Responses to Public Consultation Mobile Markets

1 Introduction

1. Orange Mobile objects to both the methodology and the data used for the market review analysis in the TRC consultations documents. In this section we provide some general comments. Thereafter we provide our specific responses to each consultation question.

2. The response contains confidential information of Orange Mobile**. Information that is confidential and is placed in square brackets should not be disclosed**.

1.1 Incorrect information

3. The consultation contains incorrect information that is not reflective of the actual market situation and some information is missing (See Section 7 for detailed overview of incorrect/missing information). TRC's use of incorrect data and information has led to incorrect conclusions in the TRC consultation.

1.2 Methodology

4. Regarding the product market definition, TRC has conducted inadequate analysis as it has based its definitions on a superficial comparison of product characteristics, some price comparisons, and on speculation on what customers may have done in response to a price increase. However, a comparison of product characteristics is only meaningful if it is conducted in the context of consumer preferences that are underpinned by robust evidence.

5. In respect of the geographic market definition, the White Paper and Competition Safeguard Instructions state that the market should be considered national unless there is evidence of different competitive conditions and a lack of a common pricing constraint. However, TRC appears to rely on this as its conclusion and has not conducted any research into the possibility of the existence of local markets. There are clear indications that markets, both mobile and national, may be local in scope. In mobile markets, there are clear differences in market shares and pricing.

1.3 Market definition

6. TRC has not conducted adequate research to substantiate the product and geographic market definitions:

- TRC has not taken into account Zain's advantages due to its high market shares in the most profitable segments of the market such as Amman (around 60%), and the fastest growing segment i.e. mobile broadband (above 50%).[1] TRC states that it has examined market share data but does not present the market share figures due to confidentiality. It is therefore not possible to assess TRC's analysis. Data from other sources suggest that the market share of Zain is significantly higher than the other operators, and in some local markets and the most profitable segments, Zain's market share is significantly above 50%.[2]
- TRC did not substantiate its conclusion that pre-paid and post-paid belong to the same market, and that there is one national market, despite clear indications that there may be different product and geographic markets.[3]As a result, TRC underestimates Zain's market power.

1.4 Susceptibility to ex ante regulation

7. In the draft decisions, TRC relies almost entirely on market shares to determine whether the market will tend towards effective competition. This is an incomplete and therefore flawed assessment which leads to incorrect conclusions. For example:

- In mobile markets, TRC did not consider many factors that lead to Zain's dominance and render mobile markets to lack effectively competition. These include, but are not limited to, Zain's strong position in the most profitable segments of the market such as Amman and the resulting high profitability, and Zain's abusive behaviour.[4]
- Moreover, the market shares considered by TRC – subscribers and call volumes – are not the most appropriate metrics to analyse competitiveness in the mobile market; revenue market shares and shares in broadband are more appropriate indicators of market power as per Competition Safeguard Instructions.

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1 See Figure 4-3, Section 4.

2 See Figure 2-1, Section 2.

3 See answer to Question 1, Section 2.2 and Question .

4 See response to Question 3, Section 4.1.

1.5 Remedies

8. The remedies proposed by TRC are neither targeted to specific competition problems, nor proportionate. Moreover, for mobile markets, the proposed remedies fail to address the main problem, that is, the dominant position of Zain and the disadvantaged position and low profitability of other operators which impedes their ability to invest in current and future networks.[5]

9. TRC has not conducted a formal impact assessment of its proposed regulatory interventions to compare the regulatory costs to benefits. Specifically, in relation to the proposed new regulation of wholesale SMS termination:

   - Such intervention will benefit only the dominant operator which has a higher customer base. Increasing the cost of SMS-termination above zero would enable Zain to apply on-net/off-net discrimination on SMS in addition to voice services, exacerbating the club effect and disadvantaging other operators further.
   - TRC did not consider Zain's historic refusal to implement the on-net/off –net ex ante remedies, and refusal to enable other operators interconnected with Zain to purchase mobile call termination services at the weighted average price of on-net calls. In addition, the high MTR, due to TRC extending the rate of 2014 to the years 2015,2016 and 2017, gave an advantage to Zain ,increased further its dominance and enabled Zain to secure its club effect.
   - Moreover, TRC did not consider:
     - The current offers in the market include free bundles of SMSs, where the increased cost of SMS termination will put the operators in a situation where they have to increase their retail prices.
     - The legal disputes that will be raised with the Bulk SMS providers, as contracts with these providers are based on Bill and Keep wholesale SMS termination.
   - TRC should focus on supporting the Bill & Keep regime as a tool to promote effective competition. TRC should not allow the largest operator to undermine the Bill & Keep regime in order to replace it with cost-based regulation that will allow that operator to exploit the club effect and harm competition by creating an artificial advantage over its competitors. Therefore, Bill & Keep should be maintained as the appropriate regulation of SMS tariffs.

5 See Section 3.1 for an explanation why Zain's SMP will increase and how it will harm future investments and competition.

1.6 Time frame of the analysis

10. The market review regulations should be forward-looking, i.e. they should take into account market trends and they should aim to ensure competition and good outcomes for customers in future. However, by underregulating mobile, TRC is undermining future competition and the future of the Jordanian digital society. The effect of underregulating mobile will exacerbate and prolong Zain's current dominant position while at the same time further weakening the position of other operators. This will increase Zain's ability to abuse its dominant position. The absence of appropriate regulation will also lead to further erosion of mobile sector revenues, particularly the revenues of non-dominant operators, with a negative impact on the operators' sustainability and on their future investment in mobile networks.

11. TRC did not analyse the market trends that strengthen Zain's dominance in the mobile market, such as the increased importance of mobile broadband and the low profitability of other operators.[6]

1.7 Lack of transparency

12. The draft decisions generally lack any supporting evidence and the use of sources is not transparent.

13. TRC's overall approach to market definition and competitive assessment is high level, lacks detail and generally is not substantiated with evidence. Only modest data are available on market structure (shares/trends) and there is no supporting evidence on substitution trends (e.g. customer surveys). The consultation documents contain numerous statements that lack references to sources and have no supporting evidence. It is therefore not possible to assess the quality of the sources used by TRC, and whether the data contained in these sources (if any) justify the TRC conclusions.

14. The lack of evidence in this consultation is remarkable, particularly when compared to TRC's approach in the 2010 market reviews. The TRC 2009 White Paper describes the information used. In contrast, in the current draft decisions, TRC states that it collected data from operators and that it met with operators to take account of their experiences in the market. However, the decisions do not present any information on, by way of example, churn. This would be relevant both for market definition and the competitive analysis. Compared to the 2009 exercise, this time around TRC did not gather qualitative information through a questionnaire. In

6 See Section 3.1 for an explanation why Zain's SMP will increase and how it will harm future investments and competition.

some instances, TRC notes that some operators did not provide data. TRC should have ensured that all operators responded appropriately.

15. It is further not clear how the information collected from operators in interviews has been used for the analysis.

16. As shown by the list of documents used, TRC did not follow best international practices; it did not make extensive use of referenced publicly available information, such as TRC publications, publicly available reports, press releases, operator annual reports, operator press releases, operator price lists, national statistics or other information. The TRC decisions contain very few references to such documents, suggesting that TRC did not make use of publicly available information.

17. The lack of transparency and lack of thorough research is even more striking when compared to international practices. Ofcom market reviews provide an example of best practice::

- First, Ofcom provides an overview of the sources of the evidence used. The Annexes to market review statements provide detailed descriptions of the documents used, and the documents are extensively referenced in the decisions. This enables the operators to assess the evidence used and whether it supports statements by the regulator. By contrast, TRC decisions are very poorly referenced.
- Second, Ofcom (and many other regulators e.g. in the Netherlands or Austria) regularly conduct additional in-depth research such as consumer surveys, econometric analysis of price correlations, quantitative hypothetical monopoly tests, detailed analysis of geographical coverage, in-depth assessments of the impact of regulation. No such analysis has been reported in the TRC draft reviews.
- Third, as can be seen from the list of documents used, Ofcom has made extensive use of, and referenced publicly available information, such as publications by the European Commission, publicly available reports, press releases, annual reports of operators, operator press releases, operator price lists, national statistics and other information. The TRC decisions contain very few references to such documents, which suggest that TRC did not make use of publicly available information.

1.8 Conclusion

18. **Given the above concerns, Orange Mobile requests that the TRC puts on hold the mobile market review consultation for further study and data investigation to avoid uncertain conclusions that could harm the telecom business, competition and future market developments.**

19. We next provide our responses to each of the consultation questions, notwithstanding our view that the consultation should be halted.

2 Question 1 Retail market definition

20. *Question 1. Do you agree with the TRC's preliminary conclusions regarding the relevant product and geographic market definitions for retail mobile services?*

21. The TRC defines "A single r*etail market, consisting of a cluster of voice and data-related services, including pre-paid and post-paid services, and including residential and business customers".*

22. Orange Mobile strongly disagrees with TRC's view that the competition conditions in various governorates are similar. Orange Mobile's position is that TRC has not properly substantiated its product and geographical market definitions.

23. Orange Mobile agrees with the market definition as comprising a cluster of services (voice, messaging, data). Customers purchase a bundle of mobile services and make their choice based on the price of all elements of the bundle that they consider relevant.

24. Orange Mobile disagrees with defining a single market for post-paid and prepaid services, and with a single national market. This is discussed in detail in Sections 2.1 and 2.2 below.

2.1 One market for post-paid and prepaid

25. TRC notes that there are barriers to switching between pre-paid and post-paid, namely:

- Post-paid customers may be prevented from switching by minimum contract length.
- Pre-paid customers may not be able to afford a post-paid subscription or may prefer not being locked into a contract.

