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Orange Fixed, Orange Mobile, Orange Internet (Orange) response to the TRC consultation: Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions

16 October 2024

Orange

About this document

This is Orange Fixed, Orange Mobile, Orange Internet (Orange) response to the TRC's consultation on Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions

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1 Introduction

Orange welcomes the opportunity to respond to the Public Consultation Document on the draft Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions (draft Instructions) issued by the Telecommunications Regulatory Commission (TRC) on 8 August 2024.

Orange's response was developed with the support of its consultants, Plum Consulting (Plum). Plum was commissioned by Orange to assist it review the TRC's four consultations, analyse the telecommunications markets in Jordan and develop responses to the consultations. Plum is an independent consulting firm, focused on the telecommunications, media, technology, and adjacent sectors. Plum applies extensive industry knowledge, consulting experience, and rigorous analysis to address challenges and opportunities across regulatory, radio spectrum, economic, commercial, and technology domains.

For the first time, in the consultation the TRC has combined proposed regulatory instruments covering interconnection, infrastructure sharing and national roaming in a single document. It is proposed that the draft Instructions will replace the previous Interconnection Instructions, which were last updated in 2010. As stated in the TRC's Public Consultation Document, the draft Instructions have been issued pursuant to market reviews in the telecommunications sector which were conducted across 2019 and 2020 using data up to 2018.

Orange is concerned that the TRC is now seeking to create regulatory rules on the basis of analysis conducted in these market reviews and the conclusions of them. The requirements which are proposed to be imposed on licensees following this consultation may take effect in 2025 and would be expected to be in place for some years after that. This creates significant risks that regulation will be set incorrectly, and that this will harm markets and consumers. We submit that markets (fixed and mobile) have inevitably changed since the conclusion of the market reviews in 2020, and call for a new review of retail and wholesale fixed broadband markets.

Furthermore, we note that many articles in the draft Interconnection Instructions have been carried forward from the existing instructions (last updated in 2010) with no material change, meaning this risk that they are outdated is even greater.

In this document we provide our comments on the draft Instructions. Aside from our concerns about the long delay between market analysis and the regulatory interventions the TRC is proposing, we also believe that the Interconnection Instructions are not needed because a comprehensive regulatory framework for interconnection already exists in the Regulatory Decisions on Market Reviews and the Reference Interconnection Offers (RIOs) of Designated Licensees. This framework is sufficient to protect markets and consumers.

Orange believes that imposition of infrastructure sharing rules would not be consistent with the Constitution of Jordan, nor with the Telecommunications Law. The TRC does not have the legal vires to regulate physical infrastructure. Furthermore there is no competition economic or public interest justification to regulate infrastructure sharing, and to do so would create risks of damage to investment incentives.

Orange also considers that the draft National Roaming Instructions are not necessary. National roaming should not be regulated due to the potential impact on incentives for infrastructure investment.

Arrangements between licensees for infrastructure sharing and national roaming arrangements should be left to commercial agreement, and the draft Regulations should be withdrawn.

In this document, we set out Orange's concerns, and explain points on which we propose change or seek clarifications. Where relevant, we explain how our assessments are based on international best practice in areas where this diverges from the TRC's proposals.

Orange's concerns about the proposed draft Instructions are explained in this document as follows.

- Concerns that apply to all four sets of draft Instructions on which the TRC is now consulting are set out in Section 2.
- Concerns that are specific to the consultation on the draft Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions are addressed in Section 3.
- Orange then provides comments on individual clauses in the draft Instructions in Section 4.

Orange proposes changes that are congruent with other developed markets which promote innovation and a competition based, outcomes oriented approach to regulation. This approach incorporates a light touch framework that promotes fair competition, and takes into account the rapidly changing technological environment in the telecommunications sector.

2 Aligning regulation more closely with current market conditions

2.1 Orange's main concerns with the TRC's four consultations

Orange has two major concerns with the TRC's four consultations. The first of these can be summarised as follows:

- the current dominance assessments are six years out of date while, in the intervening years, market conditions have changed rapidly; and
- as a result the interests of all of Orange's business units, the wider industry and the public interest, would be seriously harmed if the instructions, presently under consultation, were implemented using the current dominance assessments.

We set out our analysis of this concern in Section 2.2 below.

In addition, Orange is concerned that there is insufficient guidance on the timing aspects for the market review process. This concern is considered in Section 2.3.

To deal with these two problems Orange proposes to the TRC that it:

- conducts a new review of the fixed broadband markets as soon as possible before implementing any of the four sets of Instructions;
- focusses in this review on market definition and the case for including 4G and 5G-based FWA within both the retail and wholesale (WLA and WBA) fixed broadband markets;
- sets a 'regulatory period' of 5 years – the maximum time between the conclusion of a market review of an individual market and the conclusion of the next market review of that market, as is required in the EU. This might mean either a full-scale review of the whole sector or a less expensive review of the one or two markets where conditions are fast changing; and
- consider requests from market players for a more frequent review of an individual market where fast changing market conditions justify such a review.

2.2 The need to undertake a new review of the fixed broadband markets

In three of the four consultations,¹ the TRC's proposals impose significantly greater obligations on dominant operators than on other operators. For such proposals to lead to effective regulation it is therefore important that the dominance assessments used should be up-to-date. Indeed two of the consultations (on KPIs and margin squeeze tests) relate almost exclusively to dominant operators in the fixed broadband wholesale markets and would be largely redundant if that dominance no longer existed.

The TRC's proposals in the consultations will be implemented in 2025 at the earliest. But, if current dominance assessments are used, they will result in regulations that reflect the market conditions from 2018 – the latest year

¹ Implementation of a Margin Squeeze Test for local access and broadband access, the Key Performance Indicators (KPIs) for Wholesale Services Instructions, and the Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions

for which data was available to assess dominance in the 2019 market review. In other words current dominance assessments are seven years out of date.

In addition Orange notes that the dominance assessments made in the 2019 review were flawed. In particular they were based on the 2006 Competition Safeguarding Instructions rather than the 2009 White Paper on the Market Review Process. This means that they did not take a forward-looking approach to the assessment of dominance.

Since 2018 market conditions in the fixed broadband markets have changed substantially, driven by three main factors:

- investment in the deployment of new fibre networks by the likes of Orange Fixed, Zain and others;
- rapid rollout of a wholesale only fibre network across Jordan by Fibertech; and
- substantial growth in the use of 4G (and now 5G) FWA which offers a strong competitor to copper and fibre-based wireline broadband services and is now rapidly substituting for TDD based FWA.

Orange considers that, as a result of these developments, the fixed broadband markets have become effectively competitive and that Orange Fixed is no longer dominant in the WLA or WBA markets. If this analysis is correct then the wholesale KPI and Margin Squeeze Instructions now proposed by the TRC, will be largely redundant.

As a result Orange considers it would be wrong to use the 2019 dominance findings when operating the proposed new Instructions. Such an approach would lead to faulty regulation, as a result of which:

- The TRC would no longer be able to meet its mandate under the Telecommunications Law and Government policy on regulating the telecommunication sector that requires the TRC to:
 - *"stimulate competition in the telecommunications and information technology sectors, relying on market forces,...."*²;
 - *"review its instructions and regulatory decisions periodically"*; and
 - *"...favour a presumption of withdrawal of ex ante regulation where market conditions allow"*.³
- Competition between licensees would weaken as major, but no longer dominant, market players are restricted in the way they can compete because of regulations that should no longer apply.
- Unnecessary regulatory costs would be incurred. The cost of implementing the margin squeeze and KPI proposals in the consultations are significant. Yet these proposals would not be needed (and the implementation costs would be avoided) if, as seems likely, dominance in the fixed broadband markets has receded.

To prevent such harm Orange asks the TRC to carry out a new market review of the fixed broadband markets – to redefine these markets and reassess dominance within them - before implementing its proposed Instructions.

² Telecommunications Law 1995, Article 6(e) (o)

³ TRC Jordan, 2020, Regulatory Decision on the Fixed Markets Review 2020, p2 references the TRC's need to follow the General Policy for the Information & Communications Technology and Postal Sectors, 2018 (the "Policy").

2.2.1 Market conditions have changed significantly since the last market review, especially in the fixed broadband market

The major market developments

Over the five years since the 2019 market review, the fixed broadband market in Jordan has seen four major developments:

- A substantial improvement in the price performance of FWA products following the rollout of 4G and now 5G technologies in Jordan. It is important to note that today, Orange Mobile has a market share of less than 1% in the mobile services retail market and only around 10% of the supply of FWA-based fixed broadband.
- The rapid rise in the importance of fibre access when compared with other access technologies for fixed broadband. Figure 2.1 illustrates.
- The rapid rise in the market shares of Fibertech in the WLA market. In 2019 Fibertech held a negligible share of the WLA market. But Orange estimates that Fibertech now has a 10% share of fibre access connections. As a result, the share of fibre access of Orange Fixed is declining quickly as shown in Figure 2.2.
- In addition both Zain and Umniah now self-supply fibre access as well as purchasing fibre access from Fibertech. So the number of fibre connections self-supplied by these two operators has grown substantially over the past five years.

Figure 2.1: Fixed broadband technology – changes in connections (000s)



The need to include 4G/5G FWA in the FBB markets

In the 2019 review TDD-based FWA was included in the definition of the fixed broadband retail and wholesale markets, but 4G based FWA was excluded. Orange considers that this exclusion is no longer appropriate given the following evidence:

- 4G FWA is now being sold by all three mobile operators in Jordan as a separate product from contracts offering a combination of mobile data, voice and text.
- In Orange's view these products are now being used by those who buy such stand-alone data plans as a substitute for wireline fixed broadband products.
- As a result, 4G and 5G-based FWA is now substituting rapidly for TDD based FWA as Figure 2.2 illustrates.
- Exclusion of 4G and 5G based FWA would be inconsistent with the TRC's principle of technology neutrality.
- 4G and 5G-based FWA are seen as a substitute for wireline fixed broadband in many other jurisdictions – especially in areas of relatively low population density where the cost of fibre broadband connections are substantially higher than in urban areas. Recognising this relationship between wireline and wireless-

based fixed broadband is an important step in maximising the availability of cost-effective fixed broadband on a nationwide basis.

