
**Consultation on Strategic Sector Review –
Responses Submitted to ictQATAR**

The Supreme Council of Information & Communication Technology “ictQATAR”

Telecommunications Regulatory Authority

27 June 2011

On 20 February 2011, ictQATAR published a consultation document on “Strategic Sector Review” and requested written comments from interested parties.

Five responses were submitted by the following parties (listed in alphabetical order):

1. AT&T
2. Friendi
3. Qtel
4. STC
5. Vodafone Qatar

As part of the consultation process and in the interest of transparency and public accountability, ictQATAR is herein publishing all the responses submitted.



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Comments by AT&T International, Inc. on the Consultation Document “Strategic Sector Review”

AT&T International, Inc. (“AT&T”), a wholly-owned subsidiary of AT&T Inc., is pleased to submit comments on the public consultation document “*Strategic Sector Review*” released by the Supreme Council of Information & Communication Technology (“ictQATAR”) on February 20, 2011 (the “*Consultation Document*”). The review, as mandated by Telecommunications Law 2006,¹ provides a good opportunity for ictQATAR to identify refinements or enhancements to existing telecom policies and regulations to sustain the sector’s development. AT&T applauds ictQATAR for assessing the sector’s performance against Qatar’s liberalization objectives: encouraging competition, increasing customer benefits, supporting the health of the industry, creating sustainable investments, and encouraging ubiquitous services.² Notably, competition drives the four other objectives.

Issues for Consultation: ictQATAR, in its commitment to Qatar’s continued telecom liberalization and attendant competition, has provided a thorough examination of the telecom market to instigate the necessary policy reforms. Although many questions and recommendations on the evolution of the sector have been presented in the *Consultation Document*, AT&T’s comments focus on the mobile market draft recommendations, specifically, whether to license a third mobile operator.

AT&T acknowledges that ictQATAR has concluded that a third mobile license is not immediately required in Qatar.³ However, Class Licenses for the *resale* of mobile services would provide an opportunity to stimulate further competition without having to issue new facilities-based licenses. The introduction of Class Licenses⁴ for the resale of mobile services, or

¹ Competition Policy Chapter (Articles 40.1 and 40.2)

² See *Strategic Sector Review* at 6.

³ *Id.* at 51.

⁴ In its January 2009 consultation, *Licensing Framework*, ictQATAR sought comments from the public on the licensing process to facilitate market entry of new products and services, among other goals. AT&T participated in

a Mobile Virtual Network Operator (“MVNO”) license or authorization,⁵ would advance competition while contributing to the efficient use of existing infrastructure and scarce resources (*i.e.*, radio spectrum). With this approach, at present the Council could issue service-based licenses or authorizations in lieu of licensing a third facilities-based mobile network operator (“MNO”). This would enable the country’s MNOs to further establish their business while, critically, permitting more market entrants and therefore enabling more competition. Moreover, with a light-touch regulatory approach, whereby any mobile resale agreement is at the sole discretion of the operators, there is no mandate to force MNOs into wholesale access agreements with MVNOs. However, MNOs may see value in offering wholesale access to their networks. In addition to general market advantages, such arrangements can benefit MNOs with the extension of mobile services to market segments or niche markets, overall market expansion, increased innovative value-added services, better network utilization, and lower operational costs.

Since MVNOs cater to specific market segments to offer innovative and bespoke content and services, AT&T suggests that ictQATAR initially focus the MVNO license or authorization on the enterprise market segment, which would include voice or data. Indeed, the Council identified mobile data as a growth opportunity.⁶ And with more than a third of enterprise employees worldwide considered to be highly or moderately mobile, and the number continues to grow, the enterprise segment contains much potential.⁷ Additionally, by focusing mobile resale on the enterprise market, as opposed to consumer markets, ictQATAR can monitor the market without the need to oversee comprehensive compliance obligations, such as those required for mass market entry (*e.g.*, emergency call services, directory listing, mobile number portability). These obligations, however, would continue to be ensured as necessary by the underlying MNO, as would technical and operational issues like help desks and call centers. Essentially, the MVNO license or authorization for the enterprise market segment would provide the legal authority for an MNO and MVNO to enter into an agreement that enables the MVNO to independently bill and contract with the multinational enterprise customer (“MNC”), and maintain responsibility for the overall service obligations, while the MNO performs the underlying operational and compliance activities.

that consultation, encouraging ictQATAR to consider issuing expanded Resale Class Licenses. AT&T still supports the eventual issuance of unbounded Class Licenses for resale, but suggests niche applications as an interim step.

⁵ MVNO is an expansive term. AT&T uses the term MVNO in these comments to mean pure reseller, with none to minimal infrastructure and compliance requirements. Such an operating model would pertain to enterprise market resale and would allow outsourcing of most, if not all, technical and regulatory requirements. This would lower the barrier for market entry of niche players.

⁶ ictQATAR identified the mobile data market as an industry opportunity, noting a 139 percent average annual increase since 2008 in the number of mobile broadband subscriptions and the expectation of continued expansion with new applications. ictQATAR also highlighted that the share of mobile data revenues in total mobile revenues remains lower in Qatar than in developed nations, signaling room for further grow. *See Strategic Sector Review* at 36-37.

⁷ Ovum, *Integrated fixed-mobile communications for enterprise*, Jan. 6, 2010, at 5. Additionally, IDC’s top 2011 business network services prediction for the Middle East is that “enterprise mobility will take a leap forward...” Moreover, the consultancy states that mobility solutions do not follow a standard model so it is important for service providers to tailor their solutions. *See IDC, Middle East Business Network Services Top 10 Predictions, 2011*, February 2011, at 1-2.

Introducing MVNO licenses or authorizations, particularly for the enterprise customers, also will enable the sector to exploit the exponential growth predicted for the emerging machine-to-machine (M2M) communications market.⁸ In fact, M2M communications are gaining traction with the world's premier MNOs and vendors, largely because businesses view M2M as a means to enhance productivity, lower costs, streamline processes, and manage assets and employees. Importantly, M2M increasingly will serve as a differentiator for enterprises. To address this burgeoning market, AT&T, for example, continues to expand its M2M services portfolio, which currently contains more than 450 M2M devices. Innovation in the Qatari mobile market has increased considerably since liberalization, as indicated by significant increase in the number of different products available. By stimulating more competition geared toward mobile data, further growth, development and innovation will result.⁹

Another benefit of MVNOs for the enterprise segment is the range of experience that can be obtained, notwithstanding the considerable international expertise of Qtel and Vodafone Qatar. However, no single service provider leads in all areas. Bringing in more service providers with different experiences, existing relationships and suites of offerings – which may include mobile device management services, mobile application enablement platforms that can be customized for an MNC, information security consulting services, telecom expense management, and global supplier management – could deliver more robust and diverse services. In fact, a strong telecommunications sector, characterized by competition that creates innovation, is key to Qatar achieving its diversification goals because telecommunications is inextricably linked to adjacent industries such as education, media, government, banking and healthcare. These industries are being transformed through technological advances in telecommunications. For instance, cutting-edge enterprise mobility solutions are profoundly changing how the healthcare industry manages patient information exchange and security and compliance processes, with consumers the ultimate beneficiaries.¹⁰ Such industry transformations, accelerated through competition and cooperation, support ictQATAR's goal to increase demand for telecom services to improve the welfare of Qataris.¹¹

Finally, as AT&T noted in comments to the *Licensing Framework* consultation, as Class Licensees (or MVNOs) become valuable and reliable wholesale customers of the facility-based

⁸ “Perhaps one of the largest themes in enterprise this year was the embedded opportunity in M2M...[t]he market is growing quickly, around 15-20% YoY...the next wave for the internet is in connecting the billions of devices that will emerge in the coming years.” McQuire, Nicholas, *Mobile World Congress Brings a Larger Focus on the Mobile Enterprise*, IDC Link, Feb. 18, 2011, at 2.

⁹ Absent granting an MVNO license or authorization for the enterprise market, AT&T suggests that mobile resale exclusively for M2M traffic should not be regulated, because the underlying MNO provides the service without alteration of the signal.

¹⁰ Mobile health services use wireless technologies to provide real-time expert lifestyle information and disease management solutions to help patients make informed health decisions and to better manage chronic conditions like diabetes. See Qtel, Press Release, *The Qtel Group Introduces “Mobile Health” Services*, Feb. 16, 2011, available at <http://www.qtel.qa/NewsFull.do?News=29503> and AT&T, Press Release, *AT&T Announces New Initiatives for Healthcare Industry*, Feb. 22, 2011, available at <http://www.att.com/gen/press-room?pid=19094&cdvn=news&newsarticleid=31623&mapcode=corporate|enterprise>.

¹¹ See *Strategic Sector Review* at 16.

operators, competition for the provision of service to enterprise customers will be further cultivated, thereby enhancing Qatar as a location for business investment. Authorizing MVNOs also may serve to provide a ready supply of operators eligible for individual licenses, when the time is appropriate. MVNOs gain experience in the local market and in turn regulators gain empirical intelligence on the operator's performance and capabilities. Thus, authorizing MVNOs could streamline the process for ictQATAR to issue a facilities-based license in the future. In Oman, for instance, Sama Telecommunications just received a Class I (facilities-based) license after operating in the Sultanate as an MVNO.¹²

Under the guidance of ictQATAR, competition in the telecommunications market in Qatar continues to progress.¹³ Over the past five years, the telecommunications industry matured from no competition to preliminary competition. As Qatar seeks to extend the reach of fixed-line services and broadband through initiatives like the Qatar National Broadband Network (QNBN), by offering Class Licenses for the resale of mobile services or MVNO authorizations, ictQATAR can capitalize on the successful mobile services market by fostering continued development in the sector and the industries it affects (*e.g.*, education, healthcare, government).

* * *

Qatar introduced telecom liberalization as part of broader overall economic reform, recognizing the multiplier effect telecommunications exerts on the economy. We are pleased to see Qatar taking further steps to develop its telecommunications sector and we appreciate the opportunity to comment on policy and regulatory reform, including the recommendation that ictQATAR expressly provide for Class Licenses for the resale of mobile services or MVNO licenses or authorizations. AT&T would be pleased to provide any further information that would be helpful to the Council.

Respectfully submitted,



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¹² TeleGeography, *Third telecoms license issued to Sama Telecommunications*, Feb. 28, 2011, available at http://www.telegeography.com/cu/article.php?article_id=36322.

¹³ ictQATAR clarified the role of the state and the regulator, noting that the State of Qatar and the ictQATAR can influence the structure of the market by defining the *number of players* that will participate in the sector and the *type of competition* to be provided—*i.e.*, either infrastructure-based (new players entering the market with their own infrastructure) or service-based (new players using the incumbent's network infrastructure using bitstream and resale type of services). See *Strategic Sector Review* at 50. AT&T suggests that at this stage of competition, the Council should authorize resale of mobile services through Class Licenses or MVNOs for the enterprise services market.



RESPONSE TO ICTQATAR
ON
STRATEGIC SECTOR REVIEW
Consultation Document

The Supreme Council of Information & Communication Technology "ic-
tQATAR"

Submitted on 20 March 2011

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or

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[Contact details for FRIENDI GROUP are provided on the Cover Sheet].

FRIENDI GROUP's submission is non-confidential and publication by ictQATAR is permitted

PART 1: EXECUTIVE HEADLINES AND INTRODUCTION

A. EXECUTIVE HEADLINES

1. Irrespective of the size of economies, multiple players and vigorous competition is still the best way to achieve price and innovation benefits for consumers.
2. ictQatar has specifically enquired in the SSR ...*"Should an additional mobile operator be introduced in Qatar immediately"*¹
3. FRiENDi GROUP considers further immediate entry is not only desirable but justifiable on competition principles and the evidence presented in the SSR.
4. Moreover, for the detailed reasons set forth throughout this Response, we consider MVNO entry is the optimal model of entry for Qatar given the present state of the market.
5. To ensure the strongest possible continued sector growth, there are two main criteria FRiENDi GROUP believes should be considered and analysed particularly carefully:
 - a. The possibility of inefficient entry (e.g. duplication of costs and reduction of scale); and
 - b. The indicative benefits and costs of different models of entry (in particular the benefits offered through MVNO entry).
6. We believe entry by a third facilities based operator is the least efficient and cost effective mode of entry for Qatar. However, entry into the market at the retail level (i.e. via MVNO) would neither erode scale (to the extent scale economies exist), nor would it pose any real risk of cost-duplication.
7. MVNO entry would provide ictQatar with the most efficient means of stimulating innovation and driving further competition in the mobile market in Qatar. It would also be consistent with what has occurred, and is continuing to evolve, in other regional markets and globally. For example, Oman and Jordan have both provisioned the entry of MVNO's into their markets.
8. MVNO entry would avoid the radio network and other infrastructure roll-out and deployment costs associated with an MNO. Neither would it generate the amount of local government and public discontent², or market disruption and incumbent concerns, of MNO entry.
9. The entry of MVNOs is by no means a "zero sum game" for MNOs. International experience suggests that the intensification of competition which results from the entry of MVNOs grows the whole market, i.e. "all boats rise with the tide". Evidence from around the world clearly establishes that MVNOs can add new "life" to a maturing market.
10. Further, a robust service based competitive dynamic (i.e. via MVNO's) will mean increased traffic on the operators networks driving improved QOS and further competi-

¹ See SSR, Question 5.1.3.

² , e.g. the many practical and administrative issues associated with site selection, location, acquisition and provisioning, as well as the plethora of health, environmental and other public interest issues surrounding mast construction and operation etc

tion, resulting in a truly long-term commitment to network development on the part of the existing carriers.

11. FRIENDi GROUP, therefore, encourages and urges ictQatar to adopt a rebuttable presumption that there is scope for immediate additional entry at the retail level in the mobile sector and that such entry in the form of MVNOs will neither duplicate costs, nor result in the erosion of scale.
12. However, a clear apparent barrier to MVNO entry is ictQatar's present policy of a moratorium on SBC. We believe the SBC moratorium policy, if maintained, will be a significant inhibitor to securing an increased contribution from the sector to the overall economy and we, therefore advocate its repeal.

B. INTRODUCTION

1. FRIENDi GROUP congratulates ictQatar on the quality of the Strategic Sector Review Consultation Document ("the SSR") and welcomes and supports this important pro-competition regulatory initiative.³
2. FRIENDi GROUP is an innovative, company whose objective is to offer mobile telecommunications services across the South Asia Middle East and Africa ("SAMEA") region as a Mobile Virtual Network Operator (MVNO), Mobile Virtual Network Enabler (MVNE) or mobile reseller (for convenience, referred to singularly as "MVNO" throughout this response ("the Response")).
3. FRIENDi GROUP is directly interested in the liberalisation of the telecommunications sector in Qatar and the potential that MVNOs could have in providing increased choice of services to Qatar's telecommunications consumers. FRIENDi GROUP is a potential new entrant to the Qatar market.
4. Through increasing competition at the non-facilities based operator level, MVNOs could deliver many new and innovative services, at competitive prices and within a very short period of time thereby enhancing the general economic welfare of Qatar.
5. Further, properly implemented, MVNOs will facilitate and provision new converged fixed and mobile services, together with value added services, currently not available to mobile users in Qatar thereby delivering increased choice and general consumer benefits.
6. We would welcome the opportunity to discuss our comments with ictQatar. If ictQatar requires any further information relating to FRIENDi GROUP's comments in this response please contact Mr. Mikkel Vinter, CEO or Mr Phil. Reynolds, CLO⁴.
7. This Response both complements and supplements FRIENDi GROUP's earlier response dated 27 May 2007 relating to ictQatar's consultation on the Liberalisation of the Telecommunications Sector in the State of Qatar (the " Liberalisation Consultation" and our "Liberalisation Response" respectively)⁵.

³ FRIENDi GROUP's response does not contain any business confidential information, and the comments in this Response are intended to address the issues set out in the SSR. In the spirit of openness and transparency, FRIENDi GROUP has no objection to the publication by ictQATAR of its response on its website.

⁴ Contact details for FRIENDi GROUP are provided in the footer on the cover page of this Response

⁵ *Response to ictQatar's Consultation on Liberalisation of the Telecommunications Sector in the State of Qatar* . Dubai: Moobility Telecom, 27 May 2007.

C. STRUCTURE AND CONTENT OF RESPONSE

1. Our Response focuses upon, and is limited to, those aspects of the SSR relating to the review of the mobile sector. We have not commented on the other specific questions in the SSR relating to the fixed sector. The Response is structure as follows:
 - Part 1 Contains General Comments
 - Part 2 Contains our answers to ictQatar’s specific questions relating to the mobile sector.

PART 2: GENERAL COMMENTS AND POTENTIAL CONCERNS

D. GENERAL COMMENTS

1. As a preliminary observation FRIENDi GROUP would like to draw ictQatar's attention to its earlier 2007 Liberalisation Consultation and the responses to it. We believe there is an obvious connection between both consultations⁶.
2. Much of what is contained in FRIENDi GROUP's previous Liberalisation Response is relevant to matters raised in the SSR. To avoid unnecessary repetition we attach as Attachment A to this Response our earlier Liberalisation Response and request that ictQatar take into consideration relevant parts of our earlier Liberalisation Response as part of the SSR.
3. The absence of:
 - a. reference to, or commentary upon, the Liberalisation Consultation mentioned above;
 - b. detailed analysis of the legal and regulatory framework (including the Class Licensing regime) and
 - c. any discussion or analysis of services based competition ("SBC"), including MVNO's,
4. unfortunately, slightly detracts from the comprehensiveness and completeness of the SSR.
5. Hopefully, ictQatar will be aware that the Bahrain TRA has undertaken a very similar Strategic Market Review to the SSR⁷. A key component in Bahrain Strategic Market Review related specifically to the introduction and provisioning of services based competition ("SBC"), including MVNO's. The Bahrain TRA supports the introduction of MVNOs. And, as further examples, Oman and Jordan have fully provisioned the entry of MVNO's into their respective markets. FRIENDi GROUP has very successful business operations in both of these last mentioned ME countries.
6. Because many of the issues and questions raised in the Bahrain consultation mirror those in ictQatar's SSR Consultation, FRIENDi GROUP has provided to ictQatar a copy of its response to the Bahrain consultation for the assistance of ictQatar. We encourage ictQatar to review that response for information relevant to the SSR.

⁶ FRIENDi GROUP notes the proposed four phased approach to opening the Qatar telecommunications sector to competition referred to in the SSR. This new process, together with absence of any reference to the earlier Liberalisation Consultation, suggests that ictQatar may be repeating aspects of the earlier Liberalisation Consultation in phase three of its new liberalisation programme. FRIENDi GROUP would appreciate an understanding of whether this is a correct view?

⁷ TRA. *Strategic and retail market review: a public consultation document issued by the Telecommunications Regulatory Authority of the Kingdom of Bahrain, 27 August 2007*. Manama: the TRA, 2007

E. POTENTIAL CONCERNS

1. Detailed analysis of the policy, legal and regulatory framework that exists in Qatar. appears important in the context of the SSR given that competition does not occur or operate in a vacuum, but rather within the dictates and structure of a set of rules.
2. Accordingly, we submit that a specific consultation and discussion of the exiting legal and regulatory framework be undertaken before the next phase of liberalisation can proceed.
3. We note the Telecommunications Law expressly provides among ictQATAR's objectives the following:
 - a. *encouraging the introduction of advanced and innovative information and telecommunications technologies to meet the needs of customers and the public;*
 - b. *increasing customers' benefits and safeguarding their interests;*
 - c. *relying, where possible, on market forces to safeguard the interests of customers and the public; and*
 - d. *ensuring that the regulation of the telecommunications sector remains in line with international rules;*
4. To facilitate implementation of these objectives the Telecommunications Law expressly provides a Class Licensing mechanism to facilitate provision of non-facilities based services. Specifically,:

"The Telecommunications Licenses shall be as follows:

 1. *Individual licenses; and*
 2. *Class Licenses.*

*...The General Secretariat shall publish the guidelines that clarify the telecommunications services and related activities that require Individual or Class Licenses as specified in the Executive By-Law of this Law."*⁸ (emphasis added)
5. Accordingly, it is apparent that the legislators in Qatar clearly intended there would be a two tier licensing framework in Qatar, which is consistent with what has occurred elsewhere in the region and internationally. As is usual and best practice, FRIENDi GROUP assumes that the Class Licenses will be general authorization for the provision of services, including in mobile markets, where the use of no scarce resources is required.
6. The express existence of Class Licensing within the Telecommunications Law should be considered an obligatory mandate to ictQATAR. Accordingly, if ictQatar intends that Class Licenses will not be issued (or their implementation delayed) in relation to mobile service provision, we respectfully anticipate ictQATAR will, in the next phase of the present liberalisation programme, provide its reasons and rationale for delay in the provisioning of mobile Class Licenses. Otherwise, as things presently stand, the legislative intent of the Telecommunications Law is being nullified or frustrated without any transparent justification.

⁸ Telecommunications Law, Article 10.

