is ubiquitous. According to Zain, if the TRC were to accept Orange's advice of examining competitive conditions in Amman it would find that the area with alternative networks sufficient to create a competitive market is so small that Orange should inevitably be considered dominant across the whole city, and the same would apply in other governorates. Zain also agreed with the TRC's view that, contrary to the position held by Orange Fixed, the fact that alternative networks are still being rolled out is an obstacle to finding geographic markets. Zain cited the European Commission's Guidelines to support this, as these require "clear and stable boundaries over time" for the definition of smaller than national geographic markets.

Response of the TRC

In the Consultation Document, the TRC proposed a market definition of retail fixed access and call origination that is reasonably forward-looking. In common with other jurisdictions, the TRC considers that, for the purposes of market definition, looking forward for a period of two to three years is appropriate.

The market definition proposed in the Consultation Document differentiates between a physical access connection and the services that run over it. Orange Fixed's comments on "internet lines" and "fixed telephony lines" do not take into account the difference between an access connection and the services it carries.

With regard to Orange Fixed's view that mobile and fixed services should be in the same product market, the TRC has not seen any evidence that challenges its preliminary conclusion set out in the Consultation Document. Further, the TRC notes that Orange Fixed's example of two NRAs finding retail fixed and mobile voice services to be in the same market is not particularly significant. The examples apply only to voice services and not to access services, and hence only to a part of the fixed market that the TRC has noted is in decline. In any case, given that the TRC has decided not to regulate retail fixed voice services, Orange Fixed's point is immaterial.

Finally, with respect to Orange Fixed's proposal that there should be a single retail market including narrowband and broadband access; OTT services; mobile access and calls; fixed calls and broadband, the TRC has found no compelling evidence from Orange Fixed that would justify such a broad market definition, and has found no example of any other NRA finding such a market.

On geographic markets, for the reasons also mentioned by Zain, TRC affirms its position that it would be premature to define sub-national geographic markets for retail access and call origination while networks are still being rolled out, given that the condition of "clear and stable boundaries over time" is not met.

Consequently, the TRC sees no justification for any change to its conclusions regarding the relevant product and geographic market definitions for retail fixed access and call origination services.

Q2: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for retail fixed broadband services?

Orange Fixed reiterated its response to Question 1 and proposed that retail fixed broadband should be part of a retail market that included fixed and mobile access and calls. In addition, Orange Fixed proposed that fixed and mobile broadband should be part of the same market. In Orange Fixed's view, mobile technologies allow broadband download speeds on a par with those via ADSL. Orange Fixed considered that the higher penetration of mobile broadband compared with fixed broadband means that customers consider mobile to be a substitute for fixed. Finally, Orange Fixed noted that, in Austria, the residential retail market for broadband access includes mobile broadband and cable TV ("CATV") connections in addition to copper-based DSL connections.

Orange Fixed also disagreed with the TRC's analysis of the geographic market for retail fixed access and call origination. In Orange Fixed's view, it should be possible to define local geographic markets (particularly in Amman) that are already competitive based on the presence of fibre. Orange Fixed proposed that, regarding prices being higher in Amman than elsewhere, the fact that operators are able to maintain differential prices suggests that these may be different markets. Higher prices in Amman may be due to higher demand, in which case prices may be higher even if competition is stronger.

Umniah and **Zain** both accepted the TRC's preliminary conclusion regarding the scope of the product and geographic market definitions for retail fixed broadband services.¹

In addressing points raised by Orange Fixed in its submission to the TRC, **Zain** disagreed with Orange Fixed's view that fixed and mobile broadband are part of the same market. Zain noted that Orange relied on a qualitative assessment of the characteristics of fixed and mobile broadband, attempting to show that they are equivalent, rather than the use of the hypothetical monopolist test. Zain also disputed Orange's technical arguments about the similarity of the consumer experience of fixed and mobile broadband. Zain provided evidence showing the difference in data consumption and quality of service between fixed and mobile broadband. Finally, Zain noted that, in its most recent review of the broadband market, the Austrian regulator has found the competitive constraint on fixed broadband by mobile broadband to have weakened. Customer satisfaction with mobile broadband had declined due to the trend towards higher data consumption caused by streaming videos.

Response of the TRC

As noted in its response to comments in Question 1, the TRC has seen no evidence in Jordan, nor examples from elsewhere, that would warrant a single retail market encompassing fixed and mobile access, calls, and broadband services.

¹ Zain's comments included in Question 1 above apply to all fixed markets.

The TRC agrees that there is a higher penetration of mobile broadband than there is of fixed broadband in Jordan. However, for the purpose of market definition, this does not mean that the products are substitutes that impose competitive constraints on each other. The TRC set out its methodology in some detail in the Consultation Document, and notes that it considered a range of factors including product characteristics, intended use and pricing in considering the impact on a hypothetical monopolist of a SSNIP in the price of the focal product (in this case retail fixed broadband). The TRC notes that further evidence provided by Zain confirms its view expressed in the Consultation Document that mobile broadband is not in the same retail market as fixed broadband.

On geographic markets, the TRC affirms its position that it would be premature to define sub-national geographic markets for retail access and call origination while networks are still being rolled out, given that the condition of “clear and stable boundaries over time” is not met. Orange Fixed’s suggestion that higher prices in Amman are driven by higher demand would suggest that there is insufficient competition, because only higher demand (lower price elasticity) is translating into higher prices. This effect would not be likely to be seen in a competitive market with sufficient market entry.

Consequently, the respondents’ remarks do not warrant any changes to the TRC’s preliminary conclusions on the relevant product and geographic market definitions for retail fixed broadband services.

Q3: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale local access services?

Orange Fixed objected to the TRC's preliminary conclusions on the product and geographic market definitions for wholesale local access because it believes that there are no competition problems in the retail fixed markets. In Orange Fixed's view, retail markets in Jordan are competitive, and as the retail competition is based on infrastructure competition, they would be competitive absent regulation. Further, Orange Fixed noted that there has been no demand for Local Loop Unbundling (LLU) in Jordan.

Notwithstanding its view that a definition of product and geographic markets for wholesale local access was unnecessary, Orange Fixed proposed that there should be separate geographic markets. Its reasoning was similar to that outlined in its response to the retail fixed markets described above.

Umniah generally accepted the TRC's preliminary conclusion regarding the scope of the respective product market definitions for wholesale local access services covering the entire territory of Jordan. However, Umniah proposed that the markets should not include virtual unbundled local access (VULA) products provided over fibre networks, because such products should not be regulated.

Zain considered that the TRC had confused the market definition with appropriate remedies. In Zain's view, both LLU and VULA are remedies to address dominance and not products in the market.

Response of the TRC

The TRC considers that evidence collected for the market reviews firmly contradicts **Orange Fixed's** contention that all the retail fixed markets in Jordan are competitive, and so there is no need to consider wholesale markets. The TRC therefore maintains that it is necessary to analyse the wholesale markets that address retail fixed markets.

With respect to Orange Fixed's points on geographic markets, the TRC refers to its reasoning set out in response to Questions 1 and 2 above.

The TRC has considered points made by **Umniah** and **Zain** on the definition of the WLA product market. The relevant market is for wholesale local access. It includes products that could be supplied by operators, but might not be supplied but for a regulatory obligation to do so. In this sense, the products discussed are closely linked to regulatory intervention, but there is no confusion between remedies and market definition. The TRC maintains that the WLA market includes products such as LLU and VULA. VULA is included because it is the functional equivalent to unbundled copper loops on a fibre infrastructure. Completely exempting fibre infrastructure from any regulatory obligations (in the form of VULA) would provide an opportunity for firms with SMP offering both products to escape regulatory obligations by retiring copper, which could then have a detrimental impact in the

market place. In any case, regulatory obligations will only be imposed on SMP operators, so would not apply to fibre built by new entrants.

With respect to **Orange Fixed's** point on demand for LLU, the TRC stated in the Consultation Document that delays in the development of an LLU product in Jordan indicate inefficiency or inertia on the part of Orange Fixed, but that it is unlikely that there will be demand for LLU now or in the future, because, as a copper-based access product, the product is coming to the end of its life. The TRC maintains this view.

Consequently, the respondents' remarks do not warrant any changes to the TRC's preliminary conclusions on the relevant product and geographic market definitions for wholesale local access.

Q4: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale broadband access services?

Orange Fixed proposed that, in line with its view of the retail broadband market, a wholesale broadband access market should include mobile broadband and fixed broadband. Orange Fixed reiterated its comments that there should be a separate market in Amman or other areas with a substantial fibre presence.

Umniah generally accepted the TRC's preliminary conclusion regarding the scope of the respective product market definitions for wholesale broadband access services covering the entire territory of Jordan. However, Umniah proposed that the markets should not include bitstream over fibre, because such products should not be regulated.

Zain agreed with the TRC's preliminary conclusion on the product and geographic market definitions for wholesale local access.

Response of the TRC

As noted in the TRC's response to Question 2, the Consultation Document analyses in detail potential substitutability and concludes that mobile broadband is not a substitute for fixed broadband. No further evidence has been provided to challenge that analysis.