Figure 2.2 Demand for FWA technology is changing fast ✂



Effective competition in the fixed broadband markets

Orange Fixed estimates its WLA market share by fixed broadband connections (all technologies) has fallen significantly since 2019 as shown in Figure 2.3 – driven partly by the rapid rollout of fibre access by Zain, Fibertech and others, and partly by growth in the use of 4G and 5G based FWA.

Figure 2.3: Market shares by connection for Orange Fixed over time ✂



Figure 2.3 indicates that:

- The market share of Orange Fixed in WLA will have fallen from ✂ if 4G and 5G FWA connections are included in the FWA markets.
- If 4G and 5G FWA connections are excluded, then the market share of Orange Fixed in the WLA market will have fallen from ✂.
- At the same time the retail share by connections of Orange Fixed will have fallen more slowly – from ✂.

In addition Orange estimates that Fibertech's share of the WLA market will have grown from ✂⁴.

Using these market shares and applying the Modified Greenfield Approach (now endorsed by the TRC in its 2024 Competition Safeguard Instructions proposals) Orange estimates that the fixed broadband retail market will be effectively competitive in the absence of ex ante regulation based on the market review process. Specifically Orange notes that:

- There will be no market player with a retail share in excess of ✂ by 2025.
- There will be no wholesale supplier with a share in excess of ✂ by 2025.

As a result Orange considers that the fixed broadband market, at both the retail and wholesale levels, should be freed from existing ex-ante market review regulation.

⁴ 4G FWA included in the WLA market.

2.2.2 The 2019 dominance analysis was flawed

The 2019 assessment

In the *Regulatory Decision on the Fixed Markets Review 2020*, the TRC's determination of dominance in the WLA market noted that Orange Fixed:⁵

- Clause (1) *...has a market share in excess of 50%, the threshold for the presumption of dominance established required by Article 8(b) of the Competition Safeguards, and it is unlikely that alternative operators providing and/or self-supplying wholesale local access could increase their market shares sufficiently over the lifetime of this review to a level that would allow them to effectively compete with Orange Fixed or constrain its power.*
- Clause (3) *Barriers to entry and expansion in this market are high (Competition Safeguards, Article 8(c), Numbers 13 and 14).*
- Clause (6) *With the exception of wholesale access via FBWA, Orange is the only potential provider of wholesale local access, and no wholesale products are active in the market. Therefore, there is no potential for countervailing buyer power (Competition Safeguards, Article 8(c), Number 6).*

In its dominance assessment for WBA the TRC cited clauses (1) and (3) above, as well as:⁶

- Clause (5) *While other operators (notably fibre providers) self-supply wholesale broadband services over their own infrastructure, they remain reliant on Orange Fixed's bitstream product outside their areas of geographical coverage and this is likely to remain the case during the lifetime of this review (Competition Safeguards, Article 8(c), Numbers 2 and 3).*
- Clause (6) *The largest customer of Orange's wholesale broadband service is Orange Data, and no other customer purchases a significantly high volume of wholesale broadband services to allow it to exercise countervailing buyer power (Competition Safeguards, Article 8(c), Number 6).*

The flaws in this assessment

Orange considers that the 2019 assessment of dominance was flawed because it:

- drew on the guidelines for assessing dominance as detailed in the *Competition Safeguards 2006*, whereas it should have been guided by the *White Paper on Market Review Process 2009*; and
- did not take a forward looking approach.

The TRC has developed two distinct guidelines: one for use in the application of ex-post competition law – the *Competition Safeguards* – and the other for ex-ante market reviews – the *White Paper on Market Review Process*. Within the market review guidelines there is no percentage threshold for presumption of dominance. There is reference to the use of indicative market share percentages by the European Commission, along with a range of other considerations that need to be taken into account. The reliance upon the wrong guidance clearly led to inappropriate determinations of dominance.

⁵ TRC Jordan Regulatory Decision on the Fixed Markets Review 2020, p7

⁶ TRC Jordan Regulatory Decision on the Fixed Markets Review 2020, p8

A key difference between the assessment of dominance in the case of an ex-post analysis to support a concern of historic abuse, versus the assessment of dominance in the case of considering the imposition of ex-ante regulation, is that the latter needs to be forward looking, taking into account expected or foreseeable market developments – such as the entry of Fibertech. The White Paper on Market Review Process clearly states this:⁷

*Whereas under competition rules one will be measuring market power at that point in time when an alleged abuse occurred, **a sector-specific regulator will take into account the possibility of that market power diminishing over time**, given the need for it to conduct a forward-looking analysis.* (Emphasis added)

*A hallmark of the process of market review lies in the fact that markets must be reviewed in a manner that **takes into account the technological and commercial developments** that are likely to occur within the timeframe **covered by the market review period**, at least insofar as these developments may have an impact on the soundness of the conclusions drawn by a regulator with respect to the outer boundaries of a relevant product market, and **with respect to the existence or non-existence of dominance**. This is expressed in the notion that the task of a regulator under the process of market review must be “forward looking”. (Emphasis added)*

The temporal aspect associated with market shares is crucial, as changes in market shares over time are likely to provide an insight into the dynamics of the relevant market and may be useful in assessing the nature and extent of competition in that market. In addition, the risks associated with adopting a snapshot view of the affected market are avoided. For example, volatile or rapidly decreasing market shares may indicate under certain circumstances the existence of effective competitive constraints.

The above analysis is supported by references to the ‘regulatory approach to market analysis’ specified by the European Commission in its Guidelines on market analysis and the assessment of significant market power:⁸

*“... NRAs should **take into account existing market conditions as well as expected or foreseeable market developments over the course of the next review period...**” (Emphasis added)*

The proposed changes to the Competition Safeguards Instructions, presently out for consultation, note that following the adoption of the proposed changes, the new Competition Safeguard Instructions will supersede the current White Paper. Within the proposed changes to the Competition Safeguard Instructions, useful distinctions are proposed to acknowledging the difference between the requirements of ex-post and ex-ante approaches. However, as we elaborate on within our response to the consultation on the Update to the Competition Safeguard Instructions, the currently proposed changes to accommodate the differences in undertaking an ex-ante market review, do not go far enough or replicate sufficiently the detailed and useful processes included within the current White Paper. Either more of the ex-ante market review specific processes need to be included within the Competition Safeguards, or the White paper needs to be retained to provide clear guidance as to how the TRC intends to conduct market reviews.

A summary of Orange’s conclusions

A finding of dominance in the 2019 market review would not have been arrived at if the TRC had followed the guidance of its market review guidelines and considered both the diminishing market shares of Orange Fixed, and taken a forward looking approach that included the expected entry of Fibertech, Zain’s expanding fibre network and growing use of mobile delivered fixed wireless access (FWA).

⁷ TRC Jordan, White Paper on Market Review Process 2009, Section 1.1 (p8 and 9), Section 4.1 (p28)

⁸ European Commission (2018), Communication on SMP guidelines, Available at: <https://digital-strategy.ec.europa.eu/en/library/communication-smp-guidelines> clause 17

Further, if a forward looking approach had been adopted by the TRC, then it would have likely reached quite different conclusions on the other key considerations of:

- the lack of barriers to entry – Fibertech had or was about to enter the market;
- the technology shift away from copper based ADSL to fibre and wireless; and
- the growth of FWA, and use of self supplied fibre.

Even if the above outcomes had not been foreseen clearly in 2019, they cannot be ignored in 2024.

2.2.3 Orange's proposal to the TRC

Based on the analysis set out above, Orange proposes that the TRC should:

- conduct a new review of fixed broadband markets as soon as possible before implementing any of the four sets of Instructions; and
- focus in this review on market definition and the case for including 4G and 5G-based FWA within both the retail and wholesale (WLA and WBA) fixed broadband markets.

2.3 Revising the timing of the market review process

2.3.1 The timing issues to be reviewed

There are two timing aspects to consider in undertaking a market review:

- how often the market review is undertaken – the time between market reviews; and
- the forward looking perspective – the time horizon projection within which a regulator should look to take account of future market developments in carrying out the market review process.

Orange considers that the TRC needs to revise both of these aspects and align them, to make regulation more timely and more relevant.

2.3.2 The case for revision

It is clearly important, if regulation is to be effective, that the interval between market reviews should lead to regulations that reflect current market conditions as far as possible.⁹ On the other hand conducting market reviews are expensive and time-consuming for both the TRC and those they regulate. So what is the appropriate frequency for market reviews?

Currently there is no guidance on the frequency with which market reviews should take place in the telecommunications sector of Jordan. Neither the Law, the Policy, nor the White Paper on Market Review Process, specify the time between market reviews or how often the TRC should undertake a market review to

⁹ We note that In practice there was a full scale market review in 2010 and another in 2019. There have been no similar reviews since and there are currently no signs of a new review being imminent.

meet the requirement of a government policy.¹⁰ As a result the TRC has taken over 10 years to reach a final decision in its most recent 2019 market review¹¹ but has still not concluded its decision on remedies – the subject of these consultations – and is not likely to until 2025: fifteen (15) years following its last market review.

“requires the TRC to review its instructions and regulatory decisions periodically and, where market conditions allow and where, in the judgment of the TRC this is appropriate, to amend such instructions and regulatory decisions in line with these conditions.” (Emphasis added)

However, the White Paper on Market Review Process does reference ‘market review period’ and specify the forward time horizon within which a forward view should be taken.¹²

“A hallmark of the process of market review lies in the fact that markets must be reviewed in a manner that takes into account the technological and commercial developments that are likely to occur within the timeframe covered by the market review period...”

“Market reviews are conducted with a forward looking perspective of 2-3 years. Therefore, it is important that these reviews are repeated at such intervals in order to ensure that new technological and market developments that may result in different market definitions and analysis are taken into account, and which may require ex ante obligations to be modified, abandoned or new ones introduced.” (Emphasis added)

Elsewhere in the White Paper on Market Review Process it notes that:¹³

“In performing this task, the TRC will consider the EU approach to be an important reference point...” (Emphasis added)

In the EU both the period between market reviews and the forward looking time horizons are required to be the same and are referred to as the ‘regulatory review period’.¹⁴

“13. In carrying out a market analysis in accordance with Article 16 of Directive 2002/21/EC, NRAs will conduct a forward-looking, structural evaluation of the relevant market over the relevant period.”