26. TRC finally concludes, however, that pre-paid and post-paid should be in the same market, based on the following:

- Post-paid customers may switch to pre-paid when their initial contract expires;
- Pre-paid customers may benefit from handset subsidies when switching to post-paid.
- There is supply side substitution.

27. The conclusion that post-paid and pre-paid belong to the same markets is not supported by sufficient research and did not take into account evidence that may indicate an alternative market definition.

28. Such evidence is as follows. First, post-paid subscriptions are clearly more expensive than pre-paid subscriptions:

- According to data included in the draft decision, post-paid subscriptions constitute about 15% of all subscriptions, but generate 27% of revenues.[7] That implies that on average, a post-paid bundle costs 1.8 times as much as a pre-paid bundle.
- This difference cannot be explained solely by differences in usage. Post-paid subscriptions generate 11% of all minutes but 21% of voice revenues.[8] This implies that on average, a post-paid minute is twice as expensive as a prepaid minute.
- According to data included in the draft decision, post-paid subscriptions constitute about 15% of all subscriptions but generate 32% of data revenues.[9]

29. These metrics clearly demonstrate that post-paid customers are willing to pay a premium for the service. We are not aware of any evidence that shows that many such customers would be willing to switch to pre-paid after a 5-10% price increase. Regarding the potential switch from pre- to post-paid, the price differences appear to be sufficiently large to make it doubtful whether a sufficient number would be willing to switch in response to a 5-10% price increase in pre-paid.

30. Second, competitive conditions in the post-paid and pre-paid segment can differ, as indicated by the variation in market shares of operators in the two segments. In Q3 2016, Zain's market share in post-paid subscriptions was 65%, compared to 33% in pre-paid.[10]

31. Third, TRC concludes that there is supply side substitution without sufficient reasoning. It should consider, for example, that Zain has a 60% market share in post-paid, and that Umniah and Orange Mobile face barriers, such as the club effect caused by Zain on-net/off-net differentiation and a lack of mobile number portability to increase their share in that segment.

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7 TRC Public Consultation on Mobile Markets 2019, Exhibit II.1 and Exhibit II.3.

8 TRC Public Consultation on Mobile Markets 2019, Exhibit II.4, II.10.

9 TRC Public Consultation on Mobile Markets 2019, Exhibit II.11.

10 TRC Quarterly reports.

32. **TRC should have taken these factors into account in its analysis and it should have conducted appropriate research into customer preferences to understand: what advantages post-paid offers to customers; what price increase these customers would be willing to accept; and the reasons for Zain's dominance in the post-paid segment.**

2.2 One national geographic market

33. While TRC acknowledges that all operators in Jordan differentiate their prices by governorate, it concludes that competitive conditions do not differ significantly between governorates. However, TRC does not provide any evidence to support this conclusion. Instead, TRC states that if competitive conditions differed across governorates, there would be lower prices in Amman where competition is strongest (prices in Amman are higher than elsewhere). TRC concludes that the price differences are likely to result from varying demand conditions.

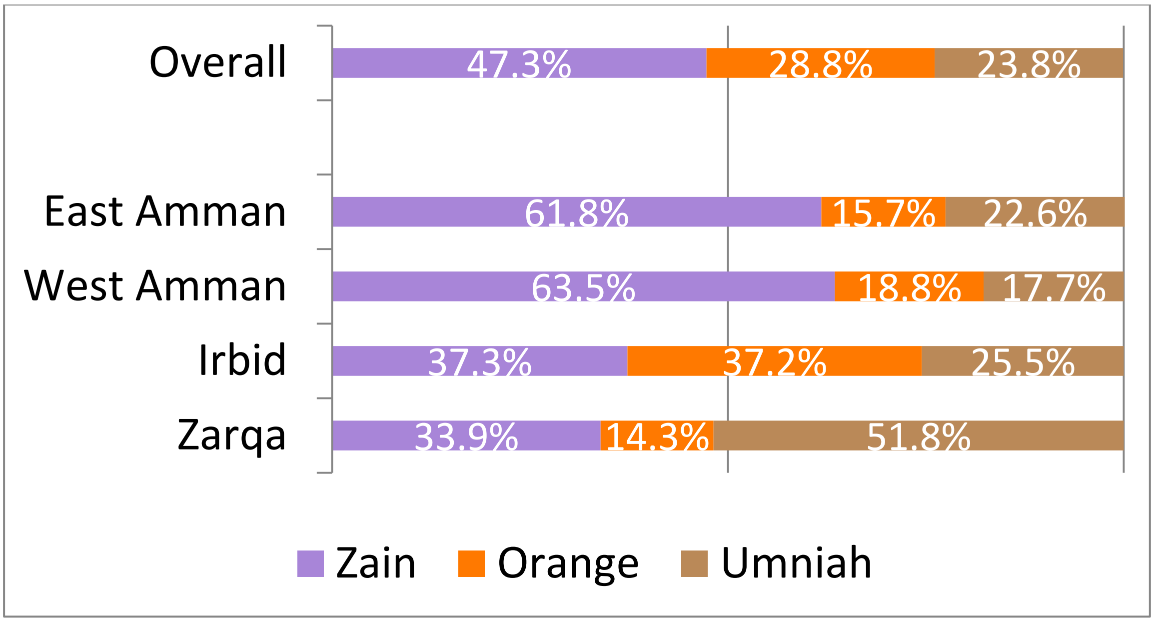
34. The White Paper and Competition Safeguard Instructions state that the market should be considered national unless there is evidence of different competitive conditions and a lack of a common pricing constraint. However, this statement does not excuse TRC from conducting a proper analysis of the market. The White Paper states that to assess the similarity of competitive condition, the following indicators should be used:

- The number of principal operators and their development (excluding niche operators with no impact on competitive conditions).
- The leading operators' market shares and their evolution.
- Barriers to entry and their development (including evidence of new entry);
- Pricing and product strategies (differences in pricing and marketing).

35. TRC has not provided such analysis.

36. Orange Mobile rebuts TRC's view that the competition conditions in various Governorates are similar. First, TRC contradicts itself by stating that competitive conditions are similar, and subsequently, a few sentences later, that competition in Amman is more vigorous. Second, market shares of operators in different Governorates differ markedly, as shown in Figure 2-1.

Figure 2-1: Mobile market shares (main line usage) overall and per region



Source: IPSOS, Telecom Scene Tracker Report, July 2018, page 18.

37. In Amman, Zain's market share in main line usage exceeds 60% (considerably above the 50% SMP threshold), compared to 47% nationally. This indicates substantial differences in competitive conditions and suggests that at least in Amman, Zain should be presumed to have SMP.[11]

38. In addition, price differentiation between regions does suggest that competitive conditions differ. TRC states that the price differences are likely due to different demand conditions. However, it does not support this statement with any research. Given the high market share of Zain in Amman, it is plausible that the higher prices in are due to the dominant position of Zain in that area. Besides, the ability to maintain geographically differentiated prices is already a strong indicator of separate geographic markets.

[11] This may be supported by prices in Amman being higher than elsewhere.

3 Question 2, 3 and 4: Wholesale market definitions

39. *Question 2. Do you agree with the TRC"s preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile voice call termination services?*

40. TRC defines the wholesale market for mobile voice call termination, for calls terminated on each MNO network. The market is defined as national in scope.

41. Orange Mobile agrees with this market definition.

42. *Question 3. Do you agree with the TRC"s preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile SMS termination services?*

43. TRC defines the wholesale market for mobile SMS termination, for calls terminated on each MNO network. The market is defined as national in scope.

44. Orange Mobile agrees with the market definition.

45. *Question 4. Do you agree with the TRC"s preliminary conclusions regarding the relevant product and geographic market definitions for wholesale mobile access and call origination services?*

46. TRC defines a wholesale market for mobile access and call origination (MACO), consisting of all wholesale access and call origination services that could be offered over an MNO"s network, and including self-supplied mobile access and call origination services by all three of the vertically integrated MNOs currently operating in Jordan. The market is defined as national in scope.

47. Orange Mobile agrees with the product market definition but not with the geographic market definition. The TRC defines a national market on the following grounds:

> *Vertically integrated MNOs are in the position to provide the wholesale service throughout Jordan, as they are currently able to do so for their own retail operations (through self- supply) given their near ubiquitous network coverage. Access seekers would likely be seeking geographic coverage for their services which would include the whole territory of Jordan. Therefore, the geographic market is the whole of Jordan.*

48. Orange Mobile considers that TRC has not sufficiently researched the possibility of defining local geographic markets. The White Paper states that to assess the similarity of competitive condition for the purpose , the following indicators should be used:

- The number of principal operators and their development (excluding niche operators with no impact on competitive conditions).
- The leading operators' market shares and their evolution.
- Barriers to entry and their development (including evidence of new entry);
- Pricing and product strategies (differences in pricing and marketing).

49. TRC has not conducted any such research.

50. As discussed in the answer to Question 1, Section 2.2, there are strong indications that competitive conditions across governorates differ. In particular, market shares are different in different governorates, with Zain's market share in Amman exceeding 60%. Also, operators charge different prices in different governorates, which also points to different competitive conditions. The wholesale market definition should be consistent with the retail market definition. Hence, when defining wholesale geographic markets, TRC should take into account differences in competition at the retail level.

51. Orange Mobile considers that even if access seekers would seek national coverage, this is a question that should be asked at the remedies phase rather than when defining markets. In the market definition phase, one should identify geographic markets where competition problems may arise. This can lead to a conclusion that competition problems are most likely to arise in a given geographic area. The remedy can then be imposed at the national level for practical reasons, even if its purpose is to solve local competition problems.

