



His Highness  
**Sheikh Tamim Bin Hamad Al Thani**  
Emir of the State of Qatar



His Highness  
**Sheikh Hamad Bin Khalifa Al Thani**  
Father Emir

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# MESSAGE FROM HE THE MINISTER OF TRANSPORT AND COMMUNICATIONS



**H.E. JASSIM SAIF AHMED AL SULAITI**  
MINISTER OF TRANSPORT AND COMMUNICATIONS

## Regulating the Future of our Smart, Safe Cities

Excellence, innovation and a set of remarkable achievements mark 2019 as a milestone for the Communications Regulatory Authority (CRA) and its unwavering commitment to provide advanced, innovative and reliable ICT and postal services across Qatar. A flexible regime of laws and regulations far exceeds international standards for consistency and transparency and furthers the goal of the QNV2030 of a connected digital economy for the State of Qatar. It is a legislative regime that is adeptly accommodating technological advancements – from 5G to the Internet of Things (IoT).

The Global Competitiveness Report 2019 issued by the World Economic Forum puts Qatar in 8th position globally on the ICT Adoption Pillar. This serves as global recognition of the strides we are making to create an integrated digital society. These achievements are keeping Qatar ahead of the digital boom the world is witnessing and enhancing the Qatari people's ability to participate in the building of a knowledge-based economy.

Exceptionally high ICT penetration rates distinguish Qatar's digital landscape, and I am proud that we are now among the nations promoting the use of technology in the implementation of many of our economic, social and environmental development programs aimed at improving quality of life and creating a sustainable society.

Against this background, the telecom sector in Qatar remains in excellent health, with solid usage, a substantial increase in broadband speed, stable revenues and growing investments. There have been great strides in the country's 5G deployment. We are supporting our service providers in the transition to 5G and transforming our communities and the country's key economic sectors and cities with IoT.

Yet, the evolution of the smart city concept and technologies has inevitably been accompanied by a growth in the size and shape of the challenges the implementation of this concept faces, notably security challenges and cyber threats. Within the current legal framework, we are working towards coordinating and improving the implementation of data protection and cybersecurity legislation.

With the support of strategic partners, we will continue to expand CRA's reach to build consumer awareness of CRA regulatory measures so that they can effectively safeguard their rights and understand their responsibilities.

The newly launched Telecom Complaints Management System is in line with broader efforts to realize the integrated and connected government strategy, consistent with the Qatar Digital Government 2020 strategy. Sadeem Platform will support CRA by accelerating the process of its digital transformation, accelerating access to users and increasing the efficiency of the provided services.

Fostering a dynamic service delivery environment to facilitate the efforts of service providers to introduce new technologies to Qatar is at the heart of our program of works. Looking ahead to next year, the 'CRA Strategy 2020-2024' has been developed to further support Qatar's national development objectives, building on related policy and strategy initiatives.

A Qatar Smart City Framework is under development, which will provide guidance and direction for the development of smart sustainable cities in Qatar, serving the National Vision 2030 and the National Strategy 2018-2022 to transform Qatar to an advanced sustainable country.

I would like to commend the CRA management team and all its employees for their hard work and dedication in balancing the authority's strategic and operational aspects so effectively. Thank you to all the stakeholders, local, regional and international, for their continued collaboration that will ultimately strengthen the global economy. We look forward to a very busy year ahead in 2020, which will bring a new set of opportunities and challenges from a regulatory perspective. I am confident that the CRA will continue to steer the sector in the right direction and nurture the needed investment, innovations, and new business models in the telecom market.

# MESSAGE FROM HE THE CRA PRESIDENT



**H.E. MOHAMMED ALI AL-MANNA'I**  
THE CRA PRESIDENT

## Advancing the Evolution of Qatar's Telecom Services

There are few sectors more dynamic than information and telecommunications technology and this makes for an exciting and challenging environment for all involved. Through a forward looking, transparent and consistent regulatory framework, we are working to enable the development of a digital society and the postal sector for the social and economic benefit of Qatar.

It therefore gives me great honor to present this annual report and proudly look back on another successful year and all we have achieved.

As a regulatory body, we continue to balance the strategic and operational aspects of our functions diligently. We are exceeding our Qatarization target rate and I am confident that we will continue building on this foundation. To promote sound and proper operational management and ensure continuous delivery of service quality regardless of challenges, we are implementing rigorous in-house training for our team encompassing all aspects of the regulatory landscape including new technologies.

Understanding the need to further align our strategy with market developments with a focus on emerging technologies, the past year

saw us perform a rigorous and comprehensive sector review. In September, after a thorough consultative process, we shared 'The CRA Strategy 2020-2024' with stakeholders for consultation. We have also presented the Strategy to the Council of Ministers for approval, which is anticipated in 2020, after which we will begin implementing this vision.

The CRA Strategy targets the full CRA legal mandate, and recognizes the importance of IT, telecommunications, access to digital media (ADM) and post for the delivery of the national development vision and strategy. Based on the findings of our detailed sector review, we have developed the strategy to address all relevant components across three horizontals: global technology trends, legal/regulatory and CRA capacity, with the overall objective of supporting a growing and dynamic sector – one that contributes to Qatar's national agenda.

We recognize that the successful implementation of the strategy will depend not only on CRA but on working together with stakeholders and service providers.

Countries around the world, and their respective postal sector stakeholders, have faced the need to adapt their postal industries to meet the

evolving needs of national and international economies, as well as consumers. Qatar faces these same challenges, and in keeping with these needs, we developed a postal regulation strategy in 2019 ahead of the new postal law. With that, we are working towards a reliable and sustainable end-to-end postal delivery system as an integral component of a modern, efficient and dynamic economy, and a key component of the national vision.

This past year, we introduced a new Complaints Management System to support our efforts to protect consumers and ensure the provision of smart, innovative and high-quality services. The Dispute Regulations will in turn support CRA's efforts to achieve this goal, as it will encourage competition, and prevent and reduce anti-competitive practices. The approach is also in line with the Qatar National Vision goals for the efficient delivery of public services and transparent and accountable government.

We also developed and put in place a new Compliance Framework, one that is comprehensive, efficient and effective, and strongly reflects the importance we place on a transparent and fair compliance process that can easily be navigated by users.

As a regulator, we will continue to be guided by previous successes in meeting the needs of service providers to offer better and more innovative services that meet their performance obligations. Balancing those with effective consumer protective efforts will enable Qatar's telecom sector to contribute in more innovative ways to strengthen the digital economy.

I extend my sincere appreciation to the Minister, all the CRA Departments and staff, the service providers, and stakeholders for their tenacity and commitment to excellence in their work. On behalf of CRA, I thank you for your continued support and trust we will continue our important work in the spirit of cooperation and mutual trust to ensure a telecom sector that drives the economic and social development of Qatar.

# VISION



Qatar - a smart connected nation,  
enabled through effective and  
innovative ICT and postal regulation.

# MISSION

To enable the development of a digital society and the postal sector for the social and economic benefit of Qatar, through a forward looking, transparent and consistent regulatory framework.



To foster sustainable competition to promote a fair marketplace and improve customer experience through the ubiquitous availability of smart, innovative and high-quality services.



To continue building our institutional capabilities through investing in and developing our staff,

# INTRODUCTION

As we reflect upon our performance in 2019 and a significant list of achievements during the year under review, a major accomplishment has been finalizing our forward looking, action oriented CRA Strategy 2020-2024. This followed an extensive sector review and wide consultation with stakeholders – government, academia and the business sector.

Our new five-year strategy focuses on the full CRA legal mandate, including information technology, telecommunications, ADM and the postal sector, and fully takes account of current and future developments and global trends in technology and existing market structure.

Major initiatives that we will be undertaking as a regulator to support and contribute to Qatar's national development objectives are outlined in the strategy. As expected, the strategy also accounts for the anticipated needs of the country in its preparation for hosting the FIFA World Cup™ in 2022.

Staying ahead of leading developments and innovations on a global level to maintain as wide as possible a view of the market prospects goes hand in hand with our efforts to stimulate remarkable technological innovation within the industry. In 2019, we continued to make firm headway with refining our legislative framework in line with our determination to ensure a dynamic and cohesive regulatory framework for Qatar's telecom sector as a strong foundation for ensuring growth, competitive prices, better

quality of service, and even higher penetration of new technologies.

Supporting service providers to access the resources they need to deliver these services, which include passive civil infrastructures, the Qatar Domain Registry and spectrum, is always vital.

Active participation at international and regional forums and conferences has once again been a large part of our activities in 2019. Showing our leadership in this way is not only a valuable platform to strengthen ties with our counterparts and industry stakeholders globally but active participation in industry bodies gives us access to best practices on emerging trends and emerging issues for telecom regulators and the sector.

Our successful public outreach event this year included celebrating World Consumer Rights day under the theme "Better Digital World". In October, we launched a "Digital Inclusion" campaign with Qatar Charity as part of the Digital Inclusion Week for the Arab Region organized by the ITU and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The campaign aimed at receiving donations of either used or new electronic devices to redistribute it to students, orphans, workers and widows, to improve their technical knowledge and capabilities. It will also support Qatar's efforts to attain the UN Sustainable Development Goals.

As our service providers have been rolling out 5G services across the country, and Qatar Innovation Week held in November (with the inaugural World 5G Show), was an occasion for CRA to highlight just how 5G will change lives and bring a new level of performance and new characteristics to the telecom networks. 5G is very critical to the growth of IoT which in turn is an important driver for both the IT and telecommunications industries. From a regulatory perspective, we are cognizant that this requires us to address significant policy and regulatory implications in areas such as cybersecurity, licensing, data protection, numbering, spectrum, competition and access.