“14. The length of the relevant period (the next review period) is the one between the end of the ongoing review and the end of the next market review (11), within which the NRA should assess specific market characteristics and market developments.” (Emphasis added)

At the inception of the EC regulatory framework in 2002 the regulatory review period was set at 5 years. For a short period it was reduced to 3 years but in the latest review of the EC framework, it was reset to 5 years. It has never been left to extend out to 10 or 15 years.

¹⁰ General Policy for the Information & Communications Technology and Postal Sectors, 2018, Paragraph 21

¹¹ The final decision of the previous market review was in 2010 and the final decision of the 2019 market review was published in 2020.

¹² TRC Jordan, 2009 White Paper on Market Review Process, p9

¹³ TRC Jordan, 2020, Regulatory Decision on the Fixed Markets Review 2020, p11

¹⁴ European Commission (2018), Communication on SMP guidelines, Available at: <https://digital-strategy.ec.europa.eu/en/library/communication-smp-guidelines> clause 13 and 14

*“(177) However, in the interest of greater stability and predictability of regulatory measures, **the maximum period allowed between market analyses should be extended from three to five years, provided market changes in the intervening period do not require a new analysis.**” (Emphasis added)*

If the TRC were following international best practice, following its 2020 Final Decision, it would have started preparing a new market review at least a year ago, so that it could issue new instructions for the markets and not issue instructions to put regulations on the outputs of the market study that was issued in 2020.

2.3.3 Orange’s proposal to the TRC

Based on these considerations Orange proposes that the TRC should (perhaps in consultation with the Government):

- set a ‘regulatory period’ of 5 years – being the maximum time between the conclusion of a market review of an individual market and the conclusion of the next market review of that market, as is required in the EU.¹⁵ This might mean either a full-scale review of the whole sector or a less expensive review of the one or two markets where conditions are fast changing. This might be done either by implementing the full four step market review process or simply reviewing (say) the assessment of dominance; and
- consider requests from market players for a more frequent review of an individual market where fast changing market conditions justify such review.

We consider that these proposals for the timing of future market reviews would help the TRC in achieving some of its key objectives such as *“improving legal certainty as to the basis upon which an ex ante regulation will apply”* and *“targeting remedies to address identified competition problems”*. At the same time this proposal would help avoid a repetition of the problems identified above.

¹⁵ In the EU this period is known as the ‘regulatory period’. In practice, in order for a National Regulator to undertake and conclude its market review within the regulatory period, it will normally commence its data gathering and analysis some 18 months to two years before the end of the regulatory period.

3 Orange's major concerns

In Section 3 we explain our major concerns about the draft Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions.

3.1 Major concerns relating to the TRC's proposed updates to the Interconnection Instructions

Further to the broader concerns set out in Section 2, Orange also has specific concerns about the draft Interconnection Instructions. These are explained in this section. In summary:

- The draft Instructions do not reflect current market conditions. Regulation to the level of detail contained in the draft instructions is unnecessary in competitive markets and creates risks of harm to markets and consumers.
- The scope of the draft Instructions and application between all licensees and Designated Licensees is not clear.
- Designated Licensees are proposed to be subject to three layers of regulation through the Regulatory Decisions on Market Reviews, requirements for Reference Interconnection Offers, and the proposed Interconnection Requirements; this is risky and inefficient.
- The draft Instructions are excessively prescriptive and detailed, and the benefits are not proven.
- The TRCs application of technology neutrality to interconnection needs to be clarified.

We explain each of these concerns in turn below.

3.1.1 The draft Instructions do not reflect current market conditions

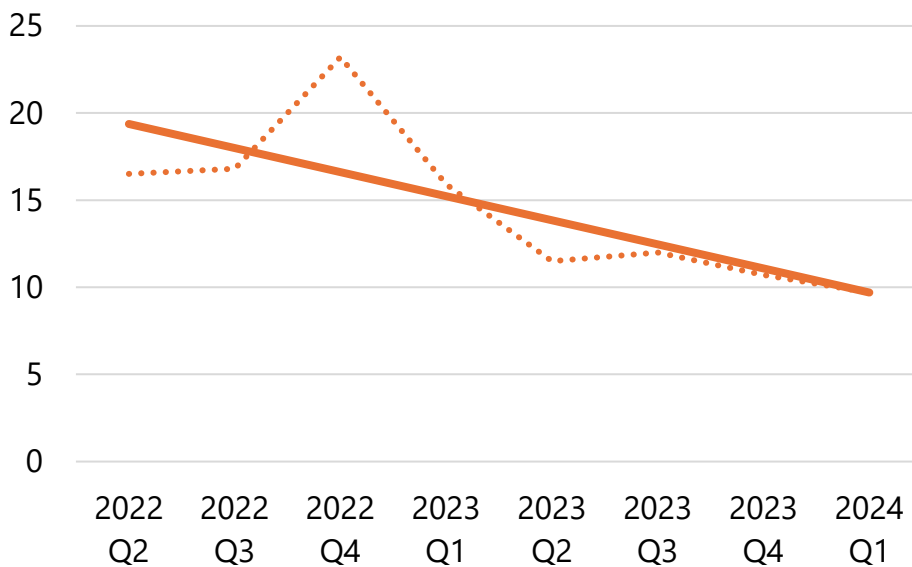
Orange is concerned that regulatory interventions are being proposed based on the conclusions of market reviews which were completed in 2020. It is certain that market conditions have changed in the period since then.

Additionally, the draft Interconnection Instructions propose very detailed and prescriptive regulations even in competitive markets. This presents a high risk that regulation will be counter-productive, i.e. it may harm markets and consumers rather than benefitting them.

We have undertaken analysis which shows that Orange is no longer dominant in the WBA and WLA markets. This analysis is included in Section 2 of this response where we also make the case for the TRC to conduct a new market review of fixed broadband markets to definitively establish whether these markets are competitive at present and looking forward.

Other markets which are affected by the draft Instructions, have inevitably changed – for example, as a result of the fall in overall volumes and use of PSTN voice services (see Figure 3.1), and increased use of mobile data services. These reductions are likely to be the result of a number of factors, including the increased use of messaging apps for voice and data services. There is no recognition of these changed market circumstances in the draft Instructions.

Figure 3.1: : Trend in fixed telephone services traffic minutes in Jordan (millions)



Source: TRC (<https://trc.gov.jo/Pages/viewpage?pageID=86>)

Instead, the draft Instructions are very detailed and prescriptive, setting precise requirements for all licensees covering technical and operational aspects of interconnection arrangements. This is despite the fact that there is an established framework of regulation covering services and facilities provided by licensees which have been found to be dominant in regulated markets (i.e. Designated Licensees).

Analysis and experience in other jurisdictions demonstrates how regulation may be adjusted to reflect the development of markets as they become more competitive or change in other ways which may affect regulation (e.g. declining markets such as PSTN telephony, sometimes described as legacy markets). This dynamic approach to regulation requires that regulators can adapt the rules appropriately as markets change.

The approach is consistent with best practice in regulation around the world. It can be seen, for example, in the European Union regulatory framework which, over time, has been reviewed and adjusted to reflect changes in markets. A common feature of the regulatory framework between Jordan and the European Union is the identification of markets which are susceptible to ex-ante regulation, i.e. markets which may need to be regulated as a result of structural characteristics leading to the likelihood of dominance and consequent need for remedies. The European Commission publishes a list of susceptible markets, and issues guidance on this system to Member States and National Regulatory Authorities.¹⁶

Figure 3.2 shows how the list of susceptible markets has changed as the framework in Europe has developed, clearly demonstrating how the need for regulation has reduced as competition developed and intensified, whilst at the same time fixed voice services became less important and thereby also a less central feature of regulation.

¹⁶ <https://digital-strategy.ec.europa.eu/en/news/commission-updated-recommendation-relevant-markets>

Figure 3.2: Evolution of markets susceptible to *ex-ante* regulation under the European regulatory framework

European framework evolution	Susceptible markets
2002 ¹⁷	<p>Retail (7 markets)</p> <ul style="list-style-type: none"> Access to the public fixed telephone network for residential customers Access to the public fixed telephone network for non-residential customers Publicly available local and/or national fixed telephone services for residential customers Publicly available international fixed telephone services for residential customers Publicly available local and/or national fixed telephone services for non-residential customers Publicly available international fixed telephone services for non-residential customers The minimum set of leased lines (defined in the framework) <p>Access and wholesale (11 markets)</p> <ul style="list-style-type: none"> Call origination on the public telephone network provided at a fixed location Call termination on individual public telephone networks provided at a fixed location Transit services in the fixed public telephone network Wholesale unbundled access to metallic loops and sub-loops Wholesale broadband access Wholesale terminating segments of leased lines Wholesale trunk segments of leased lines Access and call origination on public mobile telephone networks Voice call termination on individual mobile networks The wholesale national market for international roaming on public mobile networks Broadcasting transmission services, to deliver broadcast content to end users
2009 ¹⁸	No change
2014 ¹⁹	<p>Access and wholesale (4 markets)</p> <ul style="list-style-type: none"> Wholesale call termination on individual public telephone networks provided at a fixed location Wholesale voice call termination on individual mobile networks Wholesale local access and wholesale central access at a fixed location for mass market product Wholesale high-quality access provided at a fixed location
2020 ^{20 21}	<p>Access and wholesale (2 markets)</p> <ul style="list-style-type: none"> Wholesale local access provided at a fixed location Wholesale dedicated capacity

Changes to the list of susceptible markets is a good indicator of the scope of *ex-ante* regulation in Europe, and the withdrawal of regulation from markets as they have either become competitive, or from legacy markets as they have declined in importance.²² The draft Instructions are not consistent with this evidence-based approach.

Furthermore, the draft Instructions are based on backward-looking assumptions about market conditions derived from the 2020 market reviews. Regulatory remedies, if they are needed, should address market conditions contemporaneously and for the future. Setting remedies according to historic market analysis, as the TRC proposes to do, is not likely to address current and forward-looking conditions in the relevant market(s).