For the same reasons as those outlined in response to Umniah's comments on the WLA market, the TRC does not agree that bitstream over fibre should be excluded from the market. A customer of bitstream over copper would be likely to find bitstream over fibre to be a substitute, and so both products fall within the same wholesale bitstream services market.

Consequently, the respondents' remarks do not warrant any changes to the TRC's preliminary conclusions on the relevant product and geographic market definitions for wholesale broadband access services.

Q5: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed voice call termination services?

Orange Fixed, Umniah and Zain all agreed with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed voice call termination services.

Response of the TRC

The TRC maintains its view of the relevant product and geographic market definitions for wholesale fixed voice call termination services set out in the Consultation Document.

Q6: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed voice call origination services?

Orange Fixed considered that VoIP and legacy fixed telephony are substitutes, and so WBA can be used to provide VoIP, and is a substitute for call origination. Consequently, in Orange Fixed's view, there is no need to define a separate market for call origination. Orange Fixed believed that this was in line with the EU approach.

Umniah and **Zain** both agreed with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed voice call origination services.

Response of the TRC

The Consultation Document proposed that managed VoIP is in same market as legacy switched voice, but that unmanaged VoIP is not a substitute for legacy switched voice and so does not fall within the same market. The TRC has seen no evidence that would challenge this finding.

The TRC notes that Orange Fixed misunderstands the reasons for the European Commission's removal of wholesale call origination as a relevant market. The EU markets experienced a decline in carrier pre-select (CPS) in favour of wholesale line rental (WLR), alongside an increase in LLU, and in the use of bitstream for managed VoIP. The significant point is that the EC's decision to remove the market for wholesale call origination was made because there were alternative wholesale inputs. This is not the case in Jordan.

Consequently, the respondents' remarks do not warrant any changes to the TRC's preliminary conclusions on the relevant product and geographic market definitions for wholesale fixed voice call origination services.

Q7: Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed transit services?

Orange Fixed disagreed with the TRC's preliminary conclusions. In Orange Fixed's view, because voice services can be provided using wholesale broadband, there is no need to define separate wholesale markets for voice services.

Umniah and **Zain** both agreed with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for wholesale fixed transit services.

Response of the TRC

The TRC has addressed Orange Fixed's points in its response to Question 6.

Consequently, the respondents' remarks do not warrant any changes to the TRC's preliminary conclusions on the relevant product and geographic market definitions for wholesale fixed transit services

Q8: Do you agree with the TRC's preliminary conclusions regarding the wholesale fixed telecommunications markets found to be susceptible to ex ante regulation?

Orange Fixed agrees that the market for wholesale fixed call termination is susceptible to ex ante regulation, but disagrees that the remaining markets (WLA, WBA, call origination and transit) are susceptible to ex ante regulation. Particular points made by Orange Fixed include:

- Jordan already has developed infrastructure-based competition
- Barriers to entry are not high – there are a number of infrastructure-based operators, plus recent entry
- Markets are effectively competitive – for example, Orange Fixed notes the decline in DSL in favour of fibre and FBWA
- Orange Fixed market share is already below 50%
- Competition is likely to increase further due to fibre commitments, including National Broadband Network (NBN)
- Retail pricing of fixed broadband is below average for the region.

Umniah and **Zain** both agreed with the TRC's preliminary conclusions regarding the susceptibility of wholesale fixed markets to ex ante regulation.

Response of the TRC

The TRC does not agree with Orange Fixed's contention that, with the exception of wholesale fixed voice call termination, there is already infrastructure-based competition in all retail and wholesale markets in Jordan. The TRC notes that evidence collected for the purposes of the market review does not support Orange Fixed's view. The TRC also notes that, based on the latest data provided by all operators, Orange Fixed has more than 50% market share in the defined wholesale fixed markets.

The existence of limited alternative infrastructure is not the same as effective competition. The TRC notes that alternative infrastructure is limited both in terms of geography – it is not available throughout Jordan – and in terms of the range of products available. An on-going absence of, or restrictions on, wholesale inputs limits the extent to which alternative operators can compete. For example, Orange Fixed notes that there is a decline in DSL, and suggests that this is evidence of competition. The TRC has assessed the decline in DSL in the Consultation Document, and notes that this is a consequence of the migration towards fibre. There is currently no wholesale equivalent to DSL available on fibre, so alternative operators cannot purchase bitstream over fibre.

The TRC maintains its view set out in the Consultation Document that the markets for wholesale local access; wholesale broadband access; wholesale fixed voice call termination; wholesale fixed transit; and wholesale fixed voice call origination are susceptible to ex ante regulation.

Q9: Do you agree with the TRC's preliminary conclusions regarding the retail fixed telecommunications markets found to be susceptible to ex ante regulation?

Orange Fixed disagreed with the TRC's preliminary finding that the retail fixed access and call origination market are susceptible to ex ante regulation. In Orange Fixed's view, there are no high barriers to entry, and the retail and wholesale markets are already competitive. Further, Orange Fixed considers that there is competitive pressure from mobile and OTT services.

Orange Fixed agreed with the TRC that the retail fixed broadband market is not susceptible to ex ante regulation, but does not agree with the TRC's reasoning that this is only in the presence of wholesale regulation.

Umniah and **Zain** both agreed with the TRC's preliminary conclusions regarding the susceptibility of wholesale fixed markets to ex ante regulation.

Response of the TRC

The TRC reiterates its finding, based on evidence, that the retail fixed access and call origination market is not competitive, and is not tending towards competition. While there is a decline in fixed narrowband services, many customers have migrated to fibre, and access over a fibre network is in the same market as access over copper. Structurally, the retail fixed access and call origination market remains characterised by high barriers to entry; it is not prospectively competitive; and competition law would not be sufficient to address problems in this market. For these reasons, the retail fixed access and call origination market remains susceptible to ex ante regulation.

The TRC maintains its view set out in the Consultation Document that the market for retail fixed access and call origination is susceptible to ex ante regulation.

Q10: Do you agree with the TRC's preliminary conclusions regarding the competition assessment and SMP findings in the wholesale fixed markets?

Orange Fixed agreed with the TRC that all operators that can terminate fixed calls have SMP for the termination of calls on their networks. Orange Fixed also agreed with the TRC that no operator has SMP in the market for wholesale fixed voice call origination.

Orange Fixed disagreed that it has SMP in the markets for wholesale local access; wholesale broadband access; and wholesale transit.

In the market for wholesale local access, Orange Fixed claimed that:

- The fixed markets are characterised by effective, infrastructure-based competition, which demonstrates that there are no high barriers to entry or expansion;
- *All* providers compete with own infrastructure and are vertically integrated, not just Orange Fixed. Therefore, vertical integration does not give Orange Fixed a competitive advantage;
- Orange Fixed is not the only operator with a ubiquitous network. FBWA providers also have universal coverage;
- Any advantage in access to poles has been eliminated in light of Zain agreements with municipalities to erect its poles, as well as the new Uminah/JEPCO licence that will enable Uminah to roll out the FTTH over electricity poles which covers 1.4 million homes and businesses

In the market for wholesale broadband access, Orange Fixed reiterated its view that the market is competitive and noted that FBWA providers also have ubiquitous coverage.

In the market for wholesale transit services, Orange Fixed reiterated its view of competitive retail and wholesale markets.

Uminah and **Zain** both agreed with the TRC's preliminary conclusions regarding the competition assessment and SMP findings in the wholesale fixed markets. Zain provided additional supporting evidence of its experience of barriers to entry in the wholesale fixed markets. Zain's comments on Question 10 applied also to Question 11 below.

Uminah and **Zain** both noted that, as confidential market share data was redacted in the public version of the Consultation Document, full comment was not possible. This point applies also to Question 11 below.

In its reply to Orange Fixed's response to the Consultation Document, Zain argued that access to the electricity network is not a perfect substitute for telecommunications infrastructure, and that such access cannot be used to build fibre networks that can compete with Orange.

Response of the TRC

The TRC repeats that evidence shows that the wholesale fixed markets deemed susceptible to ex ante regulation are not competitive, and that while there is some presence of alternative infrastructure, this is limited. The TRC notes that the competition assessment considered a range of factors that may indicate market power, and that no single factor was determinative.

The TRC agrees that FBWA does have ubiquitous coverage. This factor by itself would not mitigate Orange Fixed's market power. Further, FBWA has an uncertain future.

With respect to Orange Fixed's comments on new initiatives introduced by Umniah and Zain, in the TRC's view these are interesting potential developments in the market, but they are at a very early stage of implementation.

The TRC maintains its view as set out in the Consultation Document that Orange Fixed is dominant in the markets for wholesale local access; wholesale broadband access; and wholesale transit. All operators that can terminate voice calls on their fixed networks have SMP for the termination of voice calls on their network.

Q11: Do you agree with the TRC's preliminary conclusions regarding the competition assessment and SMP findings in the retail fixed markets?

Orange Fixed disagreed that it has SMP in the FACO market and considered that the market for fixed telephony is effectively competitive. In Orange Fixed's view, there is competitive pressure from broadband at the retail and wholesale level, as well as from mobile.

Umniah proposed that the TRC should consider the impact of the delay of the provision of LLU on competition for the provision of retail fixed market services.