7. Further, depending upon what ictQatar's current policies are⁹, we are particularly concerned by ictQATAR's Draft Recommendation in paragraph 5.1 of the SSR wherein, in relation to mobile markets, ictQatar appears to be pre-empting possible outcomes for later stages of the liberalisation programme by stating that "*...apart from...the entry of a third mobile player, the price approval process ... improvements in the quality of service [and a review of] spectrum policy...We feel there is little need to review other policies that are already in place.*"(emphasis added).
8. Relevantly, in our Liberalisation Response we expressed concern about ictQatar's policy regarding a moratorium on services based competition in mobile markets. More specifically FRIENDI GROUP then submitted:
- "The issue of specific concern to [FRIENDI GROUP] – and, [FRIENDI GROUP] expects, to many other potential telecommunications service providers - is ictQATAR's policy statement that:*
- "...ictQATAR does not propose to encourage service-based competition, (emphasis added).¹⁰*
- ... ictQATAR provides only the general statement that this is necessary to "...provide the new entrants with adequate incentives to invest in state-of-art infrastructure...*
- The core of our submission is that the moratorium policy, based on perceived disincentives to infrastructure investment, is challengeable and, in our view, is misconceived..."*
9. We are, therefore, concerned that the current moratorium may be one of ictQatar's "already in place" policies that ictQatar may not be intending to review. Alternatively, as the policy was always expressed as being an "initial" policy¹¹, we hope that ictQatar, if it has not already done so, is intending to revoke it shortly? Either way, we would very much appreciate clarification from ictQatar on the moratorium policy.
10. Much of our Response to the SSR presumes in good faith that ictQatar considers, or will consider, services-based competition ("SBC") in mobile markets as one of the key pro-competitive policy options in relation to further sector liberalisation and that no policy bias or prejudice exists in Qatar solely towards facility based competition ("FBC"). FRIENDI GROUP would respectfully appreciate confirmation from ictQatar of our presumption.

⁹ After searches and enquiries, identification of a definitive list of ictQatar's policies remains somewhat opaque. For example there is no reference on ictQatar's website to its current moratorium policy of services based competition in mobile.

¹⁰ Liberalisation Consultation, p. 27.

¹¹ For an initial 3 year period only.

PART 3: ANSWERS TO ictQATAR's SPECIFIC QUESTIONS

F. Question 4.1.1: What role should ictQATAR play in ensuring continued sector growth?

13. To fulfil ictQatar's role in ensuring the strongest possible continued sector growth, there are two main criteria FRIENDi GROUP believes should be considered and analysed particularly carefully:
 - c. The possibility of inefficient entry (e.g. duplication of costs and reduction of scale); and
 - d. The indicative benefits and costs of different models of entry (in particular the benefits offered through MVNO entry).
14. The role of ictQatar in fully understanding these criteria is key to the prospect of market entry, sustainable sector growth, and delivering expected consumer and economic welfare gains in terms of price, quality and innovation.
15. The first issue - the possibility of inefficient entry - is discussed next. The second criterion - different entry models - is discussed in Section F below, with a focus on an MVNO market entry model.
16. It should be recognized that a zero constraint on entry potentially may pose as much risk to the competitive process and consumer outcomes as would an overly narrow and restrictive "facilities based licensing" only approach.
17. If entry into the market is totally 'free', that is, without cost, and there were no threshold selection criteria to filter and limit the the number of licenses, there is every likelihood that inefficient entry would occur. For example, where an increasing number of firms enter the market, duplicating costs and eroding any potential scale benefits only for a proportion of these entrants, or all, exiting the market after a period of incurring sustained losses.
18. The other policy option is to enable entry on a licensed basis (as the present Qatar two-tier licensing framework envisages), but allow the potential entrants to determine the feasibility of any market entry proposition. However, for reasons not totally transparent to us, ictQatar appears concerned about the possibility of any entry, in particular, to prevent the possible erosion of scale economies and to protect both existing incumbent licensee's investments.
19. In relation to ictQatar's evident preference relating to facilities based operator ("FBO") only entry ¹²we respectfully caution that, at this stage, it would be difficult for ictQatar to confidently predict the exact nature of any potential 3rd MNO's infrastructure deployment. And, absent any analysis of such, it cannot simply be assumed by ictQatar that any other form of entry in the mobile sector would be inefficient. For example, it could reasonably be assumed (consistent with the legislative intent of Qatar's two-tier licensing framework) that there are a number of different possible network models that could be deployed.
20. In terms of existing operator's scale economies, it is likely to be found upon investigation that scale is not as prevalent in the market in Qatar as might be expected. If

¹² As gleaned from the content of the SSR and the existing moratorium policy.

few scale economies actually exist then any risk of scale erosion from new entry is minimal.

21. Further, an investigation of any scale economies will also determine where the risk of cost-duplication by any new entrant is likely to be greatest. In both of these respects, it is the large sunk costs associated with network infrastructure (and its rollout), which are primarily the source of scale economies. Furthermore, the risk of cost-duplication is highest where a full facilities (including radio network) infrastructure is permitted.
22. Therefore, entry into the market at the retail (MVNO) level would neither erode scale (to the extent scale economies exist), nor would it pose any real risk of cost-duplication. For these reasons (and the reasons set forth in Section G below), MVNO entry would provide ictQatar with the most efficient means of stimulating competition in the mobile market in Qatar for the following reasons;
 - a. **The cost of entry is lower** - In the case of an MVNO, it can be assumed that the cost of entry will be lower than that attributable to an infrastructure-based MNO. For example, an MVNO would seek to enter the market at the retail level, foregoing major infrastructure, rollout and other associated wholesale costs.
 - b. **The risk of cost-duplication is mitigated** - Any risks in respect of cost duplication or scale erosion would be minimized. Assuming the prospective MVNO entrant is efficient, there is a strong possibility that the MVNO will drive additional output (subscription and call volumes) which would serve to improve (reduce) average industry costs.
 - c. **MVNO will help deliver economies of scale and scope** - If scope and scale economies are not achievable at the network or wholesale level, and assuming the respective networks mimic one another, then competition is more feasible and likely to occur at the retail level and we believe this is where ictQatar should focus its analysis. For example, constant returns to scale at the network and wholesale level suggest that average wholesale costs approximate to marginal wholesale costs, and it is at the retail/service layer at which efficiencies and innovation should be encouraged and facilitated.
23. FRIENDi GROUP firmly believes that a detailed investigation and analysis should be undertaken in relation to (a) all potential models of entry, and each prospective type of entrant's proposition, and (b) which model and which prospective new entrants proposition, are most likely to most beneficially impact competition and enhance consumer and general welfare in Qatar. We are pleased to provide our own comments on the various models of competitive entry in Section G below.
24. FRIENDi GROUP encourages and urges ictQatar to adopt a rebuttable presumption that there is scope for additional entry at the retail level and that such entry in the form of MVNOs will neither duplicate costs, nor result in the erosion of scale (if economies of scale do at all exist). The substantial benefits of MVNO entry are expanded upon in other Sections of this Response, in particular Sections G and U.

G. Question 4.1.2: What are the main factors inhibiting the sector from contributing more to the overall economy, and how should these be addressed?

1. The main inhibitor preventing the sector from contributing to the overall economy may be that a legacy or traditional view of competition in small economies¹³ prevails in Qatar. Namely, that scale economies force integration at both the infrastructure and vertical services level market, such that a small number of big players is more efficient than many smaller players.¹⁴
2. In the telecommunications market, this assumption is reinforced by the unusual history of telephony, where systems and entities were built and organised pursuant to a policy design for the government controlled monopoly, and outside of competitive market forces.¹⁵
3. However, modern opponents of this traditional view make 3 key points:
 - a. **first, regulatory tolerance of concentration carries a higher cost for small economies.** The barriers to entry and related informational asymmetries create behavioural incentives and opportunities for concentrated players to extract profits from higher prices. This in turn, combined with lack of competition, diminishes the incentive to innovate, as research and development costs is an unavoidable tax on monopoly.¹⁶ In this sense, small economies are no different to large economies: the end goal of maximising economic and social welfare by a competition policy that eliminates negative effects of concentrated market power is common to both.¹⁷
 - b. **second, even if scale concentration at the infrastructure level is needed to encourage investment, this does not require concentration in the vertical services markets.** In the modern technology state, a more relevant dynamic model should contemplate economies operating on a network of networks level, which is many layered, rather than at a firm level.¹⁸;
 - c. **third, given the higher tolerance of concentration, small economies face a different set of challenges in ensuring markets remain competitive.** Consequently, it is imperative for them to develop a tailored regulatory response that aims to *"...minimise the undesirable economic effects of concentrated market structures and support the dynamic, long-run market forces that lead to more efficient market structures."*¹⁹

¹³ Qatar is considered to be a small economy from a socio-economic perspective.

¹⁴ Fontenay, Liebenau and Savin, "A New View of Scale and Scope in the Telecommunications Industry; Implications for Competition and Innovation" (Columbia University, draft paper, December 2004), p 5.

¹⁵ Fontenay et al (2004), p 5.

¹⁶ M Gal, *Competition Policy for Small Market Economies*, (Harvard University Press, 2003 (2003), pages 42-45

¹⁷ M Gal (2003), pages 5, 49, 54-56

¹⁸ Fontenay et al (2004), p 2.

¹⁹ M Gal (2003), pages 54-56

4. In other words, "small economies need a competition policy that is specifically tailored to their markets [to promote competition]."²⁰ That is, more, not less, focus on ex ante behavioural rules may be required to balance out the effects downstream of the higher levels of concentration may have to be tolerated in small economies. Policy makers cannot adopt the broad-brushed rules of larger economies (US, Europe, Australia) which have a bias against industry concentration, and the structural remedies and sanctions (for example, divestiture) have limited application to a small economy.
5. In short, the smallness of economies does not mean insulation from the "economic laws of gravity". Vigorous competition is still the best way to achieve price and innovation benefits for consumers in both large and small economies alike. Accordingly, in small economies, the need for regulators to implement more effective conduct regulation, including open access, is even more imperative than in larger economies which exhibit stronger, more diversified upstream competition. and we encourage icQatar to do so.
6. In commenting on the Infocomm Development Authority of Singapore (IDA's) Second Public Consultation on the first Triennial Review of the Code of Practice for Competition in the Provision of Telecommunications Services²¹, the Joint Carriers Submission, while noting that the IDA's continued policy of encouraging FBC was important, strongly argued against the IDA's emphasis on FBC at the expense of SBC:

"SBC (service based competition) remains important, not only in its own right, but also as a platform for FBC:

In our experience, SBC is a means of market entry for facilities based operators ("FBO"), allowing them to familiarize themselves and establish a customer base before making the significant investment necessary for effective FBC;

 - *Service-based operators ("SBO") help create niche wholesale markets for FBOs;*
 - *SBOs help spread the risk for new FBOs by purchasing significant volumes of capacity, allowing FBOs to unload bulk capacity without having to first establish a retail market presence; and*
 - *SBOs are a major customer group for FBOs, competitive with the incumbent. If SBOs are harmed as a result of the withdrawal of regulatory protections, competitive FBOs will likewise be harmed as their customer base is threatened. "*
7. In disagreeing with the traditional incumbent argument that the facilitation of SBC would discourage new entrants from investing in infrastructure of their own, the Joint Carrier Submission pointed out that regulated limits on service based competition did not necessarily lead to infrastructure investment.
8. In other words, SBC and the availability of key access products from incumbent providers (such as fixed interconnection, wholesale local leased lines, local loop unbundling and wholesale DSL services), on mandated terms, was felt to be crucial to stimulating investment in competing infrastructures. Any barriers to entry at these levels would adversely impact an operator's (both new entrant and incumbent) ability to move up the ladder of investment.

²⁰ M Gal, p 4

²¹ *Joint Submission of Telecommunication Carriers in the Asia Pacific*, 22 June 2004 ([Joint Carriers Submission](#)).

9. The Joint Carriers Submission clearly states that a robust service based competitive dynamic was preferred in Singapore to drive increased infrastructure competition and a truly long-term commitment on the part of carriers, such that there was a balance between the two extremes.
10. In conclusion, for the reasons explained above - and in more detail in other sections of this response - we consider ictQatar's current moratorium policy relating to SBC in mobile, if maintained, will be a significant inhibitor to securing an increased contribution from the sector to the overall economy.

H. Question 4.1.3: What other initiatives can ictQATAR implement to facilitate an increase in both supply and demand for telecom services in Qatar?

1. We refer to and repeat our comments above in Sections E and F.
2. Additionally, FRIENDI GROUP considers that one key initiative would be to undertake a detailed evaluation of various models of competitive entry. However, before addressing the different models and their various benefits, we set out FRIENDi GROUP's views on the nature of competition in the mobile market in Qatar currently.
3. Relative to other mobile markets around the world the Qatar market is highly concentrated with just two service providers. Use of the Herfindahl-Hirschman (HHI) index will provide a number²² which clearly illustrates the high level of market sector concentration in Qatar. The US FTC considers markets with an HHI greater than 1800 as being highly concentrated, to the extent that any merger proposals likely to result in a measure above this would be challenged.
4. Furthermore, it is widely understood that under certain assumptions, a duopoly, without a complementary MVNO layer, may not deliver a competitive outcome that is resulting in prices approximating marginal cost and/or economically optimal levels of output. For example, in the context of the mobile market in Qatar it may be in neither incumbent provider's interest to compete too aggressively as this would presumably affect each providers' respective revenues and profits; aggressive pricing which reduces retail margins by Qtel would bring a response from Vodafone, and vice versa.
5. It is possible, therefore, that it is in the interests of both current MNOs to "accommodate" one another, and this is traditionally the case where the incumbent recognises and accepts the entrant's intention to establish a sustainable market presence, and where marginal costs are constant (or fall slowly as a result of minimal scale economies).
6. FRIENDi GROUP notes prices and Qtel's EBITDA margin in Qatar is high and Vodafone Qatar is likely to be EBITDA positive in an unusually short space of time when compared to other global markets. This indicates a duopoly outcome, where price remains consistently above the economic cost of supply since both providers are effectively insulated from any potential or actual external competitive threat, such as market entry.
7. In FRIENDi GROUP's opinion, the most relevant "test" that should be applied by ictQatar (in addition to the current assessment of which models might help generate further competition), is the following high-level test: Absent further competitive entry, will the current market structure deliver an effectively competitive market?

²² The HHI index is calculated by adding the squares of the market shares of the current competitors.

8. FRIENDi GROUP concludes from the information set out in the SSR that a degree of competition exists, to the extent that Vodafone has managed to secure a sustainable market share, and relative price baskets would at least appear comparable to other regional jurisdictions. However, it is our contention that neither of the existing providers have any real incentive to compete aggressively in terms of price. In short, absent further competitive entry, would ictQatar expect to observe increased competition between the parties, e.g. striving for greater efficiencies and innovations that would facilitate repeated and sustainable competition?
9. We discuss next the key optional models of market entry into the market in Qatar.
10. As discussed above, FRIENDi GROUP is considering investing in the mobile market in Qatar – FRIENDi GROUP is a potential entrant. Therefore, we have a good understanding of ictQatar’s concerns, albeit from a more commercial rather than a regulatory perspective. Furthermore, we recognise the relative advantages and disadvantages of different entry strategies.
11. Having reviewed and considered the SSR in some detail, FRIENDi GROUP believes there is merit in developing a simple comparative analysis of the various models of competition. In FRIENDi GROUP’s view, this might help inform ictQatar’s thinking and enable a series of potential options to be listed, possibly ranked according to their ‘value’ or relative attractiveness²³.
12. In an effort to “measure” the value of each possible model of entry, FRIENDi GROUP has considered a series of criteria against which each model is then measured. Some of the criteria used in the analysis are those that form the basis of ictQatar’s own thinking, such as the impact on prices (of different entry models).
13. The table below lists a restricted number of entry options and models for competition, and these are set against the different criteria. To aide understanding, the entry options have been limited and the various criteria applied are necessarily high-level.
14. The table uses three criteria to evaluate the different entry scenarios considered;
 - a. **‘Depth’ of Competition:** - the depth of competition might simply be measured by means of the three competition variables discussed in the SSR, i.e. the (likely) impact on prices, innovation and quality of service (whether network or customer service related).
 - b. **Risk of inefficient entry:** - For example, is there is a risk of cost-duplication and/or erosion of scale, and what implications, if any, are there for the financial viability of the existing providers?
 - c. **Regulatory Burden:** - This include the likely policy and administrative burden placed on ictQatar, but might also reflect the level of administrative complexity (for both the entrant and ictQatar), and regulatory risk faced by the potential entrant.

²³ Of course, this exercise could be further developed more accurately and robustly by means of applying a formal cost-benefit analysis (for each option), however such an approach could in itself incur a substantial opportunity cost to consumers were market entry to be delayed significantly as the current MNOs continue to benefit from limited competition.

Table 1 - Comparative Analysis of options for entry / competition			
Evaluation Criteria	Market Entry Options		
	No further entry	MNO	MVNO
'Depth' of competition	It can be assumed that there will be minimal further competition on price and other variables. Providers unlikely to compete aggressively absent some exogenous stimuli.	Entry by an infrastructure MNO would score highly on this measure. For example, the efficient deployment of modern equivalent assets might provide a good foundation for product and service innovation. Similarly, over the long term, (network) quality of service may be improved and/or differentiated, and greater price competition might also ensue.	Assuming MVNO entry was to be facilitated at the retail level (regulated access to existing networks on fair and reasonable terms), this option would score highly against this measure. It offers the prospect of service and price differentiation and competition at the retail level, and evidence suggests that such a model deliver sustainable long-term competition.
Risk of inefficient entry /outcomes	There is no risk of inefficiencies, which is to say, absent further entry there is no risk of cost duplication or erosion of scale (to the extent that scale economies exist).	Deployment of additional mobile infrastructure, whether limited in scope or not, will pose a risk of cost duplication, and result in scale erosion to the extent the average industry cost increases. In addition, and assuming there is a risk of inefficient entry, this may have implications for the financial viability of all providers in the market.	There is no/very limited risk of duplication of either network or infrastructure cost; MVNO entry would only be likely to occur where retail level costs such as OSS, Billing and service management can be managed more efficiently than the existing providers. Moreover, this option may help to improve the average industry costs, and would generate improved financial viability.
Regulatory and Administrative burden	Other than further policy development on the current consultation, and assuming there is no regulatory intervention to 'control' pricing of the existing providers, the regulatory and administrative burden is minimal, though the consumer welfare gain is limited.	The MNO option would almost certainly generate the greatest level of regulatory burden (and cost). In addition to the continuing development of regulatory policy, considerable work would be required in respect of licensing and spectrum allocations (and the design of suitable allocation policies around each of these). Moreover, this would add a level of administrative complexity to potential entrants, and potentially increase the regulatory risk.	The Regulatory burden would be limited relative to the MNO option, and more importantly, work can be progressed quickly to enable rapid entry. Also, the administrative complexities for both ictQatar and the potential entrant are minimised, thereby limiting any regulatory and/or commercial risk. In short, the MNVO option almost certainly offers a more timely and less complex route to additional competition in the market.

15. It can be seen from the above comparison that different models of entry pose different questions and risks. However, if the objective were to minimise the set of risks whilst facilitating competition, then an MVNO model is more likely to meet that objective. Moreover, there are arguments to suggest also that significant positive consumer outcomes would be achieved relatively quickly were an MVNO model to be pursued.
16. Alternatively, it might also be argued that MNO entry offers the prospect of greater 'depth' of competition in that any new network and infrastructure could be more fully exploited, over the long run, to deliver further product innovation and price competition. The MNO option will, however, carry certain risks and administrative burdens, and perhaps more importantly, it will take considerable time before the competitive process delivers the consumer outcomes sought by ictQatar.
17. Each of these models can be evaluated against the above (and other) criteria in order to ascertain their "attractiveness", though FRIENDi GROUP assumes there is a point at which such models would equate. If so, the question of regulatory costs, e.g. risk, license and spectrum fees becomes more of a consideration – would the benefits of holding a spectrum allocation (for an MNO), outweigh the costs, and exceed the benefits of an MVNO model of entry.

18. Two immediate benefits of MVNO entry are lower costs, and the speed with which entry can be facilitated. In terms of the latter, FRIENDi GROUP estimates that entry is feasible in less than 4-6 months (assuming a suitable regulatory framework is under development), relative to at least 12-18 months for an additional MNO. In terms of the likely cost of entry to an MNO, these would be an order of magnitude significantly larger than those incurred by any MVNO.
19. An MVNO would not the radio network and other infrastructure roll-out and deployment costs associated with an MNO. Neither would it generate the amount of local government and public discontent, disruption and concern of an MNO, e.g. all the issues associated with site selection, location, acquisition and provisioning as well as the plethora of health and environmental issues surrounding mast construction and operation etc.

I. Question 4.1.4: What other legal initiatives or policies could be introduced in the next three years? Please rank them in order of their importance for supporting the continued development of the telecom sector in Qatar.

1. We deal below with policies first, followed by legal initiatives
2. In relation to policies - and having regard to what we have submitted in earlier sections of the Response - while FRIENDi GROUP agrees that facilities-based competition (FBC) is imperative for ictQATAR, FRIENDi GROUP nevertheless strongly believes that ictQATAR has seemingly presented itself with a false choice through its moratorium policy by pitting SBC against FBC. Rather, a robust service based competitive dynamic will drive increased infrastructure competition and a truly long-term commitment on the part of carriers. There can be a balance between the two extremes.
3. FRIENDi GROUP submits that FBC need not and should not be at the expense of SBC. SBC remains important at the outset of liberalisation, not only in its own right, but also as a platform for FBC.
4. FBC and SBC are in fact not opposite, but instead, complementary models of regulation providing a "spectrum of opportunity", with one type of regulation facilitating the other. As the European Regulator's Group (ERG) says,

*"It is important that infrastructure and service competition are not seen as opposed to each other, but are linked through the ladder of investment allowing competitors, through a sequence of regulated access products that are consistently priced to invest in a step-by-step manner in own infrastructure. Service competition based on regulated access at cost-oriented prices can be (and in general is) a vehicle for long term infrastructure competition"*²⁴
5. Regulators have reconciled FBC and SBC by structuring regulation into a "ladder of investment"²⁵, which is essentially a regulatory model which assumes that investments are made in a step-by-step way by new entrants:

²⁴ ERG, *Consultation Document on Regulatory principles of Next Generation Access*, ERG (07) 16, page X (ERG NGA Consultation Paper)

²⁵ Cave, *The Economics of Wholesale Broadband Access*, Proceedings of the RegTP Workshop on Bitstream Access – Bonn – 30 June 2003, MMR-Beilage 10/2003.