¹⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32003H0311>

¹⁸ https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32009L0140#ntr14-L_2009337EN.01003701-E0014

¹⁹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014H0710>

²⁰ <https://digital-strategy.ec.europa.eu/en/news/commission-updated-recommendation-relevant-markets>

²¹ Note that wholesale voice call termination on individual networks is now subject to a regulated ceiling across the European Union <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32021R0654>

²² It should be noted that the list of susceptible markets does not define the scope of regulation in each European Member State, and it is for national regulators to identify whether dominance exists in markets susceptible to *ex-ante* regulation, and hence whether remedies should be implemented to address it.

To summarise, Orange considers that the Interconnection Instructions are unnecessary and create risks of harm to markets. The level of regulation they contain is inappropriate for competitive markets. In markets where there is dominance, the TRC can rely on existing provisions on interconnection contained in Regulatory Decisions on Market Reviews and the Reference Interconnection Offers (RIOs) of Designated Licensees. These provisions are sufficient to protect markets and consumers, and the draft Instructions on top of these is excessive. The draft Interconnection Instructions should therefore be withdrawn.

Nevertheless, if the draft Instructions are retained, Orange submits that the TRC should reconsider the draft Interconnection Regulations. Such a review should include consideration of:

- whether affected markets have changed since the market reviews of 2020, including whether markets in which dominance was identified in 2020 remain susceptible to ex-ante regulation;
- whether there is any need for regulation of interconnection in markets in which dominance has not been identified; and
- the proportionality of the proposed Interconnection Instructions and particularly whether the benefits would outweigh the costs; we discuss further the case for a cost benefit analysis (CBA) in Section 3.1.3 below.

3.1.2 The scope of the draft Instructions and application between all licensees and Designated Licensees is not clear

The Interconnection Instructions contain detailed clauses which apply to all licensees, and some which apply only to Designated Licensees.

In Section 3.1.1, we proposed that the TRC should withdraw the draft Interconnection Instructions as they are not needed in either competitive or non-competitive markets.

Irrespective of this, if the Interconnection Instructions are to be retained, their applicability to Designated Licensees and more broadly across the market should be made clearer. Whilst Section 2 of the draft Instructions, "General Rules Applicable to all Licensees", and Section 3, "Rules Applicable to Designated Licensees" separately specify a number of requirements which apply across the market from those applying only to Designated Licensees, subsequent sections mix clauses which apply sometimes to all licensees and sometimes only to Designated Licensees.

Figure 3.3: Mixing of clauses addressing all Licensees and Designated Licensees

Interconnection Instructions Section	No. of clauses addressing all licensees	No. of clauses addressing Designated Licensees
Section 4	7	3
Section 5	15	2
Section 6	44	10

It is not clear in any part of the draft Instructions why certain requirements apply only to Designated Licensees whereas others apply horizontally across the whole market. Furthermore, the application of certain requirements in the draft Instructions is not clearly explained and does not appear to be justified by the conclusions of market reviews. In the main body of the draft Instructions, it simply says "Mandatory Obligations on the Designated Licensee are included in these Instructions. Licensees shall always refer to current market review decisions for

confirmation of dominance findings and remedies applied per market".²³ This does not help identify which dominance findings give rise to specific requirements in the draft Instructions, or why.

This creates an unnecessarily complex framework which will be difficult for licensees to interpret and comply with.

Orange submits that, if the Interconnection Regulations are retained, they should be simplified and given clearer explanation. In particular, the rationale for applying certain requirements only to Designated Licensees should be explained, including the regulated market (and hence Designated Licensee(s)) to which each of these requirements applies.

3.1.3 The TRC proposes to impose three layers of interconnection regulation on Designated Licensees, this is risky and inefficient

We note that complex and far reaching interconnection requirements are applied to Designated Licensees through the Regulatory Decisions on Market Reviews made in 2020, and in Reference Interconnection Offers (RIOs) required to be provided by Designated Licensees.

The Regulatory Decision on the Fixed Market Review²⁴ identifies a number of remedies applicable in markets in which a licensee has been found to be dominant and hence is a Designated Licensee. Some of these markets are likely to include services or facilities which are in scope of the draft Interconnection Instructions. These markets are:

- Wholesale Fixed Voice Call Termination (all terminating operators are Designated Licensees); and
- Wholesale Fixed Transit (Orange is the Designated Licensee).

The Regulatory Decision on the Mobile Market Review²⁵ similarly identified remedies in markets which are in scope of the Interconnection Instructions:

- Wholesale Mobile Voice Call Termination Markets; and
- Wholesale SMS Termination Markets.

The regulatory decisions contain information on regulatory remedies (obligations) which should apply in these markets. These remedies include:

- provision of access on reasonable request;
- non-discrimination;
- transparency;
- accounting separation; and
- pricing requirements.

²³ See paragraph 8 of the draft Interconnection, Infrastructure Sharing, and National Roaming Instructions.

²⁴ Issued by TRC Board Decision No.(14-12/2020)

²⁵ Issued by the TRC Board Decision No.(6-12/2020) https://trc.gov.jo/EchoBusV3.0/SystemAssets/PDFs_EN/market%20reweiw/2cbb3b96-a80b-4582-857c-4a6777b0e0b3_TRC%20Decision%20on%20Mobile%20Markets%20%20%20.pdf

Therefore the regulatory decisions establish a comprehensive set of requirements for Designated Licensees. These regulatory decisions do not mention nor make provision for further requirements to be applied to Designated Licensees in separate Interconnection Instructions.

Furthermore, Designated Licensees are required to provide Reference Interconnection Offers (RIOs) in markets in which they have been found to be dominant. RIOs provide comprehensive offerings of services, facilities and service levels which Designated Licensees must provide.

Under the TRC's proposals, Designated Licensees are hence subject to three layers of detailed interconnection regulations:

1. Requirements under the Regulatory Decision.
2. RIO obligations.
3. The Draft Interconnections Instructions.

Orange believe that the three layers of interconnection regulation applied to Designated Licensees is unnecessary, excessive and hence disproportionate.

In light of the above, in the event that the Interconnection Instructions are retained, Orange submits that the TRC should review the framework for regulation of interconnection, considering requirements of the Regulatory Decision, the RIO and the draft Interconnection Requirements to ensure that regulation is coherent, efficient, consistent and proportionate between these three instruments.

3.1.4 The draft Instructions are excessively prescriptive and detailed, and the benefits are not proven

The draft Interconnection Instructions contain an extensive and very detailed set of rules which are proposed to apply to the whole market or, in some cases, only to Designated Licensees. In total, the draft Instructions contain 286 discrete requirements on interconnection.

The setting of such detailed rules risks over-regulation which is likely to have damaging consequences for markets and consumers.

In considering the effectiveness and proportionality of regulation, it is necessary to take account of the costs to businesses of implementing and complying with regulatory requirements, and of the risk of errors in regulation, which will increase with the scope and detail of the regulation.

There is a risk that the volume and detail of interconnection regulation will lead to inefficient costs to licensees having to implement and then comply with the rules. The TRC's prescriptive approach also creates risks that detailed requirements are not focussed appropriately or do not accurately reflect operational best practice which can most efficiently be agreed between the expert teams of licensees interconnecting with one another.

The TRC should therefore take care to ensure that regulation does not produce higher costs overall, keeping in mind that costs of regulation which are not offset and exceeded by benefits are ultimately borne by consumers. For this reason, robust and transparent evaluation of regulatory proposals is essential before decisions are taken. Cost benefit analysis (CBA) or impact assessment of regulatory proposals is a key feature of effective regulation to demonstrate and satisfy stakeholders that the benefits of intervention outweigh the costs.

We have not seen a CBA or impact assessment to support the implementation of the Interconnection Instructions (nor the Infrastructure Sharing Instructions nor the Mobile National Roaming Instructions) and, if the draft Instructions are retained, Orange calls upon the TRC to provide transparent evidence that the benefits of the Instructions will outweigh the costs.

CBAs and impact assessments are commonly used by regulators to ensure that the benefits of their proposals will outweigh the costs, and that proposed interventions are effective and proportionate. The ITU notes that this is important, including to ensure that regulatory initiatives do not simply result in continuation of outdated rules when technology changes.²⁶ In the UK, Ofcom has published transparent guidance on their approach to impact assessments, which also explains why they are important.²⁷ In its guidance Ofcom says:

"We recognise that the decisions we make can deliver significant value for citizens and consumers but can also impose significant costs on our stakeholders. It is therefore important for us to think carefully before deciding whether a particular policy intervention may be appropriate.

We use impact assessments to help us understand and assess the potential impact of our policy decisions before we make them. They also help us explain the policy decisions we have decided to take."

To avoid the risk of detailed regulation becoming outdated, the TRC should consider whether a more outcomes-focussed approach to regulation of interconnection would be a more effective and efficient way to establish proportionate requirements in regulated markets. This is an approach which regulators have adopted to mitigate the risk that overly detailed regulation can be inefficient, particularly in dynamic markets as they develop and become more competitive. For example:

- The European Electronic Communications Code (EECC) sets out principles for regulation of interconnection without establishing detailed operational requirements. The EECC also provides for commercial negotiation of interconnection with regulatory intervention where needed. Specifically, Article 59 of the EECC states: *"Member States shall ensure that there are no restrictions which prevent undertakings in the same Member State or in different Member States from negotiating between themselves agreements on technical and commercial arrangements for access or interconnection, in accordance with Union law."*
- Similarly, the regulatory framework in Australia operates under outcomes focussed principles with the ability of the regulator to intervene. Negotiations between providers are encouraged for access and interconnection arrangements, with a regulatory backstop if negotiations fail.²⁸

Neither of these examples includes a requirement for regulation of detailed technical or operational aspects of regulation, equivalent to the TRC's draft Instructions.

This concept and benefits of outcomes-focussed regulation are explored further in Figure 3.4.

²⁶ The ITU's guidance on regulatory governance and independence: <https://digitalregulation.org/regulatory-governance-and-independence/>

²⁷ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/255552-impact-assessment-guidance/associated-documents/impact-assessment-guidance.pdf?v=329975>

²⁸ See the Telecommunications Act <https://www.legislation.gov.au/C2004A05145/latest/text>

Figure 3.4: Outcomes-focussed regulation

The benefits of outcomes-focussed (or principles based) regulation

Telecommunications markets are not static, and hence the case for regulatory intervention can alter over time.