Our growing leadership role in the telecoms sector, regionally and globally, is reflected in our full events program this past year. We regularly attended leading world events to network, share knowledge and best practices, explore common challenges and partnership solutions, and understand the latest industry innovations.

We were in London for Communications Policy and Regulation Week 2019, an opportunity to be part of a forum addressing 'big picture' themes that affect the communications community including digital transformation strategies and the changing nature of regulation in the online

world. We explored several potential international policy collaborations, and we hope to see positive outcomes in future.

Throughout the year, we coordinated with other regulators through our network and membership of the International Telecommunications Union, Universal Postal Union, and ICANN - The Internet Corporation for Assigned Names and Numbers, to discuss issues such as shared global use of the radio spectrum, coordination of worldwide technical standards, and the future direction of the postal sector.

We also took part at Qatar IT Conference and Exhibition 2019 (QITCOM 2019), from 29 October to 1 November, under the theme "Safe and Smart Cities". Visitors to our booth had a chance to know more about CRA through interactive tech activities and were able to register Qatari Internet domain names and communicate directly with our consumer protection team.

The 'Looking to 2020' section of this report outlines our forthcoming initiatives, including the development of the Qatar Smart City Framework, Qatar Spectrum Outlook 2022, and the Consumer Protection Regulation.





# 2019 HIGHLIGHTS

RAISING AWARENESS AND FOSTERING THE SPIRIT OF COOPERATION AMONG STAKEHOLDERS - IN QATAR AND GLOBALLY

Greater visibility and awareness of the CRA's functions and mandate amongst our stakeholders both locally and internationally, is crucial to our role supporting the QNV 2030.

Our active participation at international conferences, working group meetings, public events, and media activities, are further opportunities to show that CRA is delivering on our stated aims, educating the public, keeping our stakeholders informed of continuing progress and developments and positioning our organization as a thought leader.

International and regional forums and conferences are a valuable platform to strengthen ties with our counterparts and other industry stakeholders globally while active participation in industry bodies such as the International Telecommunication Union (ITU) lets us share Qatar's successes on a global stage while benefiting from sharing ideas and experiences on emerging trends and issues for telecom regulators and the sector.

## CRA Meets with US Deputy Assistant Secretary of State for Cyber and International Communications and Information Policy

A meeting with Ambassador Robert L. Strayer, Deputy Assistant Secretary of State for Cyber and International Communications and Information Policy, was a crucial opportunity for important discussions about several international matters of mutual concern, joint cooperation in the field of ICT, in addition to the development and enhancement of the bilateral relations between the State of Qatar and the United States of America.



## QUARTER 1

## World Consumer Rights Day Outreach Event

Our successful public outreach event celebrated World Consumer Rights day under the theme "Better Digital World". The event was held in Mall of Qatar from 14 to 17 March and aimed to raise awareness about telecom consumers' rights and responsibilities.

During the event, CRA surveyed 493 visitors. The results indicated that 49% of respondents were aware that they have the right to lodge a telecom complaint to CRA if their telecom service provider did not resolve their lodged complaint. Also 56% of respondents said that they have faced a fraud attempt via telephone calls, SMS messages or social media and have been asked to disclose personal information related to their telecom or bank accounts. However, 78% confirmed that they had the appropriate awareness not to disclose the details.

It confirmed an increase in visitors' awareness about the importance of knowing their rights and responsibilities as telecom consumers and highlights the strides being made by CRA to ensure a balance between the rights of consumers and the needs of service providers. Consumers' awareness of their rights and responsibilities ultimately contributes to the development of the sector, by encouraging telecom service providers to provide the best competitive services towards consumers' satisfaction.



# 2019 HIGHLIGHTS

## QUARTER 1



### CRA hosts European Telecommunications Standards Institute Delegation

We hosted a delegation from the European Telecommunications Standards Institute (ETSI) during their visit to Qatar. Our meetings aimed at enhancing the relations and cooperation between the CRA and ETSI in the field of ICT, particularly standards development and recognition.

As part of ensuring that Qatar leads in ICT at the regional level; we maintain regular communications with related international organizations, to stay up to date with the latest developments in the ICT sector and with international standards in particular. This in turn contributes to Qatar's early standards adoption and to the development of the sector, taking into consideration international best practices, assuring the provision of smart, innovative, and high-quality services to the consumers in Qatar.



### Deputy Secretary-General of the ITU Hosted at CRA

The visit by His Excellency Malcolm Johnson, the Deputy Secretary-General of the ITU, at CRA's headquarters, created a forum to discuss ways of developing Qatar's contribution to the ITU.

As part of the visit, the Deputy Secretary-General of the ITU met with the telecommunications SPs to examine the latest technologies, developments and achievements in the ICT sector. He also met with academic entities and discussed the importance and role of education in the development of the ICT sector. The visit was in line with CRA's aim to

communicate and cooperate with related Arab and international organizations and to present the latest developments in the ICT sector in Qatar.

### CRA Participates at ICANN Governmental Advisory Committee Meeting

We participated at ICANN64 in Kobe, Japan from 9-14 March to discuss a variety of issues related to Internet governance, including potential geographical top-level domains, data protection regulations and public safety.

Our participation in international meetings such as ICANN64 ensures we are up to date with the latest developments in the field of Internet security and top-level Internet domain, and to adopt the best practices in this field. That contributes to the growth of the Internet and ensures that consumers in Qatar have the best services in the ICT field.

# 2019 HIGHLIGHTS

## QUARTER 2



### CRA Delegation Participates at WSIS Forum in Geneva

This year, the World Summit on the Information Society (WSIS) Forum celebrated the 10th anniversary of its establishment, and the event this year represented the world's largest annual gathering of the 'ICT for development' community and the CRA was also present.

Held in Geneva, Switzerland from 8-12 April 2019, the CRA attended the forum under the theme "Information and Communication Technologies for achieving the Sustainable Development Goals". The core aim of the forum was to align the UN Sustainable Development Goals (SDGs) that covers a wide range of social and economic development issues worldwide with WSIS Action Lines, to accelerate the achievement of the SDGs.

### First Session of the Council of Administration of the UPU held in Berne, Switzerland

A delegation attended the first session of the Council of Administration (CA) of the UPU, held at UPU headquarters in Berne, Switzerland from 8-12 April.

The five-day session discussed different postal subjects related to the work of UPU and included a conference on postal regulation covering topics like competition and policy options. The CA discussed various postal topics such as regulatory, administrative, financial, legal, economic and commercial issues.

### Boosting Regional Cooperation – Hosting a Delegation from the GSMA

We hosted a delegation from the GSM Association (GSMA) on an official visit to Qatar, where we discussed several matters of mutual interest and ways to activate cooperation in different fields and issues related to the mobile industry.

The head of MENA at the GSMA and the accompanying team presented a brief overview of GSMA's industry programs such as Future Networks, Identity and the Internet of Things as well as the advocacy initiatives.

For our part, we presented an overview on some of the regulatory instruments that are going to be developed in accordance with the new government legislation as well as some of strategic plans related to spectrum and telecommunications infrastructure, which are in line with Qatar National Vision 2030 as well as a number of our future projects for FIFA World Cup 2022.

We anticipate future cooperation with GSMA, especially in the area of institutional capacity building for knowledge acquisition.



# 2019 HIGHLIGHTS

## QUARTER 2

### ICANN65

We participated at ICANN65, its fourth Policy Forum, and third Public Meeting in Marrakech, Morocco from 24-27 June.

ICANN65 served as a platform for cross-community dialogue on issues and topics such as Universal Acceptance, Policy Aspects of DNS over HTTPS and DNS of TLS, and the evolution of the ICANN multi-stakeholder model.

### Joint Conference Between International Institute of Communications – European Regulator for Electronic Communications (BEREC)

Under the theme “Competing Continents: The Pursuit of Excellence in Electronic Communications”, we participated in a joint conference between BEREC and the International Institute of Communications from 25-26 June in Riga, Latvia. The forum focused on the strong momentum for 5G and its opportunities, among other topics, and we were able to share Qatar’s achievements as leaders in this area.



## QUARTER 3



### Qatar Represented by CRA at ITU Telecom World 2019 in Budapest

A CRA delegation represented Qatar at the ITU Telecom World 2019 from 9-12 September in Budapest, Hungary.

On the sidelines of the ITU Telecom World 2019, we also met with Houlin Zhao, ITU Secretary-General, and discussed ways to enhance collaboration and coordination between CRA and ITU towards the development of the ICT sector.

5G and its opportunities, among other topics, and we were able to share Qatar’s achievements as leaders in this area.

### CRA Contributes at UPU Third Extraordinary Congress

A high-level delegation from the CRA and Q-Post at the UPU Third Extraordinary



Congress, from 24-26 September 2019 at the International Conference Centre Geneva (CICG), Switzerland.

The congress was held to review and decide on proposed changes related to UPU’s remuneration rate system of E format letter-post items (bulky letters and small packets). The congress was successful and a new methodology for setting up the termination dues was agreed unanimously by all UPU members that attended the congress.

Participation in the discussions and decision making at bodies such as the UPU congresses and key meetings of its Council of Administration is our way of contributing to shaping the future of the global postal sector, and in turn impacting the development of Qatar’s postal sector and the other sectors associated with these services.

# 2019 HIGHLIGHTS

## QUARTER 4

### **CRA Part of Communications Policy and Regulation Week 2019 in London**

Communications Policy and Regulation Week 2019 was an opportunity to be part of a forum addressing 'big picture' themes that affect the communications community including digital transformation strategies for developed and developing countries and the changing nature of regulation in the online world. There were several opportunities to explore potential international policy collaborations that we regard as vital to strengthening our role as regulator.