Response of the TRC

The TRC has set out in its response to previous questions the basis for its rebuttal of Orange Fixed's proposal that the retail market for fixed access and call origination is competitive. With respect to Orange Fixed's points specifically on the telephony part of the fixed access and calls market, the TRC notes that it recognised in the Consultation Document the decline in legacy voice calls, and the constraint posed by OTT services and mobile on legacy voice calls. Indeed, this recognition contributed to the TRC's preliminary finding that the market for wholesale fixed voice call origination was no longer susceptible to ex ante regulation. Further, the TRC does not propose to impose any remedies on retail or wholesale legacy fixed voice calls.

The TRC notes that, while both Umniah and Zain indicated that they could not comment fully on the competition assessment due to the redaction of confidential information, neither operator disagreed with the TRC's preliminary findings.

The TRC maintains its view as set out in the Consultation Document that Orange Fixed is dominant in the market for retail fixed access and call origination.

Q12: Do you agree with the TRC's preliminary proposals for remedies in the wholesale local access market?

Orange Fixed disagreed with the designation of Orange Fixed as the SMP operator and considered any regulatory obligations unnecessary and disproportionate.

Notwithstanding, Orange Fixed made a number of specific points on remedies, including the following:

- Orange Fixed welcomed the decision not to impose a price cap on fibre, but it considered that no regulation at all should be imposed on fibre.
- Orange Fixed objected to the obligation to provide access to civil engineering infrastructure (CEI) such as ducts, poles, and dark fibre. In Orange Fixed's view, there is no legal basis for such an obligation imposed solely on Orange Fixed. Further, access to infrastructure of all operators is currently under consultation (Infrastructure Sharing and National Roaming).
- Orange Fixed disagreed with the obligation to provide an annual Statement of Compliance with the non-discrimination obligation. In Orange Fixed's view, this obligation places an unnecessary administrative burden on Orange Fixed, and will incur considerable costs to provide the required information. Orange Fixed believed that the remedy is unnecessary as the TRC already has all the necessary powers.
- Orange Fixed disagreed with the obligation not to withdraw access to any wholesale product or associated facility without the prior approval of TRC, including the withdrawal of a product or service in a particular geographic area. In Orange Fixed's view, this obligation would harm Orange Fixed's ability to modernise its network by replacing obsolete technology with a modern one. Orange Fixed proposed that the TRC should be required to approve proposed changes within a reasonable period of time.
- Orange Fixed objected to the TRC's proposal that the launch of a new wholesale product should be notified 6 months in advance, changes to products 3 months in advance, with an additional 1 months' notice to TRC.

Umniah emphasised the need for enforcement of remedies. Umniah suggested that the TRC should ensure that the Reference Offer to be published by Orange Fixed should be transparent and technically and commercially reasonable. The Reference Offer must be sufficiently unbundled so as to ensure that new entrants are not charged for facilities they do not require and the offer must provide a description of the relevant offerings in detail, including the associated terms, conditions and prices. Umniah noted that, as a vertically integrated, single economic entity, Orange Fixed would be able to affect competitive conditions in a number of related retail markets that depend on the existence of a physical access connection to an end user.

Zain also emphasised the need for enforcement of remedies, and noted the unreasonable delays that Orange Fixed imposed with regard to LLU, the weakness of the current set of regulations and Orange Fixed's lack of compliance.

Zain expressed a view that the TRC should consider the more radical alternative of enforcing the functional, legal or even structural separation of Orange, since in Zain's opinion TRC's legal powers to fine Orange for breach of SMP obligations are inadequate.

Zain agreed with the TRC's approach to access to civil engineering infrastructure (CEI). Zain noted that the civil engineering cost of building a new network accounts for approximately 70% – 80% of total costs, so if Orange Fixed was allowed to reuse this asset for itself it has a significant cost advantage over its rivals.

Zain agreed that the transparency obligation should include an obligation on Orange Fixed to provide the TRC with Key Performance Indicators (KPI) to demonstrate that Orange Fixed is compliant with its non-discrimination and access obligations. However, Zain proposed that this information should not be just for the use of the TRC, but should be public.

Zain did not agree with the TRC's approach to financial and accounting information. In Zain's view, Orange Fixed should be required to publish a complete set of separated accounts for its fixed business to help the TRC ensure that it is complying with its various obligations in fixed and dedicated access markets as well as make the information public on Orange Fixed's website.

Zain agreed in principle to the use of a margin squeeze or economic replicability test (ERT) instead of a direct cost orientation obligation for FTTx where there is an unknown degree of risk. However, Zain noted that the structure, implementation and enforcement of the ERT would be critical.

Response of the TRC

The TRC notes that, as respondents provided the same comments in response to Q12 and Q13, the TRC's response should also be read as applying to the wholesale broadband access and the wholesale local access markets.

The TRC wishes to clarify the application of the access obligation as set out in the Consultation Document. Access is to be provided to "any other operator" on reasonable request. Where services are provided by Orange Fixed to an Orange affiliate, the affiliate is not treated as "any other operator" but rather as self-supply from Orange Fixed to the Orange affiliate. Other obligations that support the access obligation (such as transparency in the form of Reference Offers and KPIs, and price controls) are not required in this circumstance.

The TRC does not agree with Orange Fixed's view that all fibre should be unregulated. The TRC is cognisant of the need to encourage investment in fibre infrastructure by Orange Fixed and by alternative operators. However, the TRC has defined a market for wholesale local access that includes access provided over copper and fibre, and has found Orange Fixed to be dominant in that market. This means that Orange Fixed has the ability and incentive to behave in an anti-competitive manner in the market for wholesale local access.

The TRC has taken a proportionate approach to remedies in the wholesale local access market by deciding to exclude FTTx services from the cost orientation obligation at this time. The TRC notes that this approach is similar to that adopted in other jurisdictions, and notes that in other jurisdictions (notably in the EU) a forbearance from imposing cost orientation on FTTx is contingent on compliance with other conditions, such as technical replicability, measures to support the non-discrimination obligation (including KPIs), and the specification of a margin squeeze obligation. The TRC will therefore retain the right to monitor prices, and to take action in the event of excessive wholesale pricing without having to conduct another market review.

The TRC does not share Orange Fixed's view that there is no legal basis for the imposition of an obligation of access to Orange Fixed's CEI. This obligation is an indispensable element of the broader ex ante obligation to provide access upon reasonable request in the wholesale local access market, and is thus legally justified, but also delimited, by the purpose of this obligation (i.e., it does not consist of an obligation to provide access to any and all CEI of Orange Fixed, but only to the CEI associated with wholesale local access). The obligation is therefore proportionate and required to allow the effective implementation of the obligation to provide access upon reasonable request. It is also a fairly standard type of obligation in international best practice in connection with ex ante remedies in the wholesale fixed local access market.

The TRC has considered Orange Fixed's point that access to infrastructure of all operators is currently under consultation, and so it is not necessary to impose obligations on access to CEI in the market review. In the TRC's view, the measures proposed in the infrastructure sharing consultation² are an important element in encouraging investment by all operators, and a faster and more efficient roll-out of fibre infrastructure. The TRC notes also that the measures currently under consultation for all operators are similar to the ex ante measures proposed for Orange Fixed in the Consultation Document. However, it is too soon to determine how infrastructure sharing will impact on the market. For this reason, the TRC has decided to maintain its approach set out in the Consultation Document, that as the SMP operator in the wholesale local access market, Orange Fixed will be obliged to offer access to CEI. The TRC notes that there are examples from other jurisdictions of parallel obligations for infrastructure sharing and ex ante access. The TRC will keep the evolution of infrastructure sharing obligations under review, with the aim of moving to a single symmetric set of obligations when appropriate.

In the Consultation Document, the TRC considered whether it was appropriate to impose a cost-based pricing obligation on all products in the WLA market. While it accepted the principle that wholesale prices should be oriented towards the cost of supply, it recognised that, in the case of fibre FTTx products, a cost orientation obligation was not necessarily appropriate at this time.

The TRC considers that a similarly flexible approach should be taken to the pricing of CEI. While, in principle, the TRC's view is that CEI prices should be cost-based, the TRC recognises that the development of cost-based pricing may lead to

² See the TRC's "Instructions for Telecommunications Network Facilities and Infrastructure sharing and National Roaming".

unacceptable delays in implementation. The TRC has therefore decided that prices for CEI products and services should be monitored and approved by the TRC. If a top down TSLRIC model is not developed and approved in a timely manner, or if Orange Fixed fails to comply with its cost accounting obligations, the TRC may assess prices by some other means, for example with reference to market conditions and suitable benchmarks as appropriate.

The TRC has considered Orange Fixed's claim that the Statement of Compliance is unnecessary and costly. In the TRC's view, the Statement of Compliance is not an additional burden on Orange Fixed. It is a measure that is designed to allow Orange Fixed to demonstrate its compliance with its non-discrimination obligations, and if Orange Fixed is compliant, there should be no additional burden. The TRC notes that both Umniah and Zain emphasised the need for stronger enforcement of remedies, and the requirement for a Statement of Compliance is one element addressing this need.