The need to keep rules under review is particularly important in dynamic markets where change can happen fast with attendant risks that remedies become obsolete, or even damaging to markets and consumers. A way to mitigate this risk is to focus regulation on principles and desired outcomes in cases where there is a need to intervene. This approach establishes the outcomes the regulator requires the market to deliver, leaving the methods of delivery to regulated companies. Because telecommunications technology and markets are fast paced, this seems an appropriate approach to regulatory remedies. It has a number of advantages, including:

- establishing required outcomes is less likely than detailed and prescriptive methods of implementation of rules to become obsolete, meaning that outcomes focussed regulation has better future proofing qualities than prescriptive detailed regulation;
- giving regulated companies discretion about how outcomes are delivered enables and incentivises them to design the best solutions for delivery;
- allowing this discretion mitigates the risk that mandating "one size fits all" systems to deliver objectives and outcomes will be more costly for some operators than others (e.g. fixed costs can usually be more easily absorbed by larger than smaller operators);
- this discretion is also likely to reduce resistance and challenge to regulatory decisions, and hence speed up the regulatory process; and
- outcomes are easier to measure and monitor than implementation of the systems and processes to deliver them.

We conclude that the draft Instructions are excessively detailed and prescriptive, setting precise requirements for all Licensees, and more for Designated Licensees. This means costs of compliance will be high across the sector. These costs will be passed on to consumers, and are also likely to divert resources away from other activities which would help the sector grow and improve services, for example innovation and customer service initiatives.

If the Interconnection Instructions are retained, Orange submits that they should be further reviewed to ensure they do not add inefficient and costly requirements to interconnection arrangements which can be commercially agreed between licensees. Such a review should take account of the comprehensive requirements governing interconnection already in place for Designated Licensees through the 2020 regulatory decisions, and mandatory provision of RIOs. The TRC should produce a transparent CBA or impact assessment to demonstrate the benefit of its proposals.

3.1.5 The TRC's application of technology neutrality to interconnection needs to be clarified

The Interconnection Instructions contain new clauses on IP interconnection. For example:

- Article 8: *"The TRC recognises the introduction of IP based telecommunications networks and the gradual conversion of existing networks to IP technology as Licensees move from circuit-switched*

telecommunications networks to IP-based telecommunications network infrastructure (NGN or next generation networks)."

- Article 9: *"Implementation of such IP-based networks may require Licensees to offer new Interconnection Services."*
- Article 10: *"The Designated Licensee shall ensure that the Interconnection Services in its Reference Interconnection Offer include services to support both circuit switched and packet switched (IP-based) technologies and that the Designated Licensee meets all reasonable requests for services using IP technologies. The Designated Licensee shall ensure that Interconnect Services it provides to its own retail divisions to support IP based technology are available to all Licensees."*

At the same time, the draft Instructions state that *"All Interconnection Services shall be provided in a technology neutral manner. These Instructions apply to all relevant current and future technologies and networks."* (Article 12).

Orange understands and appreciates the principle of technology neutrality, and that it is important in certain regulatory settings. For example, it can be an effective and appropriate mechanism to ensure that provision of services is regulated effectively at the retail level when equivalent services are provided on different technology platforms. However, it is not necessarily appropriate in all cases when applied in wholesale markets or to interconnection. Different technologies have different technical characteristics and this can affect many relevant factors, for example, network architectures, traffic routing and management, and the costs of services and facilities. Indeed, the draft Instructions seem to acknowledge this in Article 74: *"Interconnection of packet switching technologies (IP) and between different platforms and technologies that requires supplementary technical aspects shall be included in the RIOs of Designated Licensees."*

Different technologies therefore may require different arrangements for interconnection. Telecommunications systems globally are undergoing migration from legacy PSTN systems to IP. Regulators are addressing the technology specific consequences and implications of this. For example, Ofcom addressed the migration from PSTN to IP networks in its most recent wholesale market review, the Wholesale Fixed Telecoms Market Review 2021 – 2026 (WFTMR),²⁹ and this includes specific requirements for IP interconnection in wholesale voice markets (but does not include detailed and prescriptive rules on interconnection as appear in the draft Instructions).

In light of this, Orange submits that, if the draft Instructions are retained, the TRC should state more clearly what the requirements of technology neutrality are, and how they can be achieved efficiently in interconnection given the different characteristics of different technologies.

A more outcomes focussed approach to regulation would address this concern to some extent, enabling the TRC to specify objectives and outcomes, providing industry with discretion to provide appropriate and, where necessary, future proof solutions (see Section 3.1.4 and Figure 3.4).

3.2 Major concerns relating to the TRC's proposed updates to the Infrastructure Sharing Instructions

Orange notes the TRC's aims and objectives in issuing these draft Instructions as set out in Article 6 as follows:

²⁹ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/185028-promoting-investment-and-competition-in-fibre-networks--wholesale-fixed-telecoms-market-review-2021-26/associated-documents/wftmr-statement-volume-3-non-pricing-remedies.pdf?v=326140>

"The purpose of these Instructions is to align the provision of Interconnection, Infrastructure Sharing, and Mobile National Roaming Services between Licensees with the objectives of the Telecommunications Law and licenses."

Orange has major concerns that the proposed Instructions are not consistent with the objectives or requirements of the Telecommunications Law and licences. On the contrary, we consider that:

- The TRC does not have vires to regulate infrastructure under Constitution of Jordan and the Telecommunications Law; and
- the draft Instructions raise risks that efficient infrastructure investment will be disincentivised, and that this will cause damage to markets and consumers in Jordan.

These points are explained below.

3.2.1 The TRC does not have vires to regulate infrastructure

Property ownership is an important and valued principle of our nation, set out in the Constitution of Jordan which contains important safeguards to uphold the rights of private property owners. Article 11 of the Constitution provides explicit protections in relation to property expropriation.³⁰

Clearly, telecommunications regulation cannot contradict or be made inconsistently with the constitutional rights of Jordanians. Orange believes that requiring licensees to share infrastructure with others through any mechanism other than a voluntary agreement would be a form of expropriation for no public benefit, and hence a violation of these fundamental principles and requirements of the Constitution.

The Telecommunications Law clearly establishes the basis on which telecommunications should be regulated, and defines the duties and responsibilities of the TRC. Article 6j of the Telecommunications Law includes the following duties and responsibilities which establish the TRC's remit in relation to telecommunications networks:

"To regulate access to telecommunications networks and conditions of interconnection therewith in accordance with instructions issued by the Commission for this purpose, approve the interconnection agreements referred to in Paragraph (e) of Article 29 of this Law, and ensure that these agreements do not violate those instructions."

"Telecommunications" is defined in the Law as follows:

Any conveyance, emission, reception, or transmission of signs, signals, sounds, images or data of any nature by means of wire, radio, photic or any other means of electronic systems."

"Public Telecommunications Network" is defined:

"A Telecommunications system or a group of Telecommunications systems for the offering of Public Telecommunications Services to Beneficiaries in accordance with the provisions of this Law."

This framework does not give the TRC duties and responsibilities, nor powers in relation to physical infrastructure. The Law clearly defines telecommunications as conveyance, reception, or transmission. It does not include the passive physical assets of licensees providing telecommunications networks and services.

³⁰ <https://www.wipo.int/wipolex/en/text/564112>

Orange submits that regulation of infrastructure is not within the remit of the TRC, is not envisaged in the Telecommunications Law, and is not consistent with the rights and principles of property ownership set out in the Constitution.

The TRC should therefore withdraw the Infrastructure Sharing Instructions.

3.2.2 The draft Instructions raise risks that efficient infrastructure investment will be disincentivised

Orange has explained in Section 3.2.1 that the Infrastructure Sharing Instructions should be withdrawn as there is no legal basis for them.

Notwithstanding this, Orange has examined the draft Instructions to see whether there would be any competition, economic or public benefit if they are retained.

Article 6 of the Telecommunications Law³¹ includes provisions requiring the TRC to stimulate competition "relying on market forces" (Article 6e) and "encourage self-regulation by the telecommunications and information technology sectors" (Article 6g).

The present proposal to impose detailed and prescriptive infrastructure sharing requirements on the sector without any supporting analysis to demonstrate the benefits of such an intervention appears inconsistent with the letter and underlying principles of these requirements. As with the draft Interconnection Instructions, Orange is concerned that the TRC has failed to follow international best practice in that it has not conducted a CBA or Impact Assessment before making its proposals (see Section 3.1.4 for detail on Orange's concerns in relation to the lack of robust CBA or impact assessment to support the TRC's proposals).

Orange agrees that, in certain circumstances, infrastructure sharing arrangements can help to avoid inefficient duplication of telecommunications infrastructure. However, Orange would like to highlight to the TRC that infrastructure sharing can also bring potential drawbacks. Key among these is a reduction in incentives to invest in infrastructure. Regulators in other jurisdictions have recognised this. For example, the Body of European Regulators for Electronic Communications (BEREC) has noted that:

"many NRAs are of the view that sharing decreases the incentives to investment and infrastructure competition for better coverage".³²

The Digital Regulation Platform project (a collaboration between the ITU and World Bank involving a number of ICT regulatory experts) also notes that a risk of infrastructure sharing is reduced incentives for investment:

Whereas infrastructure sharing increases the efficient usage of existing infrastructure, it may dampen enthusiasm for additional investment if the return on investment is perceived as lower or less certain. This is an issue particularly for passive infrastructure sharing where the host operator may be burdened with active components from other companies while receiving a very low margin on its asset base.³³

The Digital Regulation Platform also notes that reduced network resilience is also a risk:

³¹ https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/Jordan_telecommunication%20law_1995_EN.pdf

³² https://www.berec.europa.eu/sites/default/files/files/document_register_store/2018/6/BoR_%2818%29_116_BEREC_Report_infrastructure_sharing.pdf

³³ <https://digitalregulation.org/the-infrastructure-sharing-imperative/>

*The lack of competing infrastructure with fewer independent networks, both increases the burden on the remaining network(s) and means that the effect of any outages will be more widespread. Robustness in case of disaster or emergency will also be reduced.*³⁴

Mindful of these risks, infrastructure sharing obligations are typically introduced to facilitate one of several objectives:

- to facilitate and incentivise the roll out of communications networks by promoting the joint use of existing infrastructure, such that networks can be rolled out at lower cost;³⁵
- to enable cost savings in the deployment and operating costs of telecommunications infrastructure, and
- to enhance coverage and consumer choice in areas where the coverage costs for a single operator deployment is high (often rural areas).