### **CRA Participates in Discussions at Broadband World Forum, Amsterdam**

We took part in the forum in Amsterdam, the Netherlands from 15-17 October. It provided a clear view of the innovative and cutting-edge technologies that will be driving the future of broadband, how they are evolving, and strategies for not only creating effective solutions that improve network speeds, capacity and reliability but how they can be monetized.

### **CRA Leads Digital Inclusion Campaign**

From October 1-5, we conducted a charity campaign launched in cooperation with Qatar Charity under the title "Digital Inclusion". The campaign aimed at receiving donations of either used or new electronic devices to redistribute it to students, orphans, workers and widows, to improve their technical knowledge and capabilities. The in-kind donations of electronic devices such as

computers, laptops, smartphones and tablets were collected at the booth in Mall of Qatar.

The CRA launched this campaign as part of the Digital Inclusion Week for the Arab Region organized by the ITU and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The Digital Inclusion Week aims at highlighting and raising awareness about mechanisms to integrate marginalized sectors of Arab societies using ICTs, especially persons with disabilities, women, youth, children, rural and remote populations, as well as migrants.



### **CRA Participates at QITCOM 2019**

We participated in Qatar IT Conference and Exhibition 2019 (QITCOM 2019), organized by the MoTC, from 29 October to 1 November under the theme "Safe and Smart Cities". Visitors to our booth at QITCOM had a chance to know more about CRA through interactive tech activities such as a hologram, interactive wall and touch screens, and learned about radio equipment licensing services, our telecom complaint process and our role in regulating the ICT sector. In addition, they were able to register Qatari Internet domain names and communicate directly with our consumer protection team.

### **Sharing Knowledge on Next Generation Technologies**

We hosted the first "IoT-5G\_IPv6" Forum in the region from 29 October to 1 November. International and local speakers raised awareness and shared their knowledge and expertise on next generation technologies.

### **CRA Supports Knowledge Transfer and Capacity Building**

Supporting knowledge transfer, we established the Academia 360 Forum that involves Qatar academic institutions conducting research and studies on new emerging technologies within the ICT sector. It is also intended to facilitate capacity-building program for students in Qatar to be able to conduct and publish reports and research on topics related to the development of the ICT sector.



# 2019 HIGHLIGHTS

## QUARTER 4

### ICANN66 in Canada - a Vital Public Forum

ICANN66 took place from 2-7 November in Montreal, Canada as a public forum, and we had the opportunity to meet with ICANN supporting organizations and advisory committees, as well as the broader ICANN community, for face-to-face discussions on various issues pertaining to ICANN's activity and the management of the domain name system (DNS).

### Internet Governance Forum (IGF) Opens Multi-Stakeholder Dialogue

The 14th meeting of the IGF was hosted by the Government of Germany in Berlin from 25-29 November under the overarching theme "One World. One Net. One Vision". We valued the chance to be part of this vital multi-stakeholder public policy dialogue where discussions help shape how we regulate and use the internet.

### CRA Speaks at World 5G Show Qatar

We participated among the speakers at the tech talks and panel discussions at Qatar Innovation Week from 25-27 November, which also inaugurated the World 5G Show. Our impactful keynote which reflected on how 5G technology is expected to change lives.

### Workshop with ICANN Builds Capacity and Raises Awareness

In collaboration with ICANN, we conducted a one-day workshop on Handling Internet Identifiers Abuse and Misuse, and another three-day workshop on Domain Name System

Security Extensions (DNSSEC) from 11-14 November. Representatives from government entities, the oil and gas sector, academia and private sector, financial sector, telecom service providers and law enforcement agencies participated in this opportunity for building capacity and raising awareness among technical professionals about the DNS operation and security.

We also conducted an academic engagement session in collaboration with ICANN on 14 November, which was attended by the students and academics of College of the North Atlantic, Qatar. The workshop was conducted as part of the Memorandum of Understanding signed between Qatar and ICANN in 2014. As part of the objectives, we maintain contact with ICANN to stay up to date with the latest developments in Internet



domain names and arrange for workshops and training courses for professionals in Qatar to equip them with the necessary skills and expertise that will contribute to the achievement of our main objectives in this field.

### World Radiocommunication Conference 2019

We took part in the World Radiocommunication Conference 2019 (WRC-19), held in Sharm El-Sheikh, Egypt from October 28 - November 22, one of the most important conferences on the ITU calendar.

Our contributions to the conference included submissions as part of the Arab Regional Group, in addition to separate submissions related to certain vital services of interest to Qatar. These included identification of frequency bands for the future development of international mobile telecommunications (5G technology), including the possibility of allocating additional frequencies to the mobile

service on a primary basis, high-altitude platform stations (HAPS), and issues related to Wireless Access Systems (WAS) including Radio Local Area Networks (RLANs).

CRA input was welcomed by the European and American administrations, especially as the contributions were in line with the global trends of frequency allocation that support a number of modern technologies and applications and contribute to the digital transformation and achieving one of the SDGs; industry, innovation and infrastructure.

# CRA AND THE ICT SECTOR AT A GLANCE



## Registered Domains

up by 18%

# 3,782

domains registered in 2019

# TOP 3

domain extensions: .qa; .com.qa; .sch.qa

## Complaints Resolution



# 1,062

complaints received

over

# 93%

of all complaints resolved

## Postpaid Billing Issues

Top subject of complaints for mobile services

## Billing and Service Disconnection Issues

Top subject of complaints for fixed-line services



## Spectrum Management



Successfully concluded satellite coordination agreements with Administrations of Oman and Malaysia



Major Events supported by assigning the frequencies to meet radiocommunication requirements: National Day Celebrations; Asian Athletics Championship; MotoGP 2019 (Losail Circuit); 2019 Commercial Bank Qatar Masters Golf Tournament; IAAF World Athletic Championships; FIFA Club World Cup 2019 and the World Super Bike Championship



To ensure interference free provision of wireless and broadcast services, we provided on-site spectrum monitoring support during all the events



## Import Authorizations

up by 12%

# 407

import authorization approvals issued

# 22,317

customs clearance applications processed

up by 180%

# 546

shops

CRA conducted routine inspections on 546 shops selling radio and telecommunication equipment

# 257

and issued 257 violation notices

# TECHNICAL AFFAIRS DEPARTMENT ANNUAL FIGURES FOR 2019



## Numbering

Total of mobile numbers allocated in 2019

100,000

273,000

Total of fixed numbers allocated in 2019

Total of mobile numbers allocated so far

8,300,000

1,723,000

Total of fixed numbers allocated so far

Total of mobile numbers ported under  
mobile number portability in 2019

23,338

3,703

Total of mobile numbers returned under  
mobile number portability in 2019



## Qatari Domains

Total number of registered domains in 2019

3,782

18%

Percentage increase in domain  
registration compared to 2018

Percentage of top 3 domain  
extensions registered  
compared to all registered  
domains.

25%  
.qa

17%  
.com.qa

10%  
.sch.qa

### Tickets Handled by Call Center

Total No.

24

Answered

24

### Tickets Handled by Support Team

Total No.

310

Resolved

310



# TECHNICAL AFFAIRS DEPARTMENT ANNUAL FIGURES FOR 2019



## Infrastructure

Number of issued approvals for the requests of construction of new mobile sites in 2019

# 304

Approved Sites Applications

Increased by

# 138.8%

compared to 2018

Percentage of increase in requests for approvals for the construction of new mobile sites in 2019 compared to 2018

# 2,674

no objection requests

Total number of no objection requests that CRA has handled on Q-PRO system

Total

# 726

Applications Handled

Total number of applications that CRA has handled on Qatar Online Design Review System (Q-DRS)

# CONSUMER AFFAIRS DEPARTMENT ANNUAL FIGURES FOR 2019

Total number of complaints received

# 1,062

# 364

Number of invalid complaints received

Percentage allocation for Mobile and Fixed Line valid Complaints

Mobile Service Complaints:

# 71%

Fixed Line Service Complaints:

# 29%

over

# 93%

of the cases have been resolved.

# (93.7%)

Percentage of resolved complaints

Top subject of complaints for mobile services

# Postpaid Billing Issues

# Billing and Service Disconnection Issues

Top subject of complaints for fixed-line services

# SPECTRUM MANAGEMENT DEPARTMENT ANNUAL FIGURES FOR 2019

## Spectrum Assignment and Licensing

**927** applications processed for station and network based radio frequency licenses (including new issuances, renewals and cancellations)

**1,320** Frequencies assigned in different radiocommunication systems

**89** Frequencies assigned for 36 VIP visits

**7** Major Events supported by assigning the frequencies to meet radiocommunication requirements:

- National Day Celebrations
- Asian Athletics Championship
- MotoGP 2019 (Losail Circuit)
- 2019 Commercial Bank Qatar Masters Golf Tournament
- IAAF World Athletic Championships
- FIFA Club World Cup 2019
- World Super Bike Championship

## Spectrum Coordination

**25** BR IFICs were examined and **398** letters have been prepared and sent to ITU/ Notifying Administrations

**32** letters have been sent on coordination of QATARSAT satellite networks with other administrations' satellite networks

Successful satellite coordination meetings with the Administrations of Oman and Malaysia, resulted in signing satellite coordination agreements and MoUs



## Total no. of Applications Processed e-Spectrum Services Portal

New License Requests **3,931**

**109** Cancellation Requests

Modification Requests **126**

**1,438** Registration of equipment Requests

Renewal Requests **2,975**

**1,438** Registration of Equipment Request

Equipment write-off Requests **142**

**556** User Registration Requests

No. of Call sign assigned **1,628**

**74** No. of Licenses for Temporary Events

# SPECTRUM MANAGEMENT DEPARTMENT ANNUAL FIGURES FOR 2019

## Type Approval

**1132** Type Approval certificates issued for Radio and Terminal Telecom Equipment (RTTE)

## Spectrum Coordination

**407** import authorization approvals issued (up by 12%), and 22,317 customs clearance applications processed

**CRA** conducted routine inspections on 546 shops selling radio and telecommunication equipment (up by 180%) and issued 257 violation notices

## Spectrum Interference Cases

**29** Interference complaints were received in 2019, all of which have been investigated and resolved.

In addition, necessary coordination was done with the GCC Telecom Bureau to resolve spillover interference cases from neighbouring states.