4 Question 5: Markets susceptible to ex-ante regulation and SMP

52. *Question 5. Do you agree with the TRC's preliminary conclusions regarding the mobile markets found to be susceptible to ex ante regulation?*

53. TRC concludes that the following markets are susceptible to ex ante regulation:

- The market for wholesale mobile voice call termination.
- The market for wholesale mobile SMS termination.

54. TRC concludes that the following markets are <u>not</u> susceptible to ex ante regulation:

- The market for wholesale mobile access and call origination.
- The market for retail mobile services.

55. Orange Mobile agrees with TRC's conclusion that the market for wholesale mobile voice call termination is susceptible to ex ante regulation.

56. Orange Mobile does not agree with the conclusion that the markets for retail mobile services and wholesale mobile access and call origination are not susceptible to ex ante regulation. There is no effective competition in mobile markets in Jordan. Zain is the SMP operator, and the market is characterised by various competition problems which harm smaller operators and, in the long run, will harm consumers. These problems are discussed in detail in Section 4.1 below.

57. Orange Mobile does not agree with the conclusion that in the current market situation, the market for wholesale mobile SMS termination is susceptible to ex ante regulation. Any competition problems in the market are addressed by the current bill-and-keep regime, which should be maintained in future. This is discussed in detail in Section 4.2 below.

58. Question 6. Do you agree with the TRC's preliminary competition assessment and SMP designations on the market for wholesale mobile voice call termination?

59. TRC concludes that in the markets for wholesale mobile voice call termination, all operators that terminate calls on their mobile networks, i.e., Orange Mobile, Zain and Umniah have SMP. Orange Mobile agrees with this conclusion.

60. Question 7. Do you agree with the TRC's preliminary competition assessment and SMP designations on the market for wholesale mobile SMS termination?

61. Orange Mobile does not agree that the market for wholesale mobile SMS termination is susceptible to regulation given the current market circumstances, and therefore considers that an SMP analysis in this market is not necessary. This is discussed in detail in Section 4.2 below.

4.1 Retail mobile market and the wholesale MACO market

62. In its 2010 decision, TRC concluded that the wholesale market for mobile access and origination ("MACO") is susceptible to regulation and Zain has an SMP in the wholesale MACO market (mobile access and call origination), because of the following reasons:[12]

[12] TRC, Regulatory Decision on the Mobile Markets Review, 21 December 2010. TRC, Explanatory Memorandum to the Regulatory Decision on the Mobile Markets Review, 21 December 2010.

- Zain's high market shares. TRC considered market shares for the number of subscribers, revenues, traffic etc. Market shares were high, generally above 50%.
- Zain is the largest operator, enjoying economies of scale.
- Lack of mobile number portability ("MNP").
- Excessive profits compared to regulatory WACC.
- Network effects caused by on-net/off-net differentiation.
- Zain is a member of an international group, enabling it to offer attractive terms for international calls.
- Lack of competitive MVNO offers.

63. In the current draft decision, TRC concludes that the retail mobile market and the MACO market are not susceptible to regulation, because:

- There are three mobile operators established in the market.
- Prices are competitive.
- On most measures of market shares, mobile operators are close competitors.[13]

64. The evidence presented by TRC is meagre and the analysis conducted appears to be far less extensive than in 2010. In the current decision, TRC relies almost entirely on market shares to determine whether the market will tend towards effective competition. This is a very limited view of competition and will lead to incorrect conclusions. It is not valid to draw conclusions on effective competition on the basis of market shares alone. While the advantage based on market shares may be insufficient to find SMP, an in-depth analysis of the cumulative effect of market shares, other indicators of dominance, and of the competition problems would be likely to lead to a conclusion that Zain is a dominant operator in the mobile market.

65. Below, we first comment on the market share analysis of TRC (Section 4.1.1). Then, we discuss other indicators of Zain's dominance (Section 4.1.2). In Section 4.1.3, we discuss competition problems arising from Zain dominance and appropriate remedies. Section 4.1.4 discuss the problems that very low mobile retail prices, combined with rising costs, are likely to cause for future competition.

[13] TRC Public Consultation on Mobile Markets 2019, page 55, page 57.

4.1.1 *Market share analysis*

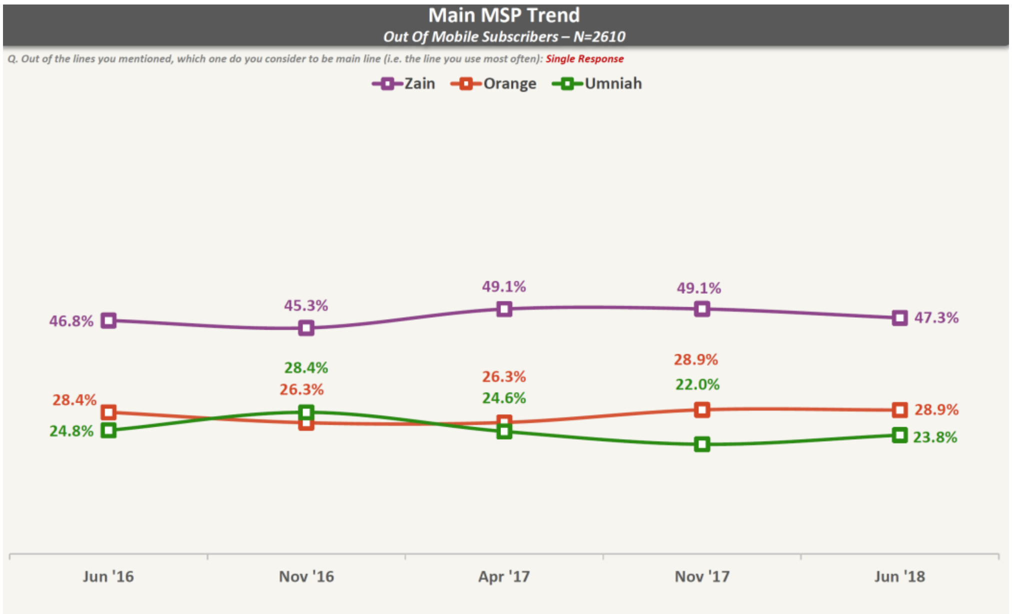
66. TRC does not provide data on market shares for confidentiality reasons, so it is difficult to assess whether its conclusions are justified. However, Orange Mobile considers it extraordinary that TRC concludes that mobile operators are close competitors on the basis of market shares.

67. First, TRC concludes that Zain has the largest market share in subscriber numbers (Exhibit II.12), revenues (Exhibit III.13) and voice call minutes (Exhibit III.14). It also reports that Zain increased its market share on subscribers in 2018, and on revenues between 2015-2018.

68. Second, the most recent TRC data (Q1 2019), published by TRC, albeit without naming the operators, indicate the following number of active customers (3,605,262 , 2,462,921, 2,007,079), which implies that Zain's market share is 44.6%.

69. Third, data from other sources also suggest that Zain's market share in subscribers is significantly higher than other operators (see Figure 4-1).

Figure 4-1: Market shares (main line)

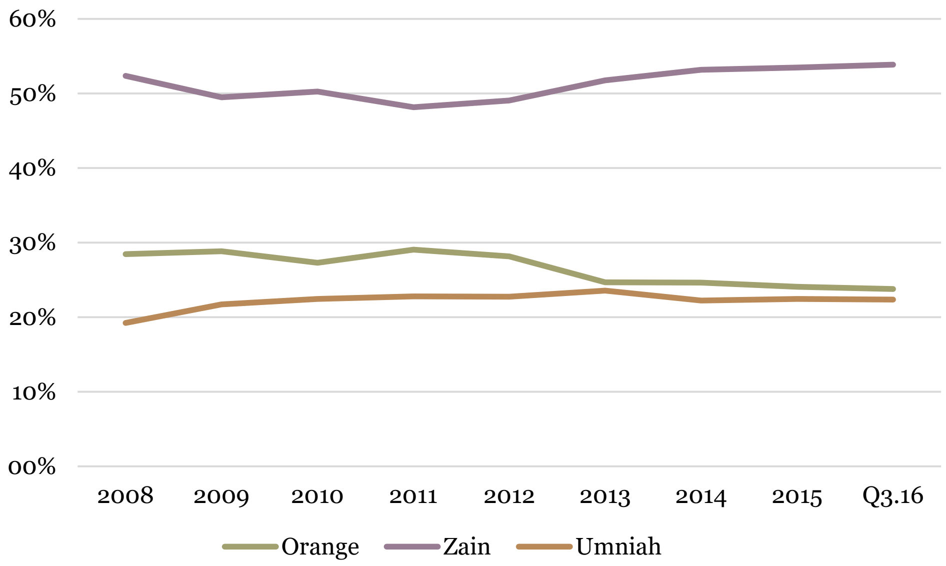


Source: IPSOS 2018 Telecom Scene survey. Subscribers are assigned to operators based on the operator of the line which they consider as their main line.

70. Fourth, according to Arab Advisors data available to Orange Mobile, Zain's market share in revenues, the most important indicator of SMP according to Competition Safeguard Instructions, is much larger than that of other operators and exceeds 50% (see Figure 4-2). Moreover, it has been increasing between 2011 and 2016, and, according to TRC, it has also been increasing between 2015 and 2018. If TRC data

show a similar picture, this would be indicative of Zain SMP in the mobile retail market.