Orange notes that telecommunications networks in Jordan are mature and already offer extensive coverage – for example, all three of Jordan’s MNOs offer 99% network coverage. Whilst infrastructure sharing might have been a relevant policy approach during network rollout (were it legal), there is at present no economic justification for an infrastructure sharing obligation in Jordan.

In light of the above arguments, Orange considers that a general obligation would prevent or reduce investment: existing operators will be hesitant to invest as other operators may "free ride" on that infrastructure. Infrastructure sharing instructions would also result in significant regulatory burdens for operators.

3.2.3 The infrastructure sharing obligation is unlikely deliver the TRC’s stated objectives

Article 6 of the Infrastructure Sharing Instructions states the TRC’s objectives for those Instructions. However, imposing an infrastructure sharing obligation is unlikely to deliver on those stated objectives.

Figure 3.5: Discussion of the Purpose of Instructions

TRC objective for infrastructure sharing Instructions	Orange comment
To promote fair competition through the sharing of Telecommunications Network Facilities which are not easily replicable	Orange understands that, in some circumstances which are evident in other markets outside Jordan, competition and market entry may be supported by the sharing of infrastructure which cannot easily be replicated. However, the TRC has not demonstrated that this is the case in Jordan. To the contrary, it is clearly not the case here because the market has delivered competition in infrastructure. For example, the mobile operators (Orange, Zain, Umniah) have all established comprehensive infrastructure to support their networks and services. Furthermore, the operators make this infrastructure available to one another on a commercial basis as a result of free negotiation with no regulatory intervention.

³⁴ *Id.*

³⁵ This is the stated aim of the EU’s Broadband Cost Reduction Directive (BCRD).

TRC objective for infrastructure sharing Instructions	Orange comment
To encourage efficient investment in infrastructure and avoid wasteful replication of infrastructure	Currently, without regulation, any operator with infrastructure can make it available to other licensees on commercial terms. Hence licensees face an efficient choice of sharing or building their own infrastructure, rather than one imposed by regulation. Orange is concerned that, as discussed in Section 3.2.2 above, the introduction of regulated infrastructure sharing will disrupt these efficient build or buy/share decisions, and discourage efficient infrastructure investment.
To improve resilience, quality of service, and accelerating coverage for areas where the coverage costs for a single Licensee deployment is high (often rural areas)	Imposing infrastructure sharing through regulation also creates risks of reducing network resilience in some circumstances. If a shared facility is damaged or destroyed (for example, as a result of power failure, cable cut, or flooding of infrastructure), then the networks and services of all operators sharing and relying on that facility will be compromised. Overall, this reduces the resilience of networks in aggregate. Network resilience can be better promoted in other ways, for example diverse transmission routes, battery back-ups to maintain operation in a power failure, and failover systems.

Orange considers that the stated objectives for the Instructions would be better met if infrastructure sharing occurs through commercial negotiation. The best way to meet broader national goals for investment and efficient use of infrastructure is for infrastructure sharing to be negotiated and agreed on a commercial basis to avoid inefficient sharing requests. In summary, Orange considers that the TRC should:

- recognise that it does not have powers to regulate infrastructure sharing;
- acknowledge that infrastructure sharing arrangements have potential drawbacks in terms of the impact on investment incentives and network resilience;
- refrain from imposing an infrastructure sharing obligation on the market, and withdraw the draft Infrastructure Sharing Regulations; and
- allow infrastructure sharing based on commercial arrangements.

3.3 Major concerns relating to the TRC's proposed updates to the National Roaming Instructions

National/domestic roaming is a form of active sharing where one operator uses the mobile service of another operator within the same domestic market for the purpose of providing services to its end users. According to BEREC, most national roaming agreements in Europe are a result of commercial negotiation, rather than regulatory obligation (Figure 3.6).

Figure 3.6: National Roaming Agreements in Europe

Country	MNO involved	Time Frame	Technology	Commercially driven/regulatory intervention
Austria	T-Mobile; Hutchison	2012-	2G vs 3G	Commercial
Croatia	Tele 2 d.o.o.; Hrvatski Telekom d.d	N/A	N/A	Commercial
Denmark	Hi3G; Telia	N/A	2G, 3G	Commercial

Country	MNO involved	Time Frame	Technology	Commercially driven/regulatory intervention
France	Orange; Free Mobile	2012-2020	2G, 3G	2G regulation, 3G Commercial
Norway	Telia; ICE	2015-2021	2G, 3G, 4G	Merger remedy
Spain	Yoigo/ Telefónica; Yoigo/ Orange	-2019	2G, 3G, 4G	Commercial

Source: BEREC

Orange notes that sectoral regulators have generally considered that there is a trade-off between national roaming obligations and market participants' incentives for infrastructure investment. For example, the Body of European Regulators for Electronic Communications (BEREC) has argued that [emphasis added]:

"Roaming is very likely to restrict the differentiation capacity of the roaming operator on several major parameters, such as coverage and quality of service (which are those of the host operator). The conditions applied on the wholesale market on the roaming operator restrict its ability to define its service at the retail level.

*In consequence, subject to a case-by-case analysis, **roaming is likely to not be in line with the objectives of infrastructure-based competition** for the end user's benefit (including investment, innovation and competition between actors) and efficient spectrum management and usage."*³⁶

The UK's communications regulator, Ofcom, has argued that implementing mobile national roaming in rural areas (which it terms rural wholesale access) could have a number of potential downsides. Ofcom stated:

Rural wholesale access [i.e. national roaming in rural areas] would reduce the extent to which operators could differentiate themselves on the basis of coverage or network quality. There is therefore a potential risk that it could have a chilling effect on investment in networks. This could manifest itself in three ways:

a) Operators might decommission existing masts in some rural areas if offering coverage in these areas ceased to be a source of competitive differentiation. If left unmitigated [i.e. unless operators are prevented from decommissioning masts] this could result in a reduction in coverage in some areas;

b) Operators might stop building new masts to expand coverage in rural areas if doing so no longer gave them a competitive advantage; and

c) Operators might be deterred from upgrading masts to new technologies in existing partial not spots³⁷ in rural areas if other operators could piggy-back off their networks. For example, there is a risk rural wholesale access could have an adverse effect on incentives to invest in 5G.³⁸

In addition, the Centre on Regulation in Europe (CERRE) has noted that:

*"National roaming is generally found to restrict competition, but can be exempted temporarily to permit a new entrant to introduce new services on a national basis. The exemption will be limited in time and geographic scope"*³⁹

³⁶ https://www.berec.europa.eu/sites/default/files/files/document_register_store/2019/6/BoR_%2819%29_110_CP_Infrastructure_sharing.pdf p20

³⁷ In the UK, a partial not-spot is defined as a geographic area served by at least one, but not all four mobile network operators.

³⁸ <https://www.ofcom.org.uk/siteassets/resources/documents/phones-telecoms-and-internet/coverage/advice-government-improving-mobile-coverage.pdf?v=323450#page=10>

³⁹ https://cerre.eu/wp-content/uploads/2020/07/cerre_implementing_co-investment_and_network_sharing-26.05.2020.pdf p47

In recognition of this trade-off, national roaming obligations are generally considered appropriate in only two contexts:

1. To facilitate market entry by an entrant mobile network operator. In this context, the national roaming obligations should be transitory and should be phased out over time, in order to provide the entrant operator with the incentives to roll out its own network. BEREC states that such a roaming agreement *"should not provide access to national roaming beyond what is necessary to allow the entrant to invest in its own network"*.⁴⁰
2. To facilitate a greater choice of retail service providers in geographic areas where infrastructure-based competition is not feasible (note that customers in such areas would still be reliant on the same underlying network). Such areas tend to be remote and rural areas where there is no commercial case for infrastructure deployment by other operators.

In respect of these two points, Orange notes that:

- Jordan has a population of 11.4m⁴¹, and three mobile network operators with extensive network coverage (each with a reported population coverage of over 99%). Jordan has the same number of operators as countries of a similar size – including Austria, Belgium, Czechia, Greece, Hungary, and the Netherlands. In light of this Orange considers that the prospects for infrastructure-based entry by an entrant operator are unlikely, and market conditions would not support this.
- The extensive coverage of Jordan's three mobile networks mean that the vast majority of customers already have a choice of provider; and
- In relation to fostering greater competition in remote and rural areas, mandated national roaming is only one of a number of potential approaches, some of which may be superior in terms of protecting incentives for investment. For example, in the UK, mobile network operators and the government agreed to establish the Shared Rural Network.⁴² As part of the deal the UK Government contributed £500m of government funding to improve rural mobile coverage.

In light of the above, Orange considers that the TRC should:

- remove the general obligation for mobile national roaming; and
- clarify that mobile national roaming arrangements may be agreed on a commercial basis between operators. This may bring benefits to the market if an operator is missing a technology layer. For example, ✂

⁴⁰ https://www.berec.europa.eu/sites/default/files/files/document_register_store/2019/6/BoR_%2819%29_110_CP_Infrastructure_sharing.pdf p21

⁴¹ <https://data.worldbank.org/country/jordan>

⁴² <https://www.gov.uk/government/news/shared-rural-network>

4 Orange's concerns on specific articles in the draft Instructions

4.1 Introduction

Orange believes that the Interconnection, Infrastructure Sharing and Mobile National Roaming Instructions should be withdrawn. In Section 3 we explain how we have reached this conclusion based on legal analysis, robust evidence and global best practice in regulation.

Notwithstanding our deep concerns about the draft Instructions and Orange's clear position that they should be withdrawn, Orange presents its analysis of individual articles in the draft Instructions in this section. They explain our detailed view on these articles to be considered in the event that the Instructions are retained.