"In order to allow new entrants to gradually (incrementally) invest in own infrastructure they need a chain of (complementary) access products to acquire a customer base by offering their own services to end users based on (mandated) wholesale access. Once they have gained a critical mass generating revenues to finance the investment, they will deploy their own infrastructure taking them "progressively closer to the customer and increasingly able to differentiate their service from that of the incumbent"²⁶, also making them less dependent of the incumbent's infrastructure. This involves migration from one access product (or access point) to another (moving to the next rung). Thus "the entrant passes progressively through several stages of infrastructure competition, as it ascends a "ladder of infrastructure"²⁷, the initial phase being service competition, which can therefore be seen as a vehicle to infrastructure competition, which is the ultimate aim as it ensures sustainable competition in the long run. Once the process gets started and provided the right regulatory measures are taken (see next paragraph), the process will get its own dynamic and with the different elements reinforcing each other will become self propelling"^{28, 29}.

6. However, SBC is important, not only as a rung on the way to FBC, but also in its own right. As the ERG points out:

"...the promotion of service competition, where replication is not feasible, is an important goal. Service competition increases consumer choice, which is an important end in itself."³⁰

7. In relation to other legal initiatives, FRIENDi GROUP cautions against any belief or suggestion that reliance upon competition law, applied in an ex-post manner, with redress for breaches or anti-competitive prohibitions available only through the court system in Qatar, would prove adequate as a process to effectively enable further entry, MVNO or MNO. Such a bias or preference would be flawed for many reasons. The difficulties include complexity, high costs, long delays and the limitations of judges and the courts to fully and adequately understand and deal with the latest technology and services and the fast moving developments within the communications industry. And, as is particularly the case with competition in telecommunications markets, justice delayed is frequently justice denied.
8. Accordingly, we strongly advocate that ictQatar provision further entry in Qatar through an appropriate choice and level of ex-ante regulation and rules to pre-empt and stymie potential abuses of market power by operators.

²⁶ Cave, Remedies for Broadband Services, Study for the Commission, Sept. 2003, available at http://europa.eu.int/information_society/topics/ecom/useful_information/library/studies_ext_consult/index_en.htm#2003, p.20.

²⁷ Ibid, p.10.

²⁸ Allowing ultimately to remove regulation.

²⁹ ERG NGA Consultation Paper, p 41.

³⁰ Revised ERG Common Position on the approach to appropriate remedies in the ECNS regulatory framework, ERG (06) 33, Final version, May 2006, available at http://erg.eu.int/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf, page 57.

J. Questions 4.2.1: What additional measures could be taken by ictQATAR to promote more competition?

1. In addition to what we have submitted elsewhere in this Response, Qatar's Telecommunications policy should be strongly forward looking. In today's next generation network (LTE etc.), IP based, world the focus of competition is on applications and services, not facilities. A "bright line" distinction between services and facilities (if it ever was sustainable) represents part of the legacy world of PSTN where networks were tightly vertically integrated and the opportunities for functional differentiation at the service layer were limited.
2. As the delivery of these service packages, applications and content will normally be independent of the access technology, NGNs will be characterised by the horizontal integration of various service providers and suppliers who provide either the physical infrastructure, the management and control of the infrastructure, or an overarching end-to-end access service to the customer / user that supports the application being utilised.
3. One key feature of NGNs (LTE etc.) will be the decoupling of service provision from the underlying infrastructure, meaning that a service provider might have no relationship with the infrastructure provider and the carriage service provider and could be geographically separated from its customers.
4. Qatar is at an inflection point in the development of its telecommunications sector. Globally, NGNs are now beginning to be deployed by both incumbents and entrants alike. As Qatar contemplates further market liberalisation, new entrants to the Qatar market are likely to (and should be permitted to) "leap frog" the intermediate PSTN and traditional data technologies deployed by entrants in markets which liberalised earlier than Qatar and Qtel is likely to respond by speeding up its deployment of its own NGN.
5. Therefore, implementing backwards looking models based on distinctions between FBC and SBC relevant to the legacy technology environment will mean that Qatar's regulatory regime and sector development will be significantly outmoded.
6. FRIENDi GROUP is concerned that ictQatar's views on SBC is based on the following business models which held true in the legacy technology environment:
 - Facilities based operators were tightly vertically integrated into the downstream services based markets. In this environment, the technology meant that there were significant vertical economies to be realised through this tight vertical integration;and
 - Conversely, services based operators were limited to substituting the facilities based operators only at a thin retail layer. These "avoided" functions were mainly "off net" based, customer facing functions, such as call centres and customer billing.
7. NGNs, (LTE etc) and IP evolution will create a more open horizontally layered network, which in turn will provide opportunities for access at different layers and for innovation at each layer. While services based entrants might not necessarily deliver investment at the physical transport layer, there will be significant investment at multiple layers above the physical layer. In effect, the scope for services based operators is enlarged and they are able to "reach down" further into the vertical stack of the network and substitute their own layers to deliver innovation.

8. FRIENDi GROUP's concern is that, in this new world, through its moratorium policy ictQatar is understating the value of, and thereby risking, innovation at the applications layer to describe it as "services based" competition. Indeed one of the objectives of the Telecommunications Law³¹ is "...encouraging the introduction of advanced and innovative information and telecommunications technologies, to meet the needs of customers and the public."
9. In an NGN (LTE etc.) world, innovation will occur at the content and applications layer.
10. Further, there will be a limited amount of capital available for investment as Qatar will be competing, as a small economy in a presently politically troubled region for global capital which can be directed at other larger more stable markets. Qatar will not realise the full benefits of investment if it is focussed only upon stimulating competition between "dumb pipes" (and their mobile equivalents) at the infrastructure level. While duplication of infrastructure is important, in an NGN world encouraging investment at higher levels of the network will also reap more significant rewards for Qatari consumers and citizens much more quickly.
11. In our view, in an NGN environment, the objectives of the Telecommunications Law necessarily requires ictQatar to actively embrace, promote and facilitate services, applications and content providers.
12. In framing a wholesale, services based, regulatory policy for the Qatar communications sector, we would suggest that ictQATAR needs to go further and ensure effective access to the network services layer. This will then permit vibrant competition at the applications and content layers. Without a strong access policy, there is a significant risk of monopolisation or oligopolisation of NGNs (LTE etc.) which will result in a limited range of services in Qatar and a consequent effect on the nation's competitiveness. The risk of oligopolisation under the moratorium policy is discussed further below in Section J.

K. Question 4.3.1.1 Does ictQatar have any further role to play to encourage service availability?

1. In addition to ictQatar's policy roles and other responsibilities already addressed in the preceding sections of this Response, ictQATAR's enforcement role in preventing anti-competitive conduct in the market is crucial to encouraging entry and sustainable service availability. ictQatar should remain aware that the end of the legal monopoly in Qatar is unlikely to mean the end of monopoly power or of natural monopoly. Economists now agree that many segments of the telecommunications sector are not characterised by natural monopoly. After the introduction of competition, Qtel will retain residual monopoly power, or market power for an extended period of time. This will certainly be the case in many niche market segments, for instance the fixed access network (e.g. local loops).
2. Furthermore, ictQATAR will be aware that the risks of co-ordinated behaviour where there are only two operators is very high. Co-ordinated behaviour, in the worst case, can involve collusion between operators in which they agree on common prices and terms.³² However, co-ordinated behaviour can also include "conscious parallelism" or

³¹ Telecommunications Law of the State of Qatar, Decree Law No. (34) of 2006 on the promulgation of the Telecommunications Law ([Telecommunications Law](#)).

³² Present indications from the SSR are that ictQATAR will have adequate remedies to deal with conscious collusive activity

“tacit collusion” in which operators, without relying on an actual agreement, align their behaviour to moderate the intensity of competition. The fewer the number of competitors, the easier it is for each firm to observe the others and for them to fall in line with each other. The leading paper on the issue is by the Nobel Laureate, Professor Selten³³. Selten concluded that four or less competitors was the “tipping point” where risks of co-ordinated behaviour escalated substantially.

3. Regulators have struggled to address the risks of conscious parallelism in duopoly or oligopolistic markets using general competition or industry specific ex-post powers. These remedies usually require evidence of an explicit or implicit agreement, but oligopolistic conduct is particularly effective because it does not need an agreement. The market structure itself is conducive to and perpetuates the conduct. Consumers are obviously harmed because the duopoly or oligopolistic “partners” capture rents which would be passed through to consumers if competition was stronger.
4. The most effective solution, then, is to address the market structure itself. The new MVNO entrants will temper potential oligopolistic behaviour. The additional MVNO competitors will simply make it impossible, or awkward, for incumbent firms to potentially monitor each other’s behaviour and will incentivised to break any tacit “price following” behaviour and offer truly competitive prices and increasingly innovative products.
5. Of course, the number of competitors which is sustainable may vary between markets. Factors such as the number of subscribers, density, potential market growth and geographic topology can affect the number of competitors which is viable. This is where SP’s (incl. MVNOs) come into their own for small markets. The SP concept allows small markets to achieve the benefits of more competitors (and the reduced risks of co-ordinated behaviour) without the risks of further deployment of network infrastructure that may prove non-viable.
6. From FRIENDI GROUP’s experience this is exactly what happened in the Oman and Jordan mobile markets, where the entry of MVNOs has resulted in more competitive prices, package innovation and product innovation. Which in turn is consistent with what has happened elsewhere in the world.

L. Question 4.3.1.2.1: How do you expect mobile prices to evolve in the future, and how will this evolution affect the industry?

1. Since the launch of Vodafone, prices have decreased in Qatar, especially in the international area. While we would predict that this trend will likely continue, the prices remain above international benchmarks, although are relatively low compared to some regional benchmarks (e.g. UAE, Kuwait, etc.). We would predict that as the market gets more competitive and Vodafone builds a larger base, the focus will shift to on-net pricing (flat rate, “all you can eat” offers and bundles, etc.). FRIENDi GROUP has seen this in the more competitive markets around the region (e.g. Jordan, Egypt).
2. Impact on the industry will likely be an increased focus on cost per minute and optimizing the operation, areas which MVNOs significantly accelerate in terms of focused offers “niche segment” offers.

³³ Selten, R. *A simple model of imperfect competition where four are few and six are many*, International Journal of Game Theory 2, 141-2-1

M. Question 4.3.1.2.2: How do you see the future of innovation in the mobile market, and what could ictQATAR do, if anything, to encourage continued innovation in the mobile market?

1. Based on worldwide evidence, FRIENDI GROUP believes the future of innovation is inextricably connected to SBC, including MVNO's entry into mobile markets.
2. The existing MNOs are engaging in developing customer and network quality of service, product and tariff innovations, although it is questionable as to the extent to which such developments affect the entire base of mobile service customers. More competitive tariff and 'niche' segmented or tailored products are enjoyed by consumers in more competitive international markets are limited.

N. Question 4.3.1.3.1: Why does quality of service remain low in the mobile industry in Qatar?

1. Absent a thorough analysis, it is of course difficult to offer a definitive response to this particular question. However, as is the nature of monopoly transition, Qtel never had strong reasons or incentives to vigorously improve QOS until Vodafone entered the market, and Vodafone is only now getting a more mature network. Looking at the UAE (see TRA link http://www.tra.gov.ae/download.php?filename=QoS%20indicators_UAE.pdf), it is only after a few years that the new operator reaches quality standards that match and exceed the incumbent. Once Vodafone reaches and surpasses Qtel, and the high-end customers perceive that this is the case, high-end customers will start churning, and Qtel will need to improve on their QOS. Mobile Number Portability (under implementation) may further accelerate this trend.
2. Any analysis of this question should consider whether the addition of an additional network would necessarily generate greater consumer welfare. That is, if network quality of service levels are considered to be at a reasonable level, which we believe they are, FRIENDi GROUP is not persuaded that the additional (and significant) cost of another network is at all necessary to deliver what might only be small and incremental improvements in network quality of service.
3. In respect of customer service, however, FRIENDi GROUP considers there is significant scope for differentiation and improvement. Furthermore, the costs associated with such developments are not nearly as onerous as those associated with network deployment. Competition on service at the retail level is also likely to impact consumers more directly, and therefore, play a more important role in the wider competitive process.
4. For example, a small difference in network coverage or calls dropped is only likely to influence consumer choice at the margin, whereas continued and repeatedly poor customer service will almost certainly affect aggregate consumer choice.

O. Question 4.3.2.1.1: what steps should be taken by operators to improve the availability of broadband services and increase broadband speeds in Qatar

1. We believe improving connection speeds and service quality (latency, etc.) is key. This expands modes of access (regular SIMs, USB dongles, Micro SIMs for tablets, etc.). Further, encouraging additional new price plans (especially prepaid as can be seen in Oman) to attract new types of customers would also be an additional step.

P. Question 4.4.2.1: What can the industry do to reduce the high dependence on voice revenues?

1. We suggest:
 - a. Increase the penetration of data services through innovation and offers.
 - b. Stimulate SMS usage through bundles and special tariffs (SMS rates are currently relatively high compared to the region).
 - c. Provisioning for innovative data focussed MVNO's as outlined throughout this Response.

Q. Question 4.4.2.2: What additional risks do you see that could jeopardize the financial health of the industry?

1. The entry of a third facilities based operator ("FBO") would be particularly disruptive and damaging to long term sustainable competition and future infrastructure investment.

R. Question 4.4.3.1: To what extent will mobile and fixed data provide a sufficient opportunity for the industry to grow further?

1. We consider this depends very much on the segments addressed. Higher-end segments will increasingly use mobile data for high-end devices (laptops, tablets), which will drive new revenues (at the expense of some cannibalization of fixed broadband).

S. Question 4.4.3.2: What other opportunities will fuel future growth, and what role (if any) should ictQATAR play in facilitating such growth?

1. We refer to and repeat our comments elsewhere in this Response in particular in Sections E, F and G.
2. Additionally, attractive interconnect and access pricing to enable new entrants to compete.
3. De-regulation of alternative calling methods (calling cards, VoIP) and liberalization of international gateways (e.g. as has occurred in Qatar and Jordan). This will facilitate industry growth in volume, although at the cost of revenue loss in some areas. Still, this is where the industry is heading.

T. Question 5.1.1: What additional policy issues should the SSR address?

1. The possible immediate provisioning for the entry of a services based operator ("SBO") into the Qatar market, as outlined in other Sections of this Response.
2. ictQatar's present moratorium policy on SBC appears inconsistent with internationally recognized best regulatory principles normally applied to liberalization of non-competitive telecommunications markets in the ME region³⁴ and around the world³⁵.

³⁴ See for example, ITU, Telecommunications Development Bureau, *Telecommunication Policies for the Arab region*. Geneva, ITU, 2002

3. In general, applying recognized best principles for economic regulation of markets, the introduction of liberalization implies that any market participant (natural or legal), wishing or intending to provide any service on the market, has the right to be granted the relevant permit depending on the type of the service³⁶. That means that all restrictions to the access to the market are eliminated, except on the grounds of objective, transparent, proportional and non-discriminating criteria, relating to the use of the scarce resources. Rejection is allowable only under publicly known conditions specified in a normative act.
4. Current wisdom on regulation for sustainable and vigorous competition lists the following key elements:
 - a. establishment of principles for licensing regimes based on balanced rights and obligations - Qatar has done this but is not provisioning it (Class Licenses in mobile);
 - b. absence of any restrictions whatsoever to access to the market, except on grounds of objective, transparent, proportional and non-discriminating criteria, relating to the use of scarce resources (frequencies, numbers, orbital positions and rights of way - Qatar's moratorium policy is indirect conflict with this element;
 - c. application of objective, transparent and non-discriminating procedures and criteria for assessment of tenders on the part of the national regulatory authority - again the reasons for Qatar's moratorium on SBC is not transparent ; and
 - d. efficient management of scarce resources aimed at the provision of impartial treatment of the various market players - Qatar seems to be in compliance with this element.
5. FRIENDi GROUP considers the introduction of full liberalisation in telecommunications in Qatar should follow, to a large extent, the European experience³⁷. Under the EC telecommunications framework the basic principles of licensing under conditions of full liberalisation are reduced to:
 - a. removal of the restrictions to the number of market participants except in the cases of using scarce resources - Qatar's moratorium on SBC is inconsistent with this principle;
 - b. giving priority of the regime for issuing permits by a general licence over the regime of individual licensing - Qatar's non-provisioning of Class Licenses, and its moratorium policy is inconsistent with this principle.;
 - c. definition of principles, procedures and documents, related to licensing, including the establishment of the "one-stop-shopping" procedure - Qatar appears generally compliant with this principle.

³⁵ See for example, ERG. *Revised ERG common position on the approach to appropriate remedies in the ECNS regulatory framework, Final Version May 2006.*

³⁶ See basic formulations of EC Directive 96/19/EC

³⁷ But also taking into account some national peculiarities, such as the relatively low consumption of advanced data services on the part of the residential subscribers and high international rates

6. As mentioned in sub-para. (c) above, there are no scarce resource implications for SBC. ictQATAR's moratorium policy is, therefore, clearly inconsistent with that internationally recognized principle, and notwithstanding the fact that:
 - a. one of ictQATAR's express legislative objectives is "...ensuring that the regulation of the telecommunications sector remains in line with international rules."³⁸; and
 - b. the Telecommunications Law expressly provides for service based competition including the mandate to ictQATAR to issue Class Licenses for that purpose.³⁹
7. ictQATAR will likely be aware that Oman, Bahrain and Jordan are examples of neighbouring countries that have taken a fully open approach to initial liberalization. These countries are now generally well recognized as having the most, advanced, competitive and liberal telecommunications markets in the ME region. In Bahrain the governments liberalization policy from the outset was to issue multiple Class Licences for service based competition simultaneously with issue of the second mobile telecommunications licence⁴⁰. A similar approach was implemented in Jordan where the Government, pursuant to the its 2003 sector Policy Statement⁴¹ facilitated serviced based competition concurrent with the issue of further mobile licenses. A draft 2007 Policy Statement will further promote and liberalize service based competition including through facilitation of MVNO's⁴².
8. FRiENDi GROUP queries the relative welfare benefits ictQATAR enjoys from a more restrictive framework than those implemented in comparable countries which are identified as having the most vibrant telecommunications sectors in the ME.

U. Question 5.1.2: Which existing policies should be reviewed based on the SSR?

1. We refer to and repeat our comments elsewhere in this Response in particular in Sections E, F and G. Most notably, the review of the existing moratorium policy on SBC.

V. Question 5.1.3: Should an additional mobile operator be introduced immediately in Qatar? Please elaborate. If not, when would it be appropriate to do so?

1. Not a facilities based operator, but yes, to an MVNO . Elaboration follows.
2. At the core of ictQatar question is whether two is an optimal number of competitors for an efficiently competitive mobile market in Qatar?

³⁸ Telecommunications Law, Article 2

³⁹ Telecommunications Law, Article 10

⁴⁰ Qatar, Ministry of Transportation, *The National Telecommunications Plan, 2002*.