Figure 4-2: Revenue market shares in the mobile market

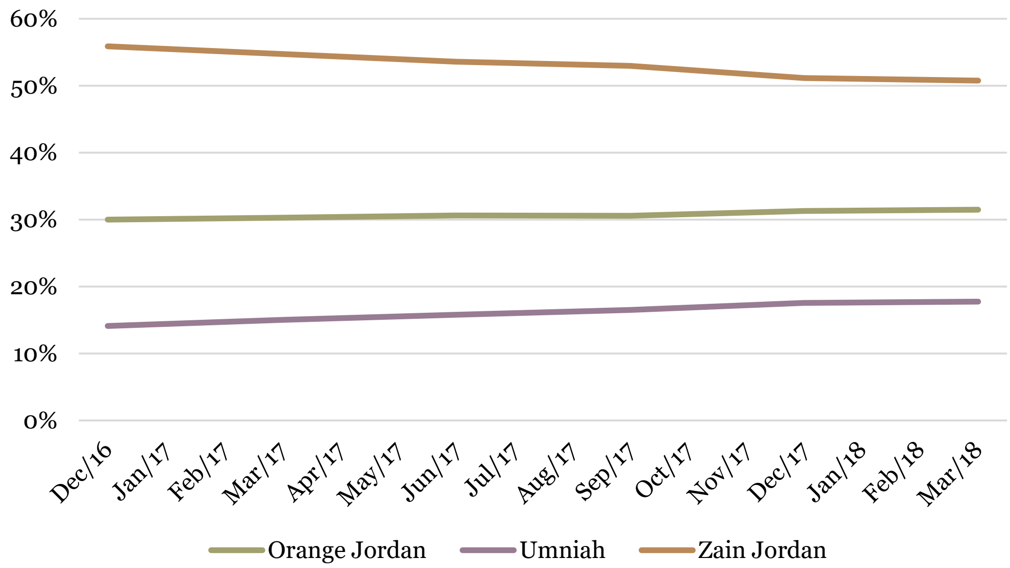


Source: Arab Advisors Group.

71. Fifth, according to data available to Orange Mobile, Zain's market share in mobile broadband is much higher than other operators, and above the SMP threshold of 50% (see Figure 4-3). The increase in mobile broadband revenues from a negligible amount in 2010 to 55% of all mobile revenues by 2018 combined with Zain's high market share implies that Zain's SMP has increased since the previous market review.[14] As the share of mobile broadband in revenues is growing (it has more than doubled since 2015, when it was around 23%), and is expected to grow further, Zain's revenue share is likely also to increase in the near future.

14 Share of broadband in mobile revenues based on Exhibit II.19 (broadband revenues) and Exhibit II.13 (total revenues).

Figure 4-3: Market shares in mobile broadband subscriptions



Source: Telegeography Global Comms database, 2018 report.

72. Finally, TRC did not take into account Zain's strong position in Amman region and in the post-paid segment. In both segments, Zain has more than 60% market share. Had TRC conducted a proper analysis of the relevant markets, it may have reached the conclusion that these are separate markets, where Zain has SMP. Notwithstanding this, and independent of market definition, Zain's high share in these segments, which are the most profitable, gives Zain an advantage over other operators. This is because the revenues earned on these segments can be used to cross-subsidise its offerings in other segments, to the detriment of competitors.

4.1.2 Other SMP factors

73. **Most of the other reasons that led TRC to conclude in 2010 that the mobile market is not effectively competitive, and that Zain has SMP in the MACO market still hold,** and, if applied consistently with the TRC 2010 approach, would also lead to the conclusion that Zain is dominant in the retail market. Additionally, the following factors give an advantage to Zain and increase its SMP:

- Zain has the largest spectrum holding (57 MHz vs. 47.5 MHZ held by Orange Mobile Jordan and 35 MHz held by Umniah).

- Zain has the largest network coverage in Jordan.[15]

- Zain has the highest brand recognition in Jordan. According to the 2018 IPSOS study, for 49% of customers Zain is the first mobile brand that comes to mind. In Amman, at 60%, Zain's advantage is larger still.[16]

- Since 2010, new taxes and fees have been introduced in the mobile sector. This impacts heavily the profitability of the operators (the smallest of which are barely commercially viable) but has a lesser effect on Zain, which has consistently been making profits, as can be seen in [Confidential: Figure 4-4. **Zain's sustained higher profitability is a clear indicator of a competitive advantage enjoyed by the dominant operator.**

[Confidential: Figure 4-4: Net income of mobile operators]

74. Accordingly, while each of Zain's advantages is very important, together their cumulative effects enhance Zain's dominance. Absent appropriate regulation, the dominance is likely to persist and may increase in future, because of:

    - Increasing importance of mobile broadband where Zain has a relatively strong position.
    - Its higher profitability, which will allow it to invest more in its network and to attract more consumers.
    - Decreasing competitive pressure from fixed telephony.
    - Club effect due to the on-net/off-net price discrimination that favours the largest operator.
    - A lack of MNP, which hampers switching.

75. In contrast, other operators' profits are under pressure due to decreasing prices and high costs (spectrum and taxes); see also Section 4.1.4 below.

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15 For example, according to Telegeography, in 3G Zain has 99% coverage, Orange Mobile 96%, and Umniah 90%.

16 Ipsos, Telecom Scene Tracker Report, July 2018.

76. Given the above evidence, which demonstrates clearly that Zain is dominant, it is unexpected and surprising that TRC has reached the conclusion that the mobile market is characterised by effective competition.

4.1.3 Competition problems and appropriate remedies

77. Zain's SMP in the mobile market enables it to abuse its dominance and engage in anticompetitive behaviour. Specifically, this enables Zain to:

- Increase further its advantage over competitors by applying on-net/off-net price discrimination, leading to a margin squeeze for competitors and a club effect. Due to on-net/off-net discrimination, consumers have the incentive to take up a subscription with the largest operator, i.e. Zain. This confers on the largest operator an advantage over competitors which is not due to superior quality or a low price offering but is due to its dominance and the price discrimination it applies.
- Refuse access to its network and permit other operators to offer services to Zain consumers based on CS/CPS access.

78. To address these problems, TRC should at least maintain and implement remedies introduced in the 2010 market review decisions, namely:

- Measures to prevent a margin squeeze on other operators' calls to Zain's network, i.e. the obligation for Zain to offer termination at LRIC or at its weighted average price of on-net retail price, whichever is lower.
- Obligation to provide CS/CPS access to other operators; this would allow alternative operators to offer services to Zain's post-paid customers, which are currently locked-in with Zain because of the lack of MNP, and because of the club effect.

4.1.4 Low retail prices as a problem for future competition and innovation

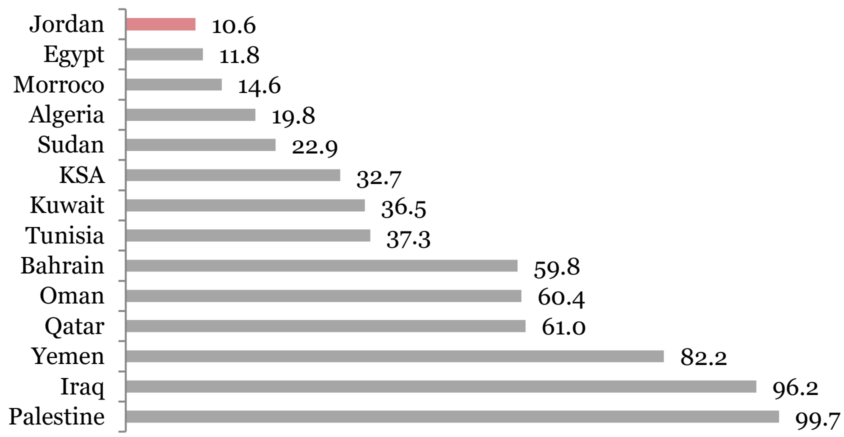
Introduction

79. TRC bases its conclusion of effective competition in the retail market partly on the fact that the pricing in the mobile market is competitive. However, rather than an indicator of strong competition, low pricing in the mobile market in Jordan may lead to competition problems in the future, harming consumers in Jordan. This is because low prices put pressure on operators' profits, especially for smaller operators, with a consequent negative impact on investment. We discuss this further in the following sections.

Low prices and rising costs put operators' profits under pressure

80. Mobile prices in Jordan are extremely low; they are considerably below those in other Arab countries and generally below the OECD average (see Figure 4-5:). In 2014, Jordan was ranked as 7^{th} cheapest country in the world with respect to prepaid subscriptions.[17]

Figure 4-5: Average pre-paid package rates in Arab countries



Source: Arab Advisors Group

81. Mobile prices and revenues have been falling since 2011. Following the introduction of mobile broadband, revenues increased slightly but the price per GB fell substantially between 2015 and 2018 (see [Confidential: Figure 4-6] and [Confidential: Figure 4-7]).

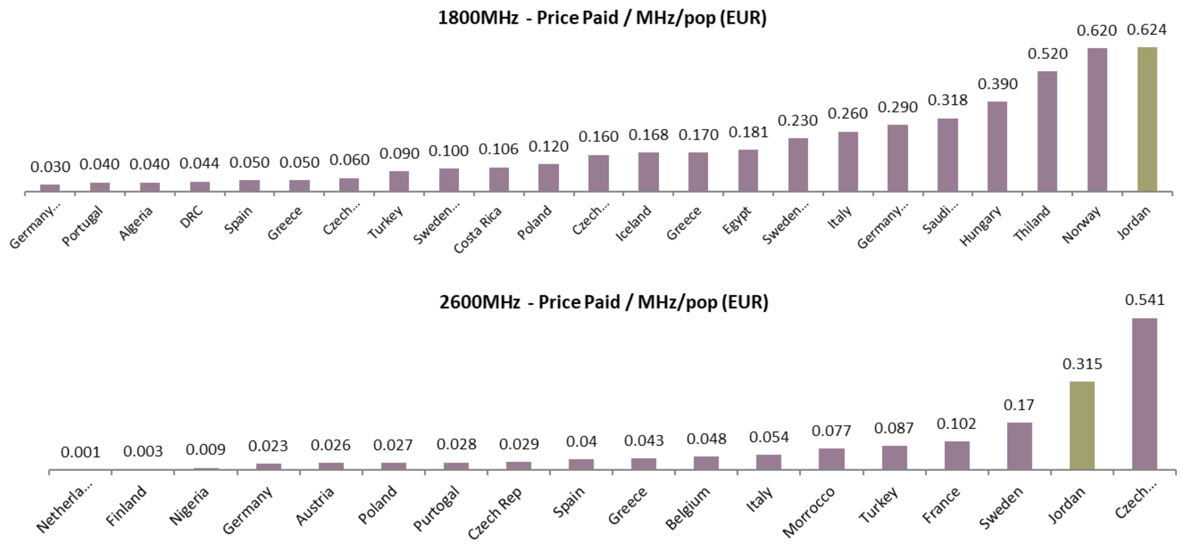
[17] World Economic Forum (2016), "The Global Information Technology Report 2016", page 228. See: http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf Price comparison based on PPP. The countries with lower prepaid prices were: Hong Kong, Russia, Bangladesh, Sri Lanka, India and China.