4.2 Specific comments on the TRC's proposed updates to the Interconnection Instructions

Orange offers the following comments on the Interconnection Instructions as currently drafted. These comments are without prejudice to the major concerns we explain in Section 3 which are:

- The draft Instructions do not reflect current market conditions. Regulation to the level of detail contained in the draft instructions is unnecessary and creates risks of harm to markets and consumers.
- The scope of the draft Instructions and application between all licensees and Designated Licensees is not clear, and many obligations applicable to Designated Licensees are also proposed to apply to all licensees..
- Designated Licensees are proposed to be subject to three layers of regulation through the Regulatory Decisions on Market Reviews, requirements for Reference Interconnection Offers, and the proposed Interconnection Requirements; this is inefficient.
- The draft Instructions are excessively prescriptive and detailed, and the benefits are not proven.
- Technology neutrality is not a valid concept for the draft Instructions and needs to be rethought.

Taking account of these concern, Orange has called for the Interconnection Instructions to be withdrawn. Notwithstanding this, we submit the following comments on individual clauses in the draft:

- **Article 4:** Orange would appreciate inclusion of a fair and robust process to deal with financial disputes. Orange has encountered exposure to financial risk in interconnection. The interconnection framework should include provisions to address this.
- **Article 6:** The TRC needs to ensure that the scope of this requirement is accurately defined, it should not include requirements in relation to any licensees which do not operate their own networks (e.g. bulk SMS providers). Such providers should be outside the scope of the requirements in the same way as is specified for Private Telecommunications Networks.
- **Article 7:** The TRC should clarify whether the requirements in this article under which the TRC must approve Interconnection Agreements or require changes should apply to all licensees or Interconnection

Agreements involving Designated Licensees only. The TRC should also state clearly whether this requirement is intended to apply to existing Interconnection Agreements.

- **Article 8:** As we point out in Section 3, detailed interconnection rules cannot necessarily be technology neutral as new technology platforms introduce specific technical requirements. If the TRC introduces detailed requirements for PSTN to IP migration, it must recognise that licensees are proceeding to different time schedules, and that some driving factors are outside of the control of licensees in Jordan, such as the need for support of international equipment vendors. If the Instructions are retained, the TRC should also provide further information on how technology neutrality is to be applied to interconnection.
- **Article 10:** This article, if it is retained, should apply to all licensees, not just Designated Licensees.
- **Article 11:** We do not understand why the Instructions would seek to impose requirements on the costs and charges of interconnection services in competitive markets. If the Instructions are retained, we suggest removal of this clause as arrangements for Designated Licensees are covered in their RIO.
- **Article 13:** We request that the TRC clarifies the objective of this article.
- **Articles 14, 16 and 17:** There are limiting factors to the capability of any licensee to provide interconnection services, e.g. feasibility constraints, availability, and capacity. As with other areas of the draft Instructions, these issues can be dealt with more effectively in competitive markets through commercial negotiation and are covered for Designated Licensees in their RIOs. In any case, the requirement to negotiate and enter into an agreement (Article 14) should apply to all licensees.
- **Article 22 and 23:** It is appropriate that licensees have flexibility in commercial negotiations on interconnection and hence the ability to vary conditions if this is needed. For Designated Licenses and Services, non-discriminatory arrangements for interconnection should be covered by the Market Review Decisions and RIO. If the Instructions are retained, these articles should be removed.
- **Article 24:** In relation to non-discrimination, there may be legitimate grounds to differentiate between requests, for example through requirements for volume and/or time commitments. This should be accommodated within the framework.
- **Article 30:** Orange suggests it is more practical for publication of approved RIOs to be required after thirty days.
- **Article 32:** Changes to RIOs should only be contemplated where a clear need for regulation of such services has been identified, e.g. a market review and only for Designated Services
- **Article 33:** The timeframes specified in this article are not viable. Work required to update a RIO is extensive and cannot always be done in sixty days. Likewise, changes requested by the TRC cannot always be processed in fifteen days. A more realistic timeframe would be one year for RIO updates, and six months to process requests from the TRC. Where the TRC requests changes to a RIO, they should give the Designated Licensee an opportunity to make representations about the request, and the TRC should not proceed with RIO changes or updates unilaterally without consultation.
- **Article 34:** We see no need to include provisions for periodic updates. The RIO updating process is resource intensive and costly, and should only be done when necessary. Any regulatory requirement for a change should be supported by evidence and, the benefits must be shown to outweigh the costs.

- **Article 37:** This requirement should only apply to Designated Services. Tariffs and charges change relatively frequently, and including this requirement in the RIO will be onerous. Regulated charges are determined or approved by the TRC. The RIO may include reference to this, but not necessarily be subject to change when the TRC issues a new determination. It should not be necessary to obtain TRC approval for removal of services from the RIO when the services in question are no longer designated.
- **Article 39:** A TRC requirement for provision of services other than those included in Annex B should be supported by transparent evidence and, the benefits must be shown to outweigh the costs before an intervention by the TRC is made. New requirements should only follow a market review, finding of dominance and identification of a Designated Licensee or Licensees.
- **Articles 45, 46, 47, 48, 49, 51 and 52:** There is no justification for regulation of costs or rates for interconnection services in markets which are competitive. The TRC should make this unambiguously clear. If the Instructions are retained, these clauses should be removed as arrangements for Designated Licensees are covered in their RIO.
- **Article 54:** (As Article 37) Tariffs and charges change relatively frequently, including this in the RIO will be onerous. Regulated charges are determined or approved by the TRC. The RIO may include reference to this, but not necessarily be subject to change when the TRC issues a new determination.
- **Article 56:** Five days is too short a period for a mandatory requirement for the setting of meetings. We propose that it should be possible for licensees to agree the scheduling of meetings to a different timescale. We suggest the article be redrafted as follows to facilitate this: "All Licensees shall agree to meetings with another Licensee within twenty (20) working days of a meeting being formally requested by a Licensee unless otherwise agreed between the two parties".
- **Articles 57, 58, 59, 60, and 61:** Requirements for the Joint Technical Committee are highly detailed and prescriptive. This is inappropriate for interconnection arrangements in competitive markets which can and should be organised commercially. Section 5.2 of the draft Instructions should therefore be removed.
- **Article 64:** This clause is not necessary in competitive markets. Notwithstanding this, if retained it should be redrafted with less detail to give licensees appropriate flexibility. We propose the following wording: "Where there is a regulatory requirement for Licensees to deal with other Licensees on a non-discriminatory basis, this shall include the provision of information".
- **Article 65:** To protect commercially confidential information, we propose the following draft for this clause: "In order to fulfil the requirement stated above, for information to be provided on a non-discriminatory basis, Designated Licensees should publish a standard set of non-confidential information, possibly within annexes to their RIOs, rather than supply this information on demand".
- **Articles 70 and 71:** We do not understand the need for creation of a database mandated by regulation in competitive markets.
- **Article 73:** As we point out in Section 2 and in relation to Article 8, detailed interconnection rules cannot necessarily be technology neutral as new technology platforms introduce specific technical requirements. If the TRC introduces detailed requirements for PSTN to IP migration, it must recognise that licensees are proceeding to different schedules, and that some driving factors are outside the control of licensees in Jordan, such as the need for support from international equipment vendors. If the Instructions are retained, the TRC should also provide further information on how technology neutrality is to be applied to interconnection.

- **Articles, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85:** Section 6.3 “Forms of Interconnection” includes very detailed requirements which can be covered in commercial arrangements between licensees or specified in the RIOs of Designated Licensees. This section can therefore be removed from the Instructions.
- **Article 89:** Orange requests clarification of this clause. We point out that, as explained in Section 2, the introduction of prescriptive and rigid rules are likely to create risks to efficient interconnection, and may constrain the ability of licensees to innovate and create more effective competitive markets.
- **Articles 94, 95, 96, 97, 98, 99, 100:** These clauses cover the technical requirements for capacity planning. They are detailed and highly prescriptive. Licensees are expert in operational matters such as this, and they are better left to commercial negotiation. These articles should be removed.
- **Article 101:** This article refers to “incumbent operators”. Could the TRC please clarify what is meant by this, how the requirements for this class of operators is defined, what is the justification for these requirements, and how it differs from the requirements for Designated Licensees.
- **Article 121:** Each licensee’s ability to monitor interconnection links should explicitly cover their own network and not include performance of any part of another licensee’s network.
- **Article 124:** This article is excessively prescriptive and detailed. The sub clauses are optional and do not need to be specified in the Instructions. This article should therefore be removed.
- **Annex A:** Any licensee’s RIO should be required to be provided only for the services for which that licensee has been identified as a Designated Licensee. The RIO should be specified only following a market review and identification of dominance and a Designated Licensee or Licensees. An illustrative RIO outline is not needed or appropriate in the Interconnection Instructions, and so Annex A should be removed.
- **Annex B:** Regulation of the services and facilities in this annex should only be necessary where markets have been identified as not competitive, and subject to regulation of Designated Licensees. In these cases, the requirements of the annex should not conflict with or duplicate the Designated Licensee’s RIO. We make the following points on specific clauses in Annex B:
 - **Article 125:** Addition and definition of services by the TRC should only take place where a clear need for regulation of such services has been identified, e.g. a market review and only for Designated Services..
 - **Article 126:** Similarly, the Annex should only be amended where a clear need for change has been identified, e.g. following a market review and only for Designated Services.
 - **Article 127:** Please specify what the TRC’s role is in specifying International Access Gateway Services.
 - We note that Sections B3 – B5 appear to be missing from the draft Instructions.
- **Annex C:** Annex C includes very detailed specification of technical features of interconnection. In many cases, the content of Annex C covers requirements which are included in earlier sections of the draft Instructions. Detailed regulation as envisaged in Annex C is only appropriate in very limited cases where markets have been identified as not competitive through a market review, and subject to regulation of Designated Services provided by Designated Licensees. In these cases, the requirements of the annex should not conflict with or duplicate the Designated Licensee’s RIO. Orange submits that Annex C should be removed from the Instructions. Additionally we offer the following comments on individual articles in Annex C:

- **Article 174:** The TRC need not approve all changes to lead times.
- **Article 218:** If the Instructions are retained, Orange requests that this article be clarified. Would progress reports be required from the point of the order, or only if the delivery is delayed? The TRC should ensure it does not introduce requirements which would be inefficient or disproportionately burdensome on licensees.
- **Article 227:** The requirement for Network Management Centres is not needed, but if it is retained it should apply to all licensees.
- **Article 250:** Whilst licensees should make every effort to inform other licensees of faults affecting interconnection services, the TRC must recognise a reasonable timeframe for this.
- **Article 272:** If the Instructions are retained, please clarify what is meant by “open standards” in this context.