## Coverage Investigation

**6** Coverage investigations conducted and reports submitted to Consumer Affairs Department with recommendations.

**2** Special QoS investigations conducted and report submitted for internal use.

## Spectrum Monitoring – Quality of Service

More than **2,000** man-hours invested in conducting and concluding annual QoS benchmarks on the mobile operators' service levels.

# REGULATORY AFFAIRS & COMPETITION DEPARTMENT ANNUAL FIGURES FOR 2019

## Regulatory Decisions and Documents

**22** President Decisions / Orders issued

**15** Regulatory documents prepared

## Regulatory Proceedings

**20** Competition Cases / Disputes

**7** Support to LU on Dispute Resolution Cases

**3** Notices of Non-compliance

**3** Cases Referred to Compliance Committee

## Tariffs

**198** Tariffs submitted by SPs and reviewed by the CRA



# QATAR'S TELECOMMUNICATIONS MARKET

## ANOTHER YEAR OF TECHNOLOGICAL ADVANCEMENT AND 5G READINESS

### 2019 Shows a very Satisfactory Service Delivery Environment:

Revenue for telecommunications services sector remains stable at about QAR 10 billion, in line with the results of the last four years.

The whole ICT sector contribution to Qatari economy amounted to 1,4% of the GDP.

Fibre coverage is extremely high, at about 99% of households.

92% of BB subscriptions are fibre connections.

86% of BB subscriptions have an advertised speed of 30 Mb/s or more.

Qatar has a mobile telephone penetration rate of 143% and mobile broadband penetration rate of 129%.

Average mobile data usage per subscriber increased 4 times from 2015 to 2019.

5G rollout was launched in 2018 and the two SPs are now delivering competing 5G services.



# OVERVIEW

Qatar's sturdy investments in digital infrastructure, together with a regulatory approach that has actively shaped favorable conditions for operators to innovate, continue to boost the digital advancement of the country.

Qatar is well-equipped to make advanced internet connectivity available: on the fixed market, there is a high-quality fibre network with about 99% fibre-to-the-premises coverage (home passed); on the mobile side, both services providers have recently launched 5G.

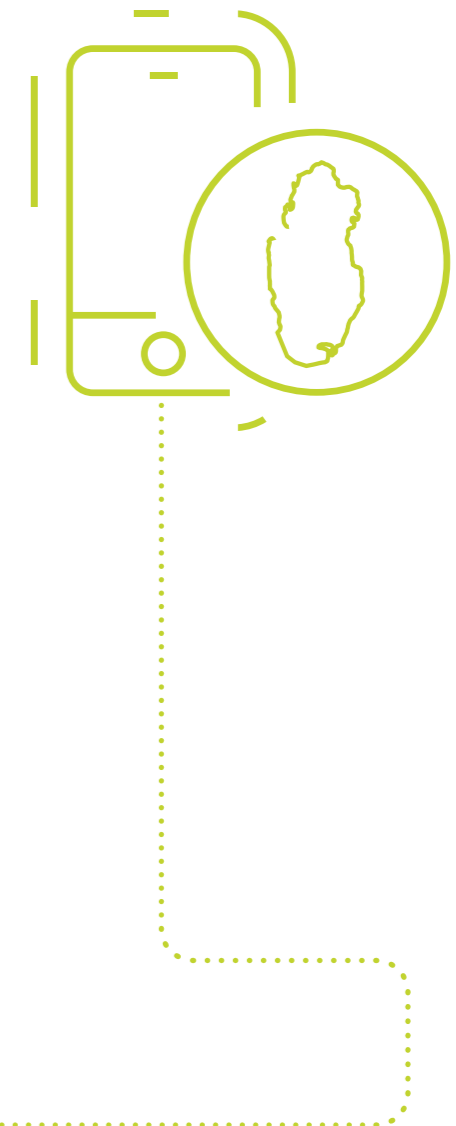
Globally, these achievements put Qatar among the top scoring countries in the MENA region in terms of infrastructure availability, consumer readiness, content and services. Qatar ranked second among Arab countries and 33rd out of 121 nations worldwide on the World Economic Forum's Network Readiness Index in 2019.

As a result, Qatar is well positioned to leverage smart technologies, with its advanced fixed and mobile networks; CRA is developing regulations to support the adoption of these innovative and smart technologies in the country, with the aim to provide universal access to ICT services across

sectors – government, business and residents.

Smart city initiatives have been at the forefront of activities for the country and its operators this year as part of Qatar's digital transformation agenda and with this, priority projects towards delivering the FIFA World Cup Qatar 2022. From our side, as a regulator, we are working to strengthen the sector to support the government's plans for the development of smart cities and the roll out of e-government services.

High-speed mobile and fibre-based internet connections continue to benefit telecom consumers. Given the mandate of the CRA to understand levels of consumer satisfaction, the availability of such high-speed services will drive higher satisfaction, in turn helping to further stimulate competition among service providers to offer even greater efficiency and innovation.



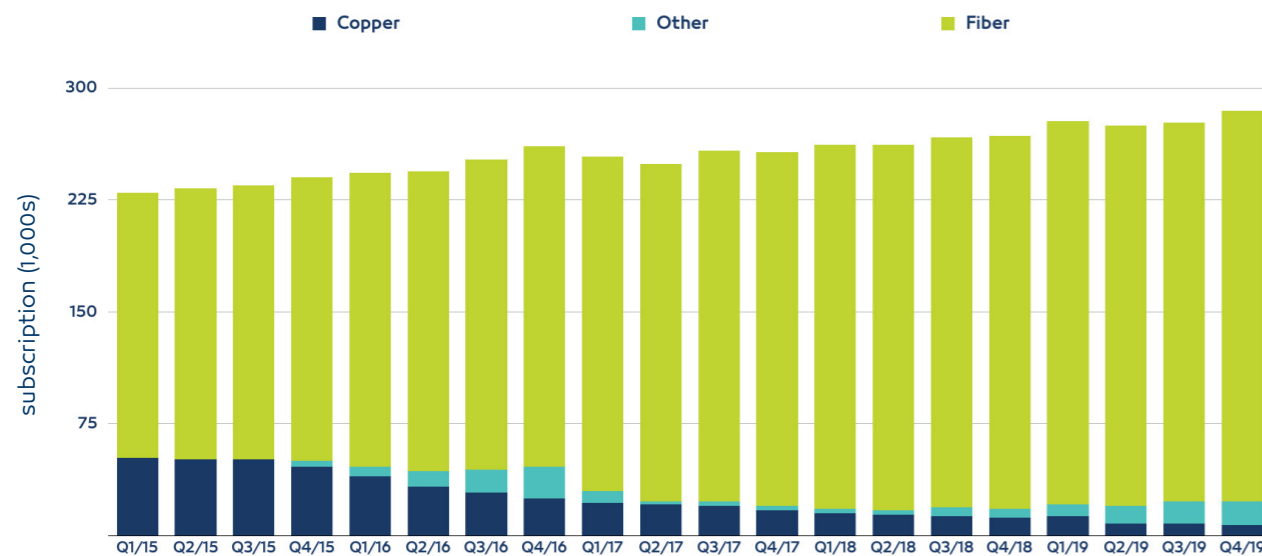
# A CLOSER LOOK AT THE MARKET IN 2019

## The Fixed Sector

Overall, fixed broadband penetration in Qatar remains unchanged from 2018, at around 99%. Ooredoo has deployed its fibre-to-the-home network, while Vodafone is offering fibre broadband services in areas like The Pearl Qatar, Lusail City, Barwa City and West Bay.

As also shown in the CRA Quarterly Report, 92% of the broadband subscription have a fibre connection.

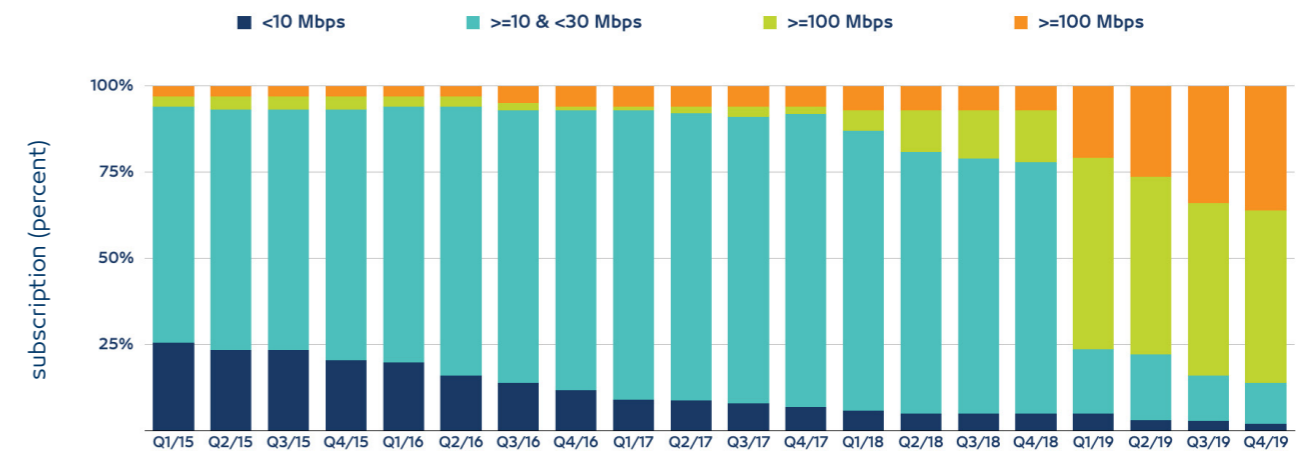
## Fixed subscription by technology (1,000s)



Moreover, 86% of all broadband connections have an advertised speed of 30 Mbit/sec or more with a fast-growing trend.