[Confidential: Figure 4-6: Annual ARPU (mobile voice and data) per operator (JOD)]

[Confidential: Figure 4-7: Decrease of mobile broadband prices]

82. Due to low prices, combined with rising costs (e.g. spectrum prices and taxes), mobile operators' profitability (mainly of the smaller operators) is subject to pressure. As stated, mobile prices in Jordan are among the lowest in the world. In contrast, spectrum prices and mobile taxes are among the highest, as shown in Figure 4-8 and Figure 4-9.

Figure 4-8: Spectrum prices in Jordan compared to other countries



Source: GSMA.

Figure 4-9: Telecoms sector taxes in the region

Source: Arab Advisors Group.

83. Due to these factors, two MNOs generally tend barely to break-even (see also [Confidential: Figure 4-4). Only the incumbent operator, Zain, continues to be profitable due its advantageous position in the most profitable and growing segments (Amman, post-paid, broadband). Continued operator losses over time is not a sustainable market equilibrium. In the absence of regulatory intervention, market forces will determine the outcome which in this case will most likely lead to detrimental effects on competition, as we discuss in the next section.

Negative impact of too low prices on the market

84. Too low prices (and profits) are a barrier to investment and innovation. There is empirical evidence for an inverted u-curve relationship between competition and innovation.[18] Starting from a monopoly, increasing the level of competition can stimulate innovation as firms need to innovate both to maintain market share and to avoid being displaced from the market by the competitors. However, increased price competition reduces firms' profits from innovation, which in turn negatively affects investment incentives and deprives firms from the financial resources required for investment. The intermediate level of price competition required to generate an optimal level of investment in innovation varies across industries. In telecoms, a cross-section study of 272 countries found that the optimal level of investment increases with market concentration, which the authors attribute to greater certainty regarding returns under less competition.[19] This suggests that in

18 See, for example, Aghion, Philippe, Nick Bloom, Richard Blundell, Rachel Griffith, Peter Howitt, (2005), "Competition and Innovation: an Inverted-U Relationship," The Quarterly Journal of Economics, Volume 120, Issue 2, 1 May 2005, Pages 701–728.

19 http://www.anatel.gov.br/Portal/documentos/sala_imprensa/19-9-2011--16h49min14s-489.pdf

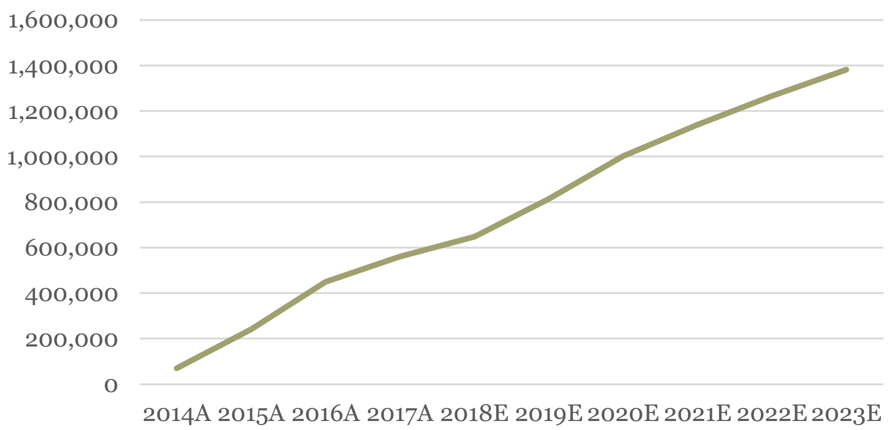
this sector, the level of competition is more often too high rather than too low from the point of view of encouraging investment.

85. To satisfy the growing demand for data and to maintain quality of service, and to enhance the competiveness of Jordan and sustainability of market growth, Jordanian operators will need to invest more on its current network and also on advanced mobile services , especially given the low penetration of fixed broadband. The rapid take up of 3G and 4G and an exponential increase in mobile data traffic, which is now among the highest in the region and exceeds that in many European countries, shows Jordanian consumers' appetite for data (see [Confidential: Figure 4-10]

[Confidential: Figure 4-10: Jordanian usage data]

86. Data traffic is expected to be more than double in 2023 compared to the 2017 level (see Figure 4-11). By that time, 2G and 3G are expected to have been replaced by new technologies.

Figure 4-11: Total mobile data traffic, actual and forecast



Source: Global Data, Mobile Broadband Forecast, September 2018. A: actual. E: expected.

87. If mobile operators experience financial constraints due to low prices and high costs, investment will necessarily be delayed. The advantages of network expansion, including improving the quality to cope with significant increase of data usage in Jordan, and also to invest of advanced mobile services technologies will be delayed too. It is also likely to have negative impact on competition, as it will perpetuate the advantage of Zain in the mobile markets.

88. The relative importance of mobile as compared to fixed is expected to increase in future, as new generation mobile technologies (4G and 5G) continue to develop. The

future of the Jordanian digital society does not lie with fixed, but with mobile communications. For the majority of the Jordanian population, efficient access to information and technology services can only be ensured if there is sufficient investment and strong competition in the mobile markets.

4.1.5 Remedies

89. A key policy question is how to respond to the market failure where price competition is so vigorous that investment is discouraged. One possible response is to grant a (temporary) monopoly, e.g. in the form of a patent, or exclusive access to a scarce resource. However, while creating monopolies or insulating incumbents from competition from innovative entrants is effective in that it reduces price competition, it also affects incentives to innovate and other important parameters of competition, such as quality or product differentiation.

90. An alternative approach is to impose a limit on price competition, while maintaining the incentives to compete on all other parameters. Imposing a price floor enables operators to earn sufficient returns to make investment worthwhile, while at the same time it encourages non-price competition as operators try to win market share with a superior quality of service. Hence, imposing a price floor can lead to an increase in quality.[20]

91. The importance of earning sufficient returns on investment has been accepted by regulators globally. Typically, regulators set (maximum) regulated prices such that the operator can recoup costs (investment cost and a reasonable return). In several countries regulators have found it necessary to impose minimum prices in the mobile sector and stop price from spiralling down. Such countries are shown in Table 4-1.[21]

[20] See e.g. Volodymyr Bilotkach (2014), "Price Floors and Quality Choice," Bulletin of Economic Research, Vol. 66, Issue 3, pp. 231-245 or Hatfield, J.W., C.R. Plott, and T.Tanaka (2011), "Price Controls, Non-Price Quality Competition, and the Nonexistence of Competitive Equilibrium," Games and Economic Behavior Volume 99, September 2016, Pages 134-163.

[21] We would note that while most countries imposed cost-based minimum prices on all operators; in Nigeria, small operators were exempted.

Table 4-1: Countries with minimum retail prices in the mobile sector

Country	When imposed	Scope	Reasons
Sri Lanka[22]	2010	Voice All operators	Price war, diminishing revenues and investments
Nigeria[23]	2014 Lifted in 2015	Small operators exempted	Promote a level playing field for all operators in the industry, encourage small operators and new entrants. Protect consumers and save the smaller operators from predatory services that are likely to suffocate them and push them into extinction. Regulation was lifted in 2015, following a critique from the market
Tunisia[24]	2014	n/a	n/a
Morocco[25]	2016	Data+ voice All operators	Ensure conditions for a better competition for the benefit of all market participants Limit the sharp deterioration in value, particularly on the mobile market
Pakistan[26]	2016	Data All operators	Price level is not 'sustainable in the long term' and may slow down investment, at the risk of delaying updating the network to the latest level of technology.
Zimbabwe[27]	2017	All operators	'Under-pricing' and fear of bankruptcy
Liberia[28]	Consultation 2018	Voice + data	Price war resulted in exit and only two providers remaining in the market

Source: See various footnotes.

92. What is striking is that mobile prices in Jordan rank fifth in the world and are lower than prices in most countries which imposed price floors.[29] The latest comparable data are for 2014; after which prices in Jordan have decreased further.