⁴¹ Jordan, Ministry of Information and Communications Technology, *The Statement of Government Policy for the Information and Communications Technology Sectors and Postal Sector, 2003*

⁴² Jordan, Ministry of Information and Communications Technology, *The Statement of Government Policy for the Information and Communications Technology Sectors and Postal Sector, 2007*

3. This question is not answered by simply looking at what competition has achieved in Qatar so far. FRIENDi GROUP agrees that competition between the existing operators has delivered benefits to consumers. FRIENDi GROUP also agrees that the Qatar market is performing relatively well among most markets in the Middle East. Rather, the issue is whether the entry of more operators would deliver even more immediate benefits to consumers than competition to date.
4. We believe further immediate entry of an MVNO is not only desirable but justifiable on competition principles. Moreover, for the reasons set forth throughout this Response, we consider MVNO entry is the optimal model of entry for Qatar given the present state of the market and not an additional MNO.
5. As previously mentioned, the most effective solution, then, is the one currently being undertaken through the SSR to address the market structure itself by lowering barriers and facilitating further entry.
6. Of course, the number of competitors which is sustainable will vary between markets. Factors such as the number of subscribers, density, potential market growth and geographic topology can affect the number of competitors which is viable.
7. We have mentioned previously that this is where MVNOs come into their own for small economy markets. The MVNO concept allows small markets to achieve the benefits of more competitors (and the reduced risks of co-ordinated behaviour) without the risks of further deployment of network infrastructure that may prove non-viable. A market of the UK's size can support five competitors each with their own end-to-end networks. While five separate networks may not be viable in smaller markets, it is still possible to secure many of the benefits of retail level competition between five operators by one or more of those operators being MVNOs.
8. The entry of MVNOs is by no means a "zero sum game" for MNOs. International experience suggests that the intensification of competition which results from the entry of MVNOs grows the whole market, i.e. "all boats rise with the tide". Evidence from around the world clearly establishes that MVNOs can add new "life" to a maturing market.
9. FRIENDi GROUP is not aware of any evidence from any of the countries in which MVNOs operate of the types of problems which the opponents of further entry put forward.
10. On the contrary, the clear international evidence is that MVNOs have delivered:
 - a. more consumer choice;
 - b. lower prices;
 - c. better customer service; and
 - d. innovative products.
11. MVNOs have lead the way in increasing customer choice. An MVNO, without a network of its own, has to differentiate itself through retail level innovation. The experience in other markets is that MNOs follow the lead set by MVNOs in introducing innovative retail pricing and packaging approaches.
12. In conclusion therefore FRIENDi GROUP submits that while two facilities based mobile operators is appropriate to FBC, the current number of mobile players is insufficient for the required level of SBC. FRIENDi GROUP's view is overwhelmingly supported by international research and the experience of what has occurred at the global level. The intention in the SSR should, therefore, be to open the market to MVNO entry.
13. Further to FRIENDi GROUP's view on the specific benefits of MVNO provisioning, FRIENDi mobile believes those likely benefits are buttressed by three fundamental underpinning propositions relevant to MVNO provisioning. Namely:

- a. Services based competition (SBC) and facilities based competition (FBC) are in fact complementary – contrary to the present view taken by ictQatar⁴³;
 - b. Two mobile network operators is insufficient competition in Qatar to deliver (a) a vigorous, healthy and long term sustainable mobile market and (b) the most innovative mobile services for consumers at the lowest possible prices; and
 - c. Reliance on ex-post general competition regulations is insufficient to deliver the required levels of competition in a timely manner..
14. Accordingly, we strongly support and advocate the immediate entry of an additional MVNO into Qatar. MVNO entry will delivered positive desired economic and social outcomes and, for the reasons explained in Section G and elsewhere, will be significantly less disruptive and costly than entry by a third facilities based MNO.

W. Question 5.2.2: Of the legal requirements in place, which ones are working well? Which need to be reviewed? Please explain giving reasons.

1. We refer to and repeat our comments elsewhere in this Response in particular in Sections E, F and G.

⁴³ As evidenced in the SSR and in imposing a moratorium on SBC - see *Consultation on Liberalisation of the Telecommunications Sector in the State of Qatar*, Consultation Document by the Supreme Council of Information and Communication Technology (ictQATAR), 23 April 2007 (Liberalisation Consultation).

ANNEX A

**TO RESPONSE TO ICTQATAR ON STRATEGIC SECTOR REVIEW CONSULTATION
DOCUMENT**

Response to ictQATAR's Consultation on Liberalisation of the Telecommunications
Sector in the State of Qatar

Submitted 27 May 2007



**ictQATAR Strategic Sector Review
Consultation Document**

**Dated 20 February 2011
(ICTRA 02/11-SSR-Consult)**

Submission by Qatar Telecommunications (Qtel) Q.S.C.

20 March 2011

Executive Summary

Qatar Telecom (Qtel) Q.S.C. (Qtel) appreciates the opportunity to respond to the Strategic Sector Review (SSR) Consultation Document published by ictQATAR on 20 February 2011. Qtel sees this consultation as a valuable way to review the experience of the telecommunications sector in Qatar and to set policy initiatives directed toward achieving the aims set out by ictQATAR of a healthy and sustainable sector.

One of the key issues in the Consultation Document is whether it is appropriate to introduce an additional mobile licensee into the market at this time. Qtel agrees with the tentative conclusions in the Consultation Document that it is not appropriate to introduce an additional mobile licensee. Important considerations in this decision include the high penetration of mobile services in Qatar, the small size of the market and the current level of competition. Qtel does believe, however, that it is appropriate ensure that the regulatory regime and its implementation does not hinder service innovation in the mobile space. Rather, it should encourage new offerings, such as branding partnerships, commercially agreed MVNOs and other retail marketing initiatives. Regulation shouldn't discourage such innovation.

ictQATAR can further foster competition in the mobile services market by conducting a thorough review of its current approach to approving mobile service tariffs. Qtel submits that the current approach to regulating Qtel's retail service offerings has outlived its usefulness and is now harming competition in the mobile services market.

ictQATAR can encourage competition and innovation in the fixed broadband services market by focusing the Qatar National Broadband Network efforts on market failures in this area, including a possible subsidy mechanism for access to unprofitable areas, addressing the high cost of international bandwidth, and facilitating necessary upgrades to inside wiring to enable deployment of fibre-optic networks in existing buildings. Other steps that can help development of the fixed telecommunications sector include enabling access to alternative infrastructure along pipelines, electricity lines, railways, and other national infrastructure.

Other important messages with respect to the SSR are as follows:

- Where markets are competitive, regulation should be scaled back to enable innovation in product and service offerings;
- ictQATAR can stimulate demand for telecommunications services by encouraging IT literacy and local content development;
- ictQATAR can facilitate access to residential developments by encouraging property owners to facilitate the availability of telecom services;

- ictQATAR can foster the greater availability of mobile broadband service by making additional radio spectrum available, particularly in lower frequency bands;
- Government should address the current requirement to offer low-priced fixed voice service by introducing a universal service funding mechanism.

Introduction

Qtel agrees with ictQATAR's view that "the [Telecommunications] sector has partially achieved most of its objectives".¹ Qtel notes that achieving effective competition in the mobile sector in such a short time span is a great achievement. Such competition has benefited and will continue to benefit customers in Qatar for the foreseeable future. Although the fixed telephony and fixed broadband subsectors have only recently been subject to competition, competition is expected to be equally strong in these areas.

As ictQATAR notes in the Consultation Document, the market for mobile service already shows all the characteristics of a competitive market. Indications of a high degree of competitiveness include: low and falling prices; very fast reductions in the incumbent's market share; and increasing choice of packages and bundles for customers. For these reasons, we can understand why ictQATAR feels that an additional mobile competitor is not required, and we agree with that conclusion.

The remainder of this submission sets out how Qtel believes ictQATAR can best respond to these changed market conditions in a way that will create the maximum benefit for Qatari society. We provide these views as a response to the questions set out in the Consultation Document in the order that they appear in the Consultation Document, and using the Consultation Document's numbering convention.

¹SSR, page 17.

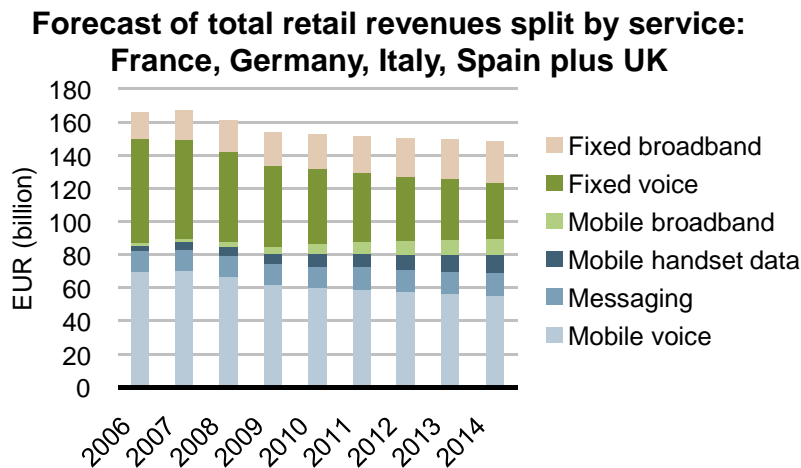
4.1- Contribution of Telecommunications sector to Qatar’s Economy

Question 4.1.1: *What role should ictQATAR play in ensuring continued sector growth?*

Answer:

In the Consultation Document, ictQATAR defines sector growth to be the rate of increase of telecommunications revenues.² The Consultation Document reports such revenues as USD 1,620 million in 2009. These telecom revenues consist, basically, of the revenues of Qtel plus those of Vodafone Qatar. Sector growth (that is, growth in telecoms revenues) over the preceding five years was the result of increasing population, as well as rising demand for high speed internet and corporate services. Towards the end of this five-year period Vodafone Qatar entered the market. Vodafone Qatar accounted for approximately all of the growth in mobile revenues in 2009. Practically all of Qtel’s revenue growth³ from 2008 to 2009 was due to wireline, not wireless, services. This trend continued in 2010, with Qtel’s wireless revenues slightly down compared to 2009. But Qtel as a whole grew thanks to continued rising demand for fixed telephony and ADSL lines.

As demonstrated by the graph in Figure 1, in countries that introduced competition before Qatar, such as the countries of Western Europe, revenues from voice telephony (fixed plus mobile) have already gone into decline, a trend that is probably set to continue.



Source: Analysys Research, 2010

Figure 1

The forecasts suggest that fixed and mobile voice revenues are expected to continue their declining trend across all five European countries shown in figure 1, but mobile revenues are forecast to decline at a slower pace. Fixed broadband revenues are

²Exhibit 3, Page 12

³ In this section we refer to Qtel’s revenues in Qatar, *not* the worldwide revenues of the Group.

expected to increase in the next five years. The forecasts indicate that the most solid revenue growth will come from mobile data (both mobile broadband to computers and tablets, as well as handset data to smartphones).

If the trend shown in the chart is replicated in Qatar in the medium term, then the actions ictQATAR can take to help operators to counteract the trend towards a reversal of sector growth include:

- Promote demand for broadband services in the daily life of citizens, and thus tap into the sources of revenue growth suggested in the chart above: fixed and mobile data.
- Provide a very clear picture of what regulation to expect, in order to minimize the regulatory risks faced by investors, in addition to the competitive and other business risks that they will face.
- Adopt more pro-competitive tariff approval policies, allowing Qtel and Vodafone Qatar pricing freedom so that they can compete through innovation and customer service rather than commoditization and price.
- Ensure that operators have unimpeded access to the market for advanced, broadband-based services by establishing and enforcing infrastructure standards, right-of-access requirements, and licensing frameworks.

Question 4.1.2: *What are the main factors inhibiting the sector from contributing more to the overall economy and how should these be addressed?*

Answer:

Now that competitively priced mobile services are available to everybody, the next big contribution the sector will make to the overall economy will derive from broadband services, both fixed and mobile. Take-up of broadband is significantly influenced by other factors in addition to the price of a broadband connection. Indeed, the price and attractiveness of the device customers use to get online (computer, tablet or smartphone) can have a significant impact on broadband take-up. Other factors that influence broadband penetration are the general educational level of the citizenry and the number of compelling applications that help people and businesses with their daily lives. Therefore the factors that may be inhibiting the sector from making a greater contribution to the economy are therefore:

- High prices of devices, and anything that prevents suppliers (including Qtel and Vodafone Qatar) from offering packages that make terminals more affordable to end users, including restrictive tariff approval policies that prohibit device subsidies and device/service bundles.

- Anything that stops citizens or businesses from carrying out their daily tasks on-line (such as government or public sector procedures that are not yet on-line, or whose on-line process is not yet widely used, or is difficult to use)
- Lack of IT literacy among the population and among businesses.
- The cost of upgrading infrastructure in existing dwellings required to realise the potential benefits of many new services

As we will explain in more detail later in response to question 5.2.3, there are also specific impediments inhibiting the rolling out of fibre-optic networks, both in the public domain (e.g. in the street) and in the private domain (e.g. inside apartment and office buildings). ictQATAR action to facilitate deployment of fibre-optic facilities in greenfield developments and inside existing buildings can help to speed such fibre-optic network deployment.

Question 4.1.3: *What other initiatives can ictQATAR implement to facilitate an increase in both supply and demand for telecom services in Qatar?*

Answer:

Qtel notes that ictQATAR and the government are committed to the promotion of innovative telecommunications services and applications. For example, taking steps to promote remote working practices, telemedicine, telelearning, creation of content, etc. will help lead to greater utility of broadband services, in particular. Qtel therefore encourages ictQATAR to ensure that the existing initiatives are expedited and given a high priority.

Increases in demand for telecommunication services can also come from innovative promotional pricing and attractive marketing initiatives. Qtel submits that ictQATAR should avoid imposing unnecessary limits (especially through the tariff approval regime) on the degree to which Qtel and Vodafone Qatar can attract customers onto new broadband connections by means of promotional and discounted offerings targeted at specific groups of customers. Resources should also be invested in significantly bringing down the cost of international bandwidth, as discussed in the answer to question 4.6.2.1 below. In addition, licensed operators should be encouraged and not restricted to introduce new brands, service providers and even virtual operators on their networks; see answer to 5.1.3 below.

Question 4.1.4: *What other legal initiatives or policies could be introduced in the next three years? Please rank them in order of their importance for supporting the continued development of the telecom sector in Qatar.*

Answer:

The current telecommunications regulatory framework in Qatar was put in place with the desire of opening up the telecommunications sector to competition. As noted in response to question 4.1.1, the mobile and international calls markets in Qatar are already fully competitive. Also, in relation to competition in fixed and broadband services, the current regulatory regime in Qatar is well -equipped to ensure that workably effective competition in these sectors will be achieved.

The regulatory regime in its current state, however, needs to be refined to take into consideration approaches to markets where competition now exists. In addition, ictQATAR needs to be vigilant in ensuring that the regulatory framework is applied in an effective manner to ensure the continued existence of a level playing field for competitors in the market.

In particular, and in view of the medium term outlook for sector revenues suggested by the Western European experience (see above), ictQATAR should ensure that it engages in *ex ante* regulation only when absolutely justified and necessary. Indeed, in the cases where *ex ante* regulation is necessary, ictQATAR should design remedies that are efficient in solving the problem identified, and can be cancelled as soon as the problem has disappeared. As discussed in greater detail in response to question 5.1.4.1, ictQATAR should seriously consider whether *ex ante* tariff regulation in the competitive mobile and international services markets can be lifted.

As there are a number of changes needed in the current legislation Qtel would propose that ictQATAR initiates a project with the relevant stakeholders to review the Telecommunications Law and Executive By-law and propose amendments to make it suitable for the future dynamic of the industry.

4.2- Encouraging competition

Question 4.2.1: *To what extent has the introduction of competition in the mobile sector been successful in Qatar? What additional measures could be taken by ictQATAR to promote more competition?*

Answer:

As ictQATAR notes in the Consultation Document, the market for mobile services already shows all the characteristics of a competitive market. Indications of a high degree of competitiveness include: low and falling prices; very fast reductions in Qtel's market share; and increasing choice of packages and bundles for customers.

Achieving competition in the mobile sector in such a short time span is a great success and has benefited the customers of Qatar. Especially noteworthy is the degree of dynamism in the mobile market. Vodafone's international resources and experience make it a formidable competitor.

Qtel believes that in the current dynamic market, it is important to shift the regulatory focus to ensuring that a level playing field exists in which the two operators are equally free to offer prices, packages and promotions in competition with each other. As discussed above, stringent asymmetric regulation of retail markets may be appropriate when the focus is on opening up the market to competition, but inhibit competition if maintained when no longer necessary.

Question 4.2.2: What are the key challenges to introduce competition in the fixed market in Qatar?

Answer:

Qtel is of the view that the main challenges are:

- Access to civil infrastructure such as ducts, manholes, poles and similar facilities is critical to rolling out new fibre-optic networks. Many institutions possess such civil infrastructure. In other developed countries fibre optic networks have been successfully rolled out using the civil infrastructure of electric utilities, water and sewage operators, municipalities, road traffic signalling networks, railways, highway operators, real estate developers, compounds owners, gas pipeline operators, and numerous other types of such entities. It is a mistake to think that only Qtel has suitable infrastructure and rights of way for rolling out telecoms cables. ictQATAR can foster faster development of competition in the fixed market by encouraging such infrastructure operators to open their facilities to telecommunications operators without extracting an unreasonably high price for their use or blocking access.
- Access to the ducts and to the cabling inside buildings, at reasonable prices and on fair terms, is of key importance in promoting competition in fixed line telecommunications markets. Landlords and other property owners should not be allowed to stand between telecommunications operators and their customers by seeking to extract high rents from telecommunications operators or otherwise blocking access to their residents.
- In this same vein, approved standards for telecommunications cabling inside residential and commercial buildings are also extremely important to

ensuring that advanced services can be provided in such buildings. Qtel encourages ictQATAR to take an active role in ensuring the specifications jointly proposed by Qtel and Vodafone Qatar are approved quickly as a national standard and adhered to in new developments.

- Market competitors such as Qtel and Vodafone Qatar need to be provided with a real view of how the telecommunications regulatory regime is expected to develop in the medium/long term, to be able to minimize regulatory risk and encourage investment.

Question 4.2.3: What can be done to improve access to property, site sharing, and RoW (Rights of Way)?

Answer:

The current framework for access to properties for the provision of FTTH services can be significantly improved. In Qtel's view, efforts by property developers to extract economic concessions in exchange for access is a big threat to development of broadband services, the adoption of new technologies and innovative services, and the achievement of the government's 'Vision 2030' objectives.

Such a problem is not peculiar to Qatar, as it has arisen in other Gulf countries, as well as countries outside our immediate region. For example, the New York City subway system is without mobile network coverage because MTA, the system operator, has insisted on taking a share of revenues from mobile operators.⁴ Similarly, drivers in the US\$15 billion road tunnel that passes beneath Boston enter a 10 km long mobile coverage dead zone because the developer is insisting on a share of revenues.⁵ In Japan, penetration of broadband services was initially delayed in part because of efforts by apartment block owners to demand a share of revenues; penetration rates soared after this roadblock was removed.⁶ Conversely, in Korea, government policy early on mandated access to apartment complexes, an approach that has been considered a key element in Korea's highly successful effort to establish itself as a global leader in network readiness.⁷

This is an issue that can only be addressed by ictQATAR or the Government, and which must be addressed if Qatar's broadband ambitions are to be realised. Qtel would encourage ictQATAR to take heed of the Korean example and consider what steps could be taken vis-à-vis large property owners to help replicate it in Qatar.

⁴<http://www.nytimes.com/2007/09/20/nyregion/20cellphone.html>

⁵ With New Tunnel, Longer Dead Zone for Cellphones, *The Boston Globe*, 16 December 2003

⁶ *Next Generation Connectivity*, Berkman Center for Internet & Society, Harvard University, 2009, p. 88

⁷ *Ibid*

Question 4.2.4: *What additional role should ictQATAR play, if any, to promote access to property, site sharing, and RoW in Qatar?*

Answer:

ictQATAR can play a critical role in promoting access by telecommunications operators to government and private property and public rights of way by developing and documenting detailed technical and operational specifications and procedures and mandating their implementation such that unimpeded access to properties by all licensees is ensured.

4.3- Increasing Customer Benefits

Question 4.3.1.1: *Does ictQATAR have any further role to play to encourage mobile service availability?*

Answer:

The full range of mobile network services is already available in Qatar to all users.

As mobile broadband data services become more widely demanded by users, Qtel will require additional radio spectrum and additional tower sites.

The availability of lower frequency spectrum is especially important for ensuring the quality of in-building coverage for mobile data services, as user demand for high bit rate service increases. As discussed in greater detail in our response to ictQATAR's separate public consultation on Radio Spectrum Policy for the State of Qatar, authorization to utilize frequencies in the 800 MHz and 900 MHz bands are particularly important.

Also important is timely acquisition of rights to deploy new radio sites and required approvals from the relevant government ministries. Qtel believes that the current dialog with the Ministry of Municipalities and Urban Planning (MMUP) has achieved positive results with respect to reducing the environmental and aesthetic impact of new radio sites through camouflaging and site consolidation. We believe that further coordination by ictQATAR with MMUP and other government ministries with respect to radio site acquisition and permitting approvals would be particularly useful in facilitating greater mobile service availability.

Question 4.3.1.2: *What other type of mobile services should be available in Qatar?*

Answer:

All mobile services requested by customers are currently available in Qatar, but some services are less mature than others or need to be more widely promoted (mobile data, for example).

The current highly effective competition between Qtel and Vodafone Qatar has led to the deployment of a good range of the latest mobile technologies suitable for data. These technologies are on track towards being world class.

In any business, when the price differential between competitors is small, competition is more likely to be focused on other dimensions, such as innovation and quality of service. In the mobile services market, the current tariff approval regime appears to be having the effect of enabling Vodafone Qatar to successfully compete by focussing excessively on price at the expense of other product features such as bit rate and quality of service. As discussed in greater detail in response to Question 5.1.4.1, Qtel believes that the current tariff approval process is unnecessarily distorting the markets for mobile and international services and believe it would be appropriate for ictQATAR to conduct a review of the impact of the current *ex ante* controls on retail offers in the mobile and international services markets.

Question 4.3.1.2.1: *How do you expect mobile prices to evolve in the future, and how will this evolution affect the industry?*

Answer:

It not possible to foresee with any degree of certainty how mobile prices will evolve, or how fast they will evolve. International trends suggest that data services will grow in importance, while voice services may be less important.

Question 4.3.1.2.2: *How do you see the future of innovation in the mobile market, and what could ictQATAR do, if anything, to encourage continued innovation in the mobile market?*

Answer:

Qtel expects that users will respond well to an increase in the number and variety of special offers and promotions, which operators will seek to offer on a frequent basis. Qtel believes that reducing regulatory impediments to such product innovations will be an important step in encouraging greater competition in the mobile and international

services markets. The current tariff approval procedure to which Qtel is subject has become increasingly cumbersome and time consuming. The lengthy approval process and the lack of predictable approval criteria have made it increasingly difficult for Qtel to make innovative offerings available on a timely basis. These factors, coupled with the freedom Vodafone Qatar enjoys in launching new offerings without prior approval is increasingly resulting in a distorted market that results in reduced benefits to consumers. As discussed in greater detail in response to Question 5.1.4.1, Qtel believes that a thorough review of the tariff approvals process presents an opportunity to stimulate innovation and competition in the mobile services market.