With reference to Orange Fixed's concerns regarding the obligation not to withdraw access to any product or associated facility without the prior approval of the TRC, the TRC believes that this obligation is necessary to prevent Orange Fixed from unilaterally withdrawing services to the detriment of customers. The TRC notes that its regulatory measures are designed to encourage migration to new technologies, and it would have no interest in artificially maintaining obsolete technology. Orange Fixed's concerns are therefore unfounded.

The TRC has considered Orange Fixed's points on the notice period associated with the introduction of new products, and changes to existing products. The TRC considers that the aim of this measure is to balance the need for all operators to have some certainty with the process and timing associated with introducing and changing products against the need to ensure that products are brought to the market as quickly and efficiently as possible.

Taking respondents' comments into account, the TRC has decided that new wholesale products in this market potentially require a reasonable length of notice to alternative operators because they are likely to entail changes in the operators' networks. Therefore, Orange Fixed should notify operators at least 4 months prior to the launch of a new wholesale product. The notification should include technical specifications and proposed prices. Orange Fixed should provide an additional 1 month's notice to the TRC (i.e. the TRC should be notified 5 months prior to the launch of a new wholesale product). This additional month is to allow the TRC to verify that Orange's Fixed proposals comply with their regulatory requirements. As there is likely to be variance in the level of detail associated with different products, the TRC should be able to vary the time required for its initial assessment, and the time required for Orange Fixed to notify other operators.

The TRC agrees that there is merit in reducing the notice period set out in the Consultation Document required for changes to existing products. The TRC has decided that, for changes to existing products, including changes solely related to price, operators should be informed 1 month prior to changes coming into effect, and that an additional 1 month's notice should be provided to the TRC (i.e., the TRC would be notified 2 months before changes come into effect). The TRC should be

able to vary the time required for its initial assessment, and the time required for Orange Fixed to notify other operators.

The TRC notes Zain's comments suggesting that the TRC should consider some form of separation of Orange. Regulatory separation is generally held to be a remedy of last resort. The TRC's assessment of its previous market reviews did not indicate that remedies had been imposed, implemented and failed. Rather, the assessment indicated that the remedies imposed in the previous market review should be strengthened, and in particular, additional measures should be considered to improve implementation. In the TRC's view, it would therefore be premature to consider a remedy of last resort.

The TRC does not agree with Zain that KPIs should be published at this time. In the TRC's view, the priority is that a set of KPIs are defined that will allow visibility of Orange Fixed's compliance with its access and non-discrimination obligations. It may be that, at some point, the TRC will consider a non-confidential version of KPIs that could be made public.

The TRC has considered Zain's comments on its approach to financial and accounting information. In the TRC's view, the objective of requiring Orange Fixed to produce financial and accounting information is to ensure Orange Fixed's compliance with regulatory obligations, and this is best served by the TRC specifying a focused set of information to be provided.

In conclusion, the TRC sees no justification for any changes to its assessment of appropriate remedies in the market for wholesale local access, with the exception of changes to the notification period in the transparency obligation, as described above.

Q13: Do you agree with the TRC's preliminary proposals for remedies in the wholesale broadband access market?

Orange Fixed stated that it disagreed with remedies proposed in the wholesale broadband access market, for the same reasons provided in response to Q12 on wholesale local access. In addition, Orange Fixed opposed any regulation of fibre, and in particular price cap regulation of WBA on fibre. In Orange Fixed's view, if any regulation on fibre is imposed, it should apply equally to all operators.

Umniah repeated its comments made in response to Q12 above and emphasised the need for enforcement of remedies.

Zain noted that its comments on transparency and accounting separation made in response to Q12 above apply also to the wholesale broadband access market.

Response of the TRC

As noted above, the TRC's response to Q12 applies also to Q13.

In the Consultation Document, the TRC proposed that the current obligation to maintain appropriate cost-based prices should be retained and should apply to all products and associated facilities in the WBA market. A cost-based pricing approach aims to mimic the prices that would pertain in a competitive market, while allowing the SMP operator to recover reasonably incurred costs (including a return on capital employed). The appropriate cost standard should continue to be top down TSLRIC.

The TRC has further considered appropriate price control measures in the wholesale broadband access market. The TRC maintains that the implementation of margin squeeze obligations in the wholesale broadband access market is an appropriate price control.

The TRC sees no justification for any changes to its assessment of appropriate remedies in the market for wholesale broadband access, with the exception of changes to the notification period in the transparency obligation, as described above.

Q14: Do you agree with the TRC's preliminary proposals for remedies in the wholesale fixed voice call termination market?

Orange Fixed agrees with the remedies proposed by the TRC, but argued that all obligations should apply to all SMP operators.

Umniah proposed that the TRC should set the fixed termination rate at the cost calculated by a LRIC model to avoid excessive termination charges paid by the mobile operator to Orange Fixed. Umniah questioned why the termination rate for the fixed network in 2021 of 3 Fills/ minute is higher than the mobile termination rate of 2 Fills/ Minute.

Zain agreed that accounting separation would be disproportionate if applied to all operators, but it was still relevant for Orange as it has SMP in all fixed markets.

Response of the TRC

The TRC maintains that it is appropriate and proportionate that, while some remedies are imposed on all SMP operators in the market for wholesale fixed voice call termination, additional remedies are imposed only on Orange Fixed. Accordingly, the TRC concludes that imposing a cost accounting obligation on all SMP operators in this market that would be as comprehensive as the one imposed on Orange Fixed would be a disproportionate regulatory burden. Instead, the TRC considers it more appropriate to rely on a presumption that the outcome of Orange Fixed's cost accounting model is also applicable to the regulated rates for fixed call termination charged by other SMP operators in this market, unless these can justify an exception.

The TRC has decided to amend an element of the transparency obligation in the market for wholesale fixed voice call termination set out in the Consultation Document.

The TRC believes that there is merit in reducing the notice period set out in the Consultation Document required for changes to existing products. The TRC has decided that, for changes to existing products, including changes solely related to price, operators should be informed 1 month prior to changes coming into effect, and that an additional 1 month's notice should be provided to the TRC (i.e., the TRC would be notified 2 months before changes come into effect). The TRC should be able to vary the time required for its initial assessment, and the time required for operators to notify other operators.

The TRC has been developing cost modelled approaches to fixed and mobile termination rates. The TRC notes that the discrepancy between the fixed and mobile modelled rates will be reviewed in the ongoing evolution of the models.

The TRC sees no justification for any changes to its assessment of appropriate remedies in the market for wholesale fixed voice call termination, with the exception of (i) the above clarification of the cost accounting obligations of Orange Fixed and those of other SMP operators, and (ii) changes to the notification period in the transparency obligation, as described above.

Q15: Do you agree with the TRC's preliminary proposals for remedies in the wholesale transit market?

Orange Fixed referred to its response to Q10. In addition, Orange Fixed expressed a view that regulating traditional voice telephony services would slow the development of VoIP.

Umniah generally accepted the TRC's preliminary proposals for remedies in the wholesale transit market, and emphasised the need for Orange Fixed to comply with its obligations.

Zain noted that its comments on transparency and accounting separation made in response to Q12 above apply also to the wholesale transit market.

Response of the TRC

The TRC has decided to amend an element of the transparency obligation in the market for wholesale transit set out in the Consultation Document.

The TRC believes that there is merit in reducing the notice period set out in the Consultation Document required for changes to existing products. The TRC has decided that, for changes to existing products, including changes solely related to price, operators should be informed 1 month prior to changes coming into effect, and that an additional 1 month's notice should be provided to the TRC (i.e., the TRC would be notified 2 months before changes come into effect). The TRC should be able to vary the time required for its initial assessment, and the time required for operators to notify other operators.

The TRC wishes to clarify that the price control obligation on Orange Fixed should be that Orange Fixed must follow the existing TSLRIC hybrid model developed by the TRC, and apply the regulated rates for transit services specified in the TRC's 2017 Regulatory Decision on Charges for Fixed Interconnection, subject to any other TRC Decision that amends or supersedes the above hybrid model or the Regulatory Decision in the future.

The TRC sees no justification for any changes to its assessment of appropriate remedies in the market for wholesale transit with the exception of changes to the notification period in the transparency obligation, as described above.

Q16: Do you agree with the TRC's preliminary proposals for remedies in the retail fixed access and call origination market?

Orange Fixed disagreed with the necessity to impose any regulation, as it considers it has no SMP in this market.

Notwithstanding, Orange Fixed raised specific issues, including the following:

- Regulation of out-of-bundle international calls. In Orange Fixed's view, the measures set out in the Consultation Document would introduce new regulation for international calls
- Obligation to submit bundled offers 4 weeks in advance. Orange Fixed believed this obligation deprived it of flexibility and decreased its competitiveness. In addition, Orange Fixed sought clarity on what bundles and services would be included. In Orange Fixed's view, all operators can offer bundles, and the retail market is already a market for bundles including fixed access, internet and fixed telephony.
- Price caps on out-of-bundle calls. Orange Fixed believed that any potential harm from increased prices of out-of-bundle calls is minimal

Umniah disagreed with the TRC's proposal to withdraw retail price caps and to maintain a watch in prices so that it can intervene if required. Umniah suggested that such a remedy can be withdrawn when the TRC specifies the information it requires to assess bundles, and the test that will be applied. Umniah noted that the TRC has the right to examine any bundle after launch, using its competition powers.