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22 https://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Indonesia-12/pdf/Session4_SriLanka_Nishantha.pdf

23 https://www.mobileworldlive.com/featured-content/home-banner/sole-qualified-bidder-for-nigeria-spectrum-auction-may-be-mtn/

24 https://www.telegeography.com/products/commsupdate/articles/2014/06/13/int-to-introduce-price-floor/

25 Orange presentation Regulation of termination rates in relation with competition issues, Meeting with TRC, Amman, November 8, 2017

26 https://www.pta.gov.pk/en/media-center/single-media/consultation-paper-on-recommended-price-for-data-services

27 https://www.herald.co.zw/potraz-sets-floor-prices-for-mobile-operators/

28 http://www.lta.gov.lr/doc/PRICE%20FLOORS%20CONSULTATION%20DOC.final%20(1).pdf

Table 4-2: Mobile tariffs in countries which imposed price floors and Jordan

Country	Prepaid mobile cellular tariffs (2014)	Rank in the world (cheapest to most expensive)
Sri Lanka	0.05	4
Jordan	**0.05**	**5**
Tunisia	0.06	8
Pakistan	0.06	10
Nigeria	0.13	33
Morocco	0.14	37
Liberia	0.33	94
Zimbabwe	0.43	114

Source: World Economic Forum, The Global Information Technology Report 2016. Available at: http://www3.weforum.org/docs/GITR2016/WEF_GITR_Full_Report.pdf

93. The regulator in Sri Lanka was one of the first to introduce retail price floors in the mobile market and to have conducted an ex-post policy evaluation.[30] In 2009, following the entry of a fifth operator, a price war led to severe reductions in revenues and investment. In response to such an unsustainable marketplace, the regulator imposed price floors for on-net and off-net prices. Accordingly, prices, revenues and investment increased (see Table 4-3 and Figure 4-12).

Table 4-3 Net profits in the mobile sector in Sri Lanka

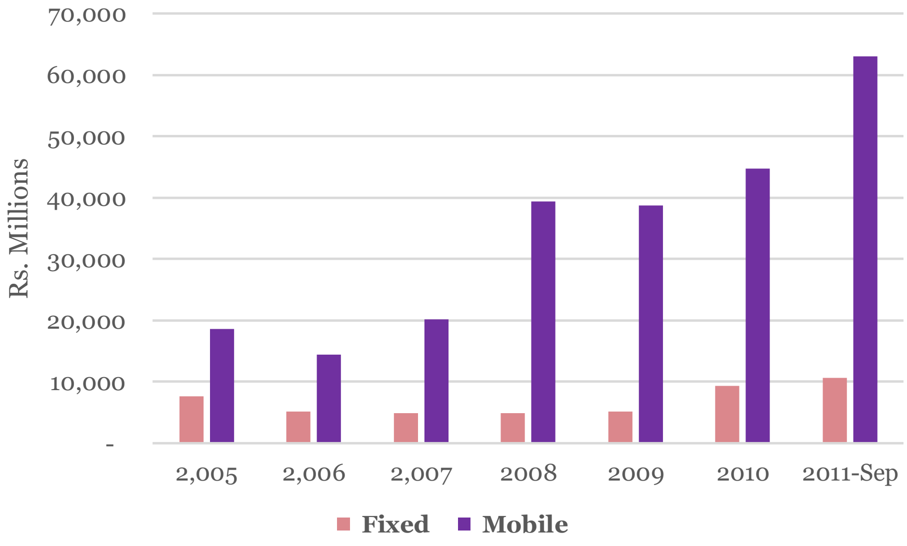
Year	Net Profit (LKR Millions)
2007	11,837.00
2008	(3,847.00)
2009	(21,082.00)
2010	(2,345.00)
2011	3,425.00

Source: See footnote 30.

29 The comparison is made using PPP (purchasing power parity) prices, to correct for the fact that lower income countries may have lower prices.

30 See https://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Indonesia-12/pdf/Session4_SriLanka_Nishantha.pdf

Figure 4-12: Investments in the mobile sector in Sri Lanka (Rs. million)

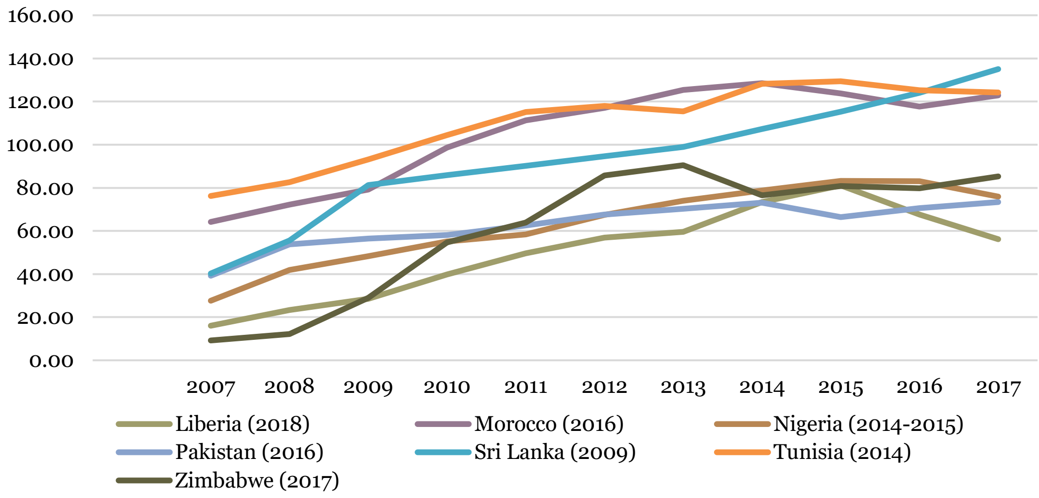


Source: See footnote 30.

94. This remedy would likely have a beneficial impact in Jordan, where prices are particularly low, and a negative impact is unlikely Figure 4-13 shows the development of mobile penetration in countries that introduced price floors. The year in parentheses shows the year in which the price floor is introduced. While the period since the introduction is often short, no immediate negative impact is notable. We would note that Liberia experienced a fall in mobile penetration prior to the introduction of price floors (where it was considered that low mobile prices led to exit of smaller operators).

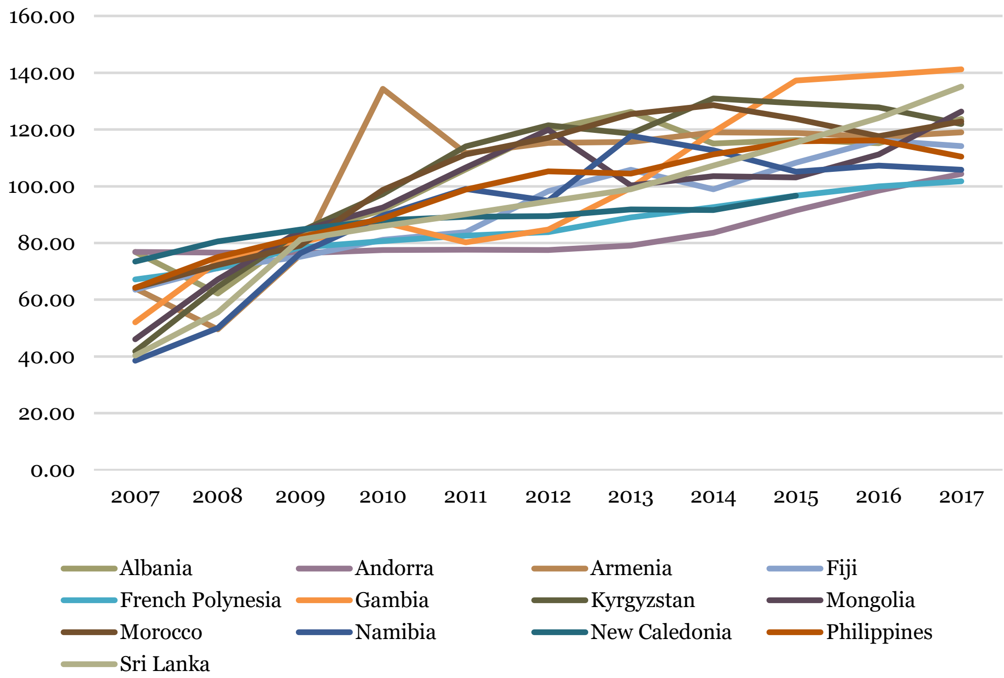
95. Figure 4-14 indicates mobile penetration in Sri Lanka, where price floors were introduced by 2009. The period since the introduction is now sufficient to observe any negative impact. The figure compares the development of mobile penetration in Sri Lanka with other countries, where mobile penetration in 2009 was at a comparable level. No negative impact is observed: mobile penetration in Sri Lanka in 2017 is second highest among all analysed countries.

Figure 4-13: Mobile penetration in countries that imposed price floors



Source: ITU, Mobile cellular 2010-2017.

Figure 4-14: Mobile penetration in countries with comparable penetration to Sri Lanka in 2009



Source: ITU, Mobile cellular 2010-2017.

96. In conclusion, rather than associating extremely low prices with vigorous competition, TRC should acknowledge that this is a problem that is likely to harm the competitive process and consumers in the long run. It should also address it with appropriate remedies such as minimum prices. To improve the competitive situation in the mobile market in Jordan, TRC and the Jordanian government should also introduce additional measures to foster competition and improve operator profitability. These include:

- Introducing MNP.
- Reducing the costs of operators by removing the special tax on mobile services and lower the spectrum prices.
- Aligning the prices paid for spectrum by mobile operators and operators providing FBWA to create a level playing field. Currently, FBWA providers are exempted from spectrum fees for providing coverage outside Amman. This creates an artificial advantage for these operators and distorts competition between fixed wireless and mobile broadband.

4.2 Wholesale SMS termination

97. In 2010, TRC concluded that the market for wholesale SMS termination was not susceptible to ex-ante regulation as the bill-and-keep regime minimised any potential abuse of market power.

98. In the current draft market reviews, TRC states that the bill-and-keep regime is based on voluntary agreements between operators, and that, according to its information, at least one operator wants to dissolve the agreement and raise SMS termination prices. Therefore, it is possible that the bill-and-keep regime will fold and operators may raise SMS termination prices above the competitive level, and cost-based regulation is required.