Question 4.3.1.3.1: Why does quality of service remain low in the mobile industry in Qatar?

Answer:

The phrasing of this question is unfortunate, as it gives the impression there is a serious problem of quality across the board in the mobile market in Qatar, an impression that Qtel considers is simply not consistent with actual user experience.

Qtel's mobile operating license requires that Qtel's GSM service achieve very high standards of performance not only on the entire network but also on the busiest parts of the network; all of the mobile parameters have been met and exceeded license requirements since 2010 as detailed below. These requirements can be briefly summarized as:

- Call setup success rate (10% busiest cells in the busy hour) $\geq 98\%$
- Dropped call rate (10% busiest cells in the busy hour) $\leq 1.5\%$
- Network quality (proportion of cells meeting the above targets in busy hour) $\geq 95\%$.

These QoS targets are exceptionally stringent by international standards because of the way they are specified to apply to both the busiest 10% of cells and 95% of all cells – compared to a more standard specification that applies to the overall network. Furthermore, the QoS targets are not specific to outdoor calls only, as is often the case in other countries.

Page 28 of the Consultation Document notes that Qtel's call setup and call drop rates exceed the stringent standards set out in Qtel's license during the busy period, the time of day where demand is the greatest, measured nationally. The parameter that was met only in July 2010 refers to the percentage of the network over which the aforementioned rates hit these targets. This parameter is a very demanding one for an operator (such as Qtel) that covers the whole territory, especially a territory characterised by a high rate of construction activity and changes in the urban

environment. Qtel notes that this target has been met in July 2010 and is therefore no longer a concern.

The missed targets of potentially more concern are those to do with the time to resolve billing complaints which was met in May 2010 and has maintained 100% measure since December 2010.

In summary, it is misleading to say that “quality of service in the mobile industry remains low”. We urge ictQATAR to examine the Quality of Service Compliance Reporting, Qtel submitted in April and October 2010.

Question 4.3.2.1.1: What steps should be taken by operators to improve the availability of broadband services and increase broadband speeds in Qatar?

Answer:

Please see response to Question 4.2.2.

Question 4.3.2.1.2: What role can ictQATAR play in the industry to help increase broadband availability and speeds?

Answer:

Qtel considers there is an important role for ictQATAR to play in the development of the broadband sector in Qatar. This does not only include ictQATAR’s de facto role of regulating the sector but also other initiatives aimed at stimulating innovation in the sector and promoting ubiquitous availability of broadband.

Qtel also suggests that ictQATAR actively work toward significantly reducing the cost of international bandwidth through bulk purchasing arrangements, subsidies and other instruments.

Qtel notes that it is important that ictQATAR’s efforts in respect of the promotion of broadband (or in fact any state effort) do not dilute or disrupt incentives to invest, strand existing investments or create the kinds of uncertainties or ambiguities that undermine the investment climate by increasing regulatory risk.

ictQATAR and Government regulatory involvement therefore needs to be limited to addressing market failure, and should be carefully crafted to avoid undermining market mechanisms while correcting such failures. Examples of suitable areas for ictQATAR and Government involvement include funding the roll out of fibre access networks in unprofitable areas and the funding of retro-fitting of brownfield dwellings with upgraded infrastructure.

Qtel also believes that ictQATAR should much more actively be working to ensure right of access and provision of required infrastructure within greenfield developments. It should establish and mandate infrastructure requirements including:

- Specification of in-building and in-home fibre and cable standards
- Provision of adequate telecoms room, riser, conduit and cable tray space
- Reserving outdoor plots for GSM sites
- Ensuring that duct and other civil infrastructure is available

These are initiatives that we have described in detail in answers to other questions in this consultation, so we will not go into more detail on them here.

Question 4.3.2.2: What steps can be taken to make broadband more affordable and to create more innovation within the sector?

Answer:

The main steps ictQATAR can take to increase affordability of broadband services have been addressed in response to question 4.2.2: lower the cost of international bandwidth, subsidize deployment of fibre-optic networks in uneconomic areas and take steps to encourage the deployment of in-building cabling sufficient to convey advanced services.

Question 4.3.2.3: Why does quality of service remain substandard in the fixed industry in Qatar?

Answer:

Since the last reporting period on the quality of service standards that Qtel is required to meet under its fixed licenses, April to September 2010, Qtel has met all 34 fixed network and service quality parameters except 2 parameters that remain slightly below targets by January 2011. With the progressive improvements of parameters measures we expect to meet all targets in June 2011.

Qtel has highlighted its continued efforts to improve Quality of Service (QoS) performance with major projects such as the implementation of major network upgrades (NGN migration, WiMAX and FTTH deployments), the development of a modern consolidated network operations center, the enablement of auto line activation and the replacement of the Customer Relations Management (CRM) system. Further, Qtel's has recently taken major field operations initiatives to improve customer experience such as extending working hours and working days of its staff in order to ensure that customer service parameters are met.

Qtel has been facing unprecedented country-wide reconstruction activities that negatively impact on QoS. However, Qtel is committed to ensuring that it meets its QoS requirements and the needs of its customers more broadly.

4.4- Health of the Industry

Question 4.4.1: *What are your expectations regarding the evolution of the telecom sector's financial health in the next three years? What conditions are necessary for further strong development in this sector?*

Answer:

As outlined in our answer to Question 4.1.1 above, sector revenues cannot be expected to grow at recently observed rates indefinitely. Growth will have to come from new services, especially broadband (fixed and mobile) and related video, value-added, content and IT services. In any country, if telecoms operators prove unable to offer a full range of such services, then the financial health of the industry can suffer. Inability to offer such services could be the result of regulation, for example restrictions on the speed of bringing to market of new services or service bundles due to the current tariff approval regime, non-availability of rights of way and other such factors mentioned elsewhere in this document. In order to reduce the regulatory risks associated with new investments, regulation must be predictable, proportionate (i.e. free of unnecessary intervention) and focussed on fostering a level playing-field.

Question 4.4.2.1: *What can the industry do to reduce the high dependence on voice revenue?*

Answer:

We do not agree that it is appropriate for there to be any intervention into the market to decrease voice revenue vis-à-vis any other type of revenue. Qtel does not consider that the current proportion of voice revenues⁸ creates a problem. As noted in figure 1 above, it is quite normal for voice to represent the majority of sector revenues. In any case, in the coming years this proportion will decrease through a natural process of migration from voice to data, based on customer demands, and is likely to be accompanied by further reductions in voice pricing brought about by competition between Qtel and Vodafone Qatar, as well as hidden (but equally powerful) competition from voice over IP services.

It is worth noting here that mobile operators in all countries usually offer a wide range of differentiated price packages of voice services targeted to the needs of specific

⁸ 71%, according to the Consultation Document, page 36.

segments and users. A regulator can unnecessarily harm or distort voice revenues in the sector by unduly restricting (or slowing down) operators' capability to create this wide range of packages.

Question 4.4.2.2: *What additional risks do you see that could jeopardize the financial health of the industry?*

Answer:

In addition to the regulatory risks already identified in the answer to the previous questions, further deterioration in general economic conditions could reduce profits and therefore cause delays in the investment of operators in the technologies.

Question 4.4.3.1: *To what extent will mobile and fixed data provide a sufficient opportunity for the industry to grow further?*

Answer:

In addition to the opportunity for the growth of data service revenues identified in the Consultation Document, the future growth of the telecom industry is likely to be linked to the revenue from video services, value-added services, and content. Qtel notes, however, that the low proportion of data services revenues versus revenues from voice service is due in part to the large proportion of unskilled labor in Qatar.

Question 4.4.3.2: *What other opportunities will fuel future growth and what role (if any) should ictQATAR play in facilitating such growth?*

Answer:

In addition to the demand- and supply-side initiatives already pursued by ictQATAR, Qtel suggests that ictQATAR facilitate future growth in the telecommunications sector by ensuring that the regulatory approaches it adopts are appropriate given the state of competition in particular markets. For example, ictQATAR should regularly review markets and ensure that where such markets are effectively competitive (such as markets for mobile voice and data and international calls), it should remove inappropriate *ex ante* regulation in these markets.

4.5- Investment Levels

Question 4.5.1.1: *To what extent are current investment levels sustainable rather than a temporary phenomenon?*

Answer:

Investment in the telecommunications sector occurs naturally in order to migrate to new technologies and applications and in response to competitive pressures. New technologies appear regularly each 5 to ten years, and investments follow. We do not see any reason for this cycle to stop.

Question 4.5.1.2: *What role can ictQATAR play (if any) to boost further investment in the mobile industry?*

Answer:

Please see response to question 4.1.2.

Question 4.5.2: *What role (if any) can ictQATAR play in increasing levels of investment in the fixed industry in Qatar?*

Answer:

Please see response to question 5.2.3.

4.6- Availability of services

Question 4.6.1: *Should any services be subject to a universal coverage requirement?*

Answer:

Current access prices (which include local fixed traffic) have, in case of the residential customers, been set specifically with the intention to be affordable for all. The obligation on Qtel to cap the price for fixed access including fixed to fixed national calls at QR 33 was decided by the Government many years ago. In essence Qtel has the obligation to provide and fund a universal service (USO) that is an obligation that all households should have access to basic telephony and local calling at a price not greater than QR 33. Qtel has not been at liberty to change the price and has continued to fund the services covered by the obligation. The natural impact of the price cap is that Qatar has a very high penetration of fixed lines and that the number is still increasing. It is becoming more and more burdensome for Qtel to fund the USO and to carry the deficit burden and it is clearly putting Qtel at a competitive disadvantage as competition has increasingly developed.

In Qtel's view, it is imperative that incentives for pricing and investment created as a result of regulatory intervention are competitively neutral. Letting one operator carry the whole burden of the USO, which has resulted in a deficit, creates the wrong incentives and will in the long run distort competition. In order to arrive at a competitively-neutral solution, while at the same time respecting the need to provide fixed access and calls at an affordable price, it is in Qtel's view imperative that ictQATAR review this issue and find a mechanism to finance the USO.

ictQATAR can also assist the government in organizing and funding universal service obligations of advanced broadband services to geographic areas that are uneconomic for private sector operators (at present, Qtel and Vodafone Qatar) to serve. Three types of geographic area can be envisaged for the roll out of advanced broadband fixed networks:

- High density areas, where Qtel and Vodafone Qatar can have parallel physically separate fibre access networks
- Medium density areas, where one fibre access network is economically viable
- Low density areas, where a fibre access network is not viable without subsidy.

It should be noted that for the high density area to be as large as possible, ictQATAR should ensure that as many as possible of the alternative providers of civil infrastructures (listed under 4.2.2 above) are opened up to Qtel and Vodafone Qatar on reasonable terms.

Universal service subsidies should be targeted at the low density areas. If the subsidies are targeted too broadly, they will tend to unnecessarily enlarge the low density area, and result in a more costly subsidy than necessary.

It should be further noted that the size of the third (low density) area will reduce as revenues per user increase. It therefore follows that the subsidy required can be minimised if the operators (Qtel and Vodafone Qatar) are allowed to offer the widest possible range of services, including TV, value added services, content and IT services.

Question 4.6.2.1: *What in your view is hindering the adoption of new technologies, particularly FTTH, in the fixed sector in Qatar?*

Answer:

Qtel is of the view that the existing market structure in Qatar does provide to existing operators the economic incentives to deploy next generation networks in most areas of Qatar. Qatar's population is concentrated in a few compact urban areas that can be easily and economically reached by fibre access networks, as we have already

mentioned above. An exception to this can be a few remote areas where there is not a sufficient population density or demand to support the deployment of FTTH profitably.

However, there are four areas that fall outside the direct control of Qtel and other operators and cannot be addressed without the pro-active support of ictQATAR.

First, the market for international access remains non-competitive with prices being at least 100 times more expensive than in cost-leading areas in Europe, East Asia and North America. Currently, the average cost of international bandwidth in Qatar is approximately QAR 700 per month per Mb/s of capacity. While the additional international bandwidth that will be brought online through Gulf Bridge International (GBI) is likely to put some downward pressure on pricing, Qtel does not believe that price reductions will be sufficiently sizable to lead to prices similar to those in countries with widespread penetration of advanced broadband services in Europe, Asia and North America. Qtel believes that to reach household penetration in excess of 95%, the cost to Qtel of international bandwidth would need to be reduced to a level of close to QAR 10 per mbps/month. Without government action to bring international bandwidth prices closer to these levels, it is unlikely that ictQATAR's broadband penetration targets can be achieved.

Second, existing buildings in Qatar are typically wired internally with ordinary copper wiring and will need to be re-wired to allow the full benefits of FTTH to be realised.

Third, access to civil infrastructures (ducts, manholes, poles, etc) of non-telecoms players has been very valuable in other countries in lowering the cost, and increasing the competitiveness, of fibre rollout. ictQATAR should make sure such opportunities are not missed in Qatar. We covered this issue in our answer to Question 4.2.2, above.

Finally, efforts by property developers to hinder access by licensed operators and/or to extract economic concessions in exchange for access are a great threat for the development of broadband. Action by ictQATAR to ensure that telecommunications operators are able to access such large developments is extremely important.

Question 4.6.2.2: What role (if any) should ictQatar play in promoting adoption of new technologies?

Answer:

First, ictQATAR should ensure that wholesale regulation does not distort the incentives of licensees to invest in new technologies. This would be, for example, the case if wholesale pricing did not allow for a sufficient rate of return that reflects the risk associated with the investment.

Second, in light of the lack of competition in the market for international bandwidth, Qtel believes that achieving the Vision 2030 targets will require substantial market intervention in the form of capacity subsidies.

Third, ictQATAR can accelerate adoption of FTTH by fostering the development of detailed technical and operational specifications and procedures and mandating their implementation in all property developments.

Fourth, it is essential that ictQATAR implement initiatives to ensure that existing apartment and office buildings with copper wiring are upgraded.

Finally, with Q.NBN ictQATAR and the Government can play a role in the development of the broadband sector by subsidizing investment for the provisions of high-speed broadband in areas where it would be otherwise unprofitable for market players to serve.

5.1- Mobile market draft definition

Question 5.1.1: *What additional policy issues should the SSR address?*

Answer:

Qtel believes that a periodic review of the success of ictQATAR's regulatory approach will be important as the regulatory regime develops. Ideally, ictQATAR would define its regulatory goals in advance and periodically measure its planned regulatory approach against such goals. All existing regulation should also be evaluated against such goals. Regulation that has achieved its goals should be scaled back, and regulation that has failed to achieve its goals should be evaluated and modified. Qtel believes that such an approach would achieve a key principle of good regulation.

Question 5.1.2: *Which additional policies issues should be reviewed as a result of the SSR?*

Answer:

Qtel considers that there is a need for ictQATAR to ensure the effectiveness and continued appropriateness of existing policies.

Question 5.1.3: *Should an additional mobile operator be introduced immediately in Qatar? Please elaborate. If not when would it be appropriate to do so?*

Answer:

Qtel is of the view that an additional mobile operator – either an infrastructure or service based one – should not be introduced into the market at this time.

A review of international benchmarks would show that high penetration at the moment of entry by a third entrant leads to low market share for the new entrant. In turn, the low market share leads to low profitability. Even a deep-pocketed entrant (such as the

telco of a GCC neighbour with international expansion plans and strategic fit in the region) would probably end up, in practice, pursuing an ultra-low-cost and low investment policy. Countries elsewhere in the world that were able to support 3 or 4 operators during periods of penetration increase, are now seeing consolidation moves (beginning with ‘network sharing’) that will ultimately reduce the number of players to 2 or 3. This is true for large countries, and will be especially the case for smaller countries.

Furthermore, a facilities-based third entrant (i.e. one with the requirement to roll-out its own radio network) is not economically feasible given the features of the Qatari market. Also, such an entrant would be unlikely to be able to keep its promises on contribution to the wider economy. An advantage, in theory, of licensing a facilities-based entrant is the “beauty contest” aspect of extra commitments to contribute to the wider economy, for example:

- direct employment and “Qatarisation”
- indirect (induced) employment in suppliers and through improved general competitiveness; and
- sponsorship, education

However, if the business outlook for a third facilities-based entrant is marginal (or even loss-making) in practice, such commitments will prove impossible to deliver

- In other advanced countries that opened markets earlier (e.g. Western Europe) there have been cases of beauty contest winners who subsequently renegotiated such commitments:
- for example, the Spanish beauty contests of 1998 to 2000 (third fixed, cable, fourth mobile) led to renegotiations of basic targets of rollout in some cases. In other cases, operators were absorbed or taken over;
- most subsidiary targets, such as contribution to the economy, were also abandoned at the same time.

In summary, the market size does not permit a good business for a third facilities-based operator. Forcing the issue would result in an increase of the costs and a decrease in activity in the market.

As the market situation is not viable for a facilities-based third operator, licensed operators should be encouraged to introduce new brands, service providers and even virtual operators on their networks. Commercially agreed MVNOs and other voluntary arrangements can offer interesting and exciting possibilities for the provision of a wider variety of bundles and packages aimed at specific types of users, without compromising quality.

The best model for this sort of arrangement is “consensual”, where the owner of the network and the reseller agree on a workable commercial collaboration with minimal

regulatory intervention. This model has worked in various European countries. Branding is widely used in Europe by many operators. It is not uncommon for operators to have brands that address different segments of the market. In some countries there are as many as 30 different providers of services but only two to four facilities-based operators. It is clear from the European experience that the encouragement of voluntary agreements of MVNOs, service providers and brands has increased competition to the benefit of customers. In Qatar similar agreements would certainly develop the market further and bring benefits to consumers.

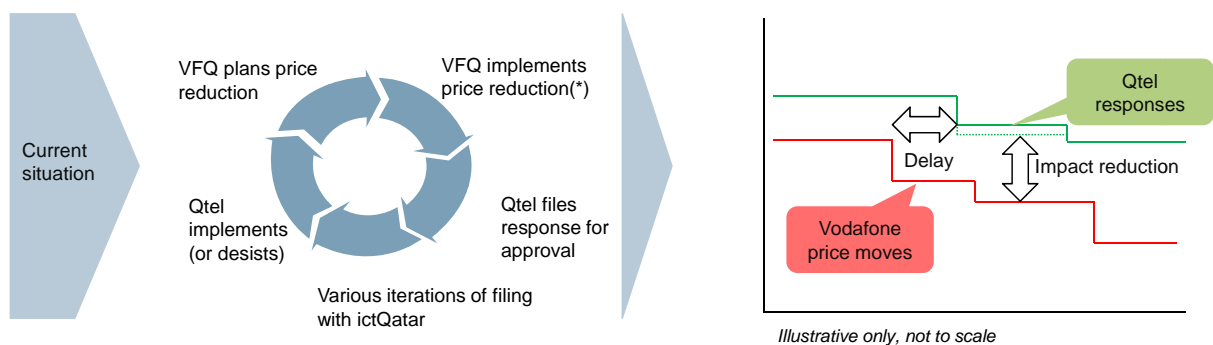
Question 5.1.4.1: Should ictQATAR maintain its current regulatory requirements of price reviews and approvals as prescribed by the Telecommunications Law and Licenses? What changes could be made to improve the tariff review and approval process?

Answer:

Qtel submits that a comprehensive review of the tariff approval process could bring significant benefits to the telecommunications market. Improving the tariff approval procedures could help focus competition on value for money, not just price.

At the present time, Qtel must seek approval 28 days in advance to initiate a new service or to make any modification to an existing offering, even for a temporary promotional period. ictQATAR’s filing and approval procedures at the current time lack consistency or predictability and often take far in excess of 28 days to achieve approval.

Under the current process, Qtel’s offers are often subject to lengthy review and a variety of consumer protection and other restrictions, while Vodafone Qatar is free to launch new offers without prior limitation. As demonstrated by the following chart, these delays result in a significant structural asymmetry in the tariff approval regime, which has the potential to be distorting to the already competitive markets in which it is applied.



While *ex ante* regulation of retail markets are sometimes considered appropriate at the beginning phases of liberalization, most telecommunication regulators agree that in

competitive markets, such regulation of retail prices is often cumbersome and counterproductive, preferring a combination of regulation of wholesale markets and *ex post* competition remedies.

Indeed, Qtel would urge ictQATAR to undertake a thorough review of its current tariff approval process, which currently focuses on preventing retail prices from falling below an *ad hoc* measure of cost for each retail service element and on the terms and condition of each offer, a time consuming and resource intensive process.

ictQATAR's retail tariff approval process stands in contrast to that of most regulators, which, when applied to non-competitive markets, ordinarily focus on ensuring that prices for monopoly services are not characterized by excessive profit. A review to protect against prices from being too low is ordinarily conducted as a part of an *ex post* analysis in response to a complaint of "margin squeeze" or predatory pricing. Indeed, the current focus in the tariff approvals process on pricing below cost is particularly notable, because, despite its cumbersome nature, an *ex ante* review to prevent pricing below cost has been adopted at the discretion of ictQATAR and is not required by the Telecommunications Law or by Qtel's licenses.

Qtel submits that the telecommunications market would benefit from ictQATAR taking a forward-looking approach to competition problems. In Qtel's view, there are no competition issues in the mobile market that need to be subject to remedy by *ex ante* tariff controls, as the market exhibits all signs of robust competition.