Zain noted that its comments on transparency and accounting separation in response to Q12 apply also to the retail fixed access and call origination market. Zain did not object to the TRC's proposal to withdraw retail price caps except for a safeguard cap, and agreed that tighter regulation of wholesale markets should help to constrain any exploitative price increases.

Response of the TRC

The TRC has reviewed its proposed remedies set out in the Consultation Document in light of respondents' comments.

The TRC maintains that Orange Fixed should continue to be subject to an obligation not to discriminate unduly between its retail customers, and should offer equivalent services, including terms, conditions and prices, in equivalent circumstances. The specific obligations regarding non-discrimination in terms of provisioning times and service management should be maintained. However, the TRC has decided to remove the obligation that Orange Fixed should provide a Statement of Compliance with its regulatory obligations in the retail fixed access and call origination market. The TRC considers that the need for Statements of Compliance imposed in the wholesale markets should be sufficient.

The TRC maintains that Orange Fixed should publish its terms and conditions, including prices, for retail fixed access and retail fixed calls services on its website.

However, the TRC has decided to remove the obligation that Orange Fixed should offer SLAs in this market. It is not proportionate to require the development and adoption of a new SLA in this market at this time.

For the avoidance of doubt, the TRC notes that bundles may contain products that fall within regulated markets (such as FACO), and products that fall within markets that are not subject to ex ante regulation (such as retail broadband and retail mobile). With respect to Orange Fixed's points on the treatment of bundles, the TRC proposed in the Consultation Document that, as part of the implementation of remedies, the TRC will further specify, in a separate document, the information it requires to assess bundles, and the test that will be applied. The TRC has decided to maintain this approach. The clarity requested by Orange Fixed will therefore be provided by the TRC as part of the implementation.

The TRC has reviewed the notification and approvals process associated with assessing bundles. The TRC has decided that Orange Fixed should notify the TRC at least four weeks before a bundle is launched, and that this time may be varied by the TRC. However, the TRC may decide that, once it has approved a bundle, that bundle can be introduced to the market immediately. This will shorten the period between bundle notification and bundle launch.

The TRC considers that obligations relating to accounting separation and cost accounting remain necessary in the FACO market. These supporting obligations provide the basis for the TRC to identify and request the information required for the conduct of the assessment of bundles.

The TRC has considered Umniah's objection to the withdrawal of price caps. For the most part, the TRC maintains that the strengthening of regulation in the wholesale markets will be sufficient to address competition problems relating to pricing in the retail fixed access and call origination market. However, the TRC maintains that a safeguard cap will remain on out-of-bundle calls, so that the price is not increased in real terms. The TRC clarifies that this safeguard cap will not apply to international calls.

The TRC sees no justification for any changes to its assessment of appropriate remedies in the retail FACO market, with the following exceptions:

- removal of the obligation that Orange Fixed should provide a Statement of Compliance;
- removal of the obligation that Orange Fixed should offer SLAs in the FACO market;
- addition of the possibility for the TRC to vary the four week notice period for bundles.

ANNEX 1: SPECIFIC ISSUES

Respondents raised a number of issues outside the structure of the consultation questions. Insofar as these comments have not been addressed under one of the consultation questions, they are summarised below, and followed by the TRC's response.

Orange Fixed suggested the following:

- The TRC did not recognise the specific features and trends in the electronic communications markets in Jordan;
- The TRC should have considered a much longer time horizon for its prospective analysis;
- Orange Fixed provided a list of information that was, in its view, incorrect or incomplete in the Public Consultation document;
- It expressed a view that the TRC's market definition methodology was inadequate, and proposed that the market definition should be based on consumer preferences underpinned by robust evidence;
- Orange Fixed argued that the TRC should have carried out an impact assessment;
- In Orange Fixed's view, the TRC's approach was high level, lacked detail and generally was not substantiated with evidence.

Umniah raised several issues. Those that have not been addressed under the relevant consultation question include:

- Use of out of date data in a rapidly changing market: Umniah noted that the data used in the market review does not reflect current or prospective market shares; and
- Lack of assessment of the impact of Orange Fixed failing to implement the remedies imposed in the previous market review conducted in 2010 on the take up of broadband internet access or increased market share of smaller operators.

Zain proposed that:

- The relatively small size of the fixed telecoms market in Jordan, and the knock-on effect on the economy, is due to Orange's dominance and the lack of pro-competition regulation in the past; and
- It can provide examples of Orange's exclusionary behaviour, and is concerned that unless Orange is regulated effectively, its exclusionary behaviour will affect vital new services in the future.

Orange Fixed commented on Zain's response to the Consultation Document, claiming that:

- Jordan's low penetration of fixed telecoms is largely due to its geography;

- There is no evidence that the entry of new access providers would increase penetration; and
- It can rebut Zain's examples of exclusionary behaviour

Response of the TRC

- *TRC did not recognise the specific features and trends in the electronic communications markets in Jordan*

The TRC disputes Orange Fixed's claim that the market review did not recognise the specific features and trends in the electronic communications markets in Jordan. First of all, the market review collected data from all operators in Jordan, and while the analysis drew on experiences in other jurisdictions, the conclusions were specific to the situation of the market in Jordan.

It is true that there are differences between the evolution of fixed networks in many European countries and in Jordan, and there is certainly a lower level of penetration of fixed services in Jordan compared with most European jurisdictions. Orange Fixed has claimed that this is because of features specific to Jordan, while Zain has claimed that Orange's behaviour in the market has contributed to the relatively low penetration of fixed telecoms.

In the TRC's view, it is not possible to make a single causal link. However, the development of legacy monopoly infrastructure is similar in Jordan and in other jurisdictions. The competition problems in the fixed market in Jordan are similar to those in fixed markets in other jurisdictions, and the competition problems in the mobile markets in Jordan are similar to those mobile markets in other jurisdictions. While the TRC does not intend to discuss in detail on-going legal disputes between operators, the TRC has been repeatedly informed (also in the framework of this public consultation) of alleged refusals, by the dominant operator, to supply access or develop wholesale products; and repeated instances of its apparent non-compliance with various regulatory obligations. Similar disputes arise frequently in other jurisdictions and are invariably associated with abuses of a dominant position.

In response to Orange Fixed's contention that the analysis did not recognise that mobile communications are more important than fixed communications, the Consultation Document considered whether mobile access and call origination was a good substitute for fixed access and call origination, and found (on a preliminary basis) that it was not. This finding was based on a comparison of, amongst other things, functional characteristics, pricing, and use. This finding is in line with the findings of almost all other NRAs. The Consultation Document also considered whether mobile broadband was a good substitute for fixed broadband, and found (on a preliminary basis) that it was not. The key reasons were differences in functional characteristics and pricing. Again, this finding is in line with the findings of almost all other NRAs.

Although mobile services were not found to be a substitute for fixed services in the retail market definitions, the Consultation Document further considered whether mobile acts as an indirect competitive constraint on wholesale fixed services. The Consultation Document recognised that mobile communications are more prevalent

than fixed communications. However, this does not negate the finding that there are competition problems in the fixed retail and wholesale markets, and that these are structural problems requiring an ex ante approach.

- *The TRC should have considered a much longer time horizon for its prospective analysis*

In Orange Fixed's view, the time that has elapsed since the last market review means that regulation becomes obsolete. Given the length of time, Orange Fixed proposed that a significantly longer time horizon should have been considered in this market review. In particular, Orange Fixed expressed a view that mobile is becoming more comparable to fixed; Orange's market share is decreasing; and the decline of fixed telephony was not taken into account.

The TRC notes that remedies imposed in the last market review were not fully implemented in a timely manner by dominant operators, and the time lapsed is at least partly explained by the time required for SMP operators to meet their obligations. In the TRC's view, it would be very unreliable to attempt to conduct a prospective review that would last for the next 8-9 years, and the TRC is not aware of any examples where such a review period has been contemplated. The dominant operators have a big role in the success of market reviews by implementing the remedies without delay. Overall, the time horizon for market reviews is determined by the rate of change in the market, and by the effective implementation of remedies already imposed.

With regard to the length of time between market reviews, "international best practice" is not considered to be 2-3 years. For example, the EU has relaxed this recommendation, and in fact, it was not strictly or consistently complied with in any case.

With reference to Orange Fixed's claim that the regulation of traditional fixed telephony will slow down technological development, the opposite is in fact the case. The TRC proposal to reduce and minimise regulation of legacy services such as fixed voice telephony is designed to encourage migration to modern services. The remaining (reduced) regulation on legacy services is required to protect the remaining installed customer base from the dominant operator's ability to, for example, unreasonably increase prices.

- *Orange Fixed provided a list of information that was, in its view, incorrect or incomplete in the Public Consultation document.*

The TRC reviewed and analysed in detail every point raised by Orange Fixed (see Annex 2). The TRC notes that it relied on data provided by operators and that, in some cases, operators (including Orange Fixed) did not provide complete data in a timely manner. Where possible, the TRC has cross-referenced data provided for the market review with data provided to the TRC for other purposes. The TRC has updated information in this Explanatory Memorandum where Orange Fixed made a valid and substantiated point. The TRC notes that items on the list provided by Orange Fixed did not have a material impact on the TRC's analysis or conclusions in the Consultation Document.