99. Orange Mobile disagrees with this conclusion. The bill-and-keep regime remains in place, and it prevents any above-competitive pricing on SMS termination. Rather than introducing regulation based on LRIC, TRC should aim at maintaining the bill-and-keep regime as it has a number of advantages over LRIC:

- First, bill-and-keep avoids the administrative and regulatory cost, both for operators and the regulator, of setting regulated prices.
- Second, raising SMS termination prices is likely to have detrimental effect on competition in the mobile market. This is discussed further in the response to Question 9 on appropriate remedies in the wholesale SMS termination market (Section 6).

100. Without prejudice to our above position, Orange Mobile would like to highlight the below concern in regarding the wholesale SMS termination prices stated in the consultation as follows.

101. Orange Mobile ran TRC's TSLRIC model for the period 2018 to 2020. The resulting annual retail and wholesale prices are shown below [Confidential].

102. It is unclear why the TRC termed the above rates in the first table "*termination rates for SMS as per TSLRIC hybrid cost model*". While they do represent the total retail off-net cost according to the TSLRIC model, it is unclear why the termination rates are equal to the retail outgoing SMS rates to other networks and are equal to wholesale incoming SMS from other networks This requires substantial clarification.

5 Question 8 Competition problems and remedies in the wholesale mobile voice call termination markets

103. Question 8. Do you agree with the TRC's preliminary assessment of competition problems and appropriate remedies in the market for wholesale mobile voice call termination?

104. TRC identified the following competition problems in the market for wholesale mobile voice call termination:

- Each operator can refuse access or charge higher rates for termination to other operators than to its retail arm.
- High MTR can have a distortive impact on the retail markets. An operator setting a high MTR can harm its competitors by reducing their margins, or by reducing their competitiveness. Excessive MTR profits allow operators to offer discounted retail prices, which distorts the retail market and potentially benefits operators with net call outflows.
- Combined with on-net/off-net price differentiation, excessive MTR leads to a club effect, benefitting larger operators.

105. As a remedy, TRC proposes the following measures:

- Access upon reasonable request

- Non-discrimination. TRC additionally proposes an obligation for all operators to publish an annual Statement of Compliance with the non-discrimination obligation.
- However, TRC proposes to lift the additional non-discrimination obligation imposed previously on Zain, and which allowed other operators to purchase MTR from Zain at either the cost-based MTR or a weighted average of Zain's on-net retail price.
- Transparency
- Accounting separation
- Cost accounting and price control
  - TRC proposes to maintain the cost-oriented MTR as determined by the TS-LRIC and the glide path to the target level of 2fils/minute in 2021, as introduced by its 2017 decision. In addition, in 2020 TRC will conduct a review of the MTR.

106. Orange Mobile agrees in principle that SMP in wholesale voice termination markets can lead to competition problems, and that remedies are required. However, Orange Mobile does not fully agree with the proposed remedies. In particular, they are not targeted at competition problems and are not proportionate, as they do not take into account the differences between operators. Specifically, Orange Mobile strongly proposes that:
    - The obligation for Zain to provide MTR at the weighted average of on-net price should be maintained.
    - The MTR should be asymmetric and lower for Zain than for Orange Mobile and Umniah.

107. This is further discussed in Section 5.1 below.

108. Furthermore, Orange Mobile objects to the obligation to provide an annual statement of compliance with the non-discrimination obligation. Such an obligation puts a high administrative burden on operators and is disproportional. There is no legal basis for such an obligation given that TRC already has power to monitor the licensees' compliance to all market regulations.

5.1 Proposed remedies

109. Remedies imposed on SMP operators should be targeted to competition problems and proportionate, which means that they should not go further than required to address competition problems. It is clear that the competition problems caused by

MTR, as identified by TRC, are much more severe when high MTRs are applied by the largest operator rather than when they are applied by smaller operators:

- The club effect caused by on-net/off-net differentiation, increases the advantage of the largest operator, but it harms smaller operators.
- Higher MTR revenues enable an operator to offer more attractive retail prices than its competitors; this is harmful if it increases the advantage that the largest operator enjoys (simply by being large) but can have a positive impact on competition if it reduces the disadvantage suffered by the smaller operators.

110. Therefore, to solve the competition problems caused by SMP on mobile voice termination markets, it would be sufficient to impose MTR regulation on the largest operator, i.e. Zain, and leave the MTR of smaller operators unregulated. If regulation is imposed on all operators, then proportionality requires that the regulation imposed on smaller operators (Orange Mobile and Umniah) is lighter than that imposed on Zain.

111. In addition, symmetric MTRs set at long run incremental cost do not fully remove the threat of margin squeeze applied by the SMP operator. As the long run incremental cost is typically higher than the short term marginal cost, Zain would still have incentives to set on-net retail prices below the MTR. This applies when they result in a positive contribution towards the costs that are fixed in the short run (even though they may be variable in the long run). This implies that the additional non-discrimination obligation on Zain that permits other operators to purchase MTR from Zain at the weighted average on-net price should be maintained.

112. In addition, MTR rates in Jordan should ideally be asymmetric, i.e. smaller operators should be permitted to apply a higher rate. This would reduce the dominant position of Zain and have a number of positive effects on the mobile retail market:

- *More competition in the postpaid segments and for other high-usage consumers.* Introducing asymmetry would make high-usage consumers (such as post-paid) relatively more profitable for the smaller operators. As a result, competition for post-paid and other high usage customers, which is currently limited as shown by the high market share of Zain in that segment, would intensify.
- *Improved price and quality in future.* Orange Mobile and Umniah have been incurring losses for some time. A market situation in which some operators incur continuous losses is not a sustainable market outcome: if revenues do not increase, in the future, either retail prices will have to be increased or costs reduced. As the operators are already efficient, a cost decrease may only be achieved by decreasing quality or reducing investment. Increased terminating revenues would help Orange Mobile and Umniah to continue to offer reasonably priced quality services on a sustainable basis.

113. Negative effects from asymmetric MTR, while theoretically possible, are unlikely in Jordan. Potential negative effects could theoretically encompass encouraging inefficient entry and discouraging smaller operators from becoming more efficient, and from increasing their market share.[31] However, such potential effects are not relevant in the Jordanian market:

- Entry of new operators in the Jordanian market is unlikely given low profitability.
- Incentives to be efficient and lower costs would be preserved.[32]
- Incentives to steal business and grow in size for each operator would remain strong as benefits of scale outweigh those of asymmetric MTR.[33]

114. **In conclusion, introducing asymmetric MTR tariffs would be a suitable and proportionate remedy in the mobile termination market, and would have a number of positive effects in the Jordanian mobile market.**

6 Question 9 Competition problems and remedies in the market for wholesale mobile SMS termination

115. Question 9. Do you agree with the TRC's preliminary assessment of competition problems and appropriate remedies in the market for wholesale mobile SMS termination?

116. Currently, SMS termination is not regulated as operators maintain a voluntary bill-and-keep regime, meaning that they do not charge each other for SMS termination. However, TRC proposes to introduce regulation as one of the operators are planning to withdraw from the agreement. The proposed remedies are similar to those in the wholesale mobile voice termination market. The SMS-termination rate is to be

31 See e.g. T. Valetti, Asymmetric regulation of mobile termination rates, 2006.

32 Termination costs are determined by the overall efficiency of the operators, i.e. termination costs decrease when networks become more efficient. It is highly unlikely that Orange mobile and Umniah would maintain high costs and decrease margins on retail services to increase termination revenues, which comprise a small share of total revenue ([Confidential: x for Orange mobile in 2017 according to Orange Mobile data submitted to TRC).

33 It is highly unlikely that Orange mobile and Umniah would reduce their ambitions to increase market share to secure higher termination tariffs. Larger operators realise a wide range of benefits, including economies of scale and increased profitability due to a higher share of high-usage customers. Such benefits vastly outweigh any disadvantages from lower MTRs.

determined by the TSLRIC+ model used also to determine the voice termination rates. The model estimates the cost of SMS-termination at 4.68 fils/SMS in 2019 and 6.09 fils/SMS.

117. Orange Mobile disagrees with cost-based regulation of SMS termination tariffs. TRC should as a priority prevent the bill-and-keep regime from folding. Increasing the cost of SMS-termination above zero would allow Zain to apply on-net/off-net discrimination on SMS in addition to voice services, exacerbating the club effect and putting other operators at an even larger disadvantage. As stated in Section 5.1, TSLRIC+ regulation does not prevent a squeeze as long as the termination rates are above the short-run marginal cost of termination. In addition, the bill-and-keep regime has an advantage of keeping the administrative and regulatory costs to the minimum.

118. There is an internal inconsistency in TRC policy regarding MTR and SMS termination rates. On the one hand, TRC lifts the non-discrimination obligation imposed previously on Zain on the grounds that lowered MTR limit the largest operator's possibility to apply on-net/off net discrimination to put competitors at a disadvantage (page 72 of the consultation document). With respect to SMS termination, TRC however seems to disregard the above fact that increasing the SMS termination tariffs will enable Zain to create tariff differentials between on-net and off-net tariffs, creating a club effect on SMS and strengthening its dominant position.

119. Furthermore, Orange Mobile objects to the obligation to provide an annual statement of compliance with the non-discrimination obligation. Such an obligation puts a high administrative burden on operators and is disproportional. There is no legal basis for such an obligation given that TRC already has power to monitor the licensees' compliance to all market regulations.

7 Detailed queries

120. Below we provide additional detailed comments on errors and omissions in specific paragraphs of the TRC consultation.

Page	Section	Comment
4	Executive Summary	TRC has not considered that the increase is due to A2P and Adv Bulk SMS sent by Bulk service providers, where P2P SMS is declining due to use of OTT interactive messages (e.g. Whatsapp)
4	Executive Summary	It is not clear why TRC concludes that Zain has slightly higher market share than Umniah and Orange Mobile. The most recent data on the number of active mobile customers was published by TRC for Q1/2019 as follows: 3,605,262, 2,462,921, and 2,007,079. This implies that Zain's market share is 44.6% which exceeds Umniah and Orange Mobile market shares.
4	Executive Summary	The mobile penetration reported on this page is 98% while on page 11, it is 85%.