Available at <https://www.cra.gov.qa/document/telecommunications-market-qatar-no-1--2020>

## Fixed broadband subscription by speed (in percent)



CRA's successes as a regulator are showing how technology policy and sector regulation are positively driving the pace at which new technologies are adopted and implemented in the country.

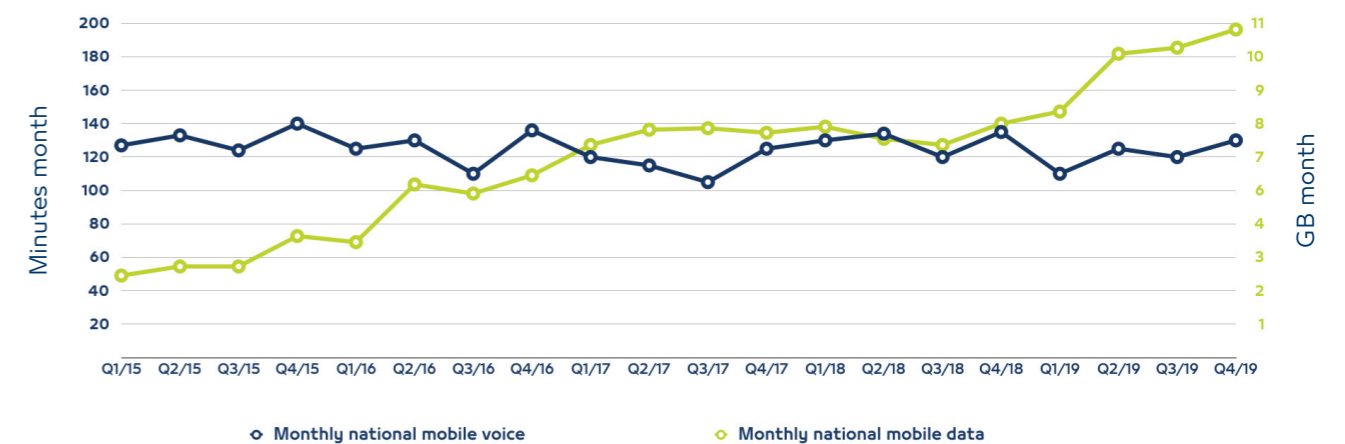
## The Mobile Sector

Responding well to our effective competition framework, the mobile market has continued a growth trajectory; mobile broadband network coverage and services are almost universal. As of the end of 2019, Qatar has a mobile telephone penetration rate of 143% and a mobile broadband penetration rate of 129%.

The overall performance of the mobile sector is excellent: in terms of data on mobile download speeds, Qatar performs exceptionally well by the highest international standards. The average download speed in Qatar was 77 Mbps in November 2019 while the upload speed was 21 Mbps, which is more than double the global average download speed.

Mobile usage shows stability in voice usage in the last five years, while data usage increased four times in the same period.

## National mobile, minutes and data, per subscriber, per month



# A CLOSER LOOK AT THE MARKET IN 2019

Impactful efforts by CRA are showing results in the form of high mobile and smartphone penetration rates in Qatar, which compare well in the region and are on par with the highest in the world. These achievements are attributable to a strong national vision for telecoms development, thorough planning on both state and municipal level, and the supportive regulatory framework we have developed, one that balances regulation, market development and investment incentives. Positive recognition for Qatar's high penetration of mobile internet is reflected in regional and international indices such as the GSMA Mobile Connectivity Index, where Qatar is ranked amongst the group of 'advanced' countries in the MENA region for mobile internet connectivity.

## Telecom Service Providers' Performance

The telecom service providers in Qatar are fully supported by the transparent and flexible regulatory framework we have put in place.

Ooredoo Qatar reported revenue of QAR 7.3 billion in 2019 and an EBITDA margin of 54%. Lower mobile voice, handset and roaming revenues were partially offset by strong performance in corporate ICT sales, following multiple new product launches. Ooredoo Qatar is now serving 3.3 million customers.

Vodafone Qatar reported stability in its financial performance during 2019. The company reported growth in Postpaid subscribers and home broadband solutions, which resulted in mobile and fixed revenue of QAR 2.1 billion, which is at par with last year, and an EBITDA margin of 33%. The profit margin of 7% in 2019 compared to 6% in 2018, is testament to the positive financial performance of the company.

## Competition in the Telecoms Market

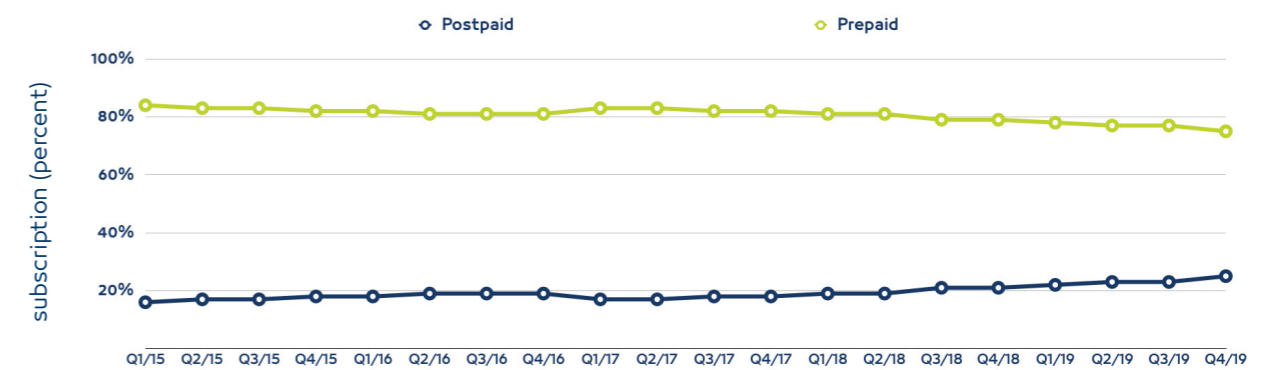
The CRA uses its full range of regulatory powers to ensure that competition in the communications sector thrives and customer rights are protected.

The space for competition in the fixed market has improved since 2018, following the introduction of wholesale duct-access offers, which has made it possible for Vodafone Qatar to build its own fibre network. Vodafone Qatar is also offering fixed solutions via its mobile network. As a consequence, both Ooredoo and Vodafone are now able to provide national coverage.

In the beginning of 2019, Ooredoo increased fixed broadband residential connection speeds up to five times, while keeping prices at the same levels and this has vastly improved the service offerings. Meanwhile, Vodafone Qatar's Fixed Wireless Access has contributed to increased market dynamics and a more competitive pricing environment.

Competition is starting to have an impact in the fixed market: during 2019 Vodafone increased its market share in terms of revenue from 5% to 10%. Competition is more intense in the mobile market, where Vodafone is presently holding a share of 28%. Growth in postpaid customers is attributed to the popularity of Vodafone Qatar's FLEX and Red plans. Vodafone Qatar is now serving 1.7 million customers.

## Active mobile prepaid and post paid subscriptions



Competitive pressure on the two service providers to develop services is expected to grow in the long term as the development of new technologies, such as IoT and artificial intelligence, continues.

We periodically review regulatory conditions to confirm they have kept pace with service providers' needs in a competitive market to ensure dynamic future growth. It will remain one of our key priorities in the coming years to enhance the network performance of both operators and monitoring service quality to provide a stimulus for enhanced performances on a regular basis. The Quality of Service (QoS) Regulatory Framework includes a set of KPIs which we benchmark through our extensive annual QoS audit of both mobile and fixed networks.

In the course of the new CRA Strategy for 2020-2024, we plan a full review of the existing regulatory framework to address price monitoring, infrastructure access, and sharing.

# A CLOSER LOOK AT THE MARKET IN 2019

## Movement in the Market With 5G Rollout

The development of Qatar's telecommunications infrastructure is on par with that of comparable high-income countries and is reflected in Qatar's high internet and mobile penetration and connection rates.

5G (fifth generation mobile telecommunications) is a reality in Qatar. Having approved initial plans for frequency bands relating to 5G mobile service in 2018, the two mobile operators - Ooredoo and Vodafone – have been launching 5G services over fixed line and mobile throughout the country. The service providers have a licensing obligation to cover 40% of all densely populated areas, primary roads and 2022 FIFA World Cup venues by 2020.

With the transition to 5G, the operators are introducing a range of new products and services that are expected to further enhance the customer experience with increased innovation in the market. Competing 5G services offer high-speed connectivity, with download speeds exceeding 1GBps, and ultra-low latency, or very short delays in data transmission

This has kept Qatar at the forefront of developing a robust 5G ecosystem where emerging areas such as IoT, big data and artificial intelligence have huge transformative potential. We are working closely with the operators and stakeholders and supporting them to roll out 5G technology, through the allocation and management of spectrum, their licensing obligations and our coverage monitoring. In October, Vodafone launched Qatar's first Narrowband-IoT (NB-IoT) network, designed to enable a wide range of IoT devices and services and low device power consumption.