- *Orange Fixed expressed a view that the TRC's market definition methodology was inadequate, and proposed that the market definition should be based on consumer preferences underpinned by robust evidence.*

Orange Fixed does not appear to have fully understood the methodology underpinning market definition. The TRC (in common with other NRAs) based its definition of markets on a hypothetical monopolist test (HMT). The HMT considers the effect of a small but significant non-transitory increase in prices (SSNIP) in a focal product. As the name suggests, the situation under examination is hypothetical – it is not the behaviour of an actual monopolist that is being evaluated. The test is considering what a sufficient number of customers would be likely to do in response to a SSNIP that would render the price increase unprofitable. Sometimes, it is possible to look at what customers have actually done in response to a price increase, and here, for example, general trends in the market may be considered. Examples like this could be used to substantiate a view of the HMT – but would need to be caveated as the actual behaviour would not relate to a hypothetical monopolist but rather to an actual operator. The HMT is, by definition, a theoretical exercise.

The TRC notes that some NRAs may use consumer surveys in order to explore consumer preferences. By using surveys, NRAs are trying to explore what consumers may choose to do in a hypothetical situation – they are asking the consumer to imagine an action that they might take in a future situation. Experience shows that a much higher proportion of consumers claim that they would switch product in response to a SSNIP than ever actually switch product in response to a price increase.

The TRC notes also that survey findings are rarely decisive. Where NRAs commission surveys, their interpretation of the findings is usually heavily caveated. The survey findings are treated as just one further input to the overall analysis, and not as the definitive input. Reviewing the experience of international NRAs led the TRC to question how valuable and proportionate a consumer survey would be.

- *Orange Fixed believes that the TRC should have carried out an impact assessment.*
- *Umniah noted the lack of assessment of the impact of Orange Fixed failing to implement the remedies imposed in the previous market review conducted in 2010 on the take up of broadband internet access or increased market share of smaller operators.*

The TRC has been conducting an impact assessment throughout the course of its work, and this market review is a result of this assessment. At an early stage of the Project, the TRC identified the impact of previous regulatory measures, and at each stage of the Project it has considered options and alternatives. At all times, the TRC has been concerned to ensure that any proposed remedies are appropriate and proportionate, and that therefore the regulatory costs do not outweigh the benefits. The consideration of the impact of proposed measures has therefore been embedded in the conduct of the whole analysis.

- *In Orange Fixed's view, the TRC's approach is high level, lacks detail and generally is not substantiated with evidence.*

- *Umniah claimed there was use of out of date data in a rapidly changing market. Umniah noted that the data used in the market review does not reflect current or prospective market shares.*

The consultation drew on a detailed data gathering exercise. Operators were required to complete data requests covering quantitative and qualitative data, and the analysis of this data forms the basis for the evidence used in the Consultation. In addition, data collected by TRC for other purposes was used to confirm and validate data provided by operators. The TRC updated and refreshed its data collection throughout the market review. The project team met with operators (in some cases, several times) during the process, and took account of all discussions. It is recognised that much of the data analysis had to be redacted in the public version. This is because the information is commercially sensitive.

ANNEX 2: COMMENTS FROM ORANGE FIXED

Orange Fixed has provided additional detailed comments on alleged errors and omissions in specific paragraphs of the TRC consultation, which are replicated below. TRC provides its response next to each comment.

Page	Section	Comment	TRC comment
5	1	Mada has not been referenced even though its FBWA subscriber base has grown.	This is an executive summary where we provide a high level overview, including only the more relevant market characteristics. Mada details are captured when we address the topic in detail, in Section 3.4 (Page 24).
7	1	We would note that SMS is not relevant in the fixed market.	It is a typo. The SMS market is excluded from fixed market. The typo does not affect the conclusions of the analysis
7	1	<p>Regarding the obligation of not bundling unreasonably, the regulation is based on an incorrect presumption that competitors cannot compete on bundles. Competitors do in fact compete on bundles. Zain is the incumbent and largest mobile operator, owning its own backbone. It has the following subsidiaries:</p> <p>1-Mada, which offers fixed broadband wireless access (FBWA), previously using WiMAX technology, since 2017 Fixed LTE.</p> <p>2-Zain data, providing fixed services. (broadband and DC) based on its own microwave infrastructure and wholesale broadband access purchased from Mada.</p> <p>3-Bella, an international gateway access services provider.</p> <p>Umniah is the third mobile operator. It is owned by Batelco, which also provides fixed voice telephony services VoIP based on its own fibre infrastructure and wholesale purchases from Orange Fixed. It owns an FBWA network (first WiMAX, now fixed LTE) and has an FttH network.</p>	This is not a data point but a disagreement about the conclusions. The requirement not to bundle unreasonably is not based on the presumption that others cannot bundle, but rather that the ability of other parties to match different bundled offers offered by the SMP operator is limited.
10	2.2	In para 2.2, part of the sentence is missing: “The legal and regulatory context for undertaking market reviews and publishing and implementing Decisions is set out in full in”	The missing words are “Annex 2”
11	2.5	As per TRC regulations, 14 days is in	It is a typo. It is 15 days.

		fact the period to provide inputs.	
13	3.2	TRC should define fixed access as one relevant market; there should be no distinction between narrowband and broadband access. Any fixed access, whether copper, fibre, FBWA or microwave enables service providers to provide narrow-band telephony services (PSTN, VoIP). For example, wholesale broadband access for ADSL over copper can enable service providers to provide VoIP over ADSL. FBWA access enables service providers to provide fixed narrow-band telephony. It is also possible to provide fixed narrowband over leased lines.	This is not a data point, but a disagreement about conclusions. The Consultation proposed a single market for retail fixed access and call origination, including access via the PSTN, ISDN, fibre, and fixed LTE. This market is concerned with physical access to the network. The competition issues identified are not linked solely to narrowband access.
14	3.2	We query whether Zain does provide ISDN-PRA.	Zain is providing ISDN-PRA in business segment in 2015-2016-2017
14	3.2	We query whether Batelco does provide ISDN-PRA.	Batelco is providing ISDN-PRA in business segment in 2017
17	3.2	Mada should be included in the retail fixed telephony access market share data.	Zain and Mada are a single economic entity, their total subscriber lines are considered together
17	3.2	Umniah FLTE should be included in the retail fixed telephony access market share data.	Based on the received data from operators, Umniah fixed LTE connections are solely used for broadband services, not used for telephony services. Accordingly, Fixed LTE information for Umniah is considered in the scope of "Fixed Broadband Services" - Section 3.4
17	3.2	TRC should have the power to collect the market information. It should not accept Batelco's lack of submission of information in this market review. Moreover, TRC should not form conclusions when there is missing information that could affect the results of any analysis conducted.	The footnote is no longer applicable, as Batelco information was collected (business - 2017) and is considered in the table and the analysis.
18	3.3	We query whether Zain and Batelco provide ISDN-PRA.	Zain and Batelco are providing ISDN-PRA in business segment, where Zain's data is for all years 2015-2016-2017, Batelco's data is for year 2017
19	3.3	It appears that TRC has confused Zain and Mada (Zain subsidiary) in its analysis.	It was clearly stated during data collection process that reasonable assumptions will be made by TRC on lack of provision of data.
22	3.3	We query whether Zain provides fixed telephony services.	Yes
22	3.3	TRC should not accept the lack of availability of such information in such an important market review exercise.	It was clearly stated during data collection process that reasonable assumptions will be made by TRC on lack of provision of data.

23	3.4	Dedicated data subscriptions for stand-alone services (mobile broadband SIM only lines) is not considered in the mobile market review consultation.	In this market review, market definitions are revised, and fixed and mobile broadband offers are found in different markets. The markets analysed in Mobile Market Review as follows: Mobile data services (mobile broadband) comprise data services used by subscribers of mobile services with a handset (i.e. used as part of their bundle with voice and SMS services) as well as usage from dedicated data subscriptions for stand-alone services (i.e. a data only SIM, allowing access via a dongle or MiFi etc)
23	3.4	Orange fixed does not provide retail ADSL fixed internet services.	Orange Fixed provides legacy ADSL (known as Classic ADSL) while Orange Data provide ADSL and VDSL. The use of legacy ADSL is minimal
23	3.4	TRC appears to have overlooked that Zain provides retail internet connectivity over FBWA leased from Mada and that Zain Data, a separate legal entity, is the provider of ADSL leased from Orange Fixed.	Zain and Mada provided their feedback during data collection process. Zain Data is already considered as per information given by Zain. Zain, Mada and Zain Data are a single economic entity.
23	3.4	Mada and Umniah are the only FBWA service providers in Jordan; Al-Nayi is not licensed to provide FBWA services.	Al-Nayi provided figures for 2017 for FTTB and FBWA
24	3.4	It is not appropriate to include Orange Fixed's coverage of its copper network in a comparison with fibre networks. Moreover, TRC has not considered FBWA coverage in its assessment of the provision of retail fixed broadband.	Copper, fiber and FBWA are found in the same market during market definition analysis
25		Total numbers of access lines in Exhibit III.12 (392,000 in 2018) and Exhibit III.13 (536,000 in 2018) are not consistent.	Exhibit III.12 shows total fixed broadband access lines in the market. Exhibit III.13 provides a technology split of the same figures. The difference between these two figures are the bitstream lines provided as wholesale service from Orange Fixed to other service providers, mapped under Wimax which is a double count. As part of its data update, the TRC reviewed these figures and concluded that the point raised by Orange is presentational, and has no material impact on the conclusions of the analysis.
26	3.4	TRC has overlooked the following facts: Zain Data provides both ADSL and leased lines; and Zain Mobile provides FTTH and FBWA (leased from Mada).	Zain Data provided information as Zain, and is already taken into account
26	3.4	TRC should assess the data available it is online published quarterly report. These indicate that Mada and Umniah WiMAX was 76,231 (Q3/2016); 24,103	The footnote is no longer applicable, as Mada information was collected for 2015 and 2016, and is considered in the table and the analysis.