We believe that removing existing *ex ante* tariff review would most likely enhance competition. If Qtel were able to respond like a competitor in a competitive market (avoiding anti-competitive cross subsidies, but allowing acceptable commercial losses on individual tariff elements and promotions), Vodafone Qatar might focus its competitive efforts more on the "non-price" aspects of changes, such as innovation and QoS. This would lead to a move from focus on price, towards one of focus on value-for-money.

In our response to the parallel MDDD consultative process⁹ we have argued that this price control in the mobile and international markets is no longer required, as these markets are effectively competitive. As a subsidiary matter, in the event that ictQATAR decides (mistakenly, in our opinion) to continue its current process of reviewing changes in Qtel offerings via a filing procedure, this procedure should be considerably streamlined, and the methodology adjusted.

If ictQATAR chooses to keep the existing tariff review process in place, we believe in reviewing whether prices are below cost, the revenues from groups of service elements should be considered on a consolidated basis, rather than on a stand-alone basis. The process should recognize that individual tariff elements (e.g. mobile calls, SMS

⁹ictQATAR, "Definition of relevant Markets and Designation of Dominant Service Providers in the state of Qatar (MDDD 2010)", 27 October 2010

messages, etc.) in any offering do not have to cover their costs individually, as long as the whole offering covers its cost and allows replication by Qtel's competitor.

In addition, it is important that ictQATAR make a distinction between those elements of the tariff approval regime that are relevant due to Qtel's Dominance in a relevant market, and those elements that should apply equally to all service providers due to consumer protection issues. ictQATAR has to date not implemented competition or consumer protection policies that it is required by law to do. Qtel submits that developing such policies could contribute greatly to improving the transparency and predictability of the tariff approval process.

Question 5.1.5: *Would the periodical publication of KPIs (Key Performance Indicators) by ictQATAR, create an incentive for operators to improve the quality of mobile services offered to customers?*

Answer:

QoS parameters should be kept confidential at this stage in order to prevent public confusion and misinterpretations of complex issues that are still unclear or not finalized. Qtel has raised legitimate issues with ictQATAR about how QoS parameters are expressed and measured. Publication of QoS parameters should be decided once all points currently under discussion with ictQATAR have been resolved, and ample time has been permitted for the measurements to stabilize.

Question 5.1.6: *Are there other mechanisms ictQATAR could adopt to increase the quality of service in the mobile industry?*

Answer:

Qtel currently uses 2 x 11.2 MHz of spectrum in the 900 MHz band and 2 x 20 MHz of spectrum in the 1800 MHz band. Qtel previously was assigned a further 2 x 13 MHz of spectrum in the 900 MHz band which was cleared, as requested by ictQATAR, for the use of a potential 3rd entrant mobile operator.

In its spectrum policy consultation document, ictQATAR acknowledges that "Value mainly arises from spectrum being in use", and further goes on to specify the first proposed principle of its assignment policy as "spectrum should be assigned rather than kept in reserve, taking due account of any constraints implied by future allocation plans and competition objectives and the practical reality that spectrum cannot be re-farmed quickly or without cost" (page 64). In the light of this principle, Qtel requests that ictQATAR reconsider its approach to holding significant quantities of spectrum in reserve for a third mobile operator in Qatar. Qtel can make valuable use of the spectrum, even if it is granted to Qtel on a temporary basis.

A temporary assignment of additional 900 MHz spectrum would accelerate a transition to deploying UMTS at 900 MHz in urban areas. Later on, when ictQATAR request it, some of Qtel's existing GSM 900 MHz spectrum could be cleared. Even a temporary assignment of an additional 2 x 5 MHz of GSM spectrum to Qtel would allow the transition to UMTS 900 to be made with far less impact on quality of service, with fewer cell sites, leading ultimately to a higher quality experience for the consumer together with a reduced environmental impact.

The use of 900 MHz spectrum for UMTS would not only lead to an improvement of coverage in the rural areas, but can also be advantageous for exceeding the especially demanding QoS targets defined in Qtel's operating license.

Qtel estimates that deployment of UMTS 900 in urban areas would lead to an improvement in street-level coverage, and an indoor coverage improvement, compared to 2100 MHz. Achieving an equivalent improvement at 2100 MHz by using additional cell sites would be practically impossible and commercially unfeasible, requiring substantial number of additional urban cell sites which are not available.

5.2- Fixed market draft recommendations

Question 5.2.1: Are there other issues affecting the fixed sector that will be important for ictQATAR to look at apart from those already raised? Please explain?

Answer:

Legal requirements should always be targeted to develop the market. Any rule or requirement which slows down or blocks the development of the market should be reviewed.

Question 5.2.2: Of the legal requirements in place, which ones are working well? Which need to be reviewed? Please explain giving reasons.

Answer:

Please see the answer to question 5.1.4.1.

Question 5.2.3: *What is the role of the Q.NBN in developing infrastructure in the telecom sector? What role should existing players play in the Q.NBN?*

Answer:

Government investment in the telecoms sector has been used by several national and local governments globally as a means to expand and accelerate deployment of fibre-optic networks. Such initiatives are motivated by broader economic and social policy objectives that take account of the positive externalities of fibre developments. Due to these externalities, there is a net benefit to the entire economy for deploying fibre in some areas, even though for operators alone it is unprofitable to do so. In those cases, government investment can ensure that the benefits for the entire economy are realized.

Qtel appreciates that the Q.NBN is driven by these types of economic and social policy considerations. To ensure that these objectives are realised in a manner that does not have adverse or unintended consequences, Qtel strongly believes that Q.NBN should focus on addressing specific instances of market failure in the Qatari telecoms sector.

To this end, Qtel considers that the Q.NBN should:

1. focus on extending the reach of the fibre access network to areas where existing licensees would not deploy in the short or medium term infrastructure on a standalone basis, because of limited density, limited demand or both;
2. limit itself to the lowest level of the technology stack that is economically or technically sufficient to meet the Qatar Government's stated objectives;
3. avoid duplication of next generation access infrastructure in geographic areas that are currently being or planned to be addressed by existing licensees; and
4. structure its wholesale products in a way that encourages facilities based investment by existing licensees and which does not strand existing investment in certain assets, such as backhaul (e.g. by only offering interconnection at the lowest point in the network at which it is technically and economically feasible).

Qtel's position on the Q.NBN is consistent with the role that has been envisaged for government funded or operated entities in other jurisdictions, such as Australia and Singapore. For example, the National Broadband Network Company (NBN Co) in Australia has been given a specific set of requirements by the Australian Government that is to underpin its deployment of the National Broadband Network in Australia¹⁰ and has been specifically prohibited from overbuilding existing players on backhaul transmission routes.¹¹

¹⁰http://www.dbcde.gov.au/_data/assets/pdf_file/0003/132069/Statement_of_Expectations.pdf

¹¹Australian Competition and Consumer Commission, Advice to Government: National Broadband Network Points of Interconnect, Public Version, November 2010. See, <http://www.accc.gov.au/content/item.phtml?itemId=963436&nodeId=128cca6c23842d65726b861f88d6a490&fn=ACCC%20Advice%20on%20NBN%20POIs%20Nov2010%20PUBLIC.pdf>

Qtel's expectation is that market incentives will be adequate to ensure the implementation of the remainder of the broadband network without further government intervention. However, as mentioned already in our answer to Question 4.6.2.2, beyond expanding fibre footprint, there are three additional areas that are key for broadband development and in which ictQATAR should play a leading role. These are:

1. Reducing the cost of service through policies, regulations and subsidies aimed at decreasing the cost of international bandwidth;
2. Developing and documenting detailed technical and operational specifications and procedures in relation to access of Greenfield properties and mandating their implementation such that unimpeded access to properties by all licensees is ensured; and
3. Using regulations and subsidies to facilitate the retrofitting of Brownfield buildings with the fibre infrastructure required to deliver next generation services, and making this infrastructure available to operators at attractive rates

Question 5.2.4: *What impact will the Q.NBN have on future competition in the sector? What should be done to ensure industry structure continues to support competition?*

Answer:

As discussed previously, Qtel is of the view that Q.NBN should be designed not to stimulate competition in the industry but to promote investment specifically in areas where it would be unprofitable for existing licensees to deploy infrastructure on a standalone basis.

Question 5.2.5: *Which of the options listed above would be more appropriate to develop competition in the fixed market in Qatar?*

Answer:

Qtel is of the view that infrastructure-based competition should be given the chance to work in the geographic areas where it is viable. And, in the geographic areas where the viability of infrastructure-based competition is doubtful (the less densely populated areas) service-based competition could be an option.¹² A recent empirical study suggests that infrastructure-based entrants have generally been more successful than

¹²It is also important to note that as the popularity of broadband increases (for example, due to demand for TV, value-added and content services), revenues per user will increase, causing the size of the "viable" geographical area to increase, and the area of doubtful viability to decrease in size, as time goes on.

services-based entrants in the EU (with the exception of three countries).¹³ Furthermore, these infrastructure-based entrants will generally be the first operators in Europe to offer ultra-fast broadband speeds, before the service-based competitors get to those rates.

It would be premature to try to bring a new fixed licensed operator to market, whether wireless or wire-line, while the second licensed operator is still planning its launch. The circumstances which are causing Vodafone Qatar's fixed line plans to move at their current rate will apply equally to such a third operator, so the third operator would not provide a solution to the problem of rollout speed.

In any case, international experience shows that the success of licensing new fixed-line operators has been mixed. In Saudi Arabia the WLL operators did not live up to initial expectations due to higher than expected costs, and lower than expected quality of the 4G wireless solutions. In Egypt the fixed-line licensing process failed to attract international operators with strong experience.

Instead of looking for an alternative investor to spur Vodafone Qatar to action, ictQATAR should address some of the problems that may be causing Vodafone Qatar to be hesitant in its rollout. Such problems include the uncertainties associated with the details of Q.NBN implementation, and lack of predictability surrounding the way that reviews of market dominance are currently carried out, and in the remedies that arise out of these reviews.

Question 5.2.6: Are there any other options ictQATAR should consider?

Answer:

Rather than introducing a new technology neutral WLL operator, Qtel encourages ictQATAR to liberalize the use of the 900 MHz and 1800 MHz bands such that existing operators can deploy broadband services in those bands. This would enable operators to offer broadband services in remote areas where currently there is no broadband coverage. In those cases where it would be unprofitable for operators to deploy broadband services even if spectrum in the 900 MHz band was employed, ictQATAR and the Government could stimulate deployment of broadband services through Q.NBN, the role of which is discussed in our answer to Question 5.2.3.

¹³Soria, de la Cruz, and Raña(2010) "Key success factors of new entrants in European broadband markets", Telecommunications Policy Research Conference (www.tprc.org), Washington DC, October 2010

Question 5.2.7:*What role could new WLL technologies in Qatar potentially play in helping to further develop the broadband market?*

Answer:

Emerging wireless technologies for broadband access such mobile WiMAX, LTE and their future evolutions are designed to deliver mobile broadband access at very high rates and therefore constitute important complements to fixed broadband in the connected world of tomorrow. At the same time, they could support broadband services in rural areas more cost-effectively than wireline broadband access technologies such as FTTH. Therefore, wireless technologies should be regarded as part of the portfolio of solutions available for the deployment of broadband in remote areas. In determining the necessary level of investment for the provision of wireless services in remote areas, ictQATAR and the government should weight the higher broadband speeds of modern wireline broadband access technologies against the lower costs of deploying wireless broadband technologies and their mobility advantage.

Qtel is of the view that introducing a WLL operator to promote the development of the fixed market would be inefficient. Existing operators (integrated across both fixed and mobile) are undoubtedly better placed than a hypothetical new WLL entrant to deliver cost-effectively, through the use of an optimal mix of wireless technologies, voice and broadband services in currently underserved areas. Indeed, a hypothetical new entrant would not possess the economies of scale and scope of existing operators, plus it would need to incur significant start-up costs.

Question 5.2.8:*Should CS/CPS be introduced in Qatar? What could be the potential consequences of their introduction for the fixed voice market?*

Answer:

Qtel fully agrees with what has been set out in the document. In addition, Qtel cannot see that there is any business case for introducing CS/CPS in Qatar.

STC Response to ictQATAR Strategic Sector Review Consultation

Riyadh

20th March 2011

STC Response to ictQATAR Strategic Sector Review Consultation

INTRODUCTION:

STC appreciates the opportunity to comment on the ICT Strategic Sector Review Consultation Document of Qatar's Supreme Council of Information and Communication Technology, dated 20th of February 2011.

STC agrees with the observation that the Qatar's ICT Market has significantly evolved in the past few years and with the advent liberalization of the telecom sector in Qatar, the consumer of the ICT market has greatly benefited as result of the healthy competition.

The objectives of the current Strategic Sector Review (SSR), as stated below are indeed commendable and would further help in developing this sector:

- § Recommend future's policies for the sector's development
- § Monitor developments since the start of the liberalization
- § To assess the current state of Competition in the Telecom sector

Based on its experiences while undergoing the Telecom liberalization process in Saudi Arabia, STC has prepared its comments on this SSR Consultation Questions, which are presented in the following pages. STC also believes that the overall feedback for this Strategic Sector Review Consultation, received from the Telecom Operators and stakeholders, would be highly beneficial and relevant in developing the Recommendations that will improve the ICT sector over the next few years.

STC Response to ictQATAR Strategic Sector Review Consultation

Question #	Clause	Question	STC Response
4.1.1	Industry Evolution	What role should ictQATAR play in ensuring continued sector growth?	<p>The ICT sector can lead to remarkable direct and indirect benefits for the market, including increased investment, higher sector growth, and increased contribution to the gross domestic product (GDP). It can help in raising the efficiency and productivity of other areas of the national economy, as well as improving employment and labour force participation across the economy. This can be achieved by applying the following activities:</p> <ul style="list-style-type: none"> § ictQATAR can play a leading role and promote awareness and incentives for ICT adoption by business, government and residential sectors to fuel the demand side of ICT. § ictQATAR can create incentives for the operators to contribute for the buildup of QNBN and LTE. § ictQATAR can help the different national sectors to develop strategic plans for establishing the necessary ICT infrastructure and pertinent applications. § Modern Regulatory framework should change focus from Competition Centric to ICT adoption Centric. § ictQATAR can provide mechanisms and the necessary and attractive incentive schemes to attract new investment (e.g. providing tax concessions).

STC Response to ictQATAR Strategic Sector Review Consultation

Question #	Clause	Question	STC Response
4.1.2	Sector Contribution to the Economy	What are the main factors inhibiting the sector from contributing more to the overall economy, and how should these be addressed?	<p>§ Generally, playing a more effective role by ictQATAR as depicted in 4.1.1 above can result in more sector contribution to the GDP.</p> <p>§ The lower contribution of the Fixed network to the economy, as stated in the SSR consultation, is due to lack of NBN and, therefore, the QNBN initiative is a step forward and will be as a catalyst to promote ICT adoption and increase contribution to the overall economy.</p> <p>§ The take-up of Mobile broadband should facilitate more adoption of ICT resulting in higher contribution to the GDP.</p>
4.1.3	ICT Initiatives	What other initiatives can ictQATAR implement to facilitate an increase in both supply and demand for telecom services in Qatar?	<p>§ ICT initiatives should extend to all sectors of the nation such as e-Transportation, e-Banking in order to realize an increase in supply and demand for the Telecom services in Qatar.</p> <p>§ Supply initiatives may include freeing of LTE frequencies at different bands, including applicable Digital Dividend to ease offering of Mobile Broadband.</p>
4.1.4	Regulatory Framework	What other legal initiatives or policies could be introduced in the next three years? Please rank them in order of their importance for supporting the continued development of the telecom	<p>§ STC proposes the following order of importance to regulatory objectives:</p> <ol style="list-style-type: none"> 1. increase customer benefits 2. encourage ubiquitous services 3. support the health of the industry

STC Response to ictQATAR Strategic Sector Review Consultation

Question #	Clause	Question	STC Response
		sector in Qatar.	4. create sustainable investments 5. encourage competition § In addition to a National ICT Sector Strategy, calling and supporting other national sectors to establish their own Sector-specific ICT strategies. § Undertake Digital Dividend initiative § Take measures to ensure fair agreements between National operators and Over The Top (OTT) players. § Assess network security and privacy requirements in view of new ICT applications.
4.2.1	Competition in the Mobile Sector	To what extent has the introduction of competition in the mobile sector been successful in Qatar? What additional measures could be taken by ictQATAR to promote more competition?	§ Mobile competition seems successful in Qatar. It has resulted in major developments in terms of service offerings, quality of service, customer care, reduced prices and subscriber growth. § Competition in contents and applications which may be specialized in certain ICT (e.g. Mobile Broadband or M2M applications). § It has been commonly experienced that the optimum number of Mobile Operators in a country is three.
4.2.2	Competition in the Fixed	What are the key challenges to introduce competition in	§ The choice of a model to build QNBN will decide the form of competition in the fixed network. It is to be noted that competition is not a goal in itself. Some studies indicate that economy of scale can only

STC Response to ictQATAR Strategic Sector Review Consultation

Question #	Clause	Question	STC Response
	Sector	the fixed market in Qatar?	<p>be attained with less competition.</p> <p>§ We believe that a Fixed license alone is not economically appealing and may only have to be combined with Mobile license.</p> <p>§ Operators may contribute to build the QNBN and share its use while competing in offering Broadband services</p> <p>§ ictQATAR can create an environment which encourages operators to invest in the fixed market .</p> <p>§ ictQATAR should continue to monitor compliance of facilities based fixed and data licensees with their license obligations, including network rollout, coverage obligation and provision of services.</p>
4.2.3	Access to Property, Site Sharing, and Right-of-Way "RoW"	What can be done to improve access to property, site sharing, and RoW?	<p>§ In case of new outside plant networks developments, the regulatory authority could try and evolve a joint construction program, so that all the network operators are involved which will make the facility sharing easy among all operators.</p> <p>§ ictQATAR can support operators in dealing with government authorities and facilitated in obtaining quick approvals.</p>
4.2.4	Access to Property, Site Sharing, and RoW	What additional role should ictQATAR play, if any, to promote access to property, site sharing, and greater use	<p>§ ictQATAR can develop technical and regulatory policy guidelines, based on benchmarks for international best practices, to regulate granting RoW to construct, manage, operate, and maintain outside plant networks (backbone, backhaul, and metro rings), which should motivate the operators to work for realizing the sector specific goals.</p>

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Question #	Clause	Question	STC Response
		of RoW in Qatar?	<p>These guidelines should take into consideration security, safety and ROI aspects for outside plant deployment and operation.</p> <p>§ ictQATAR can encourage establishment of commercial agreements between operators to share sites and other resources.</p>
4.3.1.1	Service Availability	Does ictQATAR have any further role to play to encourage service availability?	§ Yes, promotion of ICT adoption will lead to the creation of new devices and services.
4.3.1.2	Service Availability	What other type of mobile services should be available in Qatar?	§ New ICT applications emerging with Mobile Broadband. This may include Machine to Machine (M2M) applications
4.3.1.2.1	Prices and Innovation	How do you expect mobile prices to evolve in the future, and how will this evolution affect the industry?	§ Generally, prices will continue to decrease and services will continue to increase. However, it is important that ictQATAR should ensure fair competition among national and international players to protect against telecom value erosion. Also, innovative market approach by the operators in introducing new services will help operators' profitability.
4.3.1.2.2	Prices and Innovation	How do you see the future of innovation in the mobile market, and what could ictQATAR do, if anything, to encourage continued	§ Promotion of ICT adoption by different national sectors will lead to several innovative mobile services, including machine-to-machine (M2M) applications (e.g. e-Automotive/Transportation, eHealth, etc..).