Looking ahead, 5G technologies are expected to contribute \$2.2 trillion to the global economy over the next 15 years, according to GSMA Intelligence, with key sectors such as manufacturing, utilities and professional/financial services benefiting the most.

High-performing mobile networks are providing the solid foundations for the digital economy and catalysts for a diverse and innovative range of services. This is essential to help the country achieve its long-term objectives of knowledge-

based economic growth and sustainable diversification. This investment will help Qatar position itself as a regional telecommunications hub.

The opportunities offered by Qatar's recent technological achievements and innovations will certainly result in increased demand for internet capacity in the near future. This demand will come from a range of sectors including education, transport, hydrocarbons, and government services – from both individuals and government. We look forward to seeing how each sector will exploit these advances to deliver new goods and services to the market.



5G



# BRINGING OUR SERVICES CLOSER TO ALL OUR CUSTOMERS

## WHO ARE CRA'S CUSTOMERS?

Consumers (Individuals 'The Public'  
Businesses/Government entities)



Service Providers:  
Ooredoo ('Dominant Service Provider'), Vodafone Qatar  
and Qatar National Broadband Network (QNBN)

Postal Sector:  
Operators of aircraft  
registered in Qatar



Commercially registered companies in Qatar who want  
to import radio and telecom devices and equipment

Satellite licensees:  
Es'hailsat (Qatar Satellite Company) and  
SpeedCast Salam, QSat Communications,  
and RigNet for "Very Small Aperture  
Terminal (VSAT) Services"



## Enhancing Consumer and Service Provider Outcomes

Bringing CRA's services closer to our valued customers - individuals, government entities, and businesses - is a value that underpins our programs and we continue striving to best meet their service needs at a time of great buoyancy in Qatar's dynamic telecom market. Ensuring they have access to the broadest possible range of innovative telecommunications services is essential.

With a view to better implementing our mandate to encourage and support a competitive communications sector that brings a broad range of advanced, innovative, and reliable service to the people of Qatar, we closely monitor the quality of telecom services using internationally accepted tools such as the Consumer Satisfaction Survey, Business Satisfaction Survey and the Quality of Service Project.

We are continuously improving the resolution rate of consumer complaints, all the while engaging with the service providers to discuss solutions to the challenges for the delivery of world-class communication services to the people of Qatar.

Over the past year, we have introduced changes to our complaints resolution process and how we manage non-compliance, and these are designed to strengthen consumer safeguards. The new rules increase the transparency of the process and we are confident that the approach will enhance consumer and service provider outcomes.

The Consumer Protection Regulation is in the draft regulation phase. The regulation instrument will combine all current regulations and fill in the gaps raised by new technology especially in terms of consumer complaints. Having a comprehensive consumer protection instrument will serve to enhance our power to protect consumers.

Engagement with all stakeholders continued to be our priority in 2019, not only to safeguard the public interest and tackle consumer concerns, but also to ensure we remain responsive to the needs of industry in our regulatory approach, ensuring a transparent and flexible yet consistent framework that promotes competition in the market.

# BRINGING OUR SERVICES CLOSER TO ALL OUR CUSTOMERS

## **CRA Effectively Manages Qatar's Valuable Resources**

We continue to make strides in the management and allocation of Qatar's valuable, yet finite resources such as spectrum, numbering, and domain names. This year, we effectively managed and allocated radio spectrum to ensure the delivery and smooth running of several major global events taking place in Qatar that included the Asian Athletics Championship Event in April, the Amir Cup Final Event in May, the World Athletics Championship 2019 in October, the World Superbike Championship in October and FIFA Club World Cup 2019 in December, along with the daily operations of other sectors including government, aviation, security, and energy.

More than 3,931 new license requests were made through the e-Spectrum Services Portal this year. Since its launch in January 2017, the e-Spectrum Services Portal has been the public interface of the CRA's Automated Frequency Management System (AFMS), which digitizes the application process for spectrum users in Qatar, allowing them to submit applications online for issuing, modifying, or canceling their spectrum licenses. The consumer-centric system represents our commitment to align our services with the Qatar Digital Government initiative and is one of the tools we have developed to improve the experience of telecom consumers in Qatar.

As part of our commitment to protect consumer rights, QoS benchmarks provided by the mobile network operators are being conducted annually and detailed results for key services are published. In June, we published the results of the audit conducted from October to December 2018 on the two SPs. The audit benchmarked some of the KPI of services such as voice calls, short message service (SMS) and data service offered by the SPs. The samples for the network audit

was conducted during busy hours on working days in different areas, streets and highways, major pedestrian areas and several indoor locations.

The audit results indicated that the SPs continue to maintain the high standards of accessibility, retainability and integrity of the services offered to their consumers and have improved their capability of providing higher data throughputs from the previous year. It can also be seen that the additional spectrum provided by CRA in 2018 for advanced 4G is contributing to improving the consumer experience in general.

We are proud to confirm that due to our ongoing activities, we continue to see growth in the uptake of Qatari domains. In 2019, 3,782 domains were registered, which represents an increase of 18% since 2018. Country specific domain names are a beneficial commodity that can help Qatari businesses and organizations distinguish themselves online, and Qatar was among the first countries in the world to offer domain names in Arabic. In addition, the figure also demonstrates that internet registration demand remains high in Qatar, which is yet another positive sign of a vigorous business landscape.

Maintaining a balance between consumer rights and the needs of service providers is key to allowing fair competition to thrive in the market. We are mindful that with the rise in the number and complexity of services and packages offered by service providers in Qatar, the service terms and conditions can often seem complex and overwhelming to the average consumer. Our Consumer Handbook, which is free to download on our website, addresses frequently asked questions relating to consumers of ICT services and products in Qatar. A guide to their rights and responsibilities and user-friendly tips assist consumers to make informed decisions when

using telecoms services and it is a vital part of our role as regulator.

## **Enhancements to the Qatar Domains Registry**

Promoting and managing the Qatar Domains Registry, a database of all registered domain names, is one of our core competencies. Choosing a Qatar-specific domain to establish an online presence offers businesses and individuals the opportunity to identify as being uniquely Qatari and extend their reach in the Arab-speaking world and globally.

Stimulating creativity and innovation in domain names and internet services boosts our ongoing efforts to shape Qatar into a digitally inclusive society.

## **CRA Confirms Implementation of the Fourth Phase of Reduced Gcc Price Caps for Roaming Charges**

As of 1 April 2019, telecom service providers in Qatar have implemented the fourth phase of the regulation on reducing retail price caps for roaming charges within the GCC countries. This year, the fourth phase requires the service providers to reduce the retail price cap of mobile data to QAR 1.82/Mbyte (decreased by around 17% from April 1, 2018). This price cap is a ceiling and the service providers are free to compete by setting prices below this regulatory cap in order to provide more attractive offers to the consumers.

## **Monitoring Business Consumers' Satisfaction Levels**

The Business Consumers Satisfaction Survey 2019 has been completed. The survey included in-depth interviews with key stakeholders internally within CRA and externally with the SPs and a regional and international benchmark study. Primary data collection took place in May with a sample of 1,500 business consumers. We will release the findings of the survey on our website early in 2020.

## **Improving the Mobile Site Construction Permit Process**

An optimized mobile site construction approval process has been implemented this year to provide faster approval for the permit. We established a weekly committee meeting with the Ministry of Municipality and Environment and the SPs to review and approve government land and allocations. The outcome has been positive and resulted in clearing of all outstanding approvals, which numbered 190 in total for both SPs in 2018, and 170 for the two SPs in 2019.

# BRINGING OUR SERVICES CLOSER TO ALL OUR CUSTOMERS

## A Tool to Monitor Service Delivery

In October, we released an update to our highly successful CRA mobile application "Arsef", now enhanced. The enhanced app now includes a QoS measuring feature as one of the tools that empower the CRA to measure the quality of telecom services. The upgraded version of "Arsef" app is also integrated with the National Authentication System "Tawtheeq", which empowers the user to log in to the CRA mobile app with the same username and password of other government applications connected to the "Tawtheeq" system. The app is available for download on the Apple and Google play store.

## Domain Name Security

Raising awareness and building capacity on the Domain Name System's (DNS) latest trends and technologies prompted us to organize two workshops in collaboration with the Internet Corporation for Assigned Names and Numbers (ICANN).

The Domain Name System Abuse/Misuse Workshop and Domain Name System Security Extensions (DNSSEC) Workshop took place from 11 to 14 November. Qatar's key stakeholders participated to show their support, including law enforcement agencies, QCERT, local registrars, ISPs, and hosting providers.

The Consumers Satisfaction Survey 2018 report has now been published on our website. The survey measures the satisfaction of consumers with the services provided by the SP. We will now continue making sure the actions identified toward improved satisfaction will be implemented by the stakeholders. The survey, conducted in 2018, is intended to statistically measure QoS and consumer satisfaction with respect to delivery of telecommunications services from their respective service providers, prices charged, and consumer rights protection.

The findings suggest that our role is becoming clearer among customers who are aware of CRA (most of the customers who are aware of the CRA understand the scope of CRA's role and functions). Most respondents identified consumer protection among other recognized core CRA functions. Customers had many suggestions for CRA to improve the telecom services in Qatar, and these were captured through the survey. These suggestions include a wide range of topics including need for improved quality of services and better prices, improving competition and allowing for OTT services to work in Qatar.

## Enhancing Qatar's Internet Domain

Our ongoing efforts to enhance Qatar's internet domain have come to fruition this year, and by the end of 2019, we were able to finalize several initiatives.