		(Q4/2016); and was 102,675 in Q1/2017. Accordingly, if TRC deducts the number of WiMAX lines provided by Umniah from the total, this will yield the number of WiMAX lines for Mada.	
26	3.4	The last sentence says that Exhibits III.13 and III.14 show the lines for residential, business, and total subscriptions, suggesting that a split by business and residential will be shown. However, no such split is shown.	Business and Residential segment breakdown of the numbers is available. However, it is not shown, in order to simplify the presentation. It is important to note that segment breakdown did not drive any change in the conclusions of the market review study. The sentence on page 26 should be edited slightly to emphasize that exhibits cover business and residential figures but that no split is provided.
28	3.4	The title of Exhibit III.14 is "Share of lines by access technology by technology". The title should probably have been "Share of lines by access technology".	The fact remains that WiMAX has been shut-down at beginning of 2017. The table in Exhibit 111.14 is accurate. The graph captures WiMAX information incorrectly.
27	3.4	TRC states in its consultation that WiMAX was shut-down at the beginning of 2017 yet the figure at Exhibit III.13 shows active WiMAX lines in 2018.	Please refer to the explanation provided above regarding the difference between Exhibits III.12 and III.13. To confirm, there are no active Wimax lines as of 2018.
28	3.4	Exhibit III.13 shows that the number of WiMAX lines were 171,000 (2017) and 146,000 (2018). Exhibit III.14, however, shows that WiMax shares of lines in 2017 and 2018 is zero. The exhibits are contradictory.	The fact remains that WiMAX has been shut-down at beginning of 2017. The table in Exhibit 111.14 is accurate. The graph captures WiMAX information incorrectly.
30	3.4	TRC states on page 23 that Al-Nayi provides FBWA. In contradiction, TRC states on page 30 that Al-Nayi is provides FTTH/FTTB.	Al-Nayi provided figures for 2017 for both FTTB and FBWA. In Page 23, it is stated correctly. In Page 30, Al-Nayi should be considered for FBWA. However, the table (Exhibit III.3) and the analysis takes this into account while drawing the conclusions. Nevertheless, due to the very low number of lines provided by Al-Nayi, there is no impact on the conclusions.
30	3.4	Orange Fixed does not provide retail ADSL	Orange Fixed provided numbers for "xDSL (not including VDSL)" classic ADSL .
30	3.4	TRC should present the data for Zain Mobile and Zain Data separately, as Zain Data provides both retail ADSL and FLTE (leased from Mada).	Zain Mobile and Zain Data are considered as a single economic entity.
30	3.4	Umniah does not provide retail ADSL	Umniah provides internet based on bitstream access. The speed breakdown from Umniah indicates that the bitstream access

			figures are to be classified under xDSL.
32	3.4	TRC provides no reason for the exclusion of Batelco market share data in the Exhibit III.18 table.	Exhibit III.18 is prepared based on the figures provided by service providers. And this figure represents the data update for 2018 where Umniah figures include Batelco figures
32	3.5	Broadband over FBWA now accounts for around 41.8% (as stated in Exhibit III.14 for 2018) not 37%.	Agree. The market review was done based on 2017 as the reference year, for which the information is more complete. The 2018 figures are as follows: 2017 - 37.4% 2018 - 41.8% The updated data raises no implications for the overall conclusions.
33	3.5	TRC should include the various Zain agreements with different municipalities (Zarqa, Irbed, Russifah) in its analysis. These show rapid expansion and widespread deployment in a short time period, beyond the area of Amman. TRC should also consider the recent MoDDE press statement that it is in process of preparing the tender documents to engage a provider to manage and operate the fibre NBN. The ministry study concluded that it is commercially feasible to enable private sector access to the NBN. We would note that the NBN fibre length is around 6,500 km and an additional 500 km will be completed during 2020.	The Consultation and Explanatory Memorandum recognised potential developments in the market, but noted that it would be premature to consider the actual impact they may have. The principles and approach set out in the Consultation still apply. The roll-out of fibre has however been taken into account in the TRC's decision not to apply a cost-orientation obligation to FTTx.
		Zain and Umniah have entered into agreements with municipalities and electricity companies, rapidly expanding their operations. Umniah, for example, with electricity provider JEPSCO has established a company, and has obtained a licence from TRC to roll out FTTH using JEPSCO electricity infrastructure including electricity poles. This will enable Umniah to reach 1.4 million homes and businesses. Such facts contrast markedly with TRC's statements.	See above
34	3.5	Competitors do offer bundled services. TRC should investigate Zain and Umniah's bundled offers provided to their customers.	This is not a data point but a disagreement about the conclusions, and a misunderstanding about the approach to bundles. The point is to ensure that an SMP operator cannot use bundling products and services eg as a way of cross-subsidising between regulated and unregulated services, or leveraging power from one market to another.

37	4.1	Sentence “it is supply-side substitution that should be relied upon as the primary criterion” should read “it is <i>demand-side</i> substitution that should be relied upon as the primary criterion”.	We have considered all available evidence. To the extent that the points raised by Orange are new and will affect our conclusions, they will be considered in the review of the consultation responses.
40	5.1	We query why TRC has not considered NTTOs, CS and CPS in its analysis.	Both of these types of service were explicitly considered in the Consultation. Despite CS/CPS being available as a remedy since the last review, there has been no demand, and this is a legacy service for which there is not likely to be future demand. NTTOs were not considered to be a competitive constraint
46	5.2	TRC should consider in its analysis the use of Tellular (fixed location handset equipped with SIM card) that are provided by mobile operators. TRC should have ready access to data on Tellular services.	The Consultation considered in some detail the extent to which fixed and mobile services could be considered to fall within the same market, and concluded that they could not. The availability of Tellular services offers some customers the possibility of using a converged fixed/mobile product, but this is not of a sufficiently significant degree to affect the TRC’s conclusion that, at present, fixed and mobile services fall within distinct product markets.
51	5.2	TRC has not included FLTE in the list of retail FACO’s technologies.	Fixed LTE was considered in the retail FACO
		TRC should re-visit and check the data underpinning the example it cites and reconsider its assessment accordingly. We provide below the correct information. Orange Fixed’s residential offer comprises: Installation: free Local and national minutes: 22,000 Flexible minutes comprising fixed to mobile and 9 international destinations: 1,000 minutes (from bundle=0.03 JoD) The small business fixed line package comprises: Installation: 20 JoD Local and national minutes: 11,000 Flexible minutes comprising fixed to mobile and 9 international destinations: 60 minutes (from bundle=0.015 JoD)	The TRC recognises that examples of pricing cited in the Consultation Document may now be out-of-date. However, examples of pricing were used to illustrate an overall analysis, and a change in pricing is unlikely to impact on the overall conclusions.
59	6.2	TRC stated in the previous paragraph that FBWA offers are available with advertised download speeds of 4 Mbps, 6 Mbps and 8 Mbps. Yet in the table (Exhibit VI.2), TRC refers to the availability of download speed 150Mbps. This needs to be checked for accuracy.	Mada advertises that FLTE services are available up to 150 Mbps (see reference in point below).
59	6.2	In Exhibit VI.1, TRC stated that the maximum monthly price (JD) for xDSL is 21.83 for 16Mbps. However, in this table (Exhibit VI.2) TRC states that the maximum monthly	Mada claims to offer speeds up to 150 Mbps on this plan (see https://www.mada.jo/website/prepaid.html); screenshot is provided on sheet: "Screenshot2". It seems that the text was not