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Question #	Clause	Question	STC Response
		innovation in the mobile market?	
4.3.1.3.1	Mobile Quality of Service	Why does quality of service remain low in the mobile industry in Qatar?	<p>§ Due to low quality of service in the mobile Industry, it is eventually that the customers are suffering. The Operators should be made to publish their QoS results periodically so that they share this QoS information with their customers.</p> <p>§ ictQATAR can increase its follow-up on the QoS reports filed by the service providers, to verify compliance with approved standards. ictQATAR can also perform inspection visits to call centers and customer service outlets of service providers.</p>
4.3.2.1.1	Broadband Availability	What steps should be taken by operators to improve the availability of broadband services and increase broadband speeds in Qatar?	<p>§ Invest more in Fixed/Mobile Broadband</p> <p>§ Operators should respond to market demand. If the return on investment in such market is guaranteed, operators will quickly respond.</p> <p>§ ictQATAR can provide incentives to entice stakeholders to invest in broadband and promote ICT applications.</p>
4.3.2.1.2	Broadband Availability	What role can ictQATAR play in the industry to help increase broadband availability and speeds?	<p>§ Pursue the QNBN with an appropriate business model.</p> <p>§ Facilitate operators' involvement by providing incentives (e.g. tax relief).</p>

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Question #	Clause	Question	STC Response
4.3.2.2	Prices and Innovation	What steps can be taken to make broadband more affordable and to create more innovation within the sector?	<ul style="list-style-type: none"> § Increase scope of ICT applications. § Encourage infrastructure sharing to reduce cost. § Lower taxes and fees
4.3.2.3	Fixed Quality of Service	Why does quality of service remain substandard in the fixed industry in Qatar?	<ul style="list-style-type: none"> § Because actual competition has not yet started for fixed services. § ictQATAR can increase its follow-up on the QoS reports filed by the service providers, to verify compliance with approved standards. ictQATAR can also perform inspection visits to call centers and customer service outlets of service providers.
4.4.1	State of Sector Health	What are your expectations regarding the evolution of the telecom sector's financial health in the next three years? What conditions are necessary for further strong development in this sector?	<p>In the last few years, the prices of telecom services have progressively decreased, while the cost of living index continued to rise due to increased prices of most of its components.</p> <p>For further strong development in this sector the following issues should be taken into consideration:</p> <ul style="list-style-type: none"> § Promote ICT applications in different national sectors § Build QNBN and introduce Broadband services. § Promote Mobile Broadband
4.4.2.1	Industry Risks	What can the industry do to reduce the high dependence	The slight decline in residential fixed telephone lines is attributable to the reduced demand for fixed services caused by the increased adoption of

STC Response to ictQATAR Strategic Sector Review Consultation

Question #	Clause	Question	STC Response
		on voice revenues?	<p>mobile services, as telecommunications is becoming more personal and focused on the individual (rather than a shared household service). This migration or "fixed-to-mobile substitution" is a global trend witnessed in many countries. Furthermore, the growth of broadband subscriptions has reduced the need for more than one line in a household, as a broadband connection negates the need for a separate fixed telephone line for dialup Internet access.</p> <p>For further strong development in this sector the following issues should be taken into consideration:</p> <ul style="list-style-type: none"> § Promote ICT applications in different national sectors § Build QNBN and introduce Broadband services. § Promote Mobile Broadband § Apply fair controls on voice services to protect against voice revenue erosion. § Promote development of Content and its applications.
4.4.2.2	Industry Risks	What additional risks do you see that could jeopardize the financial health of the industry?	<ul style="list-style-type: none"> § Impact of Over The Top (OTT) players together with slower introduction of broadband services. § Lack of ICT enabled applications by other sectors.
4.4.3.1	Industry	To what extent will mobile	<ul style="list-style-type: none"> § To a large extent since Qatar lags behind developed and GCC

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Question #	Clause	Question	STC Response
	Opportunities	and fixed data provide a sufficient opportunity for the industry to grow further?	countries in the availability of Broadband especially as the technologies improve for both fixed and mobile networks.
4.4.3.2	Industry Opportunities	What other opportunities will fuel future growth and what role (if any) should ictQATAR play in facilitating such growth?	<p>§ Future growth will be fueled by promotion of ICT that will be adopted by both consumers and businesses and in the different sectors of the nation.</p> <p>§ ictQATAR can play a leading role to improve ICT awareness and encourage adoption.</p> <p>§ ictQATAR can make incentives for operators to build broadband networks (e.g. tax exemption).</p> <p>§ Qatar government has been at the forefront for promoting the industry by embracing and promoting e-government. QNBN would further promotes the growth.</p>
4.5.1.1	Mobile Investments	To what extent are current investment levels sustainable rather than a temporary phenomenon?	<p>§ Current investment level is temporarily, being associated with the building of the new Mobile network of Vodafone.</p> <p>§ However, continued high investments are expected in connection with new infrastructure deployment.</p>
4.5.1.2	Mobile	What role can ictQATAR play (if any) to boost further investments in the mobile	<p>§ Promote broadband demands through ICT adoption</p> <p>§ Make incentives such as tax exemption.</p>

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Question #	Clause	Question	STC Response
	Investments	industry?	§ Expedite QNBN to ease LTE eNodeB deployment. § Free LTE frequencies, specially thro digital dividend
4.5.2	Fixed Investments	What role (if any) can ictQATAR play in increasing levels of investment in the fixed industry in Qatar?	§ Expedite expansion of QNBN. § Encourage infrastructure sharing § Promote broadband demands through ICT adoption
4.6.1	High Coverage	Should any services be subject to a universal coverage requirement?	§ Internet (at speed of 1 Mbps).
4.6.2.1	Future Technologies and Products	What in your view is hindering the adoption of new technologies, particularly FTTH, in the fixed sector in Qatar?	§ High cost of FTTx implementation and investment. § Qatar is at an early stage of liberalization.
4.6.2.2	Future Technologies and Products	What role (if any) should ictQATAR play in promoting adoption of new technologies?	§ Promote broadband demands through ICT adoption. § Provide subsidies and make incentives such as tax exemption. § Expedite QNBN deployment.
5.1.1	Mobile Market Draft	What additional policy issues	§ Call other sectors to develop ICT strategic plans.

STC Response to ictQATAR Strategic Sector Review Consultation

Question #	Clause	Question	STC Response
	Recommendations	should the SSR address?	§ Free LTE lower frequencies through digital dividend. § Ensure fair agreements with Over The Top (OTT) players.
5.1.2	Mobile Market Draft Recommendations	Which existing policies should be reviewed based on the SSR?	§ NA
5.1.3	Mobile Market Draft Recommendations	Should an additional mobile operator be introduced immediately in Qatar? Please elaborate. If not, when would it be appropriate to do so?	§ Yes. As the best practice showed that for a healthy competitive environment, the optimal number of Mobile Operators in a country is 3. § It will be fair for the 3 rd mobile operator to be part of the QNBN deployment and also have fixed license.
5.1.4.1	Mobile Market Draft Recommendations	Should ictQATAR maintain its current regulatory requirements of price reviews and approvals as prescribed by the Telecommunications Law and Licenses? What changes could be made to improve the tariff review and approval process?	§ Current state of competition in Qatar may justify reduced tariff regulations, where ictQATAR may rely on Ex-post measures in case of pricing below cost.

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Question #	Clause	Question	STC Response
5.1.5	Mobile Market Draft Recommendations	Would the periodical publication of individual quality of service indicators by ictQATAR create an incentive for operators to improve the quality of mobile services offered to customers?	§ Yes.
5.1.6	Mobile Market Draft Recommendations	Are there other mechanisms ictQATAR could adopt to increase the quality of service in the mobile industry?	§ Ensure effective operation of MNP
5.2.1	Fixed Market Draft Recommendations	Are there other issues affecting the fixed sector that will be important for ictQATAR to look at apart from those already raised? Please explain.	§ Encourage operators to implement Fixed Mobile Convergence. § Address security concerns for broadband applications.
5.2.2	Fixed Market Draft Recommendation	Of the legal requirements in place, which ones are working well? Which need to be reviewed? Please explain	§ NA

STC Response to ictQATAR Strategic Sector Review Consultation

Question #	Clause	Question	STC Response
	ations	giving reasons.	
5.2.3	Fixed Market Draft Recommendations	What is the role of the QNBN in developing infrastructure in the telecom sector? What role should existing players play in the QNBN?	<p>§ QNBN can be considered the most important part for both Fixed and Mobile Broadband services.</p> <p>§ Existing players, as well as possible new operator may contribute to the QNBN in order to expedite its deployment.</p>
5.2.4	Fixed Market Draft Recommendations	What impact will the QNBN have on future competition in the sector? What should be done to ensure industry structure continues to support competition?	<p>§ QNBN will form the platform for the operators to compete to build ICT infrastructures and offer innovative services and applications.</p>
5.2.5	Fixed Market Draft Recommendations	Which of the options listed above would be more appropriate to develop competition in the fixed market in Qatar?	<p>§ None.</p>
5.2.6	Fixed Market Draft Recommendations	Are there any other options ictQATAR should consider?	<p>§ It is recommended to introduce a third operator with both Fixed and Mobile licenses to be in equal footing as Qtel and Vodafone in terms of competition for ICT applications.</p>

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Question #	Clause	Question	STC Response
5.2.7	Fixed Market Draft Recommendations	What role could new WLL technologies in Qatar potentially play in helping to further develop the broadband market?	§ WLL is not recommended. Investment should better be directed to LTE.
5.2.7'	Fixed Market Draft Recommendations	Should CS/CPS be introduced in Qatar? What could be the potential consequences of their introduction for the fixed voice market?	<p>§ No. Fixed revenue is declining. It is recommended to retain international service with the fixed operators.</p> <p>§ Experience from other countries with CS/ CPS has shown that success has been limited.</p> <p>§ Proper implementation of MNP makes CS/CPS of no value to the customer.</p>



Christa Cramer
Acting Assistant Secretary General
Regulatory Authority
ictQATAR
P.O. Box 23264
Doha, Qatar

20 March 2011

Dear Christa

RE: Strategic Sector Review ("SSR") Consultation Document

Details of Responding Party

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Vodafone Qatar ("VQ") refers to ictQATAR's consultation document on the Strategic Sector Review dated 20 February 2011.

VQ would like to thank ictQATAR for the opportunity to comment on this important review of the telecommunications sector

VQ is responding to the specific questions asked in the consultation document, see Annexure A below. Should there be any material changes to the scope, recommendations, and decisions in the next round of the Sector Review consultation process, we request a reasonable opportunity to be consulted.

In summary, our key positions are as follows:

1. VQ agrees with ictQATAR's proposed recommendation not to issue a third mobile license for the reasons that ictQATAR has set out. VQ has only been providing services for a year and a half and requires further time to establish itself especially given the size of the license fee paid for this opportunity.
2. VQ does not agree with any of ictQATAR's 3 options being considered for the fixed communications market. We strongly support the QNBN and ictQATAR's board reasons for QNBN and we are committed to investing in fixed services, in partnership with QNBN.
3. ictQATAR's focus should be to complete the implementation of the regulatory framework and support unblocking of infrastructure planning approvals.

Please do not hesitate to contact me if you have any questions or comments.

Yours sincerely

Matthew Harrison-Harvey
Director of Regulatory and External Relations
Cc: Itumeleng Moerane – Itumeleng.moerane@vodafone.com

Annex A: VQ's Answers to SSR questions

Question	Comments
<p data-bbox="69 217 519 284"><u>Contributions of Telecom sector to Qatar's economy</u></p> <p data-bbox="69 331 519 443">4.1.1 What role should ictQATAR play in ensuring continued sector growth?</p>	<p data-bbox="539 217 2179 639">VQ believes that ictQATAR as the Regulatory Authority ("RA") has a big role to play in ensuring continued sector growth. A commitment of regulatory transparency and consistency has been and will continue to be critical for long-term development of the communications sector and investment in the sector. The growth of the sector and the growth of the market depend upon ictQATAR to ensure a level competitive playing ground for all operators, allocate scarce resources such as frequency, numbering plans and rights of way in an objective, timely, transparent and non-discriminatory manner. ictQATAR must ensure that all regulatory processes and decisions that were held by Qtel prior to liberalisation are transferred to ictQATAR or an independent party with the required authority. ictQATAR must enforce the rules and regulations fairly and firmly. VQ also believes that the role that ictQATAR can play is to apply the Telecommunications Law no 34 of 2006 ("Telecoms Law") and applicable regulatory framework in an evidence-based, (using criteria established in the applicable regulatory framework) robust, timely and transparent manner. It is our view that this will improve regulatory certainty for all operators which will improve competition and lead to further investment.</p> <p data-bbox="539 687 2179 791">VQ notes that ictQATAR has a strategy around broadband uptake. A key part of the strategy is investment in the Qatar National Broadband Network. We strongly support this initiative. Please see VQ's responses to questions 5.2.1 and 5.2.3 below.</p>
<p data-bbox="69 845 497 1029">4.1.2. What are the main factors inhibiting the sector from contributing more to the overall economy and how should these be addressed?</p>	<p data-bbox="539 845 2179 997">ictQATAR must ensure that all regulatory processes and decisions that were held by Qtel prior to liberalisation are transferred to ictQATAR or an independent party with the required authority and are conducted in a non-discriminatory and timely manner. The most critical process has been telecoms infrastructure planning and building approvals, in which a "Qtel approval" remains, as a required step in this process without any involvement of VQ</p> <p data-bbox="539 1045 2179 1308">VQ has obtained only 15 mobile radio site approvals since January 2010 (whilst VQ required 185 BPs; 66 new sites and 119 temporary to permanent sites) and was blocked from being able to access telecom road corridors for fibre deployment since June 2010. The recent ictQATAR - Ministry of Municipality and Urban Planning interim Memorandum of Understanding is a welcome initiative to enable access to telecom road corridors. VQ and the Sector urgently need ictQATAR to undertake similar initiatives and a greater leadership role with other government agencies to support investment in telecoms infrastructure. This will enable operators to rollout infrastructure capable of providing the quality of services that we want to provide and that our customers require.</p>

	<p>VQ submits that the RA is significantly under-resourced to carry out the work that it is required to do to support the application of the Telecoms Law. The RA has issued a number of important decisions since VQ entered the market, however there are a number of key processes required under the Telecoms Law that have not been implemented (for example, spectrum management, the consumer protection code, accounting separation of Qtel) that are critical to the development of the Sector</p>
<p>4.1.3 What other initiatives can ictQATAR implement to facilitate an increase in both supply and demand for telecom services in Qatar?</p>	<p>ictQATAR has developed the ictQATAR’s 2015 vision and process which we believe to be a positive forward looking approach and if implemented successfully it will play a significant role in facilitating an increase in both the supply and demand for Telecoms services in Qatar. Such initiatives should be identified in consultation with the community through this process.</p>
<p>4.1.4 What other legal initiatives or policies could be introduced in the next three years? Please rank them in order of their importance for supporting continued development of the telecom sector</p>	<p>The Telecoms Law sets out a number of policies/regulations that ictQATAR should implement, which includes amongst others:</p> <ul style="list-style-type: none"> • Access to property procedures as per article 53 of the Telecoms Law; • Consumer Protection policy as per article 48 of the Telecoms Law • Spectrum policy as per article 14 of the Telecoms Law <p>It is also critical that ictQATAR enforces compliance with obligations of the Telecoms Law and applicable regulatory framework and this should be supported by the increase of fines ictQATAR can impose on operators. The current fines do not pose much of a disincentive.</p>
<p><u>Encouraging Competition</u></p> <p>4.2.1 To what extent has the introduction of competition in the mobile sector been successful in Qatar? What additional measures could be taken by ictQATAR to promote more competition?</p>	<p>The introduction of competition in the mobile sector has been successful as it has increased customer choice and benefits to the markets. This is illustrated by the increase in penetration and the decline in cost of mobile services in Qatar which were very high prior to competition being introduced.</p> <p>ictQATAR can continue to promote competition in the market by:</p> <ul style="list-style-type: none"> • Working with the industry to produce a marketing communications code; • Introducing transparency on the process and methodology they use to determine whether tariffs of a Dominant Service Provider are above cost or not. <p>VQ believes that the Qatar telecoms sector needs a competition-based regulatory framework that is consistent with leading international practice in the EU and other countries. In a market such as the Qatari market where one party has significant</p>

	market power, that party's conduct has the potential to exclude competitors that operates in the interest and welfare of end users. Competition policy can both help markets deliver the benefits of competition to consumers and support sustainable economic growth. VQ welcomes ictQATAR's approach in the current market definitions and Dominance Designation process.
4.2.2 What are the key challenges to introduce competition in the fixed market in Qatar?	<p>The major challenges that VQ has been faced with is access to infrastructure including:</p> <ul style="list-style-type: none"> • Inability to access roads to build the infrastructure; • Inability to access Qtel ducts on reasonable terms – currently subject of dispute; • Lack of capacity/ resourcing of the RA which have led VQ to discount the viability of traditional access models such as Local Loop Unbundling. • Qatar National Broadband Project, which we strongly support as a partner if implemented as planned will have a very significant positive impact on the development of fixed line competition. However delays to QNBN deployment and any material changes to the determined model have the potential to have a significant negative impact on VQ's participation and the level of competition in the Sector. See our responses to Questions 5.1.1 and 5.1.3 for further explanation". • Qtel below cost pricing for fixed line telephone packages. Qtel claims it is required to provide voice services on a below cost basis due to a previous decision by government. VQ considers that any such decision was superseded by the passage of the Telecommunication Law of 2006. Qtel is prohibited from below cost pricing and must amend its prices accordingly. Pricing below cost by a DSP has the effect of limiting VQ's potential to compete in the fixed arena which will limit consumer benefits in that arena..
4.2.3 What can be done to improve access to property, site sharing and RoW	VQ believes that the process established for agreeing ROW access between ictQATAR and MMUP creates a model which can be applied to other problems such as mobile site permissions. The key aspect is ictQATAR taking ownership in recognition of the importance of resolving these issues for the viability of the industry. VQ appreciates ictQATAR taking such ownership and would recommend that it continues to do so.
4.2.4 What additional role should ictQATAR play, if any, to promote access to property, site sharing, and greater use of RoW in Qatar?	As mentioned above VQ believes that ictQATAR should play a strong support role with all government agencies and property owners when blockages are identified. It is critical that the Board of ictQATAR and the Secretary General are escalation points, along with their peers from other relevant government authorities when there are material blockages to the process
<u>Increasing customer benefits</u>	ictQATAR as the RA will always have a role to play when it comes to encouraging service availability. Publishing the consumer protection policy and the marketing communications code are examples of deliverables that ictQATAR still need to complete.
4.3.1.1 Does ictQATAR have any	Any such decisions must be conducted in a consultative, transparent and evidence based manner.

further role to play to encourage service availability?	
4.3.1.2 What other type of mobile services should be available in Qatar?	<p>There are still a number of mobile services that can be introduced in Qatar, which includes but are not limited to:</p> <ul style="list-style-type: none"> • Value added services like DAS, content services • Location based services; and • Fixed services through the mobile network. • Fixed-mobile converged services
4.3.1.2.1 How do you expect mobile prices to evolve in the future, and how will this evolution affect the country?	<p>VQ is of the view that because of the increase in the penetration levels, prices will further erode, however assuming that the population will increase at a higher pace as we get closer to 2022, the market value is expected to increase significantly. A key determinator will be the decisions that the RA takes as long as there is a Dominant Service Provider ("DSP") found in the Mobile Retail Market to ensure that the DSP does not undertake anti-competitive pricing behaviour.</p>
4.3.1.2.2 How do you see the future innovation in the mobile market, and what could ictQATAR do, if anything to encourage continued innovation in the mobile market?	<p>VQ expect to see more converged offerings as the QNBN initiative becomes reality merging fixed and mobile products giving customers more choice. We also expect to see further innovations in data services and access to superior internet and data speeds across both fixed and mobile.</p> <p>Value Added Services and customer segmentation will also form a big part in defining the market. Customers will choose what service levels they want and pay accordingly, offering additional competition</p> <p>ictQATAR can play a role in this space by ensuring that there is a clear spectrum policy in Qatar and assist operators with network rollout processes as innovation can truly be achieved when operators have first class network quality.</p>
4.3.1.3.1 Why does quality of service remain low in the mobile industry in Qatar?	<p>As mentioned above network rollout has been a challenge for VQ due to the cumbersome/redundant land leasing procedures and restrictions of new building permits which has meant that we are increasingly reliant on temporary mobile sites. These sites do not have permanent power so are run on generators which means we often face outages. These outages have a significant impact on Quality. Furthermore, temporary sites are not as stable as permanent towers and microwave transmission may suffer from fluctuations which also impact Quality. We are unable to deploy the mobile network sites that we want to due to planning permission blockages. Despite these blockages VQ continues to put significant effort into improving the network, for example:</p> <ol style="list-style-type: none"> a. Upgrading major MW rings with Space Diversity feature to limit issues from ducting, b. Overhauling all the generators we have in the network on temporary sites to minimize outages,

- c. Improving voice quality through features like AMR-HR,
- d. Adding costly leased lines to key hub sites to ensure network continuity.

It is also VQ's view that the formulas used by ictQATAR to measure network quality are not accurate. All cells are given equal weighting even if the traffic they carry is very different. For example, 1 drop call / day in a cell which has 10 calls per day, the drop call rate will be 10%, while 200 drops in a cell which carries 20000 calls, the rate is 1%. VQ believe we should correlate the rates with traffic to have a clearer view about number of subscribers affected. It is therefore worth reviewing how this measure is calculated. Another reason could be the big concentration of customers in specific areas & high volume of calls on specific days. VQ recommends that ictQATAR should conduct a consultation process to review the Quality of Service process and criteria being used.

Whilst network rollout remains a critical issue and is impacting on the quality of services, we do not agree with the general statement that quality of service remains low in the mobile industry. Vodafone globally measure consumer opinion about services through independent Net Promoter Score (NPS) assessments. This assessment is conducted by Neilson and is based on a sample of people across all customer segments. In Qatar, Neilson asks about consumer opinion of both VQ and Qtel.

Slide 1 below shows overall NPS for Qtel and VQ since VQ entered in the market. As you will see there has been a significant improvement from when VQ first started to today. VQ's most recent score of 52 is one of the highest in Vodafone companies today. You will also note that Qtel's NPS has significantly improved as well due to their own initiatives and we would suggest the introduction of competition has been the key catalyst for this change.

Slide 2 below shows a breakdown of VQ's NPS scores across key metrics. You will see that Network is the lowest; however there are high scores across other customer service touch points.

This information shows that customer opinion is that there are getting good level of services from VQ, albeit the quality of our network is our main challenge

4.3.2.1.1 What steps should be taken by operators to improve the availability of broadband services and increase broadband speeds in Qatar?

VQ is of the view that availability of broadband and the speeds thereof are a function of healthy competition between operators.

The operators will need ictQATAR's assistance discussed below in order to be able to invest in providing ubiquitous broadband to all people in Qatar.