4.3 Specific comments on the TRC’s proposed updates to the Infrastructure Sharing Instructions

Notwithstanding Orange’s major concerns with the proposed Infrastructure Sharing Instructions (set out in Section 3.2, Orange also offers comments on specific Articles on the TRC’s proposed Instructions. Note that this section only includes references to the Articles where Orange has specific objections. However, this should not be construed as acceptance of the Articles not mentioned, nor of the proposed Instructions as a whole.

Please note that while Orange has provided these comments, its overall position remains that infrastructure sharing obligations should not be imposed on the market; and that infrastructure sharing should be optional and based on commercial arrangements between licensees.

- **Article 10** appears to be redundant given that Article 9 obliges all Licensees to negotiate and enter into a Sharing Agreement under fair and reasonable terms and conditions.
- **Article 14** appears to be redundant given that Article 13 obliges all Licensees to negotiate and enter into a Sharing Agreement.
- **Article 18** requires Designated Licensees to provide sharing of Telecommunications Network Facilities subject to the principles of non-discrimination. However, this implies that Licensees that are not Designated may discriminate against other operators who are sharing their infrastructure. Moreover, it is not clear in which market a licensee must be Designated in order to be subject to this obligation.

Orange considers removing the differentiated requirements imposed on Designated Licensees would substantially clarify these Instructions.

- **Article 19** requires Designated Licensees’ Reference Interconnection Offer (RIO) to include services that provide sharing of Telecommunications Network Facilities. In Orange’s view this is not part of the scope of the RIO, and therefore this Article should be removed. Orange also notes that it is not clear in which markets a licensee must be Designated in order to be subject to this and other obligations specifically imposed on Designated Licensees.
- **Articles 25 and 26** appear to require only Designated Licensees to justify the refusal of a Sharing Request. This would suggest that Licensees which are not Designated may arbitrarily refuse any Sharing

Request without justification. Note also it is not clear in which market a licensee must be Designated in order to be subject to this obligation.

- **Articles 31 – 35** detail a highly prescriptive approach to the negotiation of a sharing agreement, which entails significant regulatory burden. Orange considers a light-touch approach, where sharing is negotiated on a commercial basis (with the TRC acting as an arbiter in the case of disputes) would be more appropriate for Jordan.
- **Articles 44 and 45** impose additional obligations on Designated Licensees. Note that it is not clear in which market a licensee must be Designated in order to be subject to this additional obligation.
- **Article 59** appears to be redundant given Article 18. Note that it is not clear in which market a licensee must be Designated in order to be subject to this additional obligation.

4.4 Specific comments on the TRC’s proposed updates to the Mobile National Roaming Instructions

Notwithstanding Orange’s major concerns with the proposed Mobile National Roaming Instructions (set out in Section 2.5), Orange also offers specific comments on the TRC’s proposed Instructions. Note that this section only includes references to the Articles where Orange has specific objections. However, this should not be construed as acceptance of any Articles not specifically mentioned, nor of the proposed Instructions as a whole.

- Please note that while Orange has provided these comments, its overall position remains that a mobile national roaming obligation should not be imposed on the market; and that mobile national roaming should be optional and based on commercial arrangements between licensees.
- **Article 1** mentions “the importance of Mobile National Roaming” to Jordan. Orange considers that there is no need for national roaming in Jordan, as there are three MNOs which cover 99% of the population with voice and mobile broadband services.
- **Article 3** notes that the Mobile National Roaming is applicable to all networks and the geographic areas within Jordan. An unlimited obligation of this kind will lead to the risks articulated in Section 3.3, including (as noted by other regulators and regulatory bodies) risks to incentives for infrastructure investment and rural coverage. Note that in other jurisdictions mobile national roaming obligations tends to be limited in geographic scope and/or time. Orange considers that, in the case of Jordan, mobile national roaming should not be mandatory, but optional and subject to commercial arrangements
- **Articles 5 and 6** detail the objectives of the Instructions and various intended benefits. Orange considers that some of the benefits identified by the TRC are unlikely to materialise and indeed may present risks. For instance, in some areas mobile national roaming may encourage consolidation of infrastructure which will reduce resilience. Conversely, in other areas, the obligation may result in duplication of infrastructure where there is insufficient space on existing masts to host additional radio equipment.
- **Article 7** notes the TRC will review all agreements for Mobile National Roaming. The TRC should acknowledge the trade-offs inherent in obliging Mobile National Roaming and explicitly consider network investment incentives as a factor in reviewing roaming agreements.
- **Article 9** states that the Mobile National Roaming obligation will apply to all operators and networks. Orange notes an unlimited obligation of this kind will lead to the risks to incentives for infrastructure

investment and rural coverage. Orange considers that mobile national roaming should not be mandatory, but optional and subject to commercial arrangements.

- **Article 13** mentions “unjustified refusal to negotiate in good faith”. However, the TRC should specify what it considers to be an “unjustified refusal” to help to avoid disputes.
- **Article 16** mentions a “fair and reasonable price” for Mobile national roaming. Orange considers that mobile national roaming should be optional and subject to commercial arrangements between licensees. .
- **Article 23** allows for one calendar month from the submission of a request for Mobile National Roaming for the completion of a feasibility study by the Host Mobile operator. Orange considers the need for a feasibility study constitutes a regulatory burden and that the allowed time period is too short.
- **Article 24** states that the TRC will review the reasons for the refusal of a request for Mobile National Roaming and may take action. Orange considers that mobile national roaming should not be mandatory, but optional and subject to commercial arrangements. As such the TRC will not need to review reasons for refusal.
- **Article 25** stipulates a timeframe of sixty days to complete a National Roaming Agreement. This timeframe is short for reaching an agreement, and the imposition of a deadline is likely to discourage good faith negotiations.
- **Article 29** covers the information that should be shared between a Requesting Mobile Operator and Host Mobile Operator. Orange notes that certain information specified is likely to be commercially confidential, including (for example) geographic coverage. Orange considers that confidential information should only be required to be provided at high level, so that confidential information is not divulged if the parties cannot subsequently reach an agreement.
- **Article 31** stipulates a timeframe of five working days for the Host Mobile Operator to inform the Requesting Mobile Operator of any additional information required in respect of the request. This timeframe is very short for reviewing a request and reviewing all relevant information. Orange considers this should be extended to thirty working days.
- **Article 32** notes that “an unjustified refusal to negotiate in good faith or denial of the provision of facilities for roaming or other discriminatory practices with respect to roaming” will be subject to sanctions. Orange considers that national roaming agreements should be negotiated on a commercial basis subject to approval by the TRC, rather than being an obligation on operators. Notwithstanding this, if the TRC is considering sanctions then it should set out its process and timelines for investigating claims of bad faith negotiations. This process should include a transparent appeal system to ensure that both parties have an opportunity to present their case before sanctions are imposed.
- **Article 33** states that the TRC will resolve disputes on Mobile National Roaming charges with a binding resolution. Orange considers that mobile national roaming should not be mandatory, but optional and subject to commercial arrangements, which would not require the TRC to be involved to this extent.
- **Article 36** presents reasons for which a Host Mobile Operator may refuse a request for national roaming. The reasons are: (a) the network of the Requesting Mobile Operator is not technologically feasible; (b) changes to the Host Mobile Operator’s network required to accommodate Mobile National Roaming are not economically reasonable; and (c) the mobile services for which Mobile National Roaming is requested for are not offered by the Host Mobile Operator to its end users.

The Instructions as drafted would benefit from greater clarity around points (a) and (b); in particular what would constitute a valid refusal on technical or economic grounds. This would ideally also specify the process by which the TRC will make this assessment and any appeals process.

- **Article 37** states *“An unfounded suspicion of a particular behaviour or outcome of the Mobile National Roaming arrangements shall not be a justifiable reason to warrant a refusal of a request for Mobile National Roaming Agreement.”* This Article is vague and should be removed.
- **Article 38** notes that if the TRC deems the reasons for a refusal of a request are not justified, it will then direct the parties to enter into a Mobile National Roaming Agreement within one calendar month. This approach may result in agreements that are economically inefficient and harmful. Nor does this Article mention any kind of appeals process for appealing the decision. Orange considers this Article should be removed.
- **Article 39** allows only five working days for submitting a Mobile National Roaming Agreement to the TRC for its approval. Orange considers that the TRC should allow fifteen working days for this process. Article 39 also states that *“the TRC may require the Mobile Operators to amend any terms and conditions in the Mobile National Roaming agreement”*. Orange considers this may result in Agreements that are detrimental to good market outcomes in Jordan, and considers that mobile national roaming should instead be optional and subject to commercial arrangements,
- **Article 40** notes the review and approval process of Mobile National Roaming Agreements by the TRC. It would be useful for the TRC to indicate the time period for its review.
- **Article 41** allows only five working days for submitting an amended Mobile National Roaming Agreement to the TRC for its approval. Orange considers that the TRC should allow fifteen working days for this process.
- **Article 42** allows the TRC to require Mobile Operators to amend their Mobile National Roaming Agreements for any reason and at any time. This is a broad proposal which could undermine regulatory certainty and increase risks for the parties involved in the Agreement. Orange considers that mobile national roaming should not be mandatory, but optional and subject to commercial arrangements, which would not require this level of intervention.
- **Article 43** allows only five working days for informing the TRC of the termination of a Mobile National Roaming Agreement to the TRC for its approval. Orange considers that the TRC should allow fifteen working days for this process.
- **Article 44** requires the Host Mobile Operator to obtain written consent of any Hosted Mobile Operator in the case of any interruptions or impairments to the mobile roaming service. This could allow the Hosted Mobile Operator to, in effect, block any network upgrades or modifications. The Instructions should permit the Host Mobile Operator to make upgrades and reasonable changes to its network.