4	Executive Summary	The share of prepaid subscribers reported on this page is over 90%, while on page 11 it is 85.3%.
9	1.5	As per TRC regulations, the period to provide inputs is 14 days not 10 days.
12	2.2	TRC has not explained the decline of dedicated data subscriptions for stand-alone services in 2018 compared with 2017, 2016, and 2015. Moreover, the figure of dedicated data subscriptions for stand-alone services in 2017 does not match the data published in the TRC annual report 2017. This shows that the dedicated data subscriptions for stand-alone services in 2017 is 2,126,808 whereas the metric stated in Exhibit II.2 is 2,594,147.
12	2.2	We query why such data has not been provided by Zain and Umniah. We understand that all operators should provide quarterly and annual reports to TRC on a regular basis.
12	2.2	This statement is not clear, as some mobile subscribers do not use data.
13	2.2	Total mobile user revenues in 2018 does not appear to be correct given the total number of subscribers in previous table which shows a substantial decrease in dedicated data subscriptions for stand-alone services from 2017 to 2018. The total mobile revenues included in the table do not coincide with the TRC published figures in 28/7/2019. These report that total mobile revenues for 2017 and 2018 were 641 MJoD and 673 MJoD respectively. Additionally, total mobile revenues included in the table for 2015 and 2016 do not coincide with the TRC published figures in the annual reports. These report that total mobile revenues for 2015 and 2016 were 609,942,944 JoD and 619,610,165 JoD respectively.
13	2.2	The apparent increase may be due to the off net bundled minutes that were introduced to the market to break the Zain club effect. The operators' approach of increasing the bundle off net minutes should be assessed by TRC in terms of the impact on operators' revenues. This should lead to the conclusion that there remains a Zain club effect impact on the operators' revenues.
15	2.2	The share of call volumes by call type (off-net fixed calls) in this Exhibit shows a decrease. However, this does not coincide with the data in Exhibit II.5 which shows an increase, particularly in 2017.
15	2.2	We query how TRC has distinguished trends in post-paid and pre-paid SMS and how it has concluded that both have increased, as the increase is due to bulk commercial SMS.
15	2.2	The last paragraph, states that the data consumption by stand-alone broadband subscriptions in 2018 was 388 million GB, while Exhibit II.8 shows 291 GB for stand-alone and 388GB for standard (handset) subscriptions. This seems to be an inconsistency.
16	2.2	This figure does not coincide with the data in Exhibit II.2 which shows a decrease in dedicated data subscriptions for stand-alone services by more than 50% in 2018 compared to 2017.
16	2.2	TRC should not conduct analysis given that there is missing data (which TRC should not accept). Analysis conducted on such data is subject to uncertainty and incorrect conclusions may be made. TRC should have reviewed alternative data sources such as Arab Advisors, operators' financial statements, and/or group financial statements.
17	2.2	Exhibit II.3 shows that total mobile users revenues is 433,611,035 and that total voice revenues is 175,198,278. This implies that total data revenues is 258,412,757. Is TRC satisfied that these metrics are correct?
17	2.2	There appears no basis for TRC to estimate the figures as Orange Mobile provided the requested data (sub sheet 6 & sub sheet 6b).
18	2.3	ARPU and market value share are strong indicators of market shares. TRC should have assessed various reports as it is surprising that TRC concludes that in 2015 all three operators held a broadly similar subscriber market share. There have been discussions with TRC on the method adopted by operators for calculating the number of active customers. TRC investigated HLR/VLR systems metrics in 2017-2018 and has the figures that it can build on.

		The most recent figures on the number of active mobile customers have been published by TRC for Q1/2019 as follows : 3,605,262, 2,462,921, and 2,007,079. These imply that Zain's market share is 44.6%.
19	2.3	This is incorrect: from 2017 to 2018, the number of subscribers fell from 9,703,287 to 8,731,760, and revenues increased from 355,503,533 to 433,611,035, as per TRC figures (Exhibit II.3 Mobile user revenues (in JD)). Accordingly, the conclusions here are not based on the correct data.
19	2.3	The total mobile revenues included in the table do not coincide with the TRC published figures for 28/7/2019. These show that total mobile revenues for 2017 and 2018 are 641 MJoD and 673 MJoD respectively. Additionally, the total mobile revenues included in the table for 2015 and 2016 do not coincide with the TRC published figures in the annual reports. These show that total mobile revenues for 2015 and 2016 are 609,942,944 JoD and 619,610,165 JoD respectively.
19	2.3	TRC should not conduct analysis given that there is missing data (which TRC should not accept). Analysis conducted on such data is subject to uncertainty and incorrect conclusions may be made. TRC should have reviewed alternative data sources such as Arab Advisors, operators' financial statements, and/or group financial statements. Arab Advisor report includes such aggregations. Such reports indicate that Zain has market share of more than 50%.
19	2.3	We question whether Umniah provides services other than mobile services? TRC should not conduct analysis given that there is missing data (which TRC should not accept). Analysis conducted on such data is subject to uncertainty and incorrect conclusions may be made. TRC should have reviewed alternative data sources such as Arab Advisors, operators' financial statements, and/or group financial statements. Arab Advisor report includes such aggregations.
20	2.3	TRC should revisit and thoroughly analyse the data it has by type of SMs provided (A2P/bulk SMS and P2P). A disaggregated assessment should be conducted - connected to on-net, off-net and international for each A2P and P2P SMS services. Only then may valid conclusions be made.
22	2.3	The estimates of Orange Mobile's unitary pricing are incorrect: the method is incorrect, and the estimates are not based on actual figures (as per the footnote on page 22). When Orange Mobile submitted retail revenues and service volumes for 2015, 2016 and 2017, such figures were split between residential and business (sheet 6A and 6B of the Data Collection sheet). The TRC appears to have based its analysis on one of these sheets not both; it is therefore not based on actual data. We request that the TRC clarify the basis on which it reached such conclusion and why it made only partial use of the actual data.
22	2.3	Orange Mobile pre-paid revenue figures for 2015 were provided to TRC.
29	3.2	TRC has not considered that the prices of post-paid are much higher than the prices of pre-paid.
29		TRC says here that in 2017, 92% subscribers had a pre-paid mobile subscription. It is not clear why TRC uses the 2017 figure while the 2018 figure (85.3%) is available.
34	3.2	This is incorrect: stand-alone mobile broadband is not considered in the fixed market review. Mobile broadband has been excluded from all market reviews.
36	3.3	This is incorrect, no such obligations (geographic and population rollout obligations on MNOs as part of licensing conditions) in the licensing conditions exist.
42	3.3	TRC provides no rationale for the inclusion of fixed line operators in the supply side substitution analysis. Fixed line operators are not relevant to the assessment.
53	4.4	TRC has not assessed Zain's refusal to implement the obligation to provide MACO in accordance with previous mobile market review regulatory decisions.
53	4.4	TRC should explain the meaning of "fairly static market share" and whether it refers to subscribers or revenues. The basis on which TRC reaches this conclusion should be made transparent.

53	4.4	TRC should state the reasons underpinning this conclusion. Orange Mobile's experience is that it has requested that Zain provide access to CS/CPS numerous times since 2005 yet Zain has taken no action.
54,55	4.4	TRC has provided no evidence in support of its statement, "*Zain's market share is higher than ["NO] when measured by revenue, but not when measured by call volume or subscribers*."
54,55	4.4	TRC has provided no evidence (e.g. a market study) in support of its statement, "*The TRC notes that the absence of Mobile Number Portability is likely to depress switching between operators, and in a market with a high penetration rate of mobile phones, this will limit movement in market shares*."
54,55	4.4	"*The TRC notes that retail prices for mobile services in Jordan are competitive, suggesting that competition in the market is functioning well.*" TRC appears to base its perception of effective competition in the retail market measured on pricing in the market. However, TRC appears not to have considered that low prices and rising costs put operators' profits under pressure. TRC also appears not to have considered that the rising costs, (e.g. spectrum prices and taxes) are among the highest in the world.
55	4.4	TRC appears to have considered only part of MVNO services to establish the need to regulate MACO. However, TRC has excluded CS/CPS in its assessment of MACO services.
56	4.4	TRC has conducted only a partial assessment. TRC should provide its analysis of all three elements of the 3CT independent of the failure of any one element. Operators should be given the opportunity to review and appraise all three elements and provide their views. TRC may have reached incorrect conclusions (particularly if data are missing) and operators should be permitted to submit corrections to enable the correct conclusions to be reached.
57	4.4	TRC has not made transparent the evidence that underpin its conclusion. The figures that TRC relied on should be made transparent and subject to stakeholder review in the context of available market reports and facts.
70	6.2	TRC has not considered the non-implementation of the Decision No.9-1/2004 as one of the major market competition problems which leads to the current situation of high traffic, price war and congestion/quality issues and the pressure on competitors revenues. This is contrary to the statement in its previous mobile market review where TRC stated that it would be considered in this consultation.
80	6.2	TRC does not refer the basis for these calculations for years 2019 and 2020. We consider that these rates represent retail off-net SMS termination not wholesale SMS termination rates as per LRIC model outputs. The data sent previously to the TRC for building the top down TSLRIC model was based on a forecast conducted in 2015 and 2016, whereas the data sent for the purpose of the market review reflects much more accurate forecast based on the recent trend of actual consumption. It is unclear why the SMS termination rates are equal to the retail outgoing SMS to other networks and in turn are equal to wholesale incoming SMS from other networks.