<p>4.3.2.1.2 What role can ictQATAR play in the industry to help increase broadband availability and speeds?</p>	<p>ictQATAR can play a crucial role of helping with broadband availability and speeds by helping with the delivery of QNBN for backhaul and providing early certainty for LTE spectrum.</p> <p>ictQATAR can also help with unblocking issues of site acquisition for Radio Access Network and by monitoring prices for international connectivity to ensure this is not a barrier to speed and availability.</p>
<p>4.3.2.2 What steps can be taken to make broadband more affordable and to create more innovation within the sector?</p>	<p>Fixed Broadband</p> <p>The lack of competition to date is a key driver of high fixed broadband prices. The combination of the introduction of the QNBN providing leading edge passive fibre network and VQ’s own investment in fixed telecommunications will result in the introduction of competition, service innovation, and affordable prices.</p> <p>In coming weeks a further subsea cable is being landed in Qatar. This will have the effect of reducing the price of international connectivity – which forms a significant portion of internet traffic in Qatar due to expat population and lack of local content. ictQATAR should monitor prices though in case prices do not drop far enough to drive the very high uptake targets ictQATAR is aiming for. The GBI cable is planned to be ready for service in July 2011.</p> <p>Cost inputs such as leased lines remain high. Qtel has not met its Dominant Service Provider requirements to implement regulatory accounting within 24 months of being declared dominant in relevant market. This makes it difficult for ictQATAR to ensure that its wholesale services are being provided on a cost basis as required by the regulatory framework in particular Article (29) of the Telecoms Law.</p> <p>Duct infrastructure is a critical cost component in the price of both mobile and fixed line broadband. VQ and Qtel have been in negotiation for access to ducts for over 12 months. Access to and price of access to Qtel duct infrastructure – required under the regulatory framework – are yet to be resolved and are at the time of writing subject to a requirement by the RA to reach agreement on access to, and price of, Qtel ducts within a specified period or the RA will determine price and non-price terms of access. There is some complexity in relation to this issue in Qatar due to different views on the ownership of certain parts of the duct network and due to the fact that significant road upgrades are undertaken by the road authorities who, VQ understands, bear the costs. This affects the approach that should be taken to depreciation and therefore the cost of access.</p>

	<p>Mobile Broadband</p> <p>VQ has seen amazing penetration of its mobile internet usage and continues to see consistent use of the mobile internet service in Qatar In the direction of promoting mobile internet service, Vodafone has offered plenty of social sites free of charge (Facebook, Maktoob, Orkut & Friendster), so customers with internet enabled devices could access these sites without being charged. At the same time, by offering 10MB for Free to customers that top-up with specific reloads increase the penetration of mobile internet which currently reaches more than 50%.</p>
<p>4.3.2.3 Why does quality of service remain substandard in the fixed industry in Qatar?</p>	<p>There is currently no effective competition in the Fixed industry in Qatar.</p>
<p><u>Health of the Industry</u></p> <p>4.4.1 What are your expectations regarding the evolution of the telecom sector’s financial health in the next three years? What conditions are necessary for further strong development in this sector?</p>	<p>VQ expects ictQATAR to work on the following issues:</p> <ul style="list-style-type: none"> • Enable mobile and fixed infrastructure planning and build permissions to take place efficiently and effectively, whilst balancing other public policy objectives. • Maintain ictQATAR current managed competition approach of 2 public mobile and fixed licensees; • Successful implementation of QNBN model and rollout. • Champion transparent and evidence based regulation, which should increase regulatory certainty and ensure cost-based pricing and no anti-competitive behaviour where DSP status has been determined. • Ensure minimal government taxes, fees, and levies are imposed, which increase the cost of providing services to customers; this includes fees charged by ictQATAR, such as the industry fee (reduce or use the industry fees for clearly defined and consulted projects that benefit all stakeholders) and spectrum fees."
<p>4.4.2.1 What can the industry do to reduce the high dependence on voice revenues?</p>	<p>It is VQ’s view that ictQATAR should focus on transparent and evidence based regulation and ensuring that competition is supported through the ability for licensed operators to build infrastructure without incurring significant costs and delays.</p> <p>The operators can assist by broadening their service portfolios and promoting the benefits of other non voice related services.</p>
<p>4.4.2.2 What additional risks do you see that could jeopardize the financial health of the industry?</p>	<p>ictQATAR needs to ensure that a strong and consistent line is taken with property developers to ensure they do not impinge of the rights of holders of Public Fixed Telecommunications Networks and Services licenses by attempting to offer services via telecommunications networks – for example IP television.</p>

	<p>The other risks that could jeopardise the health of the industry include:</p> <ul style="list-style-type: none"> • Introduction of further licensed operators at this early stage of competition which could potentially slow down the network roll-out process even more; • Low quality of networks and further erosion of prices will limit profitability of the sector and slow down investment.
<p>4.4.3.1 To what extent will mobile and fixed data provide a sufficient opportunity for the industry to grow further?</p>	<p>VQ believes that with mobile penetration currently at over 150%, there is a great opportunity of growth through mobile data services.</p> <p>Mobile and fixed data also provide a significant opportunity for operators if they are empowered to capture an appropriate portion of the value chain and can appropriately monetise different types of services.</p>
<p>4.4.3.2 What other opportunities will fuel future growth, and what role (if any) should ictQATAR play in facilitating such growth?</p>	<p>As mentioned above, VQ is of the view that the following actions by ictQATAR will help fuel future growth of the telecommunications sector:</p> <ul style="list-style-type: none"> • Enable mobile and fixed infrastructure planning and build permissions to take place efficiently and effectively, whilst balancing other public policy objectives. • Maintain ictQATAR current managed competition approach of 2 public mobile and fixed licensees; 3. Successful implementation of QNBN model and rollout. • Champion transparent and evidence based regulation, which should increase regulatory certainty and ensure cost-based pricing and no anti-competitive behaviour where DSP status has been determined. <p>Ensure minimal government taxes, fees, and levies are imposed, which increase the cost of providing services to customers; this includes fees charged by ictQATAR, such as the industry fee (reduce or use the industry fees for clearly defined and consulted projects that benefit all stakeholders) and spectrum fees."</p>
<p><u>Investment levels</u></p> <p>4.5.1.1 To what extent are current investment levels sustainable rather than a temporary phenomenon?</p>	<p>VQ is of the view that investment levels depend on the business case of each opportunity. Key drivers of the business case for telecoms in Qatar will always remain: (a) the population - growth slowed down over the last 2 years, but we expect it to pick up in preparation for the World Cup 2022; and (b) the certainty and stability of regulatory and licensing structure. For example; the delays in planning permission on mobile build has negatively impacted the business case for Qatar as customers perception of service quality has deteriorated, the Sector Review decision on licensing new entrants will materially impact the business case. The introduction of a third mobile operator would very likely result in an impairment of VQ's license value and a significant reduction in VQ's share price value, as VQ would no longer be able to meet the market share projections in the initial business case shared in the IPO prospectus.</p>

<p>4.5.1.2 What role can ictQATAR play (if any) to boost further investments in the mobile industry?</p>	<p>Please refer to VQ's response to 4.4.1 above.</p>
<p>4.5.2 What role can ictQATAR play (if any) to boost further investments in the fixed industry?</p>	<p>ictQATAR is already playing a significant role to boost investment in the fixed industry by establishing the Qatar National Broadband Network. Please see VQ's response in 4.3.2.2 above.</p>
<p><u>Availability of services</u></p> <p>4.6.1 Should any services be subject to universal coverage requirements?</p>	<p>The licensees already have a requirement to provide 100 percent coverage and to provide access to Voice calling, therefore VQ is of the view that there are no services that should be subject to universal service coverage. Further services should be left to competitive dynamics</p> <p>Under their licenses VQ and Qtel are required to pay an annual industry fee. To date it is not clear on what this industry fee is used for. As a minimum, ictQATAR should provide clarity and transparency on what is purpose of the industry fee and what is the raised fund being spent on.</p>
<p>4.6.2.1 What in your view is hindering the adoption of new technologies particularly FTTH, in the fixed sector?</p>	<p>ictQATAR has decided to build an FTTH network. This issue has been addressed.</p>
<p>4.6.2.2 What role (if any) should ictQATAR play in promoting adoption of new technologies?</p>	<p>As part of the QNBN project ictQATAR needs to consider demand side initiatives to promote uptake of broadband. It has already outlined a consultative structure for consider these issue and we encourage ictQATAR to continue with a transparent, consultative approach to policy development.</p> <p>ictQATAR also needs to Ensure that spectrum is made available in a timely manner to allow the delivery of new technologies. The new spectrum should also be part of the existing license and should be kept for mobile operators only, thus ensuring the most efficient use of the spectrum.</p>
<p><u>Mobile market draft recommendations</u></p> <p>5.1.1 What additional policy issues should the SSR address</p>	<p>The key aspect of this Sector Review is to assess whether there should be additional public licenses or any changes to the regulatory framework. Generally we think the draft review does this. Over time, once the licensing structure is established, we would anticipate the sector review having a bigger emphasis on consumer benefit and welfare</p>

5.1.2 Which existing policies should be reviewed based on the SSR	VQ is of the view that ictQATAR's focus at this stage should be on completing the implementation and maturing of the existing framework under the Telecoms Law. Please see key policies listed in 4.1.4
5.1.3 Should any additional mobile operator be introduced immediately in Qatar? Please elaborate. If not when would it be appropriate to do so?	<p>VQ is of the view that no new mobile operator should be introduced immediately in Qatar. Despite the competition that the mobile industry has seen since VQ came into the market, it is important to keep in mind that VQ has only been providing mobile services in Qatar for just over a year and a half now. VQ submits that ictQATAR should give competition some time before introducing a new mobile operator.</p> <p>The population of Qatar and market conditions (150%+penetrations) does not substantiate the introduction of a third operator, while at the same time this will jeopardize the current investments.</p> <p>VQ submits that it still needs at least another year and a half to compete before a new entrant is being considered. Three years of no new entrant in the mobile industry was one of the conditions in which Vodafone made its decision to invest in Qatar.</p>
5.1.4.1 Should ictQATAR maintain its current regulatory requirements of price reviews and approvals as prescribed by the telecommunications law and licenses? What changes could be made to improve the tariff review and approval process?	<p>VQ submits that this is a question that should be addressed in the market reviews and dominate designation consultation process that is currently underway. Having said that VQ is of the view that as long as there is a dominant service provider in the market, the <i>ex- ante</i> price reviews regulation remains critical in order to ensure that the dominant service provider does not engage in predatory pricing which could have an effect of lessening competition in the market. It is also important for ictQATAR to clearly set out what model or criteria they use to determine whether tariffs of a dominant service provider are below cost or not.</p> <p>VQ believes that the Qatar telecoms sector needs a competition-based regulatory framework that is consistent with leading international practice in the EU and other countries. In a market such as the Qatari market where one party has significant market power, that party's conduct has the potential to exclude competitors that operates in the interest and welfare of end users. Competition policy can both help markets deliver the benefits of competition to consumers and support sustainable economic growth. VQ welcomes ictQATAR's approach in the current market definitions and Dominance Designation process</p>
5.1.5 Would periodical publication of individual quality of service indicators by ictQATAR create an incentive for operators to improve the quality of mobile	<p>VQ is of the view that publishing the QoS indicators is good for transparency however VQ is committed to continuous improvement of Quality of Service because it is a competitive advantage therefore the publication of the QoS is not a incentive for making improvements.</p> <p>VQ would welcome ictQATAR consulting on Quality of Service measurements, process, and reporting</p>

services offered to customers?	
5.1.6 Are there other mechanisms ictQATAR could adopt to increase the quality of service in the mobile industry?	ictQATAR could issue its own annual network audit (Drive Tests) and publish the results. This process can be done by an independent 3 rd party on behalf of ictQATAR.
<p><u>Fixed market draft recommendations</u></p> <p>5.2.1 Are there other issues affecting the fixed sector that will be important for ictQATAR to look at apart from those already raised? Please explain?</p>	<p>VQ respectfully submits that the draft recommendations for the fixed market make no meaningful reference to the issues preventing the establishment of fixed line competition – (see response to 5.2.5).</p> <p><u>Ability to roll out infrastructure and competitive neutrality</u></p> <p>As noted above VQ has been blocked from installing any fixed line infrastructure since it obtained its Public Fixed Networks and Services License on 29 April 2010. Following many months of negotiation and the establishment of a process between ictQATAR and MMUP VQ received the appropriate road opening permissions for its key route on 20 March 2011. The issue was raised with ictQATAR and the MMUP around the time of VQ being awarded its Fixed License and has only been resolved by ictQATAR in March 2011. VQ notes that Qtel claims to have deployed 510 km of fibre over a similar period including 200 km in the previous month (http://www.qtel.qa/NewsFull.do?News=29941).</p> <p>It is unclear how ictQATAR might have expected competition to develop under such circumstances. However, we note an increased desire for ictQATAR to demonstrate leadership in this regard.</p> <p><u>Regulatory Capacity, Enforcement and Compliance</u></p> <p>The analysis makes no meaningful reference to the role of the RA in supporting fixed competition through exercising its powers to ensure access to key infrastructure. Furthermore it does not appear to consider the ‘ladder of investment’ approach to the development of fixed line competition. VQ accepts that, alongside the operators, the RA is in a period of transition. However, assessments of both ictQATAR’s capacity and Qtel’s willingness have been factored into VQ’s approach to providing services and whether to take the established approach in more competitive markets of utilising a range of wholesale inputs purchased from Qtel from wholesale line rental through to Local Loop Unbundling to provide services.</p> <p><u>Qatar National Broadband Network</u></p> <p>ictQATAR’s QNBN initiative has had a significant impact on VQ’s business plans for fixed line services. VQ is strongly supportive of the initiative and has invested considerable resource in supporting the initiative. VQ is now working closely with the QNBN Company to align our business plans to support and make best use of the QNBN. It is notable that during the</p>

	<p>planning phase of the QNBN VQ faced considerable uncertainty on the most effective means of investing in fixed line infrastructure as it did not make sense to plan investments which would duplicate QNBN infrastructure damaging the business case for both VQ and QNBN. VQ communicated this to ictQATAR, and this was acknowledged by ictQATAR, in the process which resulted in the granting of the 2nd public fixed telecommunications network and services license</p> <p>As discussed, there are a significant number of positive developments in the areas outlined above including a more proactive approach from the RA, the potential unblocking of Road Opening permissions and the establishment of QNBN which have the potential to allow meaningful fixed line competition to flourish in the coming years. However, there remain significant challenges with regard to the appropriate licensing and access conditions and the behaviour of Qtel. To resolve these issues the Regulatory Authority needs to be adequately resourced and strongly supported by the Board of ictQATAR to make transparent, appropriate and evidence based decisions in line with the Applicable Regulatory Framework.</p>
<p>5.2.2 Of the legal requirements in place, which ones are working well? Which need to be reviewed?</p>	<p>VQ considers that appropriate legal and regulatory framework is set out in the telecommunications law. At this stage, ictQATAR should focus on the implementation (eg consumer protection code, spectrum policy) and maturing of the framework (the DSP orders enforcement, specifically tariffs)"VQ understands that Qtel's fixed line packages are below cost and therefore a breach of Qtel's Dominant Service Provider Requirements. Qtel must be brought into compliance with its requirements on this issue as this will damage VQ's ability to compete in this market.</p>
<p>5.2.3 What is the role of QNBN in developing infrastructure in the telecom sector? What role should existing players play in QNBN?</p>	<p>The role of QNBN is to provide equivalent access to licensed operators to FTTH access, co-location, ducts and metro-connectivity for fixed and mobile transmission.</p> <p>VQ is committed as a key customer of the QNBN, as a potential partner to assist fibre deployment and, in time, as a potential investor in QNBN. Given that the QNBN is a significant part of the government's vision for Qatar and ictQATAR's strategy VQ has been disappointed by Qtel's actions with regard to its own fibre rollout which threatens the development of competition and will impose a significant additional cost burden on the Government to ensure the viability of QNBN. VQ considers the QNBN is best served by having both operators as fully committed customers of the QNBN and as potential investors in the QNBN company.</p>
<p>5.2.4 What impacts will the QNBN have on future competition in the sector? What should be done to ensure industry structure continues to support</p>	<p>VQ is of the view that if executed successfully the QNBN will have a significant positive impact on competition by allowing licensed operators to compete on a level playing field. ictQATAR's role remains as supporting the development of the QNBN and ensuring the viability of the model is not damaged by the behaviour of Qtel, through its powers under the applicable regulatory framework, notably DSP access regulation</p>

<p>competition?</p> <p>5.2.5 Which of the options listed by ictQATAR would be more appropriate to develop competition in the fixed market in Qatar?</p>	<p>ictQATAR’s consideration of the three options outlined is premature given the time VQ has held a Public Fixed Telecommunications Networks and Services License and, in particular, the issues outlined in response to 5.2.1 above. ictQATAR is investing in a significant market intervention in the form of the QNBN and must remain committed to ensure and allow it time to work. VQ is not aware of any public broadband initiative in the world that has moved from design to the establishment of the company in as short a period as the QNBN. ictQATAR does not need to ‘speed up’ deployment of QNBN <i>per se</i>, VQ recommends it focuses on ensuring it has the regulatory capacity to manage any issues that arise through the implementation phase. This includes establishing appropriate reference offers for access to QNBN services. ictQATAR should be cognisant of the time taken in markets for the establishment of National Broadband Networks and for establishing regulated access – for example the Australian NBN has been in development since 2007 and New Zealand’s Ultrafast Broadband Initiative has been in development since 2008.</p> <p>We comment briefly on the options outlined below:</p> <p><u>Bring a new fixed license operator to the market</u> – VQ submits that, not only is it premature to make this assessment given the time Vodafone has a license and the issues faced in deploying fixed line services in Qatar VQ sees no benefit to consumers in introducing a further operator. Indeed, introducing another operator will slow the development in competition in Qatar as the process for issuing a license would unnecessarily stretch the same resources within the RA required to ensure the QNBN and associated regulatory framework work effectively. Furthermore, a further operator would greater confusion with municipalities and planning agencies creating more difficulty in accessing planning permissions for current operators – including the QNBN. Finally, a further operator would not bring any additional expertise in to the market. Vodafone is currently Europe’s largest alternative fixed line operator and the fifth largest fixed line operator in Europe. Accordingly it brings significant expertise and experience to the fixed line market in Qatar.</p> <p><u>Enforce current license commitments to Vodafone Qatar</u> –VQ submits that the logic behind this option is unclear. As ictQATAR knows Vodafone Qatar has a license with requirements which it is currently meeting. Furthermore, in recognition that the QNBN could significantly alter the fixed line environment VQ has an option to re-align any rollout requirements to ensure alignment with the QNBN process. The objective of the QNBN is to reduce unnecessary duplication of infrastructure so it would not make sense if a license requirement means there was duplication of roll-out.</p> <p>Furthermore, the option seems to ignore the fact that if planning regulation or inadequate regulatory access to key wholesale inputs are not supported by ictQATAR ‘enforcing requirements’ would have no practical effect.</p> <p>Vodafone Qatar is concerned that the option implies that either Vodafone Qatar is in breach of its license commitments or</p>
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	<p>does not intend to honour its license commitments. Vodafone Qatar’s significant investment in personnel, IT systems, an International Landing Station, in addition to its attempts to deploy fibre demonstrates our strong commitment to the fixed line market in Qatar. VQ has met its license requirements to date</p> <p><u>Introduce a new technology-neutral wireless local loop operator in Qatar</u> – VQ is concerned that such an option has been proposed in opposition to the key assumptions and drivers behind one of ictQATAR’s key policies – the establishment of the QNBN. The QNBN project has very high projections for FTTH uptake and achieving these projections is not only a key policy goals for ictQATAR but critical for the viability of the QNBN Company’s business case. To introduce a further competitor to bypass the QNBN’s access network with a potentially lower cost alternative would work against the policy objective of reaping the benefits of ubiquitous access to high-speed broadband services. Furthermore, Qatar has an extremely high rate of urbanisation, if the operator was confined only to rural areas there would be no achievable business case. In addition, given the requirement for both mobile operators to have 100 percent geographic coverage both could provide a fixed line substitute via mobile access network if there was consumer demand to do so.</p>
<p>5.2.6 Are there any other options that ictQATAR should consider?</p>	<p>VQ submits that ictQATAR has a role in managing the expectations of the public with regard to the time required for fixed line competition to develop. Qatar is moving quickly in this regard and there are promising signs that the conditions for sustainable fixed line competition are developing. However, building infrastructure takes time, even in countries where planning and associated processes are simple.</p> <p>VQ recommends that ictQATAR develop a communications campaign to explain the QNBN decision, the benefits, and its progress to key stakeholders and the public. This will help manage expectations. QNBN is a truly ambitious project, which if implemented successfully will put Qatar as one of, if not the, best communications infrastructure and services in the world. We would welcome the opportunity to participate in the development of such a communications campaign</p>
<p>5.2.7 What role could new WLL technologies in Qatar potentially play in helping to further develop the broadband market?</p>	<p>VQ submits that Mobile operators could provide fixed services via their radio access networks if there was demand to do so. However, given high mobile penetration, accessible mobile broadband products and high rates of urbanisation it is not clear there would be strong demand for such services.</p>
<p>5.2.8 Should CS/CPS be introduced in Qatar? What could be the potential consequences of their introduction for the fixed voice market?</p>	<p>Introducing any further licensees to offer such services would be destructive to value in the market. VQ reserves its right to request such a service from Qtel under Annex F of the operators’ licenses should it considerate necessary or desirable.</p>