One of our major achievements is an up-to-date, clean Qatari Domains' database. We focused our efforts on the optimization of Qatari Domains with a view to enabling better security. Among the enhancements, we have implemented an automatic mechanism to ensure that the contact details of the registered domains, as well as the domain owner contacts, are current and accurate.

In order to promote to promote the Qatari domain name uptake by local businesses and individuals, we updated the Registry-Registrar Agreement (RRA), which now gives CRA the power to assess compliance and non-compliance.

## Early Steps for our Internet Exchange Project

The Qatar Internet Exchange Project "QIXP" and our plans to implement IXPs advanced another step with the establishment of an IXP Steering Committee to spearhead planning and implementation. The multi-stakeholder committee is currently finalizing the IXP model and implementation plan. The aim of the Committee is also to provide the cost of exchanging local visits through international links, in order to meet the market requirements of providing developed and innovative quality services and exchanging Internet points internally without having to send them outside the country.

Among the benefits of QIXP is greater cyber security resulting from traffic not having to leave the country's borders; and a reduction in latency when accessing content. Overall, it will enhance internet users' experience in terms of speed and security.

## Implementing Universal Acceptance – Promoting our Arabic Language

In keeping with global trends and practices followed by other countries such as China and Russia, we are working on a Universal Acceptance (UA) Initiative that will allow users to send emails with Arabic ID without site limitations and keep all the related data stored locally. The initiative is in line with the national prerogative to support the use of the Arabic language. Specifically, Law No.7 of 2019 on the Protection of the Arabic Language, requires all governmental and non-governmental organizations to commit to supporting the Arabic language and all the Ministries, government agencies and bodies are obliged to use Arabic language in their meetings, discussions, and all decisions, regulations, contracts and correspondences.

A vital part of our efforts to boost domain registrations is the newly finalized integration of the Qatar Domain Registry System with the single window platform (Ministry of Commerce and Industry) that allows registration to be done through the single window system directly.

# AN INNOVATIVE REGULATORY FRAMEWORK THAT KEEPS PACE WITH TECHNOLOGICAL DEVELOPMENTS

## Stimulating Innovation

A dynamic yet cohesive regulatory framework for Qatar's telecom sector remains a strong foundation for ensuring growth, competitive prices, better quality of service, and even higher penetration. In 2019, we continued to make firm headway with refining our legislative framework to keep pace with the rapid rate at which new technology - such as the Internet of Things (IoT) and M2M - is coming onto the market. That goes hand in hand with staying ahead of leading developments, technologies and innovations on a global level as well, to understand the market look ahead and base our decisions on those insights. In turn, we have seen how these efforts continue to stimulate remarkable technological innovation within the industry.

Our forward looking, action oriented CRA Strategy 2020-2024 has been developed to further support Qatar's national development objectives, as set out in the National Vision 2030 and the National Development Strategies (2011-2016 and 2018-2022). The Strategy targets the full CRA mandate and reflects one of our key priorities: supporting Qatar's transition to a digital nation. The CRA Strategy outlines a range of major initiatives we plan to undertake during the strategy period to strongly contribute to those national efforts. Similarly, the strategy also accounts for the anticipated needs of the country in its preparation for hosting the FIFA World Cup™ in 2022.

Responsiveness to industry and consumer needs underpins our efforts to subject all policies and regulations to continuous review once in effect. We began the year by revising key sector

regulations including changes to the National Numbering Plan and our Dispute Regulations.

Among our priorities in 2019 has been regulating the postal sector ahead of the enactment of the new postal law in Qatar. CRA is the responsible authority for regulating the sector while the postal industry stakeholders include Qatar Post, international courier firms, the MoTC, the Ministry of Commerce and Industry, and other organizations such as Qatar Airlines. Local firms that may conduct (legal) local delivery services also have a role and responsibilities in the sector. Consumer and business representatives have an interest in ensuring that the sector provides relevant services of the necessary quality, affordability and accessibility.

Our vital role at CRA is ensuring that the market is well structured, operates according to the law - in line with any future sector policy issued by the Ministry - and is clearly delineated so that market parties can operate legally and with certainty. We have a general objective to promote organized competition in the postal industry, which in turn will allow us to regulate and monitor the market effectively. This must be conducted within the anticipated market structure in line with the stages of market liberalization envisaged by the MoTC.

Our focus has therefore been to develop a strategy in advance of the new law's enactment, so that we are fully prepared, with structured

plans and robust, well-informed regulatory instruments, to support the law as an important supervisory framework in the postal sector as soon as it is enacted.

Among our other regular activities has been tariff regulation, in keeping with our mandate to ensure that charges for products and services across the different telecom segments are efficiently cost-based and appropriately applied to ensure transparency and responsiveness to market conditions. We issued a new Retail Tariff Instruction (RTI) for telecommunications services to improve consumer experience and ensure sustainable competition and development of the telecommunications market in Qatar for all service providers to comply with, effective January 1, 2019. The new RTI provides the SPs with more flexibility as it will allow the introduction of new tariffs and promotions targeting specific sectors or customer segments. SPs are required to publish these tariffs and promotions on their respective websites. We chose this approach as a regulatory best practice to encourage the competition in the telecommunications market.

A comprehensive list of orders issued in 2019 is included at the end of this chapter.

## Accommodating New Technologies in our Numbering Regulations

The existing National Numbering Plan and the Numbering Regulation (NNP and NR) have been reviewed and amended to include an additional requirement to enhance and accommodate new requirements from the growth in cutting edge technologies such as the Internet of Things (IoT) and Machine to Machine (M2M) communication.

## A Visionary Postal Regulatory Strategy to Develop and Implement the New Postal Regulatory Framework

In advance of the enactment of the new postal law in Qatar, we developed the 'CRA Postal Regulation Strategy and Roadmap for Implementation' which sets out the approach for our regulatory activities in the postal sector. This postal regulatory strategy is defined in the context of both the new National Development Strategy ("NDS-2") and broader QNV2030.

The draft Law on the Regulation of Postal Services that we prepared and submitted to the Minister of Transport and Communications and to the Cabinet in March 2018, was approved in principle by the Cabinet in July 2018. The CRA Postal Regulation Strategy and Roadmap for Implementation was developed in advance of its enactment, so that we are fully prepared, with structured plans and regulatory instruments, to support its important supervisory work in the postal sector once it is enacted.

The regulation strategy sets out the overarching postal strategy of the CRA, including the required regulatory instruments that the CRA must develop and implement as it commences formal regulation of the postal sector in Qatar.

The Strategy defines four key strategic priorities: 1) Organize the market; 2) Develop and apply the licensing framework; 3) Establish a clear, predictable and effective oversight and

## AN INNOVATIVE REGULATORY FRAMEWORK THAT KEEPS PACE WITH TECHNOLOGICAL DEVELOPMENTS

administration of the sector; and 4) Safeguard the interests of consumers.

To accompany the postal strategy, we issued the “Postal Regulation in Qatar – Actions and Instruments”, a summary of the actions and regulatory instruments that the CRA will need to develop and implement to establish itself as an efficient regulator of the postal sector in Qatar. It describes the recommended steps prior to, and in the period following, the enactment of the new postal law when we can then develop to complete the suite of initiatives as the new, independent regulator of the postal sector.

In preparing this regulatory strategy and implementation plan, the CRA has also strongly reflected the national policy goals to transform Qatar into a smart nation, with an advanced digital economy and a reliable and sustainable postal delivery industry. However, remain aware that a strategic approach to regulation must also account for trends in the postal sector – the declining use of traditional mail and growth in e-commerce – which mean that conventional regulatory tools or short-term decisions may not be appropriate to achieve the vision for the sector.

Against these developments, we have a general objective to promote organized competition in the postal industry, which in turn will allow us

to regulate and monitor the market effectively within the anticipated market structure.

### Progress Towards IPV6 Adoption

Qatar’s global ranking for Internet Protocol version 6 (IPv6) adoption has improved to 124 in 2019, a recognition of the enormous strides we are making in this area. Our latest achievement has been to issue and publish guidelines for the IPv6 Dual Stack Implementation and security considerations to facilitate IPv6 adoption across Qatar. We are confident that the guidelines will support IPv6 stakeholders to accelerate the adoption rate while supporting the smooth transition from IPv4 to IPv6.

### Reviewing the Regulatory Accounting System – A Tool to Secure Competitive Behavior

Under Decision No. 1 of 2019 - review and approval of the Regulatory Accounting System (RAS) of Ooredoo for the financial years 2016, we closed the RAS FY 2016 implementation process and instructed Ooredoo on improvements to be incorporated in the RAS FY 2017 and 2018. The RAS is one of the ways we secure competitive behavior and ensure the prices and charges of the dominant service provider (DSP) are efficiently cost-based and appropriately applied to products and services offered at both wholesale and retail level.

### Enhancing the Customer Experience through the New Telecom Complain Management System

The Qatar Digital Government 2020 strategy is a blueprint for how we can enhance customer experiences through greater access to government services, leading to better outcomes for the nation. Aligning with this strategy, we have launched an enhanced Telecom Complaints Management System to support government efforts.

The new Telecom Complaints Management System now manages the entire consumer complaints operations end to end that includes all stakeholders, beginning with the consumer who initiates the process through any of the available channels (website/social media/email or in person) to the resolution provided by the SP, and to validation by the CRA, according to the appropriate regulatory framework (Advertising Code, Consumer Protection regulations and the new Consumer Protection Regulation currently under development).

Aimed at automating all the processes related to resolving telecom consumers’ complaints, the system is supported by the Government Cloud-Services (Sadeem). Built on the Microsoft intelligent cloud, the Sadeem platform will empower CRA to further enhance its e-services and engage with its customers in a more efficient, effective and seamless manner. Ultimately, we are working to position Qatar as a digital hub.