		price (JD) is 21.83 for 24Mbps. Which is correct 16Mbps or 24Mbps?	adjusted after the table had been updated. Orange GovMax+ offers up to 24 Mbps (https://eshop.orange.jo/en/internet/adsl-offers/internet-governorates/internet-max-plus-gov.html); screenshot is provided in sheet: "Screenshot1". It seems that the text in VI.1 has not been adjusted following the update of VI.2. This has no material effect on the analysis.
61	6.2	We question why TRC has excluded this offer from its assessment. This offer competes with fixed broadband retail offers.	As stated - considered to be an outlier. Based on the discussions, concentration on this high capacity mobile offers are low and constitute very small portion of the mobile commercial offers
65	6.2	We query why Zain and Umniah have been excluded from this table.	The information was presented as samples based on availability in Operators' websites We are not only concerned with the underlying technology, but also with the ability to offer retail services to a broad customer base. Note that internet access provided over leased lines is not part of the retail broadband market due to differences in functional characteristics and pricing. Again, this is not a point about data, but about the conclusions drawn and the materiality of the impact of suppliers of leased lines to switch to retail provision of broadband services.
67	6.2	Existing suppliers of leased lines have appropriate infrastructure and can provide retail broadband services; Umniah and Mada are providing LL over FBWA, and most of the existing operators are providing leased lines over fibre and microwave links. TRC should also consider Umniah leased line services provided to more than 3,000 schools.	The information was presented as samples based on availability in Operators' websites We are not only concerned with the underlying technology, but also with the ability to offer retail services to a broad customer base. Note that internet access provided over leased lines is not part of the retail broadband market due to differences in functional characteristics and pricing. Again, this is not a point about data, but about the conclusions drawn and the materiality of the impact of suppliers of leased lines to switch to retail provision of broadband services.
75,76	7.3	TRC should consider the cost incurred by operators for each contract with property developers/owners. It should also note that the value of the contract paid by the contracted operator is based on commercial business cases of retail offers' plans. Making the access available to OLOs based on regulated prices of WLA will prevent the SMP operator to compete on the tenders released by property developers/owners. This is unfair and will damage the SMP operator substantially.	Not a data point, but one about the appropriate remedy, and in particular the relative merits of defining sub-national markets vs. addressing competition issues that arise from exclusive contracts using competition law.
92	10.2	TRC should re-visit and check the data underpinning the example it cites and reconsider its assessment	The TRC recognises that examples of pricing cited in the Consultation Document may now be out-of-date. However, examples of pricing

		<p>accordingly. We provide below the correct information.</p> <p>Orange Fixed's residential offer comprises:</p> <p>Installation: free</p> <p>Local and national minutes: 22,000</p> <p>Flexible minutes comprising fixed to mobile and 9 international destinations: 1,000 minutes (from bundle=0.03 JoD)</p> <p>The small business fixed line package comprises:</p> <p>Installation: 20 JoD</p> <p>Local and national minutes: 11,000</p> <p>Flexible minutes comprising fixed to mobile and 9 international destinations: 60 minutes (from bundle=0.015 JoD)</p>	were used to illustrate an overall analysis, and a change in pricing is unlikely to impact on the overall conclusions.
102	12.2	We query why Mada has not been considered in the assessment of FBWA services. TRC should refer to the QoS bi-annual reports which include the number of orders for both Umniah and Mada FBWA services.	The point highlighted is emphasized using Umniah as an example. We have also considered Mada, however due to their lower share, this was not commented on specifically in the text. Note that Mada is included in the table on the page referenced here.
111	12.7	In its analysis of the 3CTs, TRC should not assume that the starting point is FACO over copper. The relevant product market for FACO comprises copper, FLTE, fibre and others. This implies that entry barriers are low due to the large number of operators providing services over various infrastructures.	The 3CT for the FACO market is not limited to copper. Retail access over copper and alternative infrastructure is explicitly considered.
111	12.7	TRC does not support its conclusion with a list of examples of such practices at the retail level for which competition law is not sufficient to deal with.	This is not a data point but one about the conclusions drawn and potential disagreement about what support is required for a particular conclusion.
113	12.7	This subject matter of this paragraph is retail FACO, not wholesale FACO.	yes. Don't see what the problem is
113	12.7	TRC has not set out the competition problems on the market for retail FACO.	competition problems in retail FACO set out and discussed in 14.6, Fixed review.
123	13.3	TRC has not considered in its assessment the exemptions on annual spectrum fees granted to FBWA licensees or the very low spectrum acquisition fees for FBWA services. Both give FBWA licensees an advantage over other fixed operators that use different technologies.	This is not a data point, but a disagreement about the materiality of particular factors. Comment has no impact on analysis
123	13.3	The trunk segment of TI is not within the scope of this consultation.	This is not about trunk segments but about vertical integration.

124	13.3	This conclusion is not valid given the market structure. TRC should consider the OLOs (more than 5 operators) that provide FTTH.	This is not a data point but a disagreement about conclusions. The number of competitors (and their respective positions) are of course being considered in our analysis. Confusion between wholesale and retail markets. Consultation considers retail FTTH. Wholesale access is limited to self-supply, because there are no wholesale fibre based products in the market, and Orange is the only potential provider
124	13.3	TRC's conclusion is based on the exception of wholesale access via FBWA. We consider that the exclusion of access via FBWA is not justified.	We have considered retail FBWA and noted that wholesale FBWA is a white label product
126	13.4	TRC should consider the declining market shares. Current trends are such that Orange Fixed's market share is likely to fall below 50% during the next 2-3 years.	This not about data, but about interpretation of information. Trends are considered
129	13.6	Orange Data is a retail not wholesale provider.	Orange Fixed was included here for self-supply of calling cards. Text is to be updated as "Orange Fixed+ Orange data
139	14.1	It is unclear why TRC references leased lines in this consultation (i.e. the fixed market review).	typo - it should read "wholesale markets". Does not affect the point being made
139	14.2	We would note that existing remedies do not include sub-loop.	sub loop is part of existing remedies, according to previous broadband market review decision
140	14.2	The delay to respond to access requests is not introduced by Orange Fixed. Orange Fixed had submitted the TD-TSLRIC since February 2017 with no response from the TRC to date in spite of the several official meetings and letters submitted by Orange Fixed to TRC.	TRC has approved the instruction for Top down LRIC in 4/12/2014
141	14.2	Access to ducts have always been subject to availability and this is currently exist as parts of the TSLRIC costing models of TRC as well as being part of the wholesale services by Orange Fixed.	The current costing model adopted by TRC calculates all wholesale services, so the proposed remedy is part of general remedy which is CEI. In any case, the availability of a service does not remove the need to include it within a remedy.
142	14.2	Account Separation <ul style="list-style-type: none"> ▪ The outputs of the TD TSLRIC model are considered inputs to the Accounting Separation. ▪ The TRC till this moment did not provide Orange Fixed with any feedback about the TD TSLRIC model submitted by Orange Fixed to TRC in 	TRC has revised its approach to separated accounts from the time of the previous Decision. In this Decision, the TRC intends that Orange will be obliged to provide appropriate accounting information as defined by the TRC, and not a full set of separated accounts. This is a less burdensome and more proportionate remedy, designed to directly address competition concerns.

		February, 2017.	
142	14.2	The top-down model has not been approved. Moreover, the rates recently approved by TRC are subject to challenge as they were not calculated based on a top-down costing model.	TRC has approved the instruction for Top down LRIC on 4/12/2014
145	14.2	The proposed notification period appears excessive. A shorter time period would be sufficient for operators to prepare for a changed offer.	The TRC has considered operators' feedback, and has reduced the proposed notification periods in its Decision.
147	14.2	<p>Orange Fixed believes that TRC should not proceed with the proposed remedies without solving the lack of clarity related to the reference of costing figures. One of the main remedies of the last market review conducted by the TRC was to build a Top-Down TSLRIC model by Orange Fixed. Consequently, Orange Fixed provided TRC with our TD TSLRIC costing model in February 2017.</p> <p>By the end of 2017, TRC had issued the new version of TSLRIC model to be applied since the first of January, 2018. This model includes the costing figures of the interconnection services like the Bitstream, DC, Collocation, Naked BS, and LLU...etc.</p> <p>Currently, we have three different costing models; the TD TSLRIC model, the TSLRIC model of 2011 and the new TSLRIC model of 2018.</p> <p>Moreover, Orange Fixed had submitted an objection to implement the new costing figures of different services including bitstream.</p> <p>Orange Fixed believes that if TRC proceed with adding extra remedies without having clear reference for implementing the needed costing figures, will make the subject more</p>	The TRC does not propose to add extra remedies on cost accounting and price control. On the contrary, the TRC has simplified the requirements on Orange. For clarity, all access services will be TDLRIC and there is no confusion about the costing methodology.

		complex.	
160	14.4	TRC says that “there is no need for Orange Fixed to provide double tandem termination”. We do not understand how double tandem termination is related to wholesale call termination.	Double tandem network structure is needed in large geographies and serves long distance fixed calls. TRC believes there is no need for double tandem termination in Jordan considering the geographical dynamics and available network infrastructure. This was an obligation on Orange in the previous market review that is now being removed.
163	14.4	Table title is Exhibit XIV.1 Regulated rates for fixed national call termination as per the 2017 Regulatory Decision on Charges for <i>Mobile Interconnection</i> ; it should state “ <i>Fixed Interconnection</i> ”.	Correct. And it is a typo only on the table title - the Text is clear about fixed interconnection
163	14.4	The trunk segment of TI is not within the scope of this consultation.	typo - it should read "wholesale markets". Does not affect the point being made
172	14.6	TRC has not considered that Zain and Umniah have affiliates and are able to make bundled offers. TRC should investigate Zain and Umniah's bundled offers available in the market.	This is not a data point but a disagreement about the conclusions. The ability of other parties to offer bundled services has been considered. It is not actually relevant - the point is whether bundles offered by the SMP operator can be replicated