With the ability to generate related reports more easily, the system will help us to identify trends and work with service providers to reduce the future occurrence of complaints. The system will support us in providing an accurate, transparent and fair resolution for both parties, as all consumers’ records will be available in one private and safe place and can be retrieved upon request.

In Phase 2 – which is ongoing, with an expected completion by end of June 2020 – we plan to link all these channels. New features will allow us, for instance, to manage outbound calls to customers at their convenience to expedite resolutions.

Under CRA’s telecom complaint resolution process; consumers with a complaint are free to approach the CRA if their complaint lodged directly to their service provider about a mobile service disconnection remains open or unresolved for 48 hours, or 72 hours in case of fixed-line disconnection. Also, if the complaint is not related to a service disconnection and remains unresolved for 30 calendar days or if the matter is closed at any time and they were dissatisfied with the offered resolution.

Consumers can lodge a complaint to CRA through different channels: through CRA’s 24/7 hotline number (103), CRA’s email address [consumervoice@cra.gov.qa](mailto:consumervoice@cra.gov.qa), CRA’s Twitter, Facebook or Instagram accounts @CRAqatar, CRA’s Mobile App “Arsel”, filling CRA’s complaint form on the website [www.cra.gov.qa](http://www.cra.gov.qa), or by visiting the CRA’s headquarters at Al Nasr Tower (B).

### Updated Dispute Regulations Take Effect

In line with our keenness to encourage sustainable competition and prevent anti-competitive practices in the market, updated Dispute Regulations took effect on May 27, 2019 under CRA President Decision No. 5 of 2019. The regulations replace the previous “Dispute Resolution Procedures” and “Ex Post Investigation Procedures” and set out the procedures and requirements that the SPs or others need to follow to file a complaint or

## AN INNOVATIVE REGULATORY FRAMEWORK THAT KEEPS PACE WITH TECHNOLOGICAL DEVELOPMENTS

dispute with the CRA about another service provider or another stakeholder.

We are committed to the fair and efficient resolution of complaints and disputes, in terms of procedure and substantive requirements. The regulations cover the form and manner of filing; the details of the information that must be included in the complaint or dispute; the exchange of information between the parties to the proceedings; and a flow chart of the different phases of the process from initiation to conclusion.

As per the Dispute Regulations, there are three key procedural stages in our assessment of any submission of a complaint or dispute. The first phase includes filing a valid complaint or dispute to CRA by email. During the second phase, the CRA investigates the complaint or dispute, taking account of any document submissions from the parties. In the final phase, the CRA issues its interim or final decision within the stipulated timeframe. Failure to comply with any dispute or complaint settlement decision of the CRA will result in the referral of the matter to the Penalties Committee or to the Courts.

### A New Compliance Framework

In 2019, the CRA developed and put in place a new Compliance Framework, which is comprehensive, efficient, and effective. The comprehensiveness of the new compliance framework strongly reflects the importance we place on a transparent and fair compliance process that is easily navigated by users.

Under CRA President Decision No. 16 of 2019 and internal Circular No. 3 of 2019, we have

established a Compliance Committee, as one of the governance components of the Compliance Framework. The key role of the Committee is to recommend actions regarding non-compliance cases.

Our new comprehensive Compliance Framework consists of a suite of documents that includes the CRA Compliance Policy and Governance Model; process flowcharts showing 1) Compliance High-level Process; 2) Service Provider Obligation Monitoring and Investigation (SPOMI); 3) Managing Service Provider Non-Compliance (MSPNC); and 4) CRA Obligation Monitoring (CRAOM). It also includes all the required forms and templates, the procedure manuals and notices for the process.

### New Guidelines for Implementing the Ras from the 2019 Financial Year

Under Decision No. 14 of 2019, we issued the Order to Ooredoo Q.S.P.C. on Review Comments on the Regulatory Accounting System for the Financial Years 2019 onwards. The new guidelines

align the RAS to the market definitions, set rules for a more granular and accurate cost attribution and require publication of the audit report which will enhance transparency toward the stakeholders.

### Progress Towards Finalizing the Quality of Service Regulatory Framework

Within our mandate to ensure the sector development while safeguarding the provision of high-quality services for all the consumers in Qatar underpins the Quality of Service (QoS) Regulatory Framework which is currently under development. The framework will update the KPIs already in place for QoS, to be more comprehensive and take into account more recent advances in technology.

Following a series of stakeholder engagement meetings in January; seven interviews were conducted with key stakeholders internally within CRA and externally with the SPs. Phase One (Context Analysis) phase kicked off in March and in September, we began working towards finalizing the benchmark, policy and regulation. Implementation of the framework is expected by end of Q1 2020.

### Facilitating Infrastructure Development

The new Radio Communications Construction Regulation streamlines the planning, design, construction and installation of permanent or temporary sites.

Best practice for the development of passive telecom construction will be implemented through

the new Telecom Infrastructure Standard, which covers:

- 1) telecom duct construction standard;
- 2) radio communication construction standard;
- 3) in-building wiring standard.

### Fixed Number Portability

Promoting customer choice and telecom consumers in Qatar by encouraging choice in respect of service providers supports fair competition in the sector. Fixed number portability supports this goal by enabling telecom consumers to retain their existing fixed number when switching to a different service provider. Fixed number portability between Vodafone Qatar and Ooredoo has now been commercialized.

### Decisions on Retail Tariffs

The CRA issued more than 20 Decisions on Retail Tariffs submitted by Ooredoo for review and approval consistently with the RTI. These Decisions are related to products belonging to fixed markets where Ooredoo is designated as DSP. Decisions consisted of approval and/or rejection of Ooredoo proposed Tariffs. The CRA is also performing a review of the SPs' Tariffs, to tackle Tariffs illegally introduced into the markets (e.g. Tariffs not compliant with the RTI).

# LOOKING TO 2020: FORTHCOMING PLANS AND STRATEGIES

Looking ahead to 2020, we will continue to initiate new projects, plans and infrastructure improvements in line with Qatar's 2030 vision of driving a knowledge-based information society.

Our plans for 2020 reflect our efforts to continue working hard along with the stakeholders and service providers to help deliver smart city transformation.

As part of our efforts to ensure that our country's regulatory framework keeps pace with its digital transformation, we are working towards the full transition from IPv4 to IPv6 before the 2022 FIFA World Cup in Qatar. We will continue in close collaboration with the MoTC to implement the new Postal Law and continue the development of the postal regulatory framework.



## CRA Strategy 2020-2024

The CRA Strategy builds on several previous related policy and strategy initiatives; and on CRA's experience in regulating and promoting competition in the telecommunications sector. In addition to regulation, it also supports sector growth and development, promotes investment and innovation, technology adoption and better coordination between government and the private sector. The strategy recognizes and supports other government ministries and authorities in carrying out their mandates in relation to the sectors in scope.

The CRA Strategy outlines a range of major initiatives which we will undertake during the strategy period to support Qatar's transition to a digital nation. These actions are designed to ensure progress towards meeting the defined objectives and targets. We will still continue carrying out our existing portfolio of duties, which are not covered in the CRA Strategy.

In anticipation of the CRA Strategy being approved by the Council of Ministers and for its implementation to start in 2020, a Strategy Implementation Plan is currently being developed. This will be a detailed work plan to cover all actions necessary to implement the strategic initiatives.

## Facilitating Qatar's Smart City Transformation

Development of the Qatar Smart City Framework provides guidance and direction for the development of smart sustainable cities in Qatar and is expected to be published early in 2020. The framework serves Qatar Vision 2030 and the National Strategy 2018-2022 to transform Qatar to an advanced sustainable country.

## Qatar Spectrum Outlook 2022

We have developed the Qatar Spectrum Outlook 2022 to cover its spectrum management priorities through its three-year spectrum outlook for the period 2020-2022. The Outlook aims to provide stakeholders an overview of CRA's overall approach and planned activities for meeting the expected spectrum demand for commercial mobile services, satellite services, broadcasting service and programme making and special events applications over the next three years. These include the national frequency allocation plan, the spectrum usage fees, a mechanism for Quality of Service mobile networks audit and other strategic spectrum projects expected to be completed before 2022.

We expect to release the Qatar Spectrum Outlook 2022 for public consultation and comments early in 2020.

# LOOKING TO 2020: FORTHCOMING PLANS AND STRATEGIES

## Satellite Monitoring Centre

CRA is implementing an Advanced Space Radio Monitoring System (ASRMS) – Satellite Monitoring Centre (SMC) which will enable CRA to provide a complete visibility over the space services signals received in Qatar, satisfying our mission to manage the current Frequency Spectrum National Allocation Plan and future expansions of the space telecommunications sector in the country.

In addition to ensuring the user licenses through monitoring and verification, the system is also capable to localize the source of interferences affecting authorized transmissions. The system is expected to be fully operational by 2021.

## Consumer Protection Regulation

The Consumer Protection Regulation is in the draft regulation phase. The regulation instrument will combine all current regulations and also fill in the gaps raised by new technology especially in terms of consumer complaints. Having a comprehensive consumer protection instrument will enable us to have more power to protect consumers.

## Consumer and Business Surveys

Implementation of current survey findings are ongoing to ensure business and consumer satisfaction levels with services are continually improving. Looking ahead, we anticipate that the next Consumer Satisfaction Survey will be launched in 2021 and the Business Satisfaction Survey will be launched in 2022.

## Master Plan for Telecom Use

A Master Plan for Telecom Land Use will assist the SPs to plan for telecom service connections and lead to improvements in the quality of service. This new centralized approach will allow for visibility of any access issues and strengthens the role of the CRA as a facilitator of access to these valuable resources